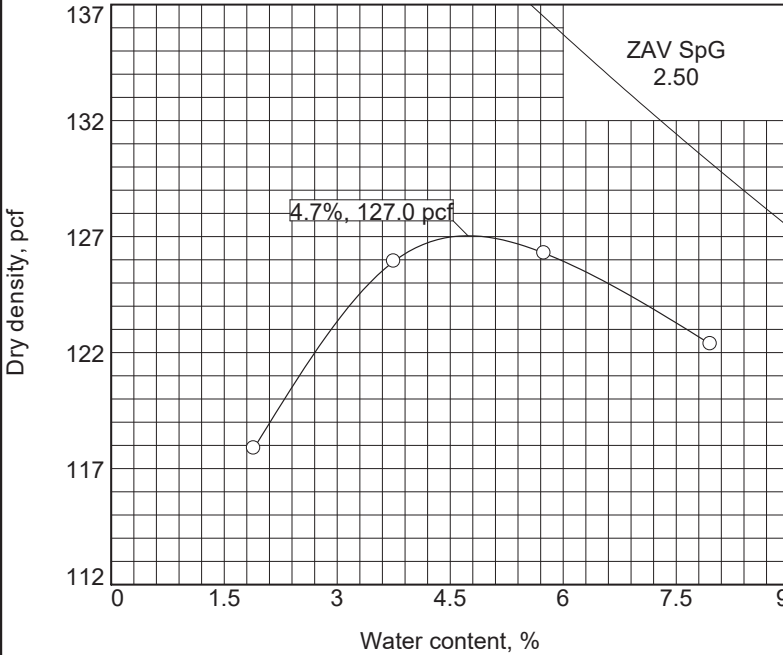


These test results apply only to the samples which were tested. the testing report shall not be reproduced, except in full, without the written approval of K & A, Inc

COMPACTION TEST REPORT

Curve No. 1560



Preparation Method _____	
Rammer: Wt. <u>10 lb.</u>	Drop <u>18 in.</u>
Type <u>Manual</u>	
Layers: No. <u>five</u>	Blows per <u>56</u>
Mold Size <u>0.075 cu. ft.</u>	
Test Performed on Material	
Passing <u>3/4 in.</u> Sieve	
%>3/4 in. <u>0</u>	%<No.200 <u>21</u>
Atterberg (D 4318): LL <u>NV</u>	PI <u>NP</u>
NM (D 2216) _____	Sp.G. (D 854) <u>2.5</u>
USCS (D 2487) <u>SM</u>	
AASHTO (M 145) <u>A-1-b</u>	
Date: Sampled <u>7-30-2021</u>	
Received <u>7-30-2021</u>	
Tested <u>8-5-2021</u>	
Tested By <u>KP</u>	

COMPACTION TESTING DATA AASHTO T 180-10 Method D Modified

	1	2	3	4	5	6
WM + WS	10590.0	10949.0	11047.0	10998.0		
WM	6504.0	6504.0	6504.0	6504.0		
WW + T #1	643.0	803.9	678.9	665.1		
WD + T #1	634.4	780.0	650.4	627.1		
TARE #1	180.5	143.1	154.6	149.5		
WW + T #2						
WD + T #2						
TARE #2						
MOIST.	1.9	3.8	5.7	8.0		
DRY DENS.	117.9	125.9	126.3	122.4		

SIEVE TEST RESULTS AASHTO T27 AASHTO T11

Opening Size	% Passing	Specs.
1"	100	
3/4"	100	
3/8"	83	
#4	76	
#8	61	
#16	44	
#30	32	
#50	25	
#100	22	
#200	21	

TEST RESULTS

Maximum dry density = 127.0 pcf
Optimum moisture = 4.7 %

Material Description

Recycled Asphalt/ -3/4" Material/ silty sand with gravel

Remarks:

Project No. 21-1-235 **Client:**
Project: Colorado Aggregate Recycling

Checked by: _____ DS

○ **Location:** South Yard **Sample Number:** 1560

Title: Lab Manager

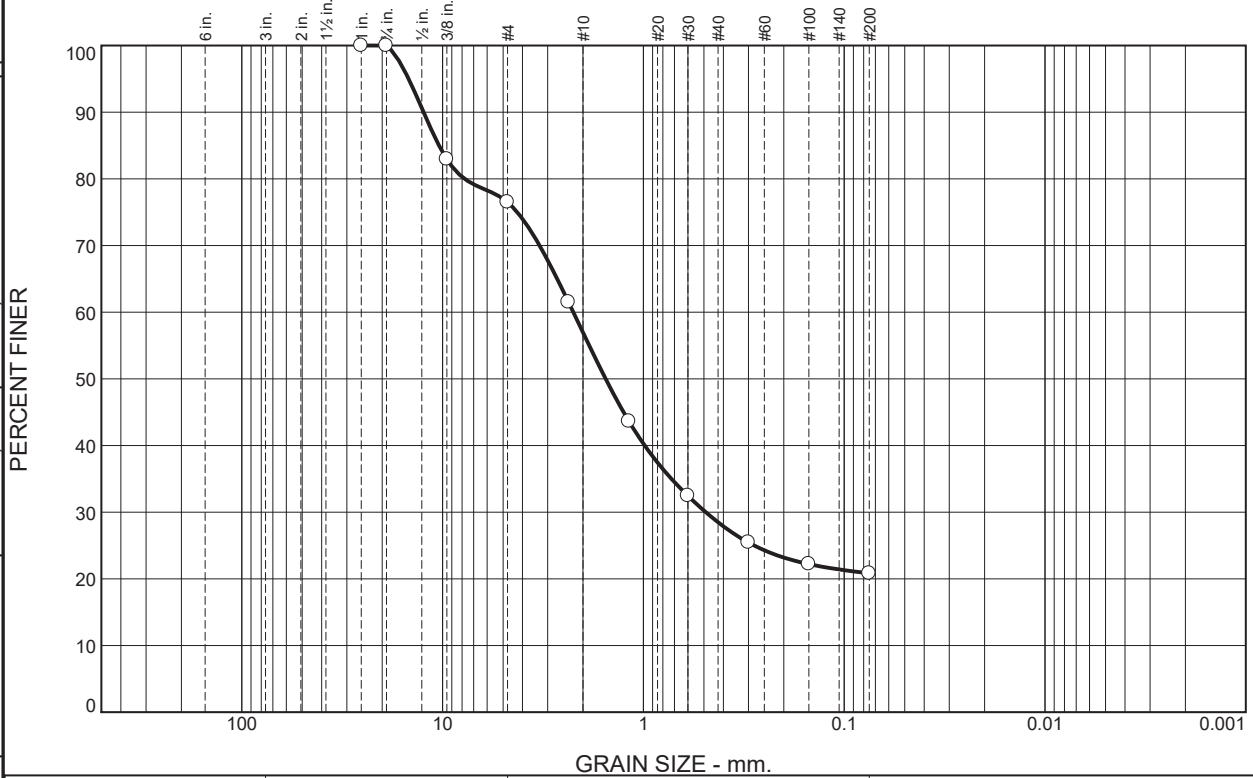
Kumar & Associates, Inc.

Denver, Colorado

Figure

These test results apply only to the samples which were tested. the testing report shall not be reproduced, except in full, without the written approval of K & A, Inc

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	0	24	19	29	7	21	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1"	100		
3/4"	100		
3/8"	83		
#4	76		
#8	61		
#16	44		
#30	32		
#50	25		
#100	22		
#200	21		

Material Description

Recycled Asphalt/ -3/4" Material/ silty sand with gravel

Atterberg Limits
 PL= NP LL= NV PI= NP

Classification
 USCS= SM AASHTO= A-1-b

Remarks

* (no specification provided)

Location: South Yard
Sample Number: 1560

Date: 7-30-2021

Kumar & Associates, Inc.
Denver, Colorado

Client:
Project: Colorado Aggregate Recycling
Project No: 21-1-235

Figure

Tested By: KP **Checked By:** DS



Kumar & Associates, Inc.
Geotechnical and Materials Engineers
and Environmental Scientists



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TABLE 1
SUMMARY OF LABORATORY TEST RESULTS

PROJECT NO.: 21-1-235
PROJECT NAME: Colorado Aggregate Recycling (South Yard)
DATE SAMPLED: 07-30-2021
DATE RECEIVED: 07-30-2021

SAMPLE LOCATION	DATE TESTED	GRADATION		PERCENT PASSING No. 200 SIEVE	ATTERBERG LIMITS		R-VALUE @ 300 PSI	LOS ANGELES ABRASION GRADING B % LOSS	OMC %	MDD pcf	SOIL OR BEDROCK TYPE
		GRAVEL (%)	SAND (%)		LIQUID LIMIT (%)	PLASTICITY INDEX (%)					
South Yard	7-30	55	35	10	NV	NP	82	38.9	10.2	120.9	Recycled Concrete Class 6 ABC Poorly Graded Gravel with Silt and Sand (GP-GM) A-1-a
South Yard	7-30	24	55	21	NV	NP			4.7	127.0	Recycled Asphalt 3/4" Material Silty Sand with Gravel (SM) A-1-b



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An Employee Owned Company

Office Locations: Denver (HQ), Parker, Colorado Springs, Fort Collins, Glenwood Springs, and Summit County, Colorado

August 20, 2021

Matt Bustamante
Colorado Aggregate Recycling
9615 East County Line Road #303
Centennial, Colorado 80112

Subject: Laboratory Test Results, Recycled Concrete and Recycled Asphalt Samples,
South Yard

Project No. 21-1-235

Dear Mr. Bustamante:

Attached are the results of testing performed on two lab samples submitted to our laboratory of recycled concrete and recycled asphalt (Kumar Lab Sample Nos. 1559 and 1560, respectively) obtained from the South Yard location. Testing was performed to determine soil classification parameters, including Atterberg Limits and gradation, moisture-density relationship (modified Proctor), R-Value (Hveem stabilometer) and L.A. Abrasion. The results of the tests are summarized in the attachments.

Based on the test results, the submitted sample of recycled concrete conforms to the gradation requirements for Class 6 Aggregate Base Course presented on Table 703-2 in the Colorado Department of Transportation's (CDOT) 2021 *Standard Specifications for Road and Bridge Construction*.

If you have questions or need further information, please call.

Sincerely,

KUMAR & ASSOCIATES, INC.

Ryan R. Kumar, P.E.



RRK:ms
Attachments
cc: file