

ARKANSAS DEPARTMENT OF TRANSPORTATION



**SUBSURFACE INVESTIGATION**

STATE JOB NO. 080495

FEDERAL AID PROJECT NO. STPR-HSIP-0075(35)

HWY. 10 – HWY. 7 (SAFETY IMPVTS.) (SEL. SECS.) (S)

STATE HIGHWAY 27 SECTION 10

IN YELL COUNTY

The information contained herein was obtained by the Department for design and estimating purposes only. It is being furnished with the express understanding that said information does not constitute a part of the Proposal or Contract and represents only the best knowledge of the Department as to the location, character and depth of the materials encountered. The information is only included and made available so that bidders may have access to subsurface information obtained by the Department and is not intended to be a substitute for personal investigation, interpretation and judgment of the bidder. The bidder should be cognizant of the possibility that conditions affecting the cost and/or quantities of work to be performed may differ from those indicated herein.



ARKANSAS DEPARTMENT OF TRANSPORTATION

ArDOT.gov | IDriveArkansas.com | Scott E. Bennett, P.E., Director

MATERIALS DIVISION

11301 West Baseline Road | P.O. Box 2261 | Little Rock, AR 72203-2261 | Phone: 501.569.2185 | Fax: 501.569.2368

August 10, 2018

TO: Mr. Trinity Smith, Engineer of Roadway Design

SUBJECT: Job No. 080495
Hwy. 10 – Hwy. 7 (Safety Impvts.) (Sel. Secs.) (S)
Route 27 Section 10
Yell County

Transmitted herewith is the requested Soil Survey, strength data and Resilient Modulus test results for the above referenced job. The project consists of widening approximately 2.4 miles of Highway 27 and making safety improvements at selected sections. Samples were taken in the existing travel lanes and the ditch line. The shoulders were not paved within the project limits.

Based on laboratory results of samples obtained, the subgrade soils consist of moderate to highly plastic sandy clay with varying amounts of shale fragments. Cross sections are not currently available, but it is assumed the construction grade line will closely match that of the existing roadway. The subgrade soils are expected to provide a stable working platform with conventional processing if the weather is favorable during construction. Rock was encountered at stations 546+00 5 feet right of centerline at a depth of 2.5 feet, and at 554+00 5 feet left of centerline at a depth of 4.5 feet. The soft unstable organic material in the ditch line should be undercut prior to embankment construction, anticipated to be no more than two feet. There were no slide areas observed within the project limits.

Earthwork recommendations will be made upon request when plans are further developed and cross sections are available.

Listed below is the additional information requested for use in developing the plans:

- 1. The Qualified Products List (QPL) indicates that Aggregate Base Course (Class CL-7) is available from commercial producers located near Russellville.

- 2. Asphalt Concrete Hot Mix

Table with 3 columns: Type, Asphalt Cement %, Mineral Aggregate %. Rows include Surface Course, Binder Course, and Base Course.

Handwritten signature of Michael C. Benson, Materials Engineer

MCB:pt:bjj
Attachment

cc: State Constr. Eng. – Master File Copy
District 8 Engineer
System Information and Research Div.
G. C. File

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS  
MATERIALS DIVISION  
MICHAEL BENSON, MATERIALS ENGINEER  
\*\*\* SOIL SURVEY STRENGTH TEST REPORT \*\*\*

DATE = 07/24/2018

JOB NUMBER = 080495

SEQUENCE NO. - 1

MATERIAL CODE - SSRV

SPEC. YEAR - 2014

SUPPLIER ID. - 1

COUNTY/STATE - 75

DISTRICT NO. - 08

JOB NAME - HWY. 10 - HWY. 7 (SAFETY IMPVTS.) (SEL. SECS.) (S)

\*\*\*\*\*

\* STATION LIMITS R-VALUE AT 240 psi \*

\*\*\*\*\*

BEGIN JOB - END JOB LESS THAN 5

RESILIENT MODULUS

STA. 530 + 00 7175

STA. 594 + 00 5586

REMARKS -

AASHTO TESTS : T190

**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT  
MATERIALS DIVISION**

**AASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS  
RECOMPACTED SAMPLES**

<b>Job No.</b>	080495	<b>Material Code</b>	SSRVPS
<b>Date Sampled:</b>	4/2/18	<b>Station No.:</b>	530+00
<b>Date Tested:</b>	June 21, 2018	<b>Location:</b>	21'RT
<b>Name of Project:</b>	HWY. 10 - HWY. 7 (SAFETY IMPVTS.)(SEL.)(S)		
<b>County:</b>	<b>Code:</b> 1	<b>Name:</b>	ARKANSAS
<b>Sampled By:</b>	THORNTON/FRAZIER	<b>Depth:</b>	0-5
<b>Lab No.:</b>	20180837	<b>AASHTO Class:</b>	A-6 (12)
<b>Sample ID:</b>	RV223	<b>Material Type (1 or 2):</b>	2
<b>LATITUDE:</b>		<b>LONGITUDE:</b>	

**1. Testing Information:**

Preconditioning - Permanent Strain > 5% (Y=Yes or N= No)	N
Testing - Permanent Strain > 5% (Y=Yes or N=No)	N
Number of Load Sequences Completed (0-15)	15

**2. Specimen Information:**

Specimen Diameter (in):	
Top	3.94
Middle	3.94
Bottom	3.94
Average	3.94
Membrane Thickness (in):	0.01
Height of Specimen, Cap and Base (in):	8.02
Height of Cap and Base (in):	0.00
Initial Length, Lo (in):	8.02
Initial Area, Ao (sq. in):	12.12
Initial Volume, AoLo (cu. in):	97.19

**3. Soil Specimen Weight:**

Weight of Wet Soil Used (g):	3080.70
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**4. Soil Properties:**

Optimum Moisture Content (%):	18.1
Maximum Dry Density (pcf):	105
95% of MDD (pcf):	99.8
In-Situ Moisture Content (%):	N/A

**5. Specimen Properties:**

Wet Weight (g):	3080.70
Compaction Moisture content (%):	18.7
Compaction Wet Density (pcf):	120.78
Compaction Dry Density (pcf):	101.75
Moisture Content After Mr Test (%):	18.4

**6. Quick Shear Test (Y=Yes, N=No, N/A=Not Applicable):**

#VALUE!

**7. Resilient Modulus, Mr:**

11050(Sc)<sup>-0.26942</sup>(S3)<sup>0.22530</sup>

**8. Comments**

\_\_\_\_\_

\_\_\_\_\_

**9. Tested By:**

GW

**Date:** June 21, 2018

**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT  
MATERIALS DIVISION**

**AAASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS  
RECOMPACTED SAMPLES**

Job No. 080495 Material Code SSRVPS  
 Date Sampled: 4/2/18 Station No.: 530+00  
 Date Tested: June 21, 2018 Location: 21'RT  
 Name of Project: HWY. 10 - HWY. 7 (SAFETY IMPVTS.)(SEL.)(S)  
 County: Code: 1 Name: ARKANSAS  
 Sampled By: THORNTON/FRAZIER Depth: 0-5  
 Lab No.: 20180837 AASHTO Class: A-6 (12)  
 Sample ID: RV223 Material Type (1 or 2): 2  
 LATITUDE: LONGITUDE:

PARAMETER	Chamber Confining Pressure	Nominal Maximum Axial Stress	Actual Applied Max. Axial Load	Actual Applied Cyclic Load	Actual Applied Contact Load	Actual Applied Max. Axial Stress	Actual Applied Cyclic Stress	Actual Applied Contact Stress	Average Recov Def. LVDT 1 and 2	Resilient Strain	Resilient Modulus
DESIGNATION	S <sub>3</sub>	S <sub>cyclic</sub>	P <sub>max</sub>	P <sub>cyclic</sub>	P <sub>contact</sub>	S <sub>max</sub>	S <sub>cyclic</sub>	S <sub>contact</sub>	H <sub>avg</sub>	ε <sub>r</sub>	M <sub>r</sub>
UNIT	psi	psi	lbs	lbs	lbs	psi	psi	psi	in	in/in	psi
Sequence 1	6.0	2.0	25.2	22.4	2.8	2.1	1.8	0.2	0.00107	0.00013	13,886
Sequence 2	6.0	4.0	47.2	44.3	2.8	3.9	3.7	0.2	0.00229	0.00029	12,830
Sequence 3	6.0	6.0	69.6	66.0	3.6	5.7	5.4	0.3	0.00386	0.00048	11,330
Sequence 4	6.0	8.0	92.1	86.0	6.1	7.6	7.1	0.5	0.00601	0.00075	9,465
Sequence 5	6.0	10.0	113.8	105.4	8.4	9.4	8.7	0.7	0.00846	0.00105	8,248
Sequence 6	4.0	2.0	25.0	22.2	2.9	2.1	1.8	0.2	0.00120	0.00015	12,191
Sequence 7	4.0	4.0	46.9	44.0	2.9	3.9	3.6	0.2	0.00261	0.00033	11,177
Sequence 8	4.0	6.0	68.3	65.4	2.8	5.6	5.4	0.2	0.00429	0.00054	10,089
Sequence 9	4.0	8.0	90.5	85.4	5.1	7.5	7.0	0.4	0.00639	0.00080	8,840
Sequence 10	4.0	10.0	112.6	105.1	7.6	9.3	8.7	0.6	0.00882	0.00110	7,884
Sequence 11	2.0	2.0	25.0	22.2	2.8	2.1	1.8	0.2	0.00146	0.00018	10,050
Sequence 12	2.0	4.0	46.8	44.0	2.8	3.9	3.6	0.2	0.00310	0.00039	9,404
Sequence 13	2.0	6.0	67.8	64.9	2.9	5.6	5.4	0.2	0.00497	0.00062	8,641
Sequence 14	2.0	8.0	89.0	84.8	4.3	7.3	7.0	0.4	0.00714	0.00089	7,859
Sequence 15	2.0	10.0	110.9	104.3	6.7	9.2	8.6	0.6	0.00962	0.00120	7,175

TESTED BY \_\_\_\_\_ DATE June 21, 2018  
 REVIEWED BY \_\_\_\_\_ DATE \_\_\_\_\_

**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT  
MATERIALS DIVISION**

**AASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS  
RECOMPACTED / THINWALL TUBE SAMPLES**

<b>Job No.</b>	080495	<b>Material Code</b>	SSRVPS
<b>Date Sampled:</b>	4/2/18	<b>Station No.:</b>	530+00
<b>Date Tested:</b>	June 21, 2018	<b>Location:</b>	21'RT
<b>Name of Project:</b>	HWY. 10 - HWY. 7 (SAFETY IMPVTS.)(SEL.)(S)		
<b>County:</b>	<b>Code:</b> 1	<b>Name:</b>	ARKANSAS
<b>Sampled By:</b>	THORNTON/FRAZIER	<b>Depth:</b>	0-5
<b>Lab No.:</b>	20180837	<b>AASHTO Class:</b>	A-6 (12)
<b>Sample ID:</b>	RV223	<b>Material Type (1 or 2):</b>	2
<b>LATITUDE:</b>		<b>LONGITUDE:</b>	

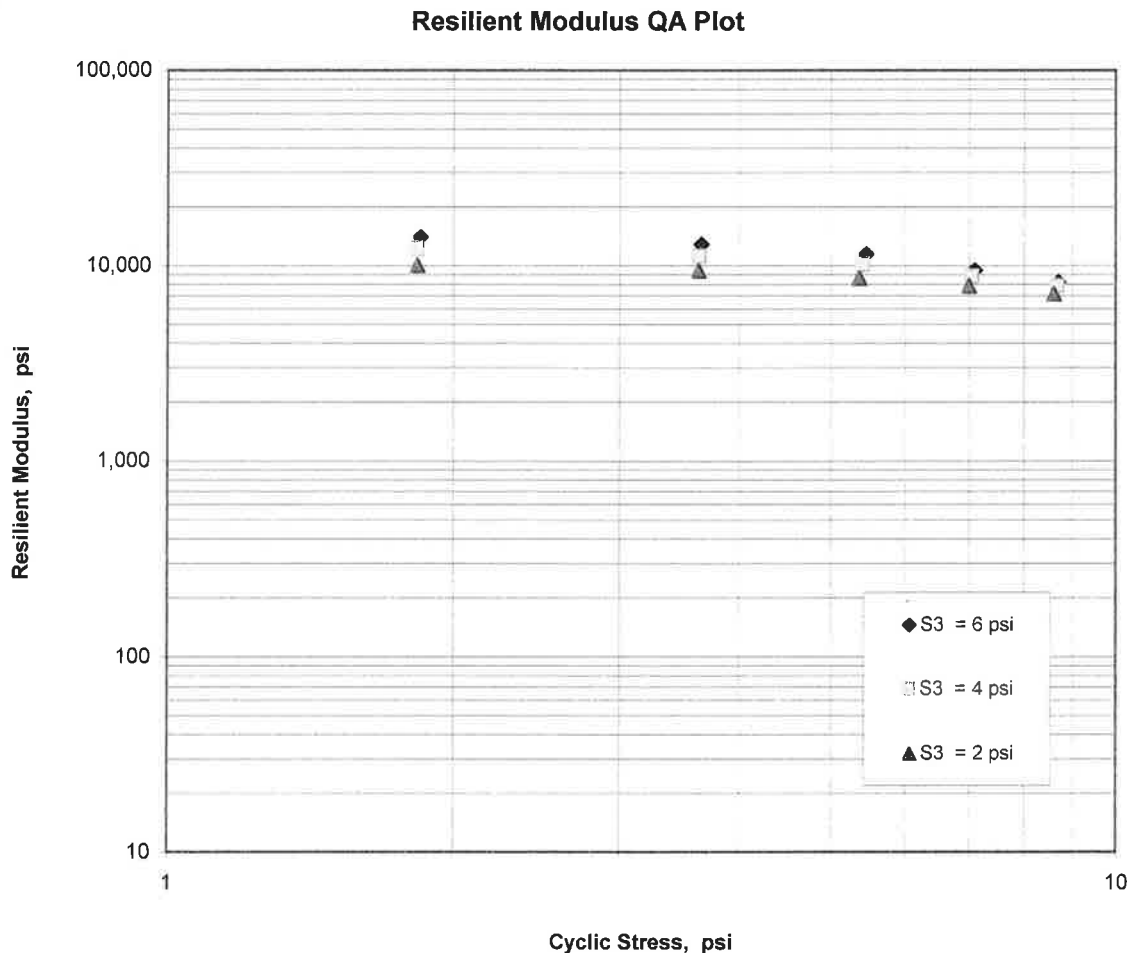
$$M_R = K_1 (S_c)^{K_2} (S_3)^{K_5}$$

$$K_1 = 11,050$$

$$K_2 = -0.26942$$

$$K_5 = 0.22530$$

$$R^2 = 0.90$$



**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT  
MATERIALS DIVISION**

**AASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS  
RECOMPACTED / THINWALL TUBE SAMPLES**

<b>Job No.</b>	080495	<b>Material Code</b>	SSRVPS
<b>Date Sampled:</b>	4/2/18	<b>Station No.:</b>	530+00
<b>Date Tested:</b>	June 21, 2018	<b>Location:</b>	21'RT
<b>Name of Project:</b>	HWY. 10 - HWY. 7 (SAFETY IMPVTS.)(SEL.)(S)		
<b>County:</b>	<b>Code:</b> 1	<b>Name:</b>	ARKANSAS
<b>Sampled By:</b>	THORNTON/FRAZIER	<b>Depth:</b>	0-5
<b>Lab No.:</b>	20180837	<b>AASHTO Class:</b>	A-6 (12)
<b>Sample ID:</b>	RV223	<b>Material Type (1 or 2):</b>	2
<b>LATITUDE:</b>		<b>LONGITUDE:</b>	

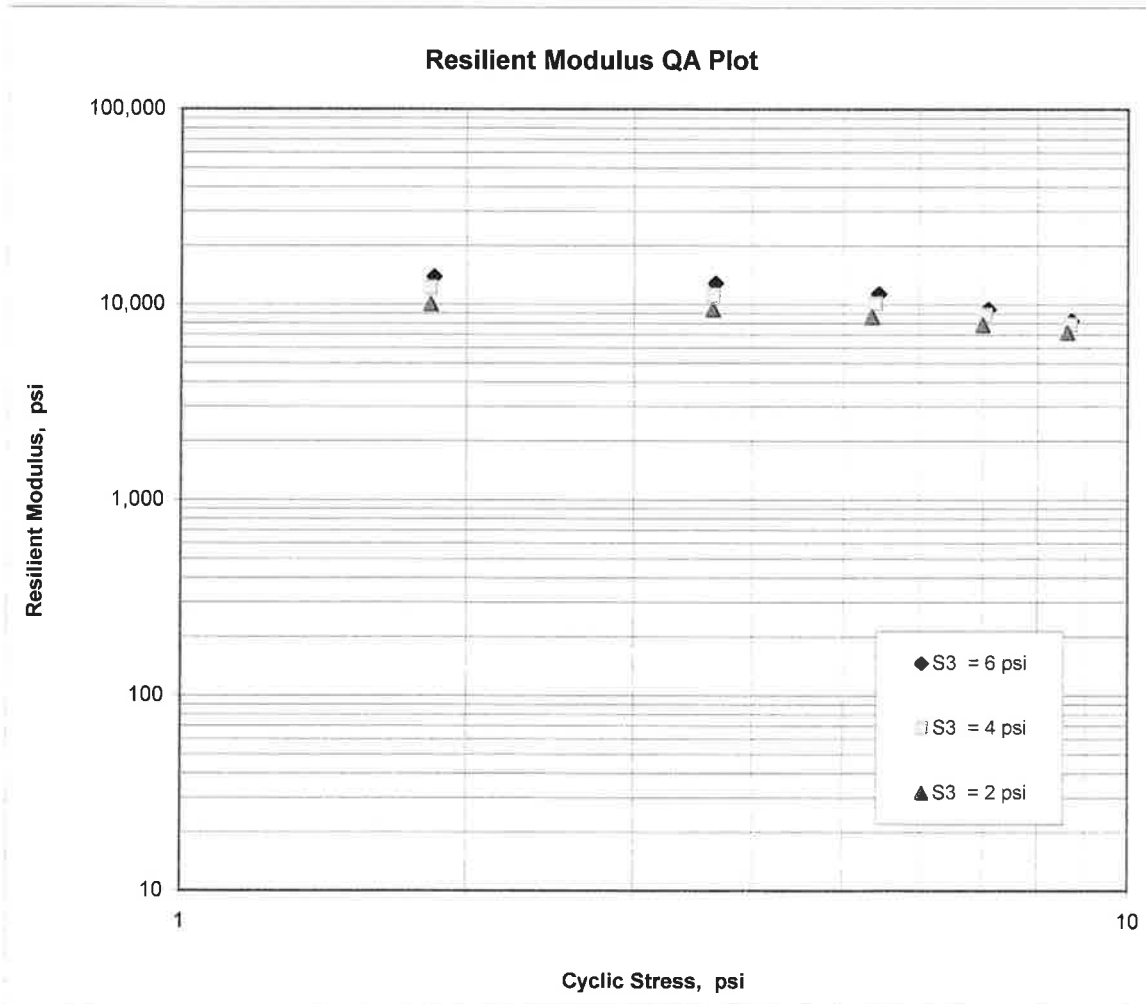
$$M_R = K_1 (S_c)^{K_2} (S_3)^{K_5}$$

$$K_1 = 11,050$$

$$K_2 = -0.26942$$

$$K_5 = 0.22530$$

$$R^2 = 0.90$$



**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT  
MATERIALS DIVISION**

**AASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS  
RECOMPACTED SAMPLES**

<b>Job No.</b>	080495	<b>Material Code</b>	SSRVPS
<b>Date Sampled:</b>	4/2/18	<b>Station No.:</b>	594+00
<b>Date Tested:</b>	June 21, 2018	<b>Location:</b>	18'RT
<b>Name of Project:</b>	HWY. 10 - HWY. 7 (SAFETY IMPVTS.)(SEL.)(S)		
<b>County:</b>	<b>Code:</b> 75	<b>Name:</b> YELL	
<b>Sampled By:</b>	THORNTON/FRAZIER	<b>Depth:</b>	0-5
<b>Lab No.:</b>	20180838	<b>AASHTO Class:</b>	A-7-6 (22)
<b>Sample ID:</b>	RV224	<b>Material Type (1 or 2):</b>	2
<b>LATITUDE:</b>		<b>LONGITUDE:</b>	

**1. Testing Information:**

Preconditioning - Permanent Strain > 5% (Y=Yes or N= No)	N
Testing - Permanent Strain > 5% (Y=Yes or N=No)	N
Number of Load Sequences Completed (0-15)	15

**2. Specimen Information:**

Specimen Diameter (in):	
Top	3.95
Middle	3.96
Bottom	3.96
Average	3.96
Membrane Thickness (in):	0.01
Height of Specimen, Cap and Base (in):	8.02
Height of Cap and Base (in):	0.00
Initial Length, Lo (in):	8.02
Initial Area, Ao (sq. in):	12.22
Initial Volume, AoLo (cu. in):	98.01

**3. Soil Specimen Weight:**

Weight of Wet Soil Used (g):	3037.80
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**4. Soil Properties:**

Optimum Moisture Content (%):	24.2
Maximum Dry Density (pcf):	98.8
95% of MDD (pcf):	93.9
In-Situ Moisture Content (%):	N/A

**5. Specimen Properties:**

Wet Weight (g):	3037.80
Compaction Moisture content (%):	24.6
Compaction Wet Density (pcf):	118.09
Compaction Dry Density (pcf):	94.78
Moisture Content After Mr Test (%):	24.6

**6. Quick Shear Test (Y=Yes, N=No, N/A=Not Applicable):**

#VALUE!

**7. Resilient Modulus, Mr:**

10503(Sc)<sup>-0.34761</sup>(S3)<sup>0.21130</sup>

**8. Comments**

\_\_\_\_\_

\_\_\_\_\_

**9. Tested By:**

GW

**Date:** June 21, 2018



**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT  
MATERIALS DIVISION**

**AASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS  
RECOMPACTED SAMPLES**

**Job No.** 080495      **Material Code** SSRVPS  
**Date Sampled:** 4/2/18      **Station No.:** 594+00  
**Date Tested:** June 21, 2018      **Location:** 18RT  
**Name of Project:** HWY. 10 - HWY. 7 (SAFETY IMPVTS.)(SEL.)(S)  
**County:** Code: 75      **Name:** YELL  
**Sampled By:** THORNTON/FRAZIER      **Depth:** 0-5  
**Lab No.:** 20180838      **AASHTO Class:** A-7-6 (22)  
**Sample ID:** RV224      **Material Type (1 or 2):** 2  
**LATTITUDE:** **LONGITUDE:**

PARAMETER	Chamber Confining Pressure	Nominal Maximum Axial Stress	Actual Applied Max. Axial Load	Actual Applied Cyclic Load	Actual Applied Contact Load	Actual Applied Max. Axial Stress	Actual Applied Cyclic Stress	Actual Applied Contact Stress	Average Recov Def. LVDT 1 and 2	Resilient Strain	Resilient Modulus
DESIGNATION	S <sub>3</sub>	S <sub>cyclic</sub>	P <sub>max</sub>	P <sub>cyclic</sub>	P <sub>contact</sub>	S <sub>max</sub>	S <sub>cyclic</sub>	S <sub>contact</sub>	H <sub>avg</sub>	ε <sub>r</sub>	M <sub>r</sub>
UNIT	psi	psi	lbs	lbs	lbs	psi	psi	psi	in	in/in	psi
Sequence 1	6.0	2.0	25.5	22.8	2.7	2.1	1.9	0.2	0.00125	0.00016	11,910
Sequence 2	6.0	4.0	47.6	44.9	2.7	3.9	3.7	0.2	0.00271	0.00034	10,884
Sequence 3	6.0	6.0	69.7	66.2	3.5	5.7	5.4	0.3	0.00467	0.00058	9,299
Sequence 4	6.0	8.0	91.3	85.2	6.0	7.5	7.0	0.5	0.00745	0.00093	7,506
Sequence 5	6.0	10.0	111.7	103.1	8.5	9.1	8.4	0.7	0.01050	0.00131	6,444
Sequence 6	4.0	2.0	25.4	22.5	2.8	2.1	1.8	0.2	0.00136	0.00017	10,855
Sequence 7	4.0	4.0	47.4	44.5	2.9	3.9	3.6	0.2	0.00302	0.00038	9,679
Sequence 8	4.0	6.0	68.3	65.4	2.9	5.6	5.4	0.2	0.00510	0.00064	8,421
Sequence 9	4.0	8.0	90.0	84.7	5.2	7.4	6.9	0.4	0.00776	0.00097	7,165
Sequence 10	4.0	10.0	111.0	103.3	7.7	9.1	8.5	0.6	0.01103	0.00138	6,146
Sequence 11	2.0	2.0	25.3	22.4	2.8	2.1	1.8	0.2	0.00169	0.00021	8,736
Sequence 12	2.0	4.0	47.2	44.4	2.8	3.9	3.6	0.2	0.00351	0.00044	8,301
Sequence 13	2.0	6.0	67.7	64.9	2.8	5.5	5.3	0.2	0.00582	0.00073	7,315
Sequence 14	2.0	8.0	88.4	84.1	4.3	7.2	6.9	0.4	0.00871	0.00109	6,332
Sequence 15	2.0	10.0	108.8	102.0	6.8	8.9	8.3	0.6	0.01199	0.00149	5,586

TESTED BY \_\_\_\_\_ DATE June 21, 2018  
 REVIEWED BY \_\_\_\_\_ DATE \_\_\_\_\_

**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT  
MATERIALS DIVISION**

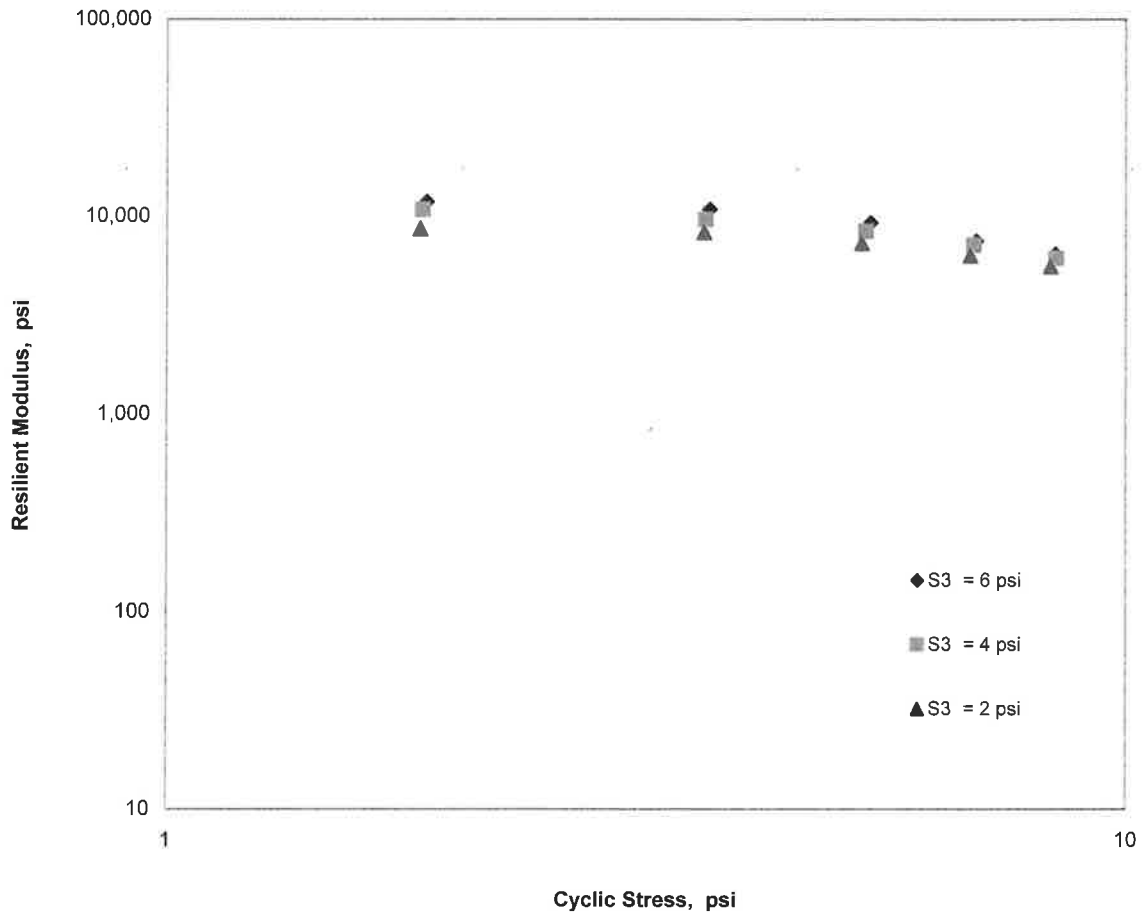
**AASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS  
RECOMPACTED / THINWALL TUBE SAMPLES**

<b>Job No.</b>	080495	<b>Material Code</b>	SSRVPS
<b>Date Sampled:</b>	4/2/18	<b>Station No.:</b>	594+00
<b>Date Tested:</b>	June 21, 2018	<b>Location:</b>	18'RT
<b>Name of Project:</b>	HWY. 10 - HWY. 7 (SAFETY IMPVTS.)(SEL.)(S)		
<b>County:</b>	<b>Code:</b> 75	<b>Name:</b>	YELL
<b>Sampled By:</b>	THORNTON/FRAZIER		<b>Depth:</b> 0-5
<b>Lab No.:</b>	20180838	<b>AASHTO Class:</b>	A-7-6 (22)
<b>Sample ID:</b>	RV224	<b>Material Type (1 or 2):</b>	2
<b>LATITUDE:</b>		<b>LONGITUDE:</b>	

$$M_R = K_1 (S_C)^{K_2} (S_3)^{K_5}$$

$K_1 = \underline{\underline{10,503}}$   
 $K_2 = \underline{\underline{-0.34761}}$   
 $K_5 = \underline{\underline{0.21130}}$   
 $R^2 = \underline{\underline{0.89}}$

**Resilient Modulus QA Plot**



JOB: 080495

Arkansas State Highway Transportation Department

JOB NAME: HWY. 10 - HWY. 7 (SAFETY IMPVTS.)(SEL. SECS.)(S)

Materials Division

COUNTY NO. 75 DATE TESTED 5/17/2018

Michael Benson, Materials Engineer

STA.#	LOC.	DEPTH	COLOR	#4	#10	#40	#80	#200	L.L.	P.I.	SOIL CLASS	LAB #:	%MOISTURE
				S	I	E	V	E					
530+00	21 RT	0-5	BROWN	86	84	82	80	75	36	18	A-6(12)	RV223	
594+00	18 RT	0-5	BROWN	77	72	69	68	65	60	35	A-7-6(22)	RV224	
530+00	05 RT	0-5	BROWN	95	92	88	87	82	42	21	A-7-6(17)	S191	22.2
530+00	21 RT	0-5	BROWN	100				91	37	16	A-6(15)	S192	25.1
538+00	05 LT	0-5	BROWN	90	84	80	74	61	28	10	A-4(4)	S193	17.9
538+00	18 LT	0-5	BROWN	95	89	85	83	78	60	35	A-7-6(29)	S194	22.6
546+00	05 RT	0-2.5Z	BROWN	96	90	86	82	71	59	24	A-7-5(18)	S195	11.9
546+00	21 RT	0-5	BROWN	96	89	81	78	69	40	22	A-6(13)	S196	15
554+00	05 LT	0-4.5Z	BROWN	97	93	88	86	80	41	19	A-7-6(15)	S197	12.6
554+00	18 LT	0-5	BROWN	94	90	84	82	76	37	16	A-6(11)	S198	18.1
562+00	05 RT	0-5	BROWN	97	94	89	85	74	35	17	A-6(11)	S199	19.2
562+00	18 RT	0-5	BROWN	97	94	90	86	74	33	15	A-6(9)	S200	20.3
570+00	05 LT	0-5	BROWN	97	95	92	90	79	32	14	A-6(10)	S201	22.1
570+00	18 LT	0-5	BROWN	95	91	86	83	74	31	15	A-6(9)	S202	22.2
578+00	05 RT	0-5	BR/GR	95	90	85	83	70	27	13	A-6(6)	S203	17.8
578+00	18 RT	0-5	BROWN	92	86	80	77	65	33	15	A-6(7)	S204	19.6
586+00	05 LT	0-5	BROWN					90	43	24	A-7-6(22)	S205	11.9
586+00	18 LT	0-5	BR/GR	100				91	41	20	A-7-6(19)	S206	18.2
594+00	05 RT	0-5	BROWN	92	88	84	83	72	48	26	A-7-6(18)	S207	20.8
594+00	18 RT	0-5	BROWN	94	90	87	80	82	71	41	A-7-5(37)	S208	25.1
602+00	05 LT	0-5	BR/GR	99	97	92	87	82	40	21	A-6(17)	S209	13.7
602+00	18 LT	0-5	BROWN	97	95	89	87	85	39	21	A-6(17)	S210	16.9
610+00	05 RT	0-5	BROWN	97	94	91	90	83	36	18	A-6(14)	S211	27.8
610+00	18 RT	0-5	BR/GR	96	94	90	89	82	33	15	A-6(11)	S212	27.2
618+00	05 LT	0-5	BROWN	96	92	87	80	75	25	8	A-4(4)	S213	20.8
618+00	18 LT	0-5	BROWN	97	93	87	85	75	25	8	A-4(4)	S214	23

comments: W=MULTIPLE LAYERS, X=STRIIPED Z=AUGER REFUSAL

Tuesday, August 07, 2018

STA.#	LOC.	DEPTH	COLOR	#4	#10	#40	#80	#200	L.L.	P.I.	SOIL CLASS	LAB #:	%MOISTURE
				S	I	E	V	E					
626+00	05 RT	0-5	BROWN	100	98	96	90	84	37	19	A-9(15)	S215	18.9
626+00	18 RT	0-5	BROWN	95	93	90	88	82	37	19	A-6(15)	S216	23.8
635+00	05 LT	0-5	BROWN	100	98	94	92	82	26	10	A-4(6)	S217	17
635+00	18 LT	0-5	BROWN	94	88	81	75	65	25	9	A-4(3)	S218	16.5
642+00	05 RT	0-5	BROWN	99	96	91	89	81	24	9	A-4(5)	S219	18.8
642+00	18 RT	0-5	BROWN	95	92	90	88	81	35	15	A-6(11)	S220	24.2
650+00	05 LT	0-5	BR/GR	95	92	87	85	80	31	14	A-6(10)	S221	24.2
650+00	18 LT	0-5	BROWN	98	96	92	88	84	32	15	A-6(11)	S222	24.3

**JOB:** 080495

**Arkansas State Highway Transportation Department**

**DATE TESTED**

**JOB NAME:** HWY. 10 - HWY. 7 (SAFETY IMPVTS.)(SEL. SECS.)(S)

**Materials Division**

5/17/2018

**COUNTY NO.** 75

**Michael Benson, Materials Engineer**

**STA.# LOC.**

**PAVEMENT SOUNDINGS**

530+00	05 RT	ACHMSC 10.0W	ACHMBC 1.0	AGG. BASE CRS CL-7 4.0
530+00	21 RT	ACHMSC	ACHMBC	AGG. BASE CRS CL-7
538+00	05 LT	ACHMSC 8.0W	ACHMBC	AGG. BASE CRS CL-7 5.0
538+00	18 LT	ACHMSC	ACHMBC	AGG. BASE CRS CL-7
546+00	05 RT	ACHMSC 10.0W	ACHMBC 1.0	AGG. BASE CRS CL-7 5.0
546+00	21 RT	ACHMSC	ACHMBC	AGG. BASE CRS CL-7
554+00	05 LT	ACHMSC 8.75W	AGG. BASE CRS CL-7 4.0	
554+00	18 LT	ACHMSC	AGG. BASE CRS CL-7	
562+00	05 RT	ACHMSC 10.0W	AGG. BASE CRS CL-7 5.0	
562+00	18 RT	ACHMSC	AGG. BASE CRS CL-7	
570+00	05 LT	ACHMSC 7.0W	AGG. BASE CRS CL-7 5.5	
570+00	18 LT	ACHMSC	AGG. BASE CRS CL-7	
578+00	05 RT	ACHMSC 7.75W	AGG. BASE CRS CL-7 5.0	
578+00	18 RT	ACHMSC	AGG. BASE CRS CL-7	
586+00	05 LT	ACHMSC 9.0W	AGG. BASE CRS CL-7 4.5	
586+00	18 LT	ACHMSC	AGG. BASE CRS CL-7	
594+00	05 RT	ACHMSC 10.0W	AGG. BASE CRS CL-7 5.0	

**comments:** W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

Tuesday, August 07, 2018

**PAVEMENT SOUNDINGS**

**STA.# LOC.**

594+00	18 RT	ACHMSC	AGG. BASE CRS. CL-7	---	
602+00	05 LT	ACHMSC	ACHMSC	AGG. BASE CRS. CL-7	
		10.0W	---	7.0	
602+00	18 LT	ACHMSC	ACHMSC	AGG. BASE CRS. CL-7	
		---	---		
610+00	05 RT	ACHMSC	ACHMSC	AGG. BASE CRS. CL-7	
		5.5W	3.0X	4.0	
610+00	18 RT	ACHMSC	AGG. BASE CRS. CL-7	---	
		---	---		
618+00	05 LT	ACHMSC	AGG. BASE CRS. CL-7	---	
		7.0W	5.0	---	
618+00	18 LT	ACHMSC	AGG. BASE CRS. CL-7	---	
		---	---		
626+00	05 RT	ACHMSC	SAND ASHALT	ACHMSC	AGG. BASE CRS. CL-7
		8.0W	---	3.0X	3.0
626+00	18 RT	ACHMSC	SAND ASHALT	ACHMSC	AGG. BASE CRS. CL-7
		---	---	---	---
635+00	05 LT	ACHMSC	SAND ASHALT	ACHMSC	AGG. BASE CRS. CL-7
		9.0W	1.0	1.0	4.0
635+00	18 LT	ACHMSC	AGG. BASE CRS. CL-7	---	
		---	---		
642+00	05 RT	ACHMSC	AGG. BASE CRS. CL-7	---	
		10.0W	4.0	---	
642+00	18 RT	ACHMSC	AGG. BASE CRS. CL-7	---	
		---	---		
650+00	05 LT	ACHMSC	AGG. BASE CRS. CL-7	---	
		11.0W	4.0	---	
650+00	18 LT	ACHMSC	AGG. BASE CRS. CL-7	---	
		---	---		

**comments:** W=MULTIPLE LAYERS, X=STIPPED Z=AUGAR REFUSAL

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS

MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

\*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\*

DATE	- 05/17/18	SEQUENCE NO.	- 1
JOB NUMBER	- 080495	MATERIAL CODE	- SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	- 2014
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	- 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	- 75
SUPPLIER NAME	- STATE	DISTRICT NO.	- 08
NAME OF PROJECT	- HWY. 10 - HWY. 7 (SAFETY IMPVTS.) (SEL. SECS.) (S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- YELL COUNTY, ARKANSAS	DATE SAMPLED	- 04/02/18
SAMPLED BY	- THORNTON/FRAZIER	DATE RECEIVED	- 04/04/18
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 05/17/18
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	-	20180805	-	20180806	-	20180807
SAMPLE ID	-	S191	-	S192	-	S193
TEST STATUS	-	INFORMATION ONLY	-	INFORMATION ONLY	-	INFORMATION ONLY
STATION	-	530+00	-	530+00	-	538+00
LOCATION	-	05 RT	-	21 RT	-	05 LT
DEPTH IN FEET	-	0-5	-	0-5	-	0-5
MAT'L COLOR	-	BROWN	-	BROWN	-	BROWN
MAT'L TYPE	-		-		-	
LATITUDE DEG-MIN-SEC	-	35 11 43.90	-	35 11 43.80	-	35 11 48.10
LONGITUDE DEG-MIN-SEC	-	93 13 3.80	-	93 13 3.80	-	93 12 55.90
% PASSING	2	IN. -	-		-	
	1 1/2	IN. -	-		-	
	3/4	IN. -	100		-	100
	3/8	IN. -	99		-	93
	NO. 4	-	95	100	-	90
	NO. 10	-	92		-	84
	NO. 40	-	88		-	80
	NO. 80	-	87		-	74
	NO. 200	-	82	91	-	61
LIQUID LIMIT	-	42	-	37	-	28
PLASTICITY INDEX	-	21	-	16	-	10
AASHTO SOIL	-	A-7-6(17)	-	A-6(15)	-	A-4(4)
UNIFIED SOIL	-		-		-	
% MOISTURE CONTENT	-	22.2	-	25.1	-	17.9
ACHMSC	(IN) -	10.0W	-	---	-	8.0W
ACHMBC	(IN) -	1.0	-	---	-	---
AGG. BASE CRS CL-7	(IN) -	4.0	-	---	-	5.0
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL  
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AASHTO TESTS : T24 T88 T89 T90 T265

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS  
 MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

\*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\*

DATE	- 07/24/18	SEQUENCE NO.	- 2
JOB NUMBER	- 080495	MATERIAL CODE	- SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	- 2014
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	- 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	- 75
SUPPLIER NAME	- STATE	DISTRICT NO.	- 08
NAME OF PROJECT	- HWY. 10 - HWY. 7 (SAFETY IMPVTS.)(SEL. SECS.)(S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- YELL COUNTY, ARKANSAS	DATE SAMPLED	- 04/02/18
SAMPLED BY	- THORNTON/FRAZIER	DATE RECEIVED	- 04/04/18
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 05/17/18
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	- 20180808	- 20180809	- 20180810
SAMPLE ID	- S194	- S195	- S196
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 538+00	- 546+00	- 546+00
LOCATION	- 18 LT	- 05 RT	- 21 RT
DEPTH IN FEET	- 0-5	- 0-2.5Z	- 0-5
MAT'L COLOR	- BROWN	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 35 11 48.20	- 35 11 52.10	- 35 11 52.00
LONGITUDE DEG-MIN-SEC	- 93 12 56.00	- 93 12 47.80	- 93 12 47.80
% PASSING	2 IN. -	-	-
	1 1/2 IN. -	-	-
	3/4 IN. - 100	-	-
	3/8 IN. - 99	- 100	- 100
	NO. 4 - 95	- 96	- 96
	NO. 10 - 89	- 90	- 89
	NO. 40 - 85	- 86	- 81
	NO. 80 - 83	- 82	- 78
	NO. 200 - 78	- 71	- 69
LIQUID LIMIT	- 60	- 59	- 40
PLASTICITY INDEX	- 35	- 24	- 22
AASHTO SOIL	- A-7-6(29)	- A-7-5(18)	- A-6(13)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 22.6	- 11.9	- 15.0
ACHMSC (IN)	- ---	- 10.0W	- ---
ACHMBC (IN)	- ---	- 1.0	- ---
AGG.BASE CRS CL-7 (IN)	- ---	- 5.0	- ---
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL  
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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS  
 MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

\*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\*

DATE	- 07/24/18	SEQUENCE NO.	- 3
JOB NUMBER	- 080495	MATERIAL CODE	- SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	- 2014
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	- 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	- 75
SUPPLIER NAME	- STATE	DISTRICT NO.	- 08
NAME OF PROJECT - HWY. 10 - HWY. 7 (SAFETY IMPVTS.) (SEL. SECS.) (S)			
PROJECT ENGINEER - NOT APPLICABLE			
PIT/QUARRY	- ARKANSAS		
LOCATION	- YELL COUNTY, ARKANSAS	DATE SAMPLED	- 04/02/18
SAMPLED BY	- THORNTON/FRAZIER	DATE RECEIVED	- 04/04/18
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 05/17/18
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS			

LAB NUMBER	-	20180811	-	20180812	-	20180813
SAMPLE ID	-	S197	-	S198	-	S199
TEST STATUS	-	INFORMATION ONLY	-	INFORMATION ONLY	-	INFORMATION ONLY
STATION	-	554+00	-	554+00	-	562+00
LOCATION	-	05 LT	-	18 LT	-	05 RT
DEPTH IN FEET	-	0-4.5Z	-	0-5	-	0-5
MAT'L COLOR	-	BROWN	-	BROWN	-	BROWN
MAT'L TYPE	-		-		-	
LATITUDE DEG-MIN-SEC	-	35 11 57.50	-	35 11 57.50	-	35 12 4.30
LONGITUDE DEG-MIN-SEC	-	93 12 40.90	-	93 12 41.00	-	93 12 36.30
% PASSING	2 IN.	-	-	-	-	-
	1 1/2 IN.	-	-	-	-	-
	3/4 IN.	-	-	100	-	-
	3/8 IN.	-	100	98	-	100
	NO. 4	-	97	94	-	97
	NO. 10	-	93	90	-	94
	NO. 40	-	88	84	-	89
	NO. 80	-	86	82	-	85
	NO. 200	-	80	76	-	74
LIQUID LIMIT	-	41	-	37	-	35
PLASTICITY INDEX	-	19	-	16	-	17
AASHTO SOIL	-	A-7-6(15)	-	A-6(11)	-	A-6(11)
UNIFIED SOIL	-		-		-	
% MOISTURE CONTENT	-	12.6	-	18.1	-	19.2
ACHMSC	(IN)	-	8.75W	-	---	-
AGG.BASE CRS CL-7	(IN)	-	4.0	-	---	-

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL  
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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS  
MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

\*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\*

DATE	- 07/24/18	SEQUENCE NO.	- 4
JOB NUMBER	- 080495	MATERIAL CODE	- SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	- 2014
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	- 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	- 75
SUPPLIER NAME	- STATE	DISTRICT NO.	- 08
NAME OF PROJECT	- HWY. 10 - HWY. 7 (SAFETY IMPVTS.) (SEL. SECS.) (S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS	DATE SAMPLED	- 04/02/18
LOCATION	- YELL COUNTY, ARKANSAS	DATE RECEIVED	- 04/04/18
SAMPLED BY	- THORNTON/FRAZIER	DATE TESTED	- 05/17/18
SAMPLE FROM	- TEST HOLE		
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	- 20180814	- 20180815	- 20180816
SAMPLE ID	- S200	- S201	- S202
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 562+00	- 570+00	- 570+00
LOCATION	- 18 RT	- 05 LT	- 18 LT
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BROWN	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 35 12 4.30	- 35 12 10.80	- 35 12 10.90
LONGITUDE DEG-MIN-SEC	- 93 12 36.20	- 93 12 30.30	- 93 12 30.40
% PASSING			
2 IN.	-	-	-
1 1/2 IN.	-	-	-
3/4 IN.	- 100	-	- 100
3/8 IN.	- 99	- 100	- 98
NO. 4	- 97	- 97	- 95
NO. 10	- 94	- 95	- 91
NO. 40	- 90	- 92	- 86
NO. 80	- 86	- 90	- 83
NO. 200	- 74	- 79	- 74
LIQUID LIMIT	- 33	- 32	- 31
PLASTICITY INDEX	- 15	- 14	- 15
AASHTO SOIL	- A-6(9)	- A-6(10)	- A-6(9)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 20.3	- 22.1	- 22.2
ACHMSC (IN)	- ---	- 7.0W	- ---
AGG. BASE CRS CL-7 (IN)	- ---	- 5.5	- ---
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL  
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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS  
 MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

\*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\*

DATE	- 07/24/18	SEQUENCE NO.	- 5
JOB NUMBER	- 080495	MATERIAL CODE	- SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	- 2014
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	- 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	- 75
SUPPLIER NAME	- STATE	DISTRICT NO.	- 08
NAME OF PROJECT	- HWY. 10 - HWY. 7 (SAFETY IMPVTS.) (SEL. SECS.) (S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- YELL COUNTY, ARKANSAS	DATE SAMPLED	- 04/02/18
SAMPLED BY	- THORNTON/FRAZIER	DATE RECEIVED	- 04/04/18
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 05/17/18
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	- 20180817	- 20180818	- 20180819
SAMPLE ID	- S203	- S204	- S205
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 578+00	- 578+00	- 586+00
LOCATION	- 05 RT	- 18 RT	- 05 LT
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BR/GR	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 35 12 14.80	- 35 12 14.70	- 35 12 20.00
LONGITUDE DEG-MIN-SEC	- 93 12 22.10	- 93 12 22.00	- 93 12 15.00
% PASSING	2 IN. -	-	-
	1 1/2 IN. -	-	-
	3/4 IN. - 100	- 100	- 100
	3/8 IN. - 99	- 95	-
	NO. 4 - 95	- 92	-
	NO. 10 - 90	- 86	-
	NO. 40 - 85	- 80	-
	NO. 80 - 83	- 77	-
	NO. 200 - 70	- 65	- 90
LIQUID LIMIT	- 27	- 33	- 43
PLASTICITY INDEX	- 13	- 15	- 24
AASHTO SOIL	- A-6(6)	- A-6(7)	- A-7-6(22)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 17.8	- 19.6	- 11.9
ACHMSC (IN)	- 7.75W	- ---	- 9.0W
AGG.BASE CRS CL-7 (IN)	- 5.0	- ---	- 4.5
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS  
MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

\*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\*

DATE - 07/24/18	SEQUENCE NO. - 6
JOB NUMBER - 080495	MATERIAL CODE - SSRVPS
FEDERAL AID NO.- TO BE ASSIGNED	SPEC. YEAR - 2014
PURPOSE - SOIL SURVEY SAMPLE	SUPPLIER ID. - 1
SPEC. REMARKS - NO SPECIFICATION CHECK	COUNTY/STATE - 75
SUPPLIER NAME - STATE	DISTRICT NO. - 08
NAME OF PROJECT - HWY. 10 - HWY. 7 (SAFETY IMPVTS.) (SEL. SECS.) (S)	
PROJECT ENGINEER - NOT APPLICABLE	
PIT/QUARRY - ARKANSAS	
LOCATION - YELL COUNTY, ARKANSAS	DATE SAMPLED - 04/02/18
SAMPLED BY - THORNTON/FRAZIER	DATE RECEIVED - 04/04/18
SAMPLE FROM - TEST HOLE	DATE TESTED - 05/17/18
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS	

LAB NUMBER	- 20180820	- 20180821	- 20180822
SAMPLE ID	- S206	- S207	- S208
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 586+00	- 594+00	- 594+00
LOCATION	- 18 LT	- 05 RT	- 18 RT
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BR/GR	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 35 12 20.00	- 35 12 25.30	- 35 12 25.20
LONGITUDE DEG-MIN-SEC	- 93 12 15.10	- 93 12 8.10	- 93 12 8.00
% PASSING			
2 IN.	-	-	-
1 1/2 IN.	-	-	-
3/4 IN.	-	100	-
3/8 IN.	-	96	100
NO. 4	- 100	92	94
NO. 10	-	88	90
NO. 40	-	84	87
NO. 80	-	83	80
NO. 200	- 91	72	82
LIQUID LIMIT	- 41	- 48	- 71
PLASTICITY INDEX	- 20	- 26	- 41
AASHTO SOIL	- A-7-6(19)	- A-7-6(18)	- A-7-5(37)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 18.2	- 20.8	- 25.1
ACHMSC (IN)	- ---	- 10.0W	- ---
AGG.BASE CRS CL-7 (IN)	- ---	- 5.0	- ---
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS  
MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

\*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\*

DATE	- 08/06/18	SEQUENCE NO.	- 7
JOB NUMBER	- 080495	MATERIAL CODE	- SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	- 2014
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	- 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	- 75
SUPPLIER NAME	- STATE	DISTRICT NO.	- 08
NAME OF PROJECT - HWY. 10 - HWY. 7 (SAFETY IMPVTS.) (SEL. SECS.) (S)			
PROJECT ENGINEER - NOT APPLICABLE			
PIT/QUARRY - ARKANSAS			
LOCATION	- YELL COUNTY, ARKANSAS	DATE SAMPLED	- 04/02/18
SAMPLED BY	- THORNTON/FRAZIER	DATE RECEIVED	- 04/04/18
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 05/17/18
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS			

LAB NUMBER	-	20180823	-	20180824	-	20180825
SAMPLE ID	-	S209	-	S210	-	S211
TEST STATUS	-	INFORMATION ONLY	-	INFORMATION ONLY	-	INFORMATION ONLY
STATION	-	602+00	-	602+00	-	610+00
LOCATION	-	05 LT	-	18 LT	-	05 RT
DEPTH IN FEET	-	0-5	-	0-5	-	0-5
MAT'L COLOR	-	BR/GR	-	BROWN	-	BROWN
MAT'L TYPE	-		-		-	
LATITUDE DEG-MIN-SEC	-	35 12 30.90	-	35 12 31.00	-	35 12 36.30
LONGITUDE DEG-MIN-SEC	-	93 12 1.20	-	93 12 1.30	-	93 11 54.20
% PASSING	2	IN.	-		-	
	1 1/2	IN.	-		-	
	3/4	IN.	-	100	-	100
	3/8	IN.	-	99	-	99
	NO. 4		-	97	-	97
	NO. 10		-	95	-	94
	NO. 40		-	89	-	91
	NO. 80		-	87	-	90
	NO. 200		-	85	-	83
LIQUID LIMIT	-	40	-	39	-	36
PLASTICITY INDEX	-	21	-	21	-	18
AASHTO SOIL	-	A-6(17)	-	A-6(17)	-	A-6(14)
UNIFIED SOIL	-		-		-	
% MOISTURE CONTENT	-	13.7	-	16.9	-	27.8
ACHMSC	(IN)	10.0W	-	---	-	5.5W
ACHMSC	(IN)	---	-	---	-	3.0X
AGG BASE CRS CL-7	(IN)	7.0	-		-	4.0
			-		-	
			-		-	
			-		-	
			-		-	
			-		-	
			-		-	
			-		-	
			-		-	

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSALS

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS  
MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

\*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\*

DATE	- 08/06/18	SEQUENCE NO.	- 8
JOB NUMBER	- 080495	MATERIAL CODE	- SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	- 2014
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	- 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	- 75
SUPPLIER NAME	- STATE	DISTRICT NO.	- 08
NAME OF PROJECT	- HWY. 10 - HWY. 7 (SAFETY IMPVTS.) (SEL. SECS.) (S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- YELL COUNTY, ARKANSAS	DATE SAMPLED	- 04/02/18
SAMPLED BY	- THORNTON/FRAZIER	DATE RECEIVED	- 04/04/18
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 05/17/18
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	- 20180826	- 20180827	- 20180828
SAMPLE ID	- S212	- S213	- S214
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 610+00	- 618+00	- 618+00
LOCATION	- 18 RT	- 05 LT	- 18 LT
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BR/GR	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 35 12 36.20	- 35 12 41.70	- 35 12 41.70
LONGITUDE DEG-MIN-SEC	- 93 11 54.20	- 93 11 47.30	- 93 11 47.40
% PASSING	2 IN. -	-	-
	1 1/2 IN. -	-	-
	3/4 IN. - 100	- 100	- 100
	3/8 IN. - 97	- 98	- 98
	NO. 4 - 96	- 96	- 97
	NO. 10 - 94	- 92	- 93
	NO. 40 - 90	- 87	- 87
	NO. 80 - 89	- 80	- 85
	NO. 200 - 82	- 75	- 75
LIQUID LIMIT	- 33	- 25	- 25
PLASTICITY INDEX	- 15	- 8	- 8
AASHTO SOIL	- A-6(11)	- A-4(4)	- A-4(4)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 27.2	- 20.8	- 23.0
ACHMSC (IN)	- ---	- 7.0W	- ---
AGG. BASE CRS. CL-7 (IN)	- ---	- 5.0	- ---
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

REMARKS - W=MULTIPLE LAYERS, X=STRIIPED Z=AUGER REFUSAL  
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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS  
MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

\*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\*

DATE	- 07/24/18	SEQUENCE NO.	- 9
JOB NUMBER	- 080495	MATERIAL CODE	- SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	- 2014
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	- 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	- 75
SUPPLIER NAME	- STATE	DISTRICT NO.	- 08
NAME OF PROJECT	- HWY. 10 - HWY. 7 (SAFETY IMPVTS.)(SEL. SECS.)(S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS	DATE SAMPLED	- 04/02/18
LOCATION	- YELL COUNTY, ARKANSAS	DATE RECEIVED	- 04/04/18
SAMPLED BY	- THORNTON/FRAZIER	DATE TESTED	- 05/17/18
SAMPLE FROM	- TEST HOLE		
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	- 20180829	- 20180830	- 20180831
SAMPLE ID	- S215	- S216	- S217
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 626+00	- 626+00	- 635+00
LOCATION	- 05 RT	- 18 RT	- 05 LT
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BROWN	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 35 12 47.20	- 35 12 47.10	- 35 12 51.10
LONGITUDE DEG-MIN-SEC	- 93 11 36.40	- 93 11 36.30	- 93 11 28.00
% PASSING			
2 IN.	-	-	-
1 1/2 IN.	-	-	-
3/4 IN.	-	- 100	-
3/8 IN.	-	- 98	-
NO. 4	- 100	- 95	- 100
NO. 10	- 98	- 93	- 98
NO. 40	- 96	- 90	- 94
NO. 80	- 90	- 88	- 92
NO. 200	- 84	- 82	- 82
LIQUID LIMIT	- 37	- 37	- 26
PLASTICITY INDEX	- 19	- 19	- 10
AASHTO SOIL	- A-9(15)	- A-6(15)	- A-4(6)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 18.9	- 23.8	- 17.0
ACHMSC (IN)	- 8.0W	- ---	- 9.0W
SAND ASHALT (IN)	- ---	- ---	- 1.0
ACHMSC (IN)	- 3.0X	- ---	- 1.0
AGG. BASE CRS. CL-7 (IN)	- 3.0	- ---	- 4.0
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGER REFUSAL

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AASHTO TESTS : T24 T88 T89 T90 T265

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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS  
MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

\*\*\* SOIL SURVEY / PAVEMENT SOUNDING TEST REPORT \*\*\*

DATE - 07/24/18	SEQUENCE NO. - 10
JOB NUMBER - 080495	MATERIAL CODE - SSRVPS
FEDERAL AID NO.- TO BE ASSIGNED	SPEC. YEAR - 2014
PURPOSE - SOIL SURVEY SAMPLE	SUPPLIER ID. - 1
SPEC. REMARKS - NO SPECIFICATION CHECK	COUNTY/STATE - 75
SUPPLIER NAME - STATE	DISTRICT NO. - 08
NAME OF PROJECT - HWY. 10 - HWY. 7 (SAFETY IMPVTS.) (SEL. SECS.) (S)	
PROJECT ENGINEER - NOT APPLICABLE	
PIT/QUARRY - ARKANSAS	
LOCATION - YELL COUNTY, ARKANSAS	DATE SAMPLED - 04/02/18
SAMPLED BY - THORNTON/FRAZIER	DATE RECEIVED - 04/04/18
SAMPLE FROM - TEST HOLE	DATE TESTED - 05/17/18
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS	

LAB NUMBER	- 20180832	- 20180833	- 20180834
SAMPLE ID	- S218	- S219	- S220
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 635+00	- 642+00	- 642+00
LOCATION	- 18 LT	- 05 RT	- 18 RT
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BROWN	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 35 12 51.10	- 35 12 53.50	- 35 12 53.40
LONGITUDE DEG-MIN-SEC	- 93 11 28.10	- 93 11 20.10	- 93 11 20.10
% PASSING			
2 IN.	-	-	-
1 1/2 IN.	-	-	-
3/4 IN.	- 100	-	- 100
3/8 IN.	- 98	- 100	- 98
NO. 4	- 94	- 99	- 95
NO. 10	- 88	- 96	- 92
NO. 40	- 81	- 91	- 90
NO. 80	- 75	- 89	- 88
NO. 200	- 65	- 81	- 81
LIQUID LIMIT	- 25	- 24	- 35
PLASTICITY INDEX	- 9	- 9	- 15
AASHTO SOIL	- A-4 (3)	- A-4 (5)	- A-6 (11)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 16.5	- 18.8	- 24.2
ACHMSC (IN)	- ---	- 10.0W	- ---
AGG, BASE CRS. CL-7 (IN)	- ---	- 4.0	- ---
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED, Z=AUGAR REFUSAL

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