

ARKANSAS DEPARTMENT OF TRANSPORTATION



**SUBSURFACE INVESTIGATION**

STATE JOB NO. 090434

FEDERAL AID PROJECT NO. NHPP-0004(808)

WOLF CREEK & DECATUR BRANCH STRS. & APPRS. (S)

STATE HIGHWAY 59 SECTION 1

IN BENTON 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

September 20, 2017

**TO:** Mr. Trinity Smith, Engineer of Roadway Design

**SUBJECT:** Job No. 090434  
Wolf Creek & Spring Branch Strs. & Apprs. (S)  
Route 59 Section 1  
Benton County

Transmitted herewith is the requested Soil Survey, strength data and Resilient Modulus test results for the above referenced job. The project consists of replacing the bridges crossing Wolf Creek and Spring Branch on Highway 59. Samples were obtained in the existing travel lanes and ditch line.

Based on laboratory results of samples obtained, the subgrade soils consist primarily of low plasticity cherty clay. 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.

Additional 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 in the vicinity Gravette.
2. Asphalt Concrete Hot Mix

<b>PG64-22</b>		
<b>Type</b>	<b>Asphalt Cement %</b>	<b>Mineral Aggregate %</b>
Surface Course	5.5	94.5
Binder Course	4.5	95.5
Base Course	4.1	95.9

<b>PG70-22</b>		
<b>Type</b>	<b>Asphalt Cement %</b>	<b>Mineral Aggregate %</b>
Surface Course	5.4	94.6
Binder Course	4.3	95.7
Base Course	4.0	96.0

<b>Type</b>	<b>PG76-22</b>	
	<b>Asphalt Cement %</b>	<b>Mineral Aggregate %</b>
Surface Course	5.4	94.6
Binder Course	4.4	95.6
Base Course	4.2	95.8



Michael C. Benson  
Materials Engineer

MCB:pt:bjj  
Attachment

cc: State Constr. Eng. – Master File Copy  
District 9 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 - 09/12/2017  
JOB NUMBER - 090434

SEQUENCE NO. - 1  
MATERIAL CODE - SSRV  
SPEC. YEAR - 2014  
SUPPLIER ID. - 1  
COUNTY/STATE - 04  
DISTRICT NO. - 09

JOB NAME - WOLF CREEK & SPRING BRANCH STRS. & APPRS. (S)

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

BEGIN JOB - END JOB 10

RESILIENT MODULUS  
STA. 210+10 4731

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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>	090434	<b>Material Code</b>	SSRVPS
<b>Date Sampled:</b>	7/31/17	<b>Station No.:</b>	210+10
<b>Date Tested:</b>	September 1, 2017	<b>Location:</b>	24LT
<b>Name of Project:</b>	WOLF CREEK & SPRING BRANCH STRS. & APPRS. (S)		
<b>County:</b>	<b>Code:</b> 4	<b>Name:</b> BENTON	
<b>Sampled By:</b>	THORNTON/BATES	<b>Depth:</b>	0-5
<b>Lab No.:</b>	20172582	<b>AASHTO Class:</b>	A-4 (0)
<b>Sample ID:</b>	RV540	<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	3.95
Bottom	3.95
Average	3.95
Membrane Thickness (in):	0.01
Height of Specimen, Cap and Base (in):	8
Height of Cap and Base (in):	0.00
Initial Length, Lo (in):	8
Initial Area, Ao (sq. in):	12.18
Initial Volume, AoLo (cu. in):	97.44

**3. Soil Specimen Weight:**

Weight of Wet Soil Used (g):	3018.10
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**4. Soil Properties:**

Optimum Moisture Content (%):	17.2
Maximum Dry Density (pcf):	101.8
95% of MDD (pcf):	96.7
In-Situ Moisture Content (%):	N/A

**5. Specimen Properties:**

Wet Weight (g):	3018.10
Compaction Moisture content (%):	17.8
Compaction Wet Density (pcf):	118.02
Compaction Dry Density (pcf):	100.19
Moisture Content After Mr Test (%):	17.3

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

#VALUE!

**7. Resilient Modulus, Mr:**

4571(Sc)<sup>-0.15902</sup>(S3)<sup>0.47562</sup>

**8. Comments**

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**9. Tested By:**

GW

**Date:** September 1, 2017

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

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

**Job No.** 090434      **Material Code** SSRVPS  
**Date Sampled:** 7/31/17      **Station No.:** 210+10  
**Date Tested:** September 1, 2017      **Location:** 24LT  
**Name of Project:** WOLF CREEK & SPRING BRANCH STRS. & APPRS. (S)  
**County:** Code: 4      **Name:** BENTON  
**Sampled By:** THORNTON/BATES      **Depth:** 0-5  
**Lab No.:** 20172582      **AASHTO Class:** A-4 (0)  
**Sample ID:** RV540      **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
	S <sub>3</sub> psi	S <sub>cyclic</sub> psi	P <sub>max</sub> lbs	P <sub>cyclic</sub> lbs	P <sub>contact</sub> lbs	S <sub>max</sub> psi	S <sub>cyclic</sub> psi	S <sub>contact</sub> psi	H <sub>avg</sub> in	ε <sub>r</sub> in/in	M <sub>r</sub> psi
Sequence 1	6.0	2.0	25.2	22.4	2.8	2.1	1.8	0.2	0.00149	0.00019	9,845
Sequence 2	6.0	4.0	47.5	44.6	2.8	3.9	3.7	0.2	0.00316	0.00039	9,290
Sequence 3	6.0	6.0	69.8	66.2	3.6	5.7	5.4	0.3	0.00509	0.00064	8,543
Sequence 4	6.0	8.0	93.6	87.5	6.1	7.7	7.2	0.5	0.00735	0.00092	7,822
Sequence 5	6.0	10.0	117.2	108.6	8.5	9.6	8.9	0.7	0.00969	0.00121	7,361
Sequence 6	4.0	2.0	25.0	22.2	2.8	2.0	1.8	0.2	0.00187	0.00023	7,779
Sequence 7	4.0	4.0	46.5	43.7	2.8	3.8	3.6	0.2	0.00413	0.00052	6,952
Sequence 8	4.0	6.0	67.5	64.7	2.8	5.5	5.3	0.2	0.00654	0.00082	6,499
Sequence 9	4.0	8.0	91.4	86.2	5.2	7.5	7.1	0.4	0.00885	0.00111	6,397
Sequence 10	4.0	10.0	114.8	107.2	7.6	9.4	8.8	0.6	0.01143	0.00143	6,158
Sequence 11	2.0	2.0	24.5	21.7	2.8	2.0	1.8	0.2	0.00243	0.00030	5,885
Sequence 12	2.0	4.0	44.7	42.0	2.8	3.7	3.4	0.2	0.00532	0.00066	5,183
Sequence 13	2.0	6.0	64.7	61.9	2.8	5.3	5.1	0.2	0.00840	0.00105	4,841
Sequence 14	2.0	8.0	86.9	82.6	4.3	7.1	6.8	0.3	0.01143	0.00143	4,749
Sequence 15	2.0	10.0	110.2	103.5	6.7	9.0	8.5	0.6	0.01436	0.00180	4,731

TESTED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 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>	090434	<b>Material Code</b>	SSRVPS
<b>Date Sampled:</b>	7/31/17	<b>Station No.:</b>	210+10
<b>Date Tested:</b>	September 1, 2017	<b>Location:</b>	24'LT
<b>Name of Project:</b>	WOLF CREEK & SPRING BRANCH STRS. & APPRS. (S)		
<b>County:</b>	<b>Code:</b> 4	<b>Name:</b>	BENTON
<b>Sampled By:</b>	THORNTON/BATES		<b>Depth:</b> 0-5
<b>Lab No.:</b>	20172582	<b>AASHTO Class:</b>	A-4 (0)
<b>Sample ID:</b>	RV540	<b>Material Type (1 or 2):</b>	2
<b>LATITUDE:</b>		<b>LONGITUDE:</b>	

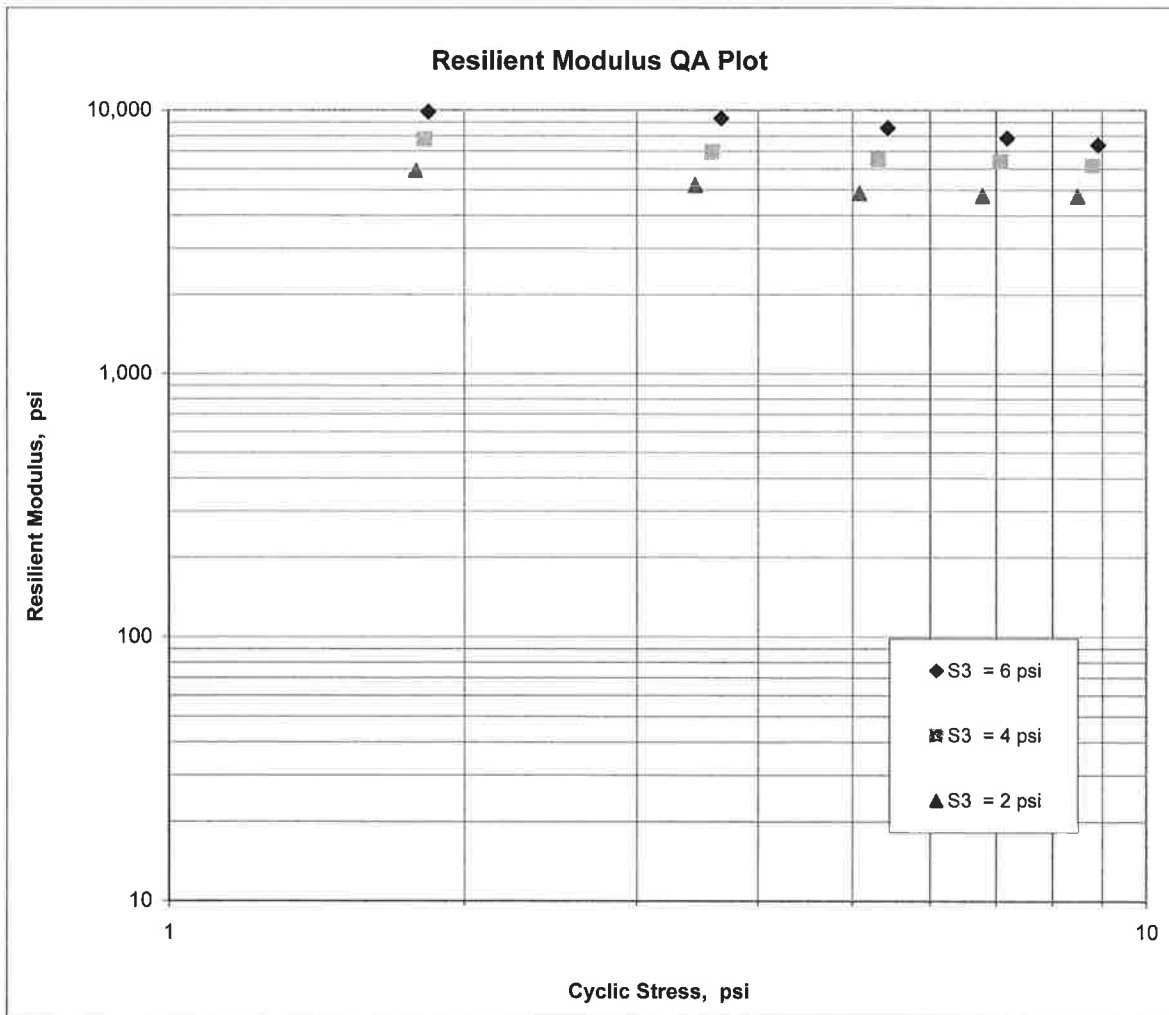
$$M_R = K_1 (S_C)^{K_2} (S_3)^{K_5}$$

$$K_1 = \underline{4,571}$$

$$K_2 = \underline{-0.15902}$$

$$K_5 = \underline{0.47562}$$

$$R^2 = \underline{0.98}$$



JOB: 090434

Arkansas State Highway Transportation Department

JOB NAME: WOLF CREEK & SPRING BRANCH STRS. & APPRS. (S)

Materials Division

COUNTY NO. 4 DATE TESTED 9/5/2017

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					
101+60	24 RT	0-5	BROWN	55	45	38	35	32	ND	NP	A-2-4(0)	RV539	
210+10	24 LT	0-5	BROWN	70	59	50	46	41	ND	NP	A-4(0)	RV540	
101+00	06 RT	0-5	BROWN	75	56	40	34	30	ND	NP	A-2-4(0)	S530	13.8
101+00	15 RT	0-5	BROWN	50	39	28	22	19	ND	NP	A-1-B(0)	S531	12.9
104+00	06 LT	0-5	BROWN	50	38	26	22	20	26	06	A-1-B(0)	S532	17.7
203+00	06 RT	0-5	BROWN	81	66	55	52	51	23	06	A-4(0)	S533	17.3
203+00	15 RT	0-5	BROWN	77	74	66	62	60	24	07	A-4(2)	S534	20.2
203+00	21 RT	0-5	BROWN	78	70	63	60	57	30	09	A-4(3)	S535	22.3
210+00	06 LT	0-5	BROWN	79	65	53	48	44	42	17	A-7-6(4)	S536	18
210+00	15 LT	0-5	BROWN	77	63	49	44	39	28	13	A-6(1)	S537	17.8
210+00	24 LT	0-5	BROWN	88	80	69	66	60	ND	NP	A-4(0)	S538	17.3

comments: W=MULTIPLE LAYERS

Wednesday, September 13, 2017



**JOB:** 090434

**Arkansas State Highway Transportation Department**

**DATE TESTED**

**JOB NAME:** WOLF CREEK & SPRING BRANCH STRS. & APPRS. (S)

**Materials Division**

9/5/2017

**COUNTY NO.** 4

**Michael Benson, Materials Engineer**

**PAVEMENT SOUNDINGS**

**STA.# LOC.**

101+00	06 RT	ACHMSC 9.0W	ACHMBC 1.5	AGG.BASE CRS CL-7 8.0
101+00	15 RT	ACHMSC 4.0	ACHMBC ---	AGG.BASE CRS CL-7 8.0
104+00	06 LT	ACHMSC 8.25W	ACHMBC 1.0	AGG.BASE CRS CL-7 3.0
203+00	06 RT	ACHMSC 9.0W	BST 2.0	AGG.BASE CRS CL-7 6.0
203+00	15 RT	ACHMSC 6.0W	BST ---	AGG.BASE CRS CL-7 4.0
203+00	21 RT	ACHMSC ---	BST ---	AGG.BASE CRS CL-7 ---
210+00	06 LT	ACHMSC 9.0W	AGG.BASE CRS CL-7 8.0	
210+00	15 LT	ACHMSC 7.0W	AGG.BASE CRS CL-7 6.0	
210+00	24 LT	ACHMSC ---	AGG.BASE CRS CL-7 ---	

**comments:** W=MULTIPLE LAYERS

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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 09/12/17 SEQUENCE NO. - 1  
JOB NUMBER - 090434 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 - 04  
SUPPLIER NAME - STATE DISTRICT NO. - 09  
NAME OF PROJECT - WOLF CREEK & SPRING BRANCH STRS. & APPRS. (S)  
PROJECT ENGINEER - NOT APPLICABLE  
PIT/QUARRY - ARKANSAS  
LOCATION - BENTON COUNTY DATE SAMPLED - 07/31/17  
SAMPLED BY - THORNTON/BATES DATE RECEIVED - 08/04/17  
SAMPLE FROM - TEST HOLE DATE TESTED - 09/05/17  
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	20172572	20172573	20172574
SAMPLE ID	S530	S531	S532
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	101+00	101+00	104+00
LOCATION	06 RT	15 RT	06 LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BROWN	BROWN	BROWN
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	36 19 57.20	36 19 57.20	36 19 54.20
LONGITUDE DEG-MIN-SEC	94 27 30.80	94 27 30.80	94 27 30.40
% PASSING			
2 IN.	-	-	-
1 1/2 IN.	-	-	-
3/4 IN.	100	100	100
3/8 IN.	94	68	67
NO. 4	75	50	50
NO. 10	56	39	38
NO. 40	40	28	26
NO. 80	34	22	22
NO. 200	30	19	20
LIQUID LIMIT	ND	ND	26
PLASTICITY INDEX	NP	NP	06
AASHTO SOIL	A-2-4 (0)	A-1-B (0)	A-1-B (0)
UNIFIED SOIL			
% MOISTURE CONTENT	13.8	12.9	17.7
ACHMSC (IN)	9.0W	4.0	8.25W
ACHMBC (IN)	1.5	---	1.0
AGG. BASE CRS CL-7 (IN)	8.0	8.0	3.0

REMARKS - W=MULTIPLE LAYERS

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 - 09/05/17 SEQUENCE NO. - 2  
JOB NUMBER - 090434 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 - 04  
SUPPLIER NAME - STATE DISTRICT NO. - 09  
NAME OF PROJECT - WOLF CREEK & SPRING BRANCH STRS. & APPRS. (S)  
PROJECT ENGINEER - NOT APPLICABLE  
PIT/QUARRY - ARKANSAS  
LOCATION - BENTON COUNTY DATE SAMPLED - 07/31/17  
SAMPLED BY - THORNTON/BATES DATE RECEIVED - 08/04/17  
SAMPLE FROM - TEST HOLE DATE TESTED - 09/05/17  
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	-	20172575	-	20172576	-	20172577
SAMPLE ID	-	S533	-	S534	-	S535
TEST STATUS	-	INFORMATION ONLY	-	INFORMATION ONLY	-	INFORMATION ONLY
STATION	-	203+00	-	203+00	-	203+00
LOCATION	-	06 RT	-	15 RT	-	21 RT
DEPTH IN FEET	-	0-5	-	0-5	-	0-5
MAT'L COLOR	-	BROWN	-	BROWN	-	BROWN
MAT'L TYPE	-	-	-	-	-	-
LATITUDE DEG-MIN-SEC	-	36 20 57.80	-	36 20 57.70	-	36 20 57.70
LONGITUDE DEG-MIN-SEC	-	94 26 53.60	-	94 26 53.60	-	94 26 53.70
% PASSING	2 IN.	-	-	-	-	-
	1 1/2 IN.	-	-	-	-	-
	3/4 IN.	100	-	100	-	100
	3/8 IN.	96	-	86	-	91
	NO. 4	81	-	77	-	78
	NO. 10	66	-	74	-	70
	NO. 40	55	-	66	-	63
	NO. 80	52	-	62	-	60
	NO. 200	51	-	60	-	57
LIQUID LIMIT	-	23	-	24	-	30
PLASTICITY INDEX	-	06	-	07	-	09
AASHTO SOIL	-	A-4 (0)	-	A-4 (2)	-	A-4 (3)
UNIFIED SOIL	-	-	-	-	-	-
% MOISTURE CONTENT	-	17.3	-	20.2	-	22.3
ACHMSC	(IN)	9.0W	-	6.0W	-	---
BST	(IN)	2.0	-	---	-	---
AGG.BASE CRS CL-7	(IN)	6.0	-	4.0	-	---
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-

REMARKS - W=MULTIPLE LAYERS

-  
-  
-  
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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	- 09/05/17	SEQUENCE NO.	- 3
JOB NUMBER	- 090434	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	- 04
SUPPLIER NAME	- STATE	DISTRICT NO.	- 09
NAME OF PROJECT	- WOLF CREEK & SPRING BRANCH STRS. & APPRS. (S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- BENTON COUNTY	DATE SAMPLED	- 07/31/17
SAMPLED BY	- THORNTON/BATES	DATE RECEIVED	- 08/04/17
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 09/05/17
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	- 20172578	- 20172579	- 20172580
SAMPLE ID	- S536	- S537	- S538
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 210+00	- 210+00	- 210+00
LOCATION	- 06 LT	- 15 LT	- 24 LT
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BROWN	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 36 20 52.90	- 36 20 52.90	- 36 20 52.90
LONGITUDE DEG-MIN-SEC	- 94 26 59.40	- 94 26 59.20	- 94 26 59.20
% PASSING			
2 IN.	-	-	-
1 1/2 IN.	-	-	-
3/4 IN.	- 100	- 100	- 100
3/8 IN.	- 92	- 95	- 99
NO. 4	- 79	- 77	- 88
NO. 10	- 65	- 63	- 80
NO. 40	- 53	- 49	- 69
NO. 80	- 48	- 44	- 66
NO. 200	- 44	- 39	- 60
LIQUID LIMIT	- 42	- 28	- ND
PLASTICITY INDEX	- 17	- 13	- NP
AASHTO SOIL	- A-7-6(4)	- A-6(1)	- A-4(0)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 18.0	- 17.8	- 17.3
ACHMSC (IN)	- 9.0W	- 7.0W	- ---
AGG.BASE CRS CL-7 (IN)	- 8.0	- 6.0	- ---

REMARKS - W=MULTIPLE LAYERS

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 - 09/05/17 SEQUENCE NO. - 1  
JOB NUMBER - 090434 MATERIAL CODE - RV  
FEDERAL AID NO. - TO BE ASSIGNED SPEC. YEAR - 2014  
PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1  
SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 04  
SUPPLIER NAME - STATE DISTRICT NO. - 09  
NAME OF PROJECT - WOLF CREEK & SPRING BRANCH STRS. & APPRS. (S)  
PROJECT ENGINEER - NOT APPLICABLE  
PIT/QUARRY - ARKANSAS  
LOCATION - BENTON COUNTY DATE SAMPLED - 07/31/17  
SAMPLED BY - THORNTON/BATES DATE RECEIVED - 08/04/17  
SAMPLE FROM - TEST HOLE DATE TESTED - 09/05/17  
MATERIAL DESC. - SOIL SURVEY - RESISTANCE R-VALUE ACTUAL RESULTS

LAB NUMBER	- 20172581	- 20172582	-
SAMPLE ID	- RV539	- RV540	-
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	-
STATION	- 101+60	- 210+10	-
LOCATION	- 24 RT	- 24 LT	-
DEPTH IN FEET	- 0-5	- 0-5	-
MAT'L COLOR	- BROWN	- BROWN	-
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 36 19 56.70	- 36 20 52.90	-
LONGITUDE DEG-MIN-SEC	- 94 27 30.90	- 94 26 59.20	-
% PASSING	2 IN. -	-	-
	1 1/2 IN. -	-	-
	3/4 IN. - 100	- 100	-
	3/8 IN. - 78	- 85	-
	NO. 4 - 55	- 70	-
	NO. 10 - 45	- 59	-
	NO. 40 - 38	- 50	-
	NO. 80 - 35	- 46	-
	NO. 200 - 32	- 41	-
LIQUID LIMIT	- ND	- ND	-
PLASTICITY INDEX	- NP	- NP	-
AASHTO SOIL	- A-2-4 (0)	- A-4 (0)	-
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

REMARKS - W=MULTIPLE LAYERS