



Oklahoma Department of Transportation Mix Design Report

Asphalt Concrete, Type S3 (PG 64-22 OK) Mat'l. Code: asco009
 (Material Full Name and Material Code)
 Overland Corp P/S # m00433
 (Producer/Supplier Name and Producer/Supplier Code)
 Overland Corp (Portable) - 400TPH PLANT ID # m00433-03
 (Plant Name and Plant ID)

Binder - Recycled ID: B2
 (Design Type and Design Type ID)
 S3pv0261500800
 (Mix ID)

Aggregate	Producer/Supplier	% USED
#67 Rock	Dolese Co (Coleman, OK) P/S # m002710302	24
5/8" Chips	Dolese Co (Coleman, OK) P/S # m002710302	20
Scrns.	Dolese Co (Coleman, OK) P/S # m002710302	10
C-33 Scrns.	Martin-Marietta (Mill Creek, OK) P/S # m002303502	10
Sand	Alan Ritchey Materials Co (ARMCO) (Yuba, OK) P/S # m006120707	11
Fine R.A.P.	Contractor / Project Site P/S # Contractor	25

Asphalt Cement: Asphaltic Cement Type PG 64-22 OK, acem003, Valero (Ardmore, OK), m00352
 (Material Full Name, Material Code, Producer/Supplier Name, Producer/Supplier Code)

Sieve Size	#67 Rock	5/8" Chips	Scrns.	C-33 Scrns.	Sand	Fine R.A.P.	Comb. Agg.	% Tol. (±)			
								JMF	Min.	Max.	% Tol.
1 in (25 mm)	100	100	100	100	100	100	100	100	100	100	0
3/4 in (19 mm)	97	100	100	100	100	99	99	92	100	100	7
1/2 in (12.5 mm)	58	96	100	100	100	96	88	81	95	95	7
3/8 in (9.5 mm)	35	66	100	100	100	92	76	69	83	83	7
#4 (4.75 mm)	3	9	90	100	98	72	50	43	57	57	7
#8 (2.36 mm)	1	3	57	84	98	55	39	34	44	44	5
#16 (1.18 mm)	1	2	38	53	97	40	30	26	34	34	4
#30 (.600 mm)	1	2	27	28	92	30	24	20	28	28	4
#50 (.300 mm)	1	2	19	11	51	22	15	11	19	19	4
#100 (.150 mm)	1	2	14	4	4	15	7	4	10	10	3
#200 (.075 mm)	1.0	1.4	10.7	2.0	0.7	10.1	4.4	4.4	2.4	6.4	2
AC Content %						4.9	4.4	4.4	4.0	4.8	0.4

Requires Form 93-E0
signed by the Department
for production use.
-Oklahoma D.O.T. Materials-

Mix temperature @ discharge from mixer: 305 (152) °F (°C) Required ± 20 °F (± 10 °C)
 Optimum roadway compaction temperature: 290 (143)
 Laboratory mixing temperature: 325 (163)
 Laboratory compaction temperature: 300 (149)

Tests on Asphalt Cement	Found
Specific Gravity @ 77 ° F	1.0100

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Tests on Compressed Mixtures (@ Design AC)			
	# Gyr.	% Density of Gmm	% Density Required
Nini	6	89.7	85.5 - 91.5
Ndes	50		96.0

Tests on Aggregates	Required	Units
Durability Index	74	40 min. %
F.A.A. %U	N/A	%
Flat and Elongated	0	10 max. %
Fractured Faces	100/100	85/80 min. %
Insoluble Residue	N/A	%
LA Abrasion	32	40 max. %
Micro-Deval	7.8	N/A
Permeability	8.4	12.5 max. 10 ⁻⁵ cm/s
Sand Equivalent	92	40 min. %
IOC	0.28	%
Gse	2.728	
Gsb	2.696	
Specimen Weight	4955	g

Tests on Compressed Mixtures							
%AC	Gmb	Gmm	% Density		% VMA	% VMA Required	% VFA
			of Gmm	% Density Required			
4.3	2.433	2.542	95.7	Design / Field	13.6	Design / Field	68.4
4.8	2.452	2.522	97.2	96.0 / 94.5 - 97.4	13.4	13.5 / 13.0	79.1
5.3	2.471	2.502	98.8		13.2		90.9

Dust Prop.
 1.1 Dust Prop. Req.
 1.0 0.6 - 1.6
 0.9

ITS (PSI) 154.1 N/A min.
TSR 0.94 0.80 / 0.75 min. (Design / Field)
 Compacted Wt. (lbs/sy/1" thick) = 111.7 @ 4.4 % Asphalt Cement
 3.2 % New Asphalt Cement

Hamburg Rut Test Depth (mm) 1.67 12.50 max. @ 10,000 cycles

MEETS SPECIFICATION REQUIREMENTS PER SPECIAL PROVISION 708-26(a-f) 09

Comments: _____

Last Modified By: Schratwieser, Edward P. eschrato
 (User Name and User ID)

Date: 5/27/2015
 (mm/dd/yyyy)