

**AGGREGATE SUBMITTAL**
Report of Physical Properties

GRP Material Description: Rock, unwashed 1"

Report Date: September 14, 2026

GRP Material Code: ROCE

Reviewed by: Dan McDaniel

Source Location/Code: 588 - Morgan

Report No. 588ROCE00226

TEST RESULTS					SIEVE ANALYSIS		
Standard	PHYSICAL PROPERTIES		Result	Test Source	ASTM C136	AASHTO T27	
ASTM C 29	Unit Weight	Unit Weight, lbs./cu.ft. =	99		Sieve Size	% Passing	Spec.
AASHTO T19		Voids, % =	43		450 mm (18")		
		☐ Jigged	R		375 mm (15")		
ASTM D1557	Modified Proctor	Max. density, lbs./cu.ft. =	0		300 mm (12")		
AASHTO T180		Optimum Moisture, % =			250 mm (10")		
ASTM D698	Standard Proctor	Max. density, lbs./cu.ft. =			225 mm (9")		
AASHTO T99		Optimum Moisture, % =			200 mm (8")		
ASTM D4318	Liquid Limit Plastic Limit Plasticity Index	Liquid Limit =	0		150 mm (6")		
AASHTO T89/90		Plastic Limit =	0		125 mm (5")		
		Plasticity Index =	NP		100 mm (4")		
ASTM C131	L.A. Abrasion	Small Coarse Loss, % =	28		75.0 mm (3")		
AASHTO T96		Grading/Revolutions, =	B/500		63.0 mm (2-1/2")		
ASTM C535	L.A. Abrasion	Large Coarse Loss, % =			50.0 mm (2")		
		Grading/Revolutions, =			37.5 mm (1-1/2")		
ASTM C 128	Fine Specific Gravity & Absorption	Bulk Specific Gravity (dry) =			25.0 mm (1")	100	
AASHTO T84		Bulk Specific Gravity, SSD =			19.0 mm (3/4")	70	
		Apparent Specific Gravity =			12.5 mm (1/2")	16	
		Absorption, % =			9.5 mm (3/8")	5	
ASTM C 127/128	Coarse/Fine Specific Gravity & Absorption	Bulk Specific Gravity (dry) =	2.720		6.3 mm (1/4")		
AASHTO T84/85		Bulk Specific Gravity, SSD =	2.746		4.75 mm (No.4)	4	
		Apparent Specific Gravity =	2.791		2.36 mm (No.8)	3	
		Absorption, % =	0.9		2.00 mm (No.10)		
ASTM D2419	Sand Equivalent	Sand Equivalent, % =			1.18 mm (No.16)	2	
AASHTO T176					0.600 mm (No.30)		
ASTM C 88	Soundness	Coarse Soundness Loss, % =	1		0.425 mm (No.40)		
AASHTO T104	Soundness	Sodium No. of Cycles =	5		0.300 mm (No.50)		
		Fine Soundness Loss, % =			0.180 mm (No.80)		
		Magnesium No. of Cycles =			0.150 mm (No.100)		
ASTM C 1252	Fine Aggregate Angularity	Uncompacted Voids, % =			0.075 mm (No.200)	1.4	
AASHTO T304		Method C (as received material)			ASTM D422		
ASTM C40	Organic Impurities	Coarse Aggregate, % =	Lighter Plate #1		Hydrometer =		
AASHTO T21		Fine Aggregate, % =			ASTM C566 AASHTO T255		
ASTM C142	Clay / Friable Particles	Coarse Aggregate, % =			Moisture Content, % =		
AASHTO T112		Fine Aggregate, % =	0		ASTM C136 AASHTO T27		
ASTM C123	Lightweight Pieces	Coarse Aggregate, % =			Fineness Modulus (FM) =		
AASHTO T113		Fine Aggregate, % =	0		AASHTO M145		
ASTM D1883	CBR	Surcharge = 10 lbs CBR @ 0.1" =			Classification of Soils =		
AASHTO T193		Swell% = 0.0% CBR @ 0.2" =			ASTM D4791 Ratio =	5:1	
ASTM D5821	Fractured Face	1 or 2 Faces =	1= 100		Flat & Elongated =	1.5	
		Fractured Face, % =	2= 99				
ASTM D2487	Soil Classification	Group Symbol =					
		Group Name =					
ASTM D2488	Soil Description & Identification	Group Symbol =					
		Group Name =					