Washington State Department of Transportation

HMA Mineral Aggregates

Contract Number	Mix Class	Sample Number	Date Sampled	Date Tested
Aggregate Source	**HMA Test Number**	**JMF Number**	**Sample Weight (lbs.)**	**Testing Site**

Sand Equivalent Test (WSDOT FOP for AASHTO T 176)

$$\text{SE Value} = \frac{\text{Sand Reading (100)}}{\text{Clay Reading}}$$

Clay Reading	Sand Reading	SE Value

Specification	

Average	

Percentage of Fracture in Coarse Aggregate (WSDOT FOP for AASHTO T 335)

P = Perecnt Fracture
F = Mass of Fractured Particles
Q = Mass of Questionable Particles or borderline Particles
N = Mass of Nonfractured Particles

$$P = \left[\frac{[F + (Q / 2)]}{F + Q + N} \right] (100)$$

F	Q	N	P

Fracture Specification Single Face = _____ Double Face = _____

Uncompacted Void Content of Fine Aggregate (WSDOT FOP for AASHTO T 304)

$$U = \left[\frac{V - (F / G)}{V} \right] (100)$$

V = Volume of Cylindrical Measure, ml
F = Net Mass, g, of fine aggregate in measure
G = Bulk Dry Specific Gravity Fine Aggregate (G_{sb})
U = Uncompacted Voids, percent, in the material

Preparation of Test Sample	
Sieve Size	**Mass**
# 8 - # 16	44 grams
# 16 - # 30	57 grams
# 30 - # 50	72 grams
# 50 - # 100	17 grams

Tare _____

V	F	G	U

Specification	

Average	

Contractor's Signature	Date
Inspector's Signature	Date