

WYOMING DEPARTMENT OF TRANSPORTATION

T-166

MATERIALS TESTING LABORATORY

(Rev. 11-21)

AGGREGATE ANALYSIS



PROJECT NO(S):
ENGINEER:
SAMPLE I.D.: 1
PIT OR QUARRY: Dog Pit TN 65c
QUANTITY: Stockpile
DATE RECEIVED: 4/1/2026

TEST NUMBER: 1
PROJECT NAME: Pit Inventory
TOWN: Driggs
SAMPLED BY: N Freeman 598/20775
COUNTY: Teton, Idaho
FOR USE AS: Base Grade L Wyoming
DATE TESTED: 4/1/2026

		WEIGHT (lbs or kg)				Weight Retained (lbs or kg)	% Retained = $\left(\frac{A \text{ or } B}{D}\right) \times 100$
		COARSE AGG.		FINE AGG.			
Sample		5672.8	= (E)	631.9	= (F)		
After Wash				578		RETAINED No. 4 [4.75 mm] = (A)	2857.30 = (H)
Pass No. 200 [75µm]				53.9		PASS No. 4 [4.75 mm] = (B)	2815.50 = (I)
Pass No. 200 [75 µm], Pan				7.2		TOTAL, A + B = (D)	5672.80
Total Pass No. 200 [75µm]				61.1			

SIEVE SIZE	WT RET =K	% RET = $\frac{K \times 100}{E}$ =L	WT RET =P	% RET = $\frac{P \times 100}{F}$ =R	% RET $\frac{R \times I}{100}$ =S					
						1 1/2" [37.5 mm]				
						1" [25mm]				
3/4" [19 mm]	51.30	0.9								
1/2" [12.5 mm]	958.20	16.9								
3/8" [9.5 mm]	664.20	11.7								
No. 4 [4.75 mm]	1183.60	20.9								
No. 8 [2.36 mm]			100.8	16.0	7.9					
No. 16 [1.18 mm]			181.9	28.8	14.3					
No. 30 [600 µm]			109.4	17.3	8.6					
No. 40 425 [µm]										
No. 50 [300 µm]			98.9	15.7	7.8					
No. 100 [150 µm]			50.1	7.9	3.9					
No. 200 [75 µm]			29.2	4.6	2.3					
Pass No. 200 [75 µm], Pan	2815.50	49.6	61.1	9.7	4.8					
TOTAL PASSING	5672.80	100.0	631.4	100.0						
SHAKER LOSS %			0.1%							
FRACTURED FACES %	64.5	SHAKER LOSS FORMULA								
FLAT & ELONGATED %	1:5 Ratio	$([E \text{ or } F] - \text{TOTAL PASSING}) / [E \text{ or } F] \times 100$								
☐ FINENESS MODULUS: see M.T.M., Sect. 816.0:										

COMBINED AGGREGATE			
=Z	% PASSING 100 - S (Z)		SPEC % PASSING
	to 0.1 %	to 1 %	
	100.0	100	100
	100.0	100	90-100
0.9	99.1	99	
16.9	82.2	82	60-85
11.7	70.5	71	
20.9	49.6	50	35-55
7.9	41.7	42	25-50
14.3	27.4	27	
8.6	18.8	19	10-30
7.8	11.0	11	
3.9	7.1	7	
2.3	4.8	4.8	3-15

WET WT (lb or kg)		21006.5
DRY WT (lb or kg)		19695.9
WET - DRY = MOISTURE		1310.6
% MOIST. = (MOIST / DRY WT) x 100		6.7

% MOISTURE							PLASTIC INDEX (PI) = LL - PL
(DD / EE) x 100		Corr. Factor	LL*Corr. Factor				
LIQUID LIMIT (LL)							
PLASTIC LIMIT (PL)							

REMARKS

TESTED BY N Freeman

CERTIFICATION NO. 598/20775