

Specific Gravity and Absorption of Coarse Aggregate - ASTM C - 127Project Name Three Springs V1F3 Project No. 51689MT Date 1-12-09Sample Designation: grey/tan sandstone from Ness Quarry Lab # 1990-B
(Trautner Geotech sample #1)

Note: The sample should be thoroughly washed and dried prior to testing. After drying, allow the Sample to cool to room temperature; then soak in water at 73.4 degrees F. for 24 +/- 4 hours.

Bulk Specific Gravity

$$\text{Bk Sp Gr} = \frac{A}{(B-C)}$$

Bulk Specific Gravity (SSD)

$$\text{Bk Sp Gr (SSD)} = \frac{B}{(B-C)}$$

Absorption

$$\text{Absorp. \%} = \left[\frac{(B-A)}{A} \right] \times 100$$

Apparent Specific Gravity

$$\text{App Sp Gr} = \frac{A}{(A-C)}$$

	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5	Trial 6	Trial 7
Tare (grams)	495.7	444.7	410.2	444.3			
Wt. of Oven Dried Specimen in Air (A)	2688.8	2461.6	2513.7	2408.8			
Wt. of SSD Specimen (B)	2734.0	2505.7	2565.7	2458.7			
Wt. of Immersed Specimen (C)	1685.6	1551.2	1585.1	1519.1			
Bulk Specific Gravity	2.56	2.58	2.56	2.56			
Bulk Specific Gravity (SSD)	2.61	2.63	2.62	2.62			
Apparent Specific Gravity	2.68	2.70	2.71	2.71			
Absorption	1.68	1.79	2.06	2.07			
(B - A)	45.2	44.1	52.0	49.9			
(B - C)	1048.4	954.5	980.6	939.6			
(A - C)	1003.2	910.4	928.6	889.7			

Bulk Specific Gravity (Avg.) 2.56 Absorption (Avg.) 1.9