



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)
 J.O.B. Const Co P/S # m00562
 (Producer/Supplier Name and Producer/Supplier Code)
 J.O.B. Const Co (Portable - Sallisaw) - 400TPH PLANT ID # m00562-04
 (Plant Name and Plant ID)

Insoluble - Recycled ID: I2
 (Design Type and Design Type ID)
 WS3qc0101295801
 (Mix ID)

Aggregate	Producer/Supplier	% USED
3/4" Chips	Arkholia Sand & Gravel (Spiro, OK) P/S # m002484003	30
1/2" Chips	Arkholia Sand & Gravel (Spiro, OK) P/S # m002484003	10
Scrns.	Arkholia Sand & Gravel (Spiro, OK) P/S # m002484003	25
Sand (Unlisted Source)	Hoffman Sallisaw, OK	10
Fine R.A.P.	Contractor / Project Site P/S # Contractor	25
Warm Mix Asphalt (WMA) Technology: TEREX (Foaming Process) qual028 Terex Roadbuilding m00801 (Product Name, Material Code, Producer/Supplier Name, Producer/Supplier Code)		
Asphalt Cement: Asphaltic Cement Type PG 64-22 OK, acem003, HollyFrontier (Catoosa, OK), m01028 (Material Full Name, Material Code, Producer/Supplier Name, Producer/Supplier Code)		

Sieve Size	Producer/Supplier:						Comb. Agg.	Tol. (%)			
	3/4" Chips	1/2" Chips	Scrns.	Sand (Unlisted Source)	Fine R.A.P.			JMF	Min.	Max.	(±)
1 in (25 mm)	100	100	100	100	100		100	100	100	0	
3/4 in (19 mm)	100	100	100	100	100		100	100	93	100	7
1/2 in (12.5 mm)	41	100	100	100	100		82	90	83	97	7
3/8 in (9.5 mm)	11	89	100	99	96		71	82	75	89	7
#4 (4.75 mm)	3	23	89	88	80		54	50	43	57	7
#8 (2.36 mm)	3	5	59	75	60		39	33	28	38	5
#16 (1.18 mm)	2	3	44	63	49		30	26	22	30	4
#30 (.600 mm)	1	3	36	49	38		24	20	16	24	4
#50 (.300 mm)	1	2	32	32	30		19	14	10	18	4
#100 (.150 mm)	1	1	26	9	17		12	9	6	12	3
#200 (.075 mm)	0.5	1.2	17.0	2.2	8.5		6.9	5.6	3.6	7.6	2
AC Content %					5.3		4.9	5.3	4.9	5.7	0.4

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

Warm Mix Asphalt (WMA) Additive % 2.0

Mix temperature @ discharge from mixer: 275 (135) ± 20 °F (± 10 °C) **Required**
 Optimum roadway compaction temperature: 260 (127)
 Laboratory mixing temperature: 325 (163)
 Laboratory compaction temperature: 300 (149)

Tests on Aggregates	Required	Units
Durability Index	70	40 min. %
F.A.A. %U	N/A	%
Flat and Elongated	10	max. %
Fractured Faces	100/100	85/80 min. %
Insoluble Residue	77	30 min. %
LA Abrasion	28.2	40 max. %
Micro-Deval	13.4	N/A %
Permeability	6.7	12.5 max. 10 ⁻⁵ cm/s
Sand Equivalent	51	40 min. %
Pba	1.22	
IOC	0.52	%
Gse	2.580	
Gsb	2.502	
Specimen Weight	4650	g

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	89.5	85.5 - 91.5
Ndes	50		96.0

Tests on Compressed Mixtures							
%AC	Gmb	Gmm	% Density of Gmm	% Density Required	% VMA	% VMA Required	% VFA
4.4	2.238	2.415	92.7	Design / Field	14.5	Design / Field	49.7
4.9	2.301	2.397	96.0	96.0 / 94.5 - 97.4	12.5	13.5 / 13.0	68.0
5.4	2.304	2.380	96.8		12.9		75.2

Dust Prop.
 1.8 **Dust Prop. Req.** 0.6 - 1.6
 1.6
 1.4

ITS (PSI) 227.6 N/A min.
TSR 0.90 0.80 / 0.75 min. (Design / Field)
Compacted Wt. (lbs/sy/1" thick) = 104.9 @ 4.9 % Asphalt Cement
 3.6 % New Asphalt Cement

x 1st JMF Revision

Hamburg Rut Test Depth (mm) 1.23 12.50 max. @ 10,000 cycles

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

Comments: _____

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

Date: 12/2/2014
 (mm/dd/yyyy)