



AGGREGATE SUBMITTAL
Report of Physical Properties

GRP Material Description: Rock, 1 1/2"

Report Date: June 4, 2024

GRP Material Code: ROCF

Reviewed by: Dan McDaniel

Source Location/Code: North Hansen / 527

Report No. 527ROCF00224

TEST RESULTS			
Standard	PHYSICAL PROPERTIES	Result	Test Spec.
ASTM C 29 AASHTO T19	Unit Weight Unit Weight, lbs./cu.ft. = 91 Voids, % = 44 <input type="checkbox"/> Jigged <input type="checkbox"/> Loose <input checked="" type="checkbox"/> Rodded		
ASTM D1557 AASHTO T180	Modified Proctor Max. density, lbs./cu.ft. = Optimum Moisture, % =		
ASTM D698 AASHTO T99	Standard Proctor Max. density, lbs./cu.ft. = Optimum Moisture, % =		
ASTM D4318 AASHTO T89/90	Liquid Limit Plastic Limit Plasticity Index Liquid Limit = 0 Plastic Limit = 0 Plasticity Index = 0		
ASTM C131 AASHTO T96	L.A. Abrasion Small Coarse Loss, % = Grading/Revolutions, =		
ASTM C535	L.A. Abrasion Large Coarse Loss, % = Grading/Revolutions, =	22 3/1000	
ASTM C 128 AASHTO T84	Fine Specific Gravity & Absorption Bulk Specific Gravity (dry) = Bulk Specific Gravity, SSD = Apparent Specific Gravity = Absorption, % =		
ASTM C 127 AASHTO T85	Coarse Specific Gravity & Absorption Bulk Specific Gravity (dry) = Bulk Specific Gravity, SSD = Apparent Specific Gravity = Absorption, % =	2.546 2.567 2.601 0.8	
ASTM D2419 AASHTO T176	Sand Equivalent Sand Equivalent, % =		
ASTM C 88 AASHTO T104	Soundness Coarse Soundness Loss, % = Sodium No. of Cycles =	1 5	
	Soundness Fine Soundness Loss, % = Sodium No. of Cycles =		
ASTM C 1252 AASHTO T304	Fine Aggregate Angularity Uncompacted Voids, % = Method C (as received material)		
ASTM C40 AASHTO T21	Organic Impurities Coarse Aggregate, % = Fine Aggregate, % =	0.0	
ASTM C142 AASHTO T112	Clay / Friable Particles Coarse Aggregate, % = Fine Aggregate, % =	0.0	
ASTM C123 AASHTO T113	Lightweight Pieces Coarse Aggregate, % = Fine Aggregate, % =	0.0	
ASTM D1883 AASHTO T193	CBR Surcharge = 10 lbs CBR @ 0.1" = Swell% = 0.0% CBR @ 0.2" =		
ASTM D5821	Fractured Face 1 or 2 Faces = Fractured Face, % =	1=100 3=92	2=98
	Resistivity 10300chm-cm		

SIEVE ANALYSIS		
ASTM C136	AASHTO T27	
Sieve Size	% Passing	Spec.
450 mm (18")		
375 mm (15")		
300 mm (12")		
250 mm (10")		
225 mm (9")		
200 mm (8")		
150 mm (6")		
125 mm (5")		
100 mm (4")		
75.0 mm (3")		
63.0 mm (2-1/2")		
50.0 mm (2")	100	
37.5 mm (1-1/2")	98	
25.0 mm (1")	22	
19.0 mm (3/4")	4	
12.5 mm (1/2")	2	
9.5 mm (3/8")	1	
6.3 mm (1/4")		
4.75 mm (No.4)		
2.36 mm (No.8)		
2.00 mm (No.10)		
1.18 mm (No.16)		
0.600 mm (No.30)		
0.425 mm (No.40)		
0.300 mm (No.50)		
0.180 mm (No.80)		
0.150 mm (No.100)		
0.075 mm (No.200)	0.9	
ASTM D422	Hydrometer =	
ASTM C566 AASHTO T255	Moisture Content, % =	
ASTM C136 AASHTO T27	Fineness Modulus (FM) =	
AASHTO M145	Classification of Soils =	
ASTM D4791	Ratio =	5:1
	Flat & Elongated, % =	0.0

NOTES: ROCF is a Quartzite material from the POM Pit.