

SCHMIDT CONSTRUCTION TESTING LABORATORIES

2635 DELTA DRIVE
COLORADO SPRINGS, COLORADO 80910
719-392-4207

1101 TOPEKA WAY
CASTLE ROCK, COLORADO 80104
303-660-1439



MENZER AGGREGATE PROPERTIES

AGGREGATE SOURCE: **MENZER QUARRY**

DATE: 5/18/2021

PROPERTY	AGGREGATE SIZE	3/4"	1/2"	FINES
LOS ANGELES ABRASION				
AASHTO T-96, ASTM C-131				
COARSE AGGREGATE GRADING		B	C	D
PERCENT LOSS AFTER 500 REVOLUTIONS		31.3	33.4	33.9
MICRO-DEVAL				
AASHTO TP-58 CPL-4211				
AGGREGATE GRADING		A	B	C
PERCENT LOSS		11.1	13.5	16.0
SPECIFIC GRAVITY & ABSORPTION				
AASHTO T-84 T-85 ASTM C-127				
BULK SPECIFIC GRAVITY		2.615	2.614	2.613
APPARENT SPECIFIC GRAVITY		2.683	2.674	2.676
BULK SSD SPECIFIC GRAVITY		2.641	2.636	2.636
ABSORPTION		0.97	0.87	0.91
SODIUM SOUNDNESS				
AASHTO T-104 ASTM C-88				
COARSE AGGREGATE				
PERCENT LOSS AFTER 5 CYCLES		0.9	0.9	
FINE AGGREGATE				
PERCENT LOSS AFTER 5 CYCLES				1.4
FRACTURED FACES				
ASTM D-5821				
PERCENT WITH TWO OR MORE FRACTURE FACES		100%	100%	
FLAT, ELONGATED, FLAT & ELONGATED				
ASTM D-4791 5 1 / 3 1				
PERCENT FLAT AND ELONGATED		0.5/2.1		
DISINTEGRATED GRANITE				
CRD C-130				
PERCENT DISINTEGRATED GRANITE		LESS THAN 1		
UNCONFINED COMPRESSIVE STRENGTH OF DRILLED CORE SPECIMEN				
AASHTO T-24				
COMPRESSIVE STRENGTH, PSI		11 182		
FREEZE/THAW				
AASHTO T-103				
PROCEDURE A TOTAL IMMERSION		-4" +3" ROCK		-3" +2" ROCK
LOSS AFTER 12 CYCLES		0.03		0.45
		0.48 % TOTAL LOSS		

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SIEVE ANALYSIS

TEST PROCEDURE ☐ AASHTO T 11, T 27, T 30, T 37 ☒ CP -31A, 31B

JOB NO.: _____

SOURCE: MENZER QUARRY

PROJECT: _____

MATERIAL: STRUCTURAL FILL

SAMPLE SOURCE: _____

SAMPLE DATE: 4/29/2021

SAMPLED BY: TC

WASHED SAMPLE

PAN I.D.	_____
PAN TARE	_____
WET WEIGHT	<u>1426.5</u>
DRY WEIGHT	<u>1385.9</u>
DRY WEIGHT	_____
WASHED/DRY	_____
SAMPLE BEFORE	<u>1248.5</u>
SIEVING	_____

SAMPLE MOISTURE

PAN I.D.	_____
PAN TARE	_____
WET WEIGHT	<u>1174.4</u>
DRY WEIGHT	<u>1141.0</u>
LOSS	<u>33.4</u>
% MOISTURE	<u>2.9</u>

SIEVE	WEIGHT RETAINED	PERCENT RETAINED	PERCENT PASSING	SPECIFICATION MNZR SF CDOT 1	
50mm 2"	<u>0</u>	<u>0</u>	<u>100</u>	<u>100</u>	
37.5mm 1 1/2"	<u>0</u>	<u>0</u>	<u>100</u>		
25mm 1"	<u>0</u>	<u>0</u>	<u>100</u>		QUARRY AVG
19mm 3/4"	<u>0</u>	<u>0</u>	<u>100</u>		100
12.5mm 1/2"	<u>0</u>	<u>0</u>	<u>100</u>		100
9.5mm 3/8"	<u>1.9</u>	<u>0.1</u>	<u>100</u>		99
4.75mm # 4	<u>250.8</u>	<u>18.1</u>	<u>82</u>	<u>30-100</u>	88
2.36mm # 8	<u>243.6</u>	<u>17.6</u>	<u>64</u>		70
1.18mm # 16	<u>188.8</u>	<u>13.6</u>	<u>51</u>		54
0.6mm # 30	<u>170.6</u>	<u>12.3</u>	<u>38</u>		42
0.3mm # 50	<u>160.1</u>	<u>11.6</u>	<u>27</u>	<u>10-60</u>	30
0.15mm # 100	<u>123.6</u>	<u>8.9</u>	<u>18</u>		20
0.075mm # 200	<u>82.7</u>	<u>6.0</u>	<u>11.8</u>	<u>5-20</u>	13.6
PAN	<u>25.9</u>				

MARK WITH X FOR
F.M.

☐

TOTAL WEIGHT
INCLUDING PAN 1257.4

#REF! PERCENT OF SAMPLE BEFORE
SIEVING: (<0.3%)

SUM OF SCREENS+PAN 1248.0

PLASTICITY

WET W/PAN

DRY W/PAN

LOSS

DRY SOIL

PAN WT

TESTERS INIT.: RR

LIQUID LIMIT

COMMENTS: _____

PLASTIC LIMIT

DEVIATION FROM
TEST PROCEDURE: _____

L.L (35 MAX)

N.V.

P.L

N.V

P.I (6 MAX)

N.P.

MATERIAL MEMZER CLASS 1 STRUCTURAL FILL MAXIMUM DENSITY 136.0 LBS/FT³
METHOD MODIFIED AASHTO T180 OPTIMUM MOISTURE 7.0%

MOISTURE/DENSITY RELATIONSHIP

