



AGGREGATE SUBMITTAL
Report of Physical Properties

Project Name:

GRP Material Description: Rock, Unwashed, 3/4"

Report Date: July 20, 2023

GRP Material Code: ROCD2

Reviewed by: Dan McDaniel

Source Location/Code: North Hansen / 527

Report No. 527ROCD200323

TEST RESULTS			
Standard	PHYSICAL PROPERTIES	Result	Test Source
ASTM C 29 AASHTO T19	Unit Weight <input type="checkbox"/> Jigged <input type="checkbox"/> Loose <input checked="" type="checkbox"/> Rodded	Unit Weight, lbs./cu.ft. =	94
		Voids, % =	40
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 =	NP
ASTM C131 AASHTO T96	L.A. Abrasion	Small Coarse Loss, % =	24
		Grading/Revolutions, =	B/500
ASTM C535	L.A. Abrasion	Large Coarse Loss, % =	
		Grading/Revolutions, =	
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) =	2.545
		Bulk Specific Gravity, SSD =	2.576
		Apparent Specific Gravity =	2.625
		Absorption, % =	1.2
ASTM D2419 AASHTO T176	Sand Equivalent	Sand Equivalent, % =	
ASTM C 88 AASHTO T104	Soundness	Coarse Soundness Loss, % =	1
		Sodium No. of Cycles =	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, % =	0.0
		Fine Aggregate, % =	
ASTM C142 AASHTO T112	Clay / Friable Particles	Coarse Aggregate, % =	0.0
		Fine Aggregate, % =	
ASTM C123 AASHTO T113	Lightweight Pieces	Coarse Aggregate, % =	0.0
		Fine Aggregate, % =	
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 =	1 100
		Fractured Face, % =	2 99
ASTM D2487	Soil Classification	Group Symbol =	GP
		Group Name =	Poorly Graded Gravel

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")		
37.5 mm (1-1/2")	100	
25.0 mm (1")	100	
19.0 mm (3/4")	99	
12.5 mm (1/2")	50	
9.5 mm (3/8")	19	
6.3 mm (1/4")		
4.75 mm (No.4)	5	
2.36 mm (No.8)	4	
2.00 mm (No.10)		
1.18 mm (No.16)	3	
0.600 mm (No.30)		
0.425 mm (No.40)		
0.300 mm (No.50)	2	
0.180 mm (No.80)		
0.150 mm (No.100)		
0.075 mm (No.200)	1.6	
ASTM D422	Hydrometer =	
ASTM C566 AASHTO T255	Moisture Content, % =	
ASTM C136 AASHTO T27	Fineness Modulus (FM) =	
AASHTO M145	Classification of Soils = A1A	
ASTM D4791	Ratio =	5:1
	Flat & Elongated, % =	0

NOTES: ROCD2 is a Quartzite material from the POM Pit.