

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT



SUBSURFACE INVESTIGATION

STATE JOB NO. 090230

FEDERAL AID PROJECT NO. STPF-0008(34)

CO. RD. 914-WEST (S)

STATE HIGHWAY 62 SECTION 5

IN CARROLL COUNTY

LETTING OF SEPTEMBER 21, 2016

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 STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

October 15, 2013

TO: Mr. Trinity Smith, Engineer of Roadway Design

SUBJECT: Job No. 090230
Co. Rd. 914 – West (S)
Route 62 Section 5
Carroll 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 3.7 miles of Highway 62 from two lanes to five lanes. Samples were obtained in the existing travel lanes, shoulders, and ditch line. Locations were measured from centerline of construction and should be noted as such on the logs.

Based on laboratory results of samples obtained, the subgrade soils consist primarily of moderately plastic sandy clay with varying amounts of chert fragments. Isolated locations of highly plastic clay were encountered within the project limits. Rock was encountered at stations 395+00 18' left of centerline at a depth of 3.5 feet, 499+00 20' right of centerline at a depth of 1.5', and at 507+00 at centerline of construction at a depth of 3.0 feet. The subgrade soils are expected to provide a stable working platform with conventional processing if the weather is favorable during construction.

Based on currently available cross-sections the maximum embankment height is approximately 22 feet. The embankments may be constructed using locally available unspecified material utilizing a 3:1 slope configuration.

Between stations 367+00 to 379+00 left of centerline is a cut 38 feet deep, and 496+00 to 510+00 is a cut of 35 feet. It is recommended that the rock be cut utilizing a 2:1 slope configuration. The maximum bench height should be no more than 25 feet, a 10 feet wide bench should be constructed at the toe of each slope, and the soil overburden should be cut on a 3:1 slope. At the soil and rock interface a ten feet wide bench should be constructed. The remaining cut slopes are acceptable as shown in the currently available cross-sections. Figure 1 illustrates this configuration.

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 of Bear Creek Springs.
2. Asphalt Concrete Hot Mix

<u>Type</u>	PG 64-22	
	Asphalt Cement %	Mineral Aggregate %
Surface Course	5.6	94.4
Binder Course	4.6	95.4
Base Course	4.3	95.7

PG 70-22		
Type	Asphalt Cement %	Mineral Aggregate %
Surface Course	5.4	94.6
Binder Course	4.3	95.7
Base Course	4.0	96.0

PG 76-22		
Type	Asphalt Cement %	Mineral Aggregate %
Surface Course	5.5	94.5
Binder Course	4.5	95.5
Base Course	4.2	95.8

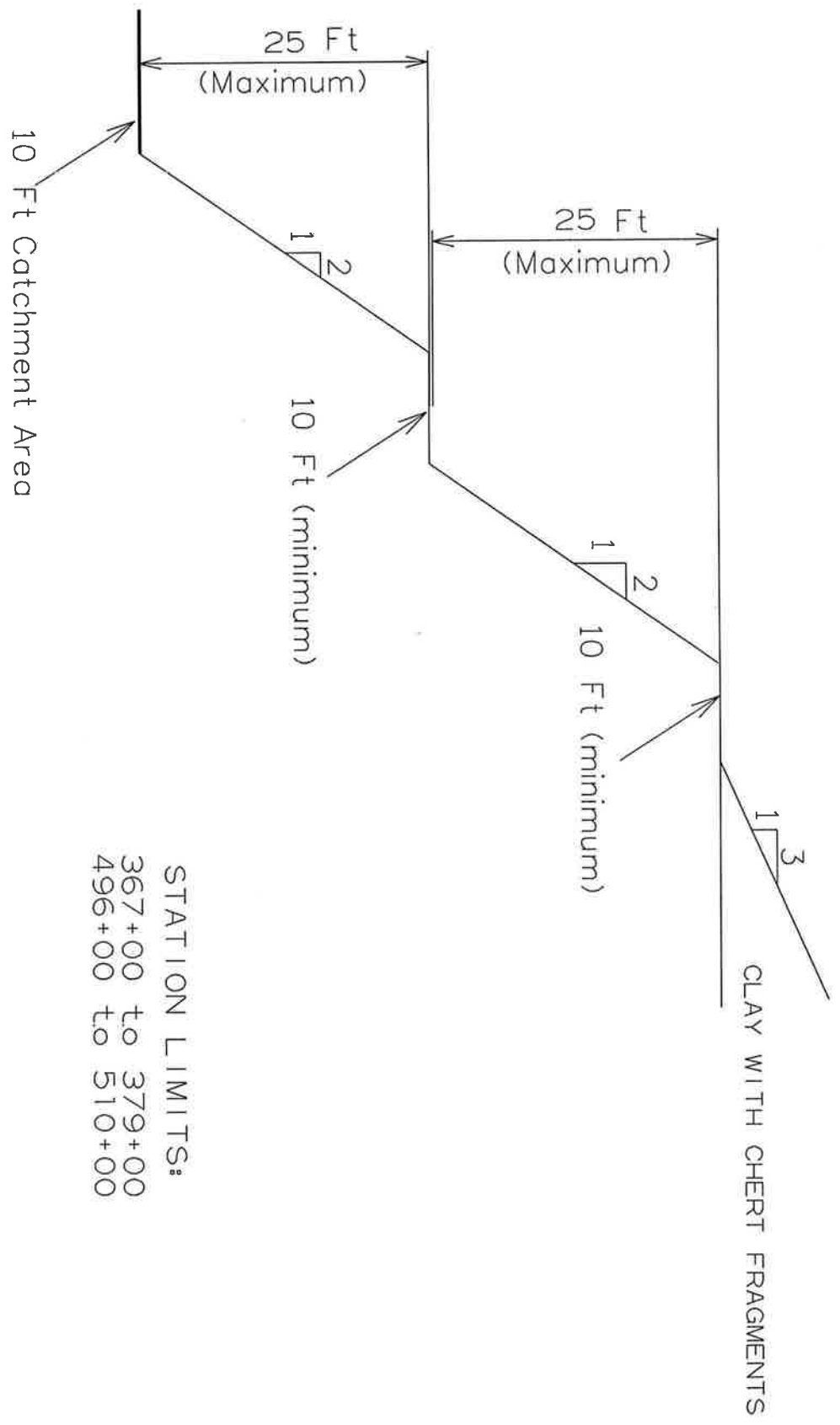


Michael C. Benson
Materials Engineer

MCB:pt:bjj
Attachment

cc: State Constr. Eng. – Master File Copy
District 9 Engineer
Planning Div.
G. C. File

2:1 CUT SLOPE



STATION LIMITS:
367+00 to 379+00
496+00 to 510+00

FIGURE 1

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

DATE - 09/27/2013
JOB NUMBER - 090230

SEQUENCE NO. - 1
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2003
SUPPLIER ID. - 1
COUNTY/STATE - 08
DISTRICT NO. - 09

JOB NAME - CO.RD 914 - WEST (S)

* STATION LIMITS R-VALUE AT 240 psi *

BEGIN JOB - END JOB	LESS THAN 5
RESILIENT MODULUS	
STA.363+00	11072
STA.419+00	13734
STA.539+00	5246

REMARKS -

-
AASHTO TESTS : T190

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

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

Job No.	090230	Material Code	SSRVPS
Date Sampled:	9/26/13	Station No.:	363+00
Date Tested:	September 26, 2013	Location:	23LT
Name of Project:	CO.RD.914 - WEST (S)		
County:	Code: 8	Name:	CARROLL
Sampled By:	FAULKNER	Depth:	0-5
Lab No.:	20134560	AASHTO Class:	A-7-6(31)
Sample ID:	RV1861	Material Type (1 or 2):	2
LATITUDE:		LONGITUDE:	

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):	0.00
Height of Specimen, Cap and Base (in):	8.03
Height of Cap and Base (in):	0.00
Initial Length, Lo (in):	8.03
Initial Area, Ao (sq. in):	12.30
Initial Volume, AoLo (cu. in):	98.73

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	2934.20
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4. Soil Properties:

Optimum Moisture Content (%):	28.2
Maximum Dry Density (pcf):	86.7
95% of MDD (pcf):	82.4
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	2934.20
Compaction Moisture content (%):	27.9
Compaction Wet Density (pcf):	113.23
Compaction Dry Density (pcf):	88.53
Moisture Content After Mr Test (%):	27.9

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

#VALUE!

7. Resilient Modulus, Mr:

10756(Sc)^-0.07337(S3)^0.21237

8. Comments

9. Tested By:

DEB

Date: September 26, 2013

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

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

Job No. 090230 **Material Code** SSRVPS
Date Sampled: 9/26/13 **Station No.:** 363+00
Date Tested: September 26, 2013 **Location:** 23LT
Name of Project: CO.RD.914 - WEST (S)
County: Code: 8 **Name:** CARROLL
Sampled By: FAULKNER **Depth:** 0-5
Lab No.: 20134560 **AASHTO Class:** A-7-6(31)
Sample ID: RV1861 **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 ₃ psi	S _{cyclic} psi	P _{max} lbs	P _{cyclic} lbs	P _{contact} lbs	S _{max} psi	S _{cyclic} psi	S _{contact} psi	H _{avg} in	ε _r in/in	M _r psi
Sequence 1	6.0	2.0	25.1	22.4	2.7	2.0	1.8	0.2	0.0094	0.00012	15,454
Sequence 2	6.0	4.0	47.3	44.5	2.7	3.8	3.6	0.2	0.00196	0.00024	14,846
Sequence 3	6.0	6.0	69.9	66.2	3.7	5.7	5.4	0.3	0.00305	0.00038	14,166
Sequence 4	6.0	8.0	93.3	87.2	6.1	7.6	7.1	0.5	0.00433	0.00054	13,149
Sequence 5	6.0	10.0	115.7	107.1	8.6	9.4	8.7	0.7	0.00588	0.00073	11,903
Sequence 6	4.0	2.0	25.1	22.5	2.6	2.0	1.8	0.2	0.00101	0.00013	14,499
Sequence 7	4.0	4.0	47.2	44.5	2.7	3.8	3.6	0.2	0.00210	0.00026	13,800
Sequence 8	4.0	6.0	68.8	66.1	2.7	5.6	5.4	0.2	0.00325	0.00041	13,270
Sequence 9	4.0	8.0	92.5	87.3	5.2	7.5	7.1	0.4	0.00450	0.00056	12,674
Sequence 10	4.0	10.0	115.1	107.4	7.7	9.4	8.7	0.6	0.00587	0.00073	11,947
Sequence 11	2.0	2.0	24.8	22.1	2.7	2.0	1.8	0.2	0.00140	0.00017	10,331
Sequence 12	2.0	4.0	47.0	44.3	2.7	3.8	3.6	0.2	0.00257	0.00032	11,246
Sequence 13	2.0	6.0	68.6	65.8	2.8	5.6	5.4	0.2	0.00380	0.00047	11,301
Sequence 14	2.0	8.0	91.2	86.8	4.4	7.4	7.1	0.4	0.00503	0.00063	11,269
Sequence 15	2.0	10.0	114.0	107.1	6.9	9.3	8.7	0.6	0.00632	0.00079	11,072

TESTED BY _____ DATE September 26, 2013
 REVIEWED BY _____ DATE _____

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

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

Job No.	090230	Material Code	SSRVPS
Date Sampled:	9/26/13	Station No.:	363+00
Date Tested:	September 26, 2013	Location:	23LT
Name of Project:	CO.RD.914 - WEST (S)		
County:	Code: 8	Name:	CARROLL
Sampled By:	FAULKNER	Depth:	0-5
Lab No.:	20134560	AASHTO Class:	A-7-6(31)
Sample ID:	RV1861	Material Type (1 or 2):	2
LATITUDE:		LONGITUDE:	

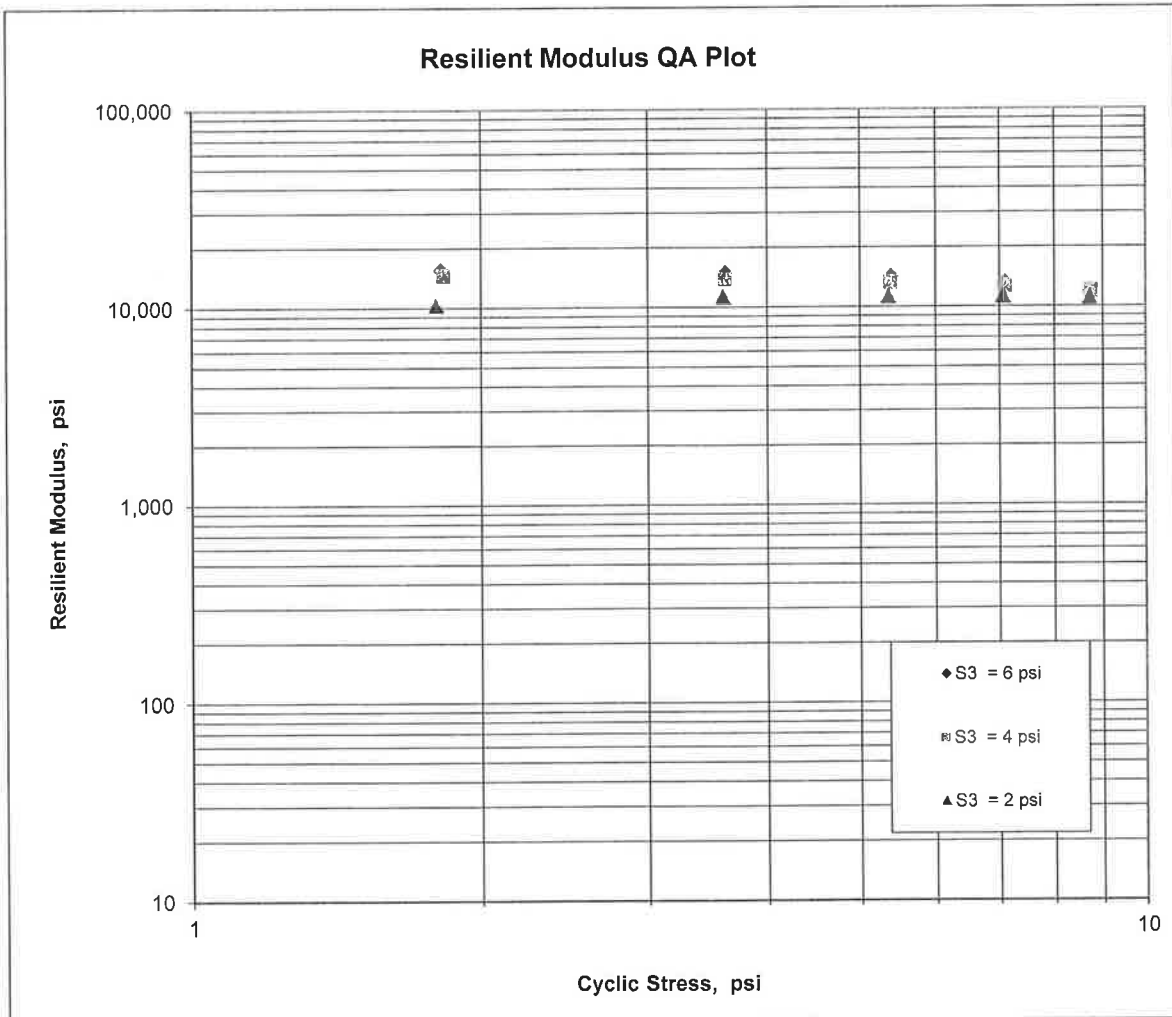
$$M_R = K_1 (S_C)^{K_2} (S_3)^{K_5}$$

$$K_1 = 10,756$$

$$K_2 = -0.07337$$

$$K_5 = 0.21237$$

$$R^2 = 0.76$$



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

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

Job No.	090230	Material Code	SSRVPS
Date Sampled:	9/26/13	Station No.:	419+00
Date Tested:	September 26, 2013	Location:	20RT
Name of Project:	CO.RD.914 - WEST (S)		
County:	Code: 8	Name:	CARROLL
Sampled By:	FAULKNER	Depth:	0-5
Lab No.:	20134561	AASHTO Class:	A-4 (2)
Sample ID:	RV1862	Material Type (1 or 2):	2
LATITUDE:		LONGITUDE:	

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	3.97
Middle	3.97
Bottom	3.97
Average	3.97
Membrane Thickness (in):	0.00
Height of Specimen, Cap and Base (in):	8.03
Height of Cap and Base (in):	0.00
Initial Length, Lo (in):	8.03
Initial Area, Ao (sq. in):	12.38
Initial Volume, AoLo (cu. in):	99.40

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	3021.10
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4. Soil Properties:

Optimum Moisture Content (%):	11.8
Maximum Dry Density (pcf):	109.8
95% of MDD (pcf):	104.3
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	3021.10
Compaction Moisture content (%):	11.9
Compaction Wet Density (pcf):	115.81
Compaction Dry Density (pcf):	103.49
Moisture Content After Mr Test (%):	11.9

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

#VALUE!

7. Resilient Modulus, Mr:

12722(Sc)^{-0.06730}(S3)^{0.27574}

8. Comments

9. Tested By:

DEB _____

Date: September 26, 2013 _____

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

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

Job No. 090230 **Material Code** SSRVPS
Date Sampled: 9/26/13 **Station No.:** 419+00
Date Tested: September 26, 2013 **Location:** 20RT
Name of Project: CO.RD.914 - WEST (S)
County: Code: 8 **Name:** CARROLL
Sampled By: FAULKNER **Depth:** 0-5
Lab No.: 20134561 **AASHTO Class:** A-4 (2)
Sample ID: RV1862 **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 ₃	S _{cyclic}	P _{max}	P _{cyclic}	P _{contact}	S _{max}	S _{cyclic}	S _{contact}	H _{avg}	ε _r	M _r
UNIT	psi	psi	lbs	lbs	lbs	psi	psi	psi	in	in/in	psi
Sequence 1	6.0	2.0	25.3	22.7	2.6	2.0	1.8	0.2	0.00072	0.00009	20,425
Sequence 2	6.0	4.0	47.5	44.9	2.6	3.8	3.6	0.2	0.00147	0.00018	19,873
Sequence 3	6.0	6.0	70.6	67.1	3.5	5.7	5.4	0.3	0.00228	0.00028	19,057
Sequence 4	6.0	8.0	94.5	88.4	6.1	7.6	7.1	0.5	0.00322	0.00040	17,816
Sequence 5	6.0	10.0	118.1	109.4	8.8	9.5	8.8	0.7	0.00422	0.00053	16,800
Sequence 6	4.0	2.0	25.4	22.6	2.8	2.0	1.8	0.2	0.00082	0.00010	17,927
Sequence 7	4.0	4.0	47.5	44.6	2.8	3.8	3.6	0.2	0.00166	0.00021	17,398
Sequence 8	4.0	6.0	69.3	66.4	2.9	5.6	5.4	0.2	0.00255	0.00032	16,876
Sequence 9	4.0	8.0	93.3	88.0	5.3	7.5	7.1	0.4	0.00349	0.00043	16,383
Sequence 10	4.0	10.0	116.9	109.0	7.9	9.4	8.8	0.6	0.00446	0.00056	15,860
Sequence 11	2.0	2.0	25.0	22.2	2.8	2.0	1.8	0.2	0.00103	0.00013	14,051
Sequence 12	2.0	4.0	46.9	44.2	2.8	3.8	3.6	0.2	0.00208	0.00026	13,753
Sequence 13	2.0	6.0	68.7	65.9	2.8	5.6	5.3	0.2	0.00309	0.00038	13,854
Sequence 14	2.0	8.0	91.7	87.2	4.5	7.4	7.0	0.4	0.00404	0.00050	13,992
Sequence 15	2.0	10.0	115.1	108.1	7.1	9.3	8.7	0.6	0.00511	0.00064	13,731

TESTED BY DEB DATE September 26, 2013
 REVIEWED BY _____ DATE _____

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

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

Job No.	090230	Material Code	SSRVPS
Date Sampled:	9/26/13	Station No.:	419+00
Date Tested:	September 26, 2013	Location:	20RT
Name of Project:	CO.RD.914 - WEST (S)		
County:	Code: 8	Name:	CARROLL
Sampled By:	FAULKNER	Depth:	0-5
Lab No.:	20134561	AASHTO Class:	A-4 (2)
Sample ID:	RV1862	Material Type (1 or 2):	2
LATITUDE:		LONGITUDE:	

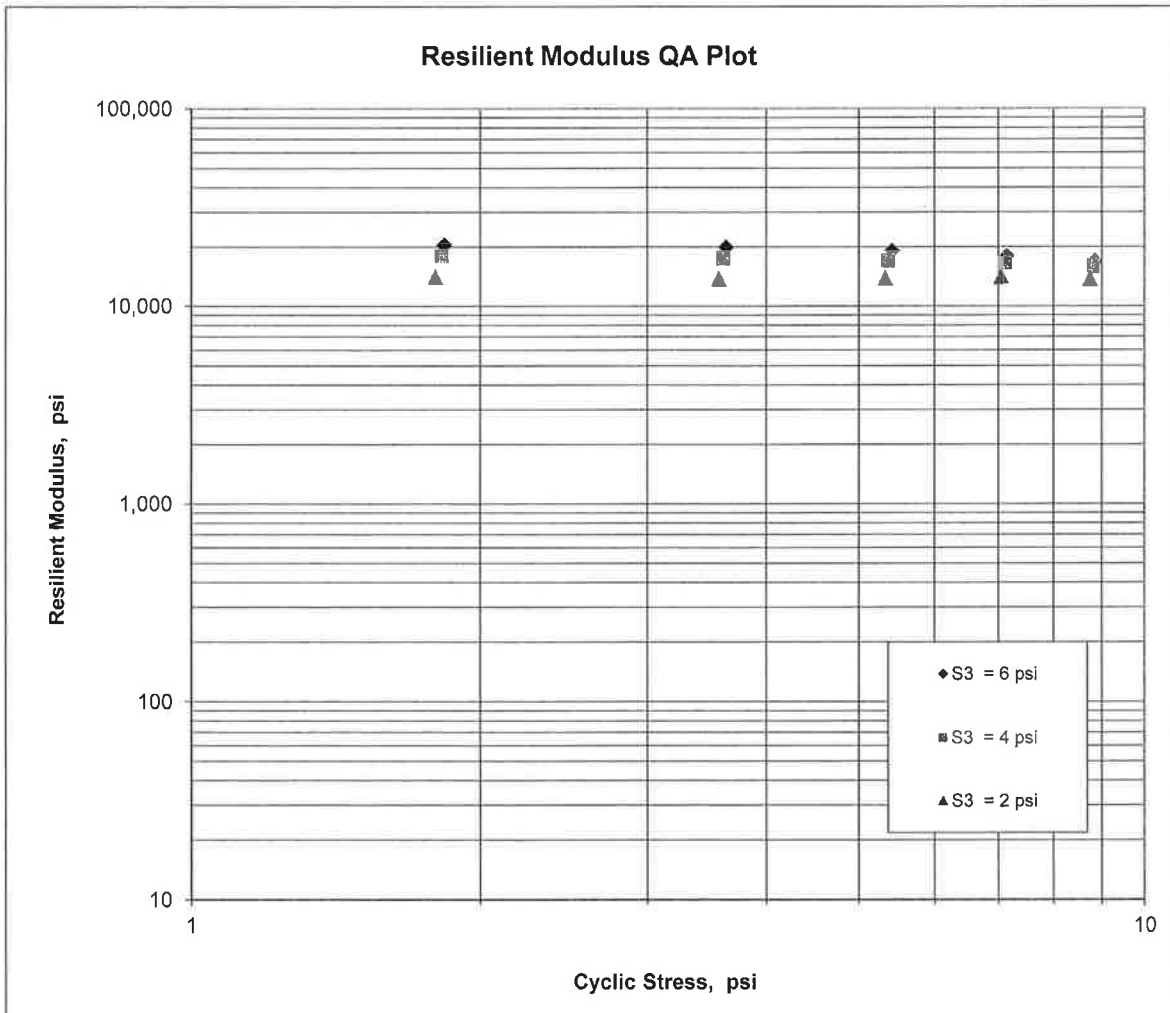
$$M_R = K_1 (S_c)^{K_2} (S_3)^{K_5}$$

$$K_1 = 12,722$$

$$K_2 = -0.06730$$

$$K_5 = 0.27574$$

$$R^2 = 0.95$$



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

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

Job No.	090230	Material Code	SSRVPS
Date Sampled:	9/25/13	Station No.:	539+00
Date Tested:	September 25, 2013	Location:	19LT
Name of Project:	CO.RD.914 - WEST (S)		
County:	Code: 8	Name:	CARROLL
Sampled By:	FAULKNER	Depth:	0-5
Lab No.:	20134562	AASHTO Class:	A-7-6(10)
Sample ID:	RV1863	Material Type (1 or 2):	2
LATITUDE:		LONGITUDE:	

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	3.98
Middle	3.97
Bottom	3.97
Average	3.97
Membrane Thickness (in):	0.00
Height of Specimen, Cap and Base (in):	8.01
Height of Cap and Base (in):	0.00
Initial Length, Lo (in):	8.01
Initial Area, Ao (sq. in):	12.40
Initial Volume, AoLo (cu. in):	99.32

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	2998.80
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4. Soil Properties:

Optimum Moisture Content (%):	23.0
Maximum Dry Density (pcf):	97.4
95% of MDD (pcf):	92.5
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	2998.80
Compaction Moisture content (%):	23.2
Compaction Wet Density (pcf):	115.04
Compaction Dry Density (pcf):	93.38
Moisture Content After Mr Test (%):	22.9

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

#VALUE!

7. Resilient Modulus, Mr:

8250(Sc)^{-0.3}1036(S3)^{-0.29705}

8. Comments

9. Tested By:

DEB

Date: September 25, 2013

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

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

Job No. 090230 **Material Code** SSRVPS
Date Sampled: 9/25/13 **Station No.:** 539+00
Date Tested: September 25, 2013 **Location:** 19LT
Name of Project: CO.RD.914 - WEST (S)
County: Code: 8 **Name:** CARROLL
Sampled By: FAULKNER **Depth:** 0-5
Lab No.: 20134562 **AASHTO Class:** A-7-6(10)
Sample ID: RV1863 **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 ₃ psi	S _{cyclic} psi	P _{max} lbs	P _{cyclic} lbs	P _{contact} lbs	S _{max} psi	S _{cyclic} psi	S _{contact} psi	H _{avg} in	ε _r in/in	M _r psi
Sequence 1	6.0	2.0	25.3	22.6	2.7	2.0	1.8	0.2	0.00126	0.00016	11,571
Sequence 2	6.0	4.0	47.4	44.7	2.7	3.8	3.6	0.2	0.00275	0.00034	10,490
Sequence 3	6.0	6.0	69.7	66.0	3.7	5.6	5.3	0.3	0.00467	0.00058	9,127
Sequence 4	6.0	8.0	91.3	85.0	6.3	7.4	6.9	0.5	0.00731	0.00091	7,513
Sequence 5	6.0	10.0	112.0	103.1	8.9	9.0	8.3	0.7	0.01039	0.00130	6,413
Sequence 6	4.0	2.0	25.2	22.4	2.7	2.0	1.8	0.2	0.00148	0.00018	9,804
Sequence 7	4.0	4.0	46.8	44.0	2.8	3.8	3.5	0.2	0.00324	0.00040	8,770
Sequence 8	4.0	6.0	67.3	64.4	2.9	5.4	5.2	0.2	0.00537	0.00067	7,747
Sequence 9	4.0	8.0	89.5	84.1	5.4	7.2	6.8	0.4	0.00795	0.00099	6,837
Sequence 10	4.0	10.0	110.5	102.6	7.9	8.9	8.3	0.6	0.01097	0.00137	6,045
Sequence 11	2.0	2.0	24.9	22.1	2.8	2.0	1.8	0.2	0.00184	0.00023	7,756
Sequence 12	2.0	4.0	46.3	43.5	2.9	3.7	3.5	0.2	0.00397	0.00050	7,072
Sequence 13	2.0	6.0	66.5	63.6	2.9	5.4	5.1	0.2	0.00638	0.00080	6,436
Sequence 14	2.0	8.0	87.3	82.7	4.6	7.0	6.7	0.4	0.00920	0.00115	5,804
Sequence 15	2.0	10.0	108.2	101.1	7.2	8.7	8.1	0.6	0.01244	0.00155	5,246

TESTED BY _____ DATE _____
 REVIEWED BY _____ DATE _____
 DEB _____ DATE September 25, 2013

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No. 090230 Material Code SSRVPS
Date Sampled: 9/25/13 Station No.: 539+00
Date Tested: September 25, 2013 Location: 19LT
Name of Project: CO.RD.914 - WEST (S)
County: Code: 8 Name: CARROLL
Sampled By: FAULKNER Depth: 0-5
Lab No.: 20134562 AASHTO Class: A-7-6(10)
Sample ID: RV1863 Material Type (1 or 2): 2
LATITUDE: LONGITUDE:

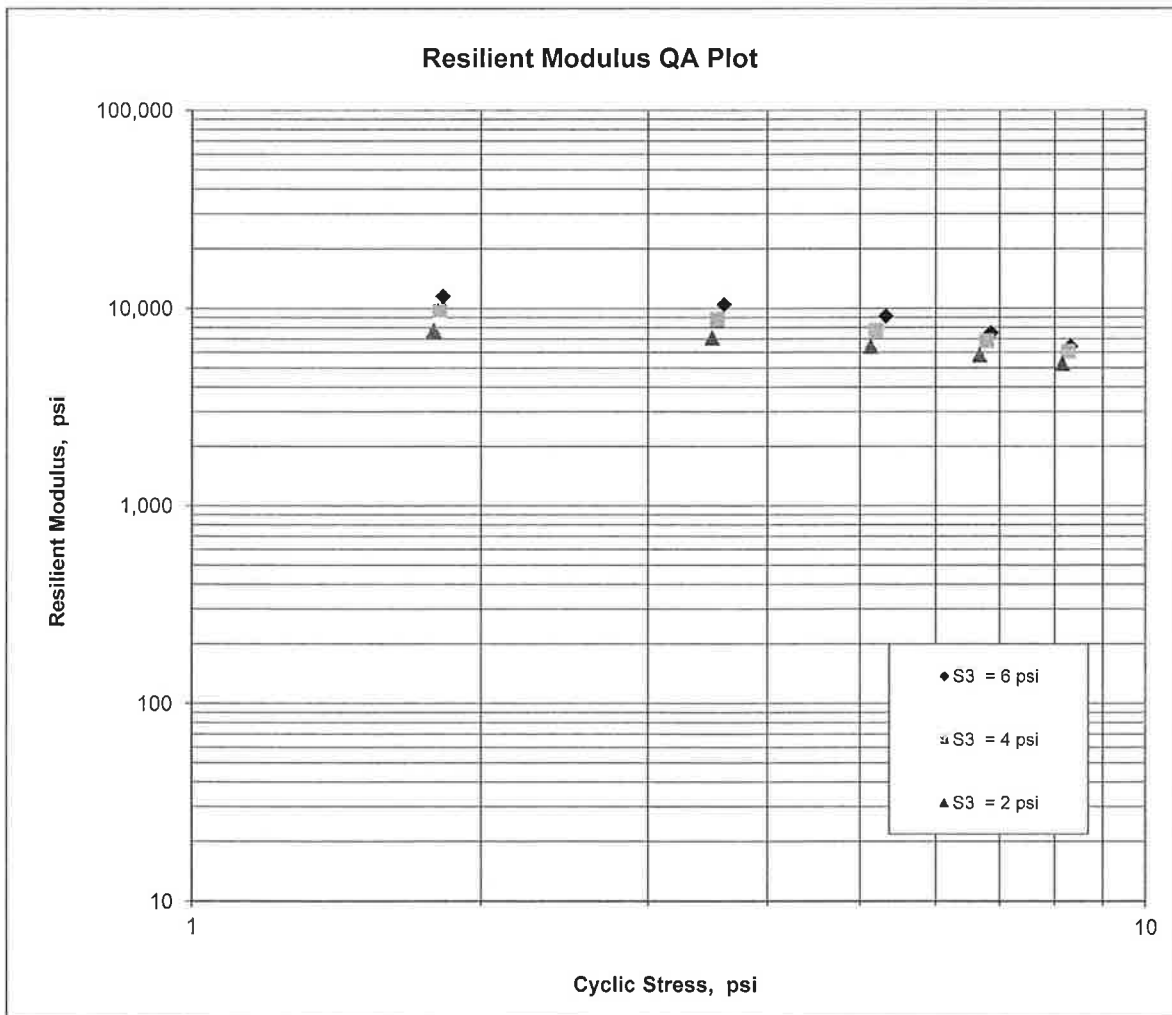
$$M_R = K_1 (S_c)^{K_2} (S_3)^{K_5}$$

$$K_1 = 8,250$$

$$K_2 = -0.31036$$

$$K_5 = 0.29705$$

$$R^2 = 0.92$$



JOB: 090230

Arkansas State Highway Transportation Department

JOB NAME: CO.RD 914 - WEST (S)

Materials Division

COUNTY NO. 8 DATE TESTED 9/23/2013

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					
363+00	23lt	0-5	BROWN	95	91	88	85	81	56	37	A-7-6(31)	RV1861	
419+00	20rt	0-5	BROWN	98	94	91	88	82	21	09	A-4(2)	RV1862	
539+00	19lt	0-5	BROWN	71	65	60	57	54	41	25	A-7-6(10)	RV1863	
355+00	20rt	0-5	BROWN	90	77	65	60	49	31	15	A-6(4)	S1813	18.7
355+00	32rt	0-5	BROWN	95	87	77	73	65	40	20	A-6(11)	S1814	23.2
355+00	43rt	0-5	BROWN	95	88	79	73	62	36	19	A-6(9)	S1815	23.5
363+00	10lt	0-5	BROWN	95	89	81	76	62	40	23	A-6(12)	S1816	17.3
363+00	23lt	0-5	BROWN	95	88	80	73	58	34	19	A-6(8)	S1817	22.9
363+00	39lt	0-5	BROWN	100				90	58	32	A-7-6(32)	S1818	45.7
371+00	20rt	0-5	BROWN	95	88	81	78	72	31	16	A-6(9)	S1819	25.3
387+00	06rt	0-5	BROWN	98	93	87	83	52	22	04	A-4(0)	S1821	18.1
387+00	20rt	0-5	BROWN	100				91	38	23	A-6(21)	S1822	14.1
395+00	05lt	0-5	BROWN	99	95	90	88	52	ND	NP	A-4(0)	S1823	8.1
395+00	18lt	0-3.5z	BROWN	99	94	88	83	72	ND	NP	A-4(0)	S1824	4
403+00	06rt	0-5	BROWN	98	95	92	90	77	17	03	A-4(0)	S1825	15.5
403+00	18rt	0-5	BROWN	97	96	95	93	78	21	05	A-4(1)	S1826	15.1
411+00	06lt	0-5	BROWN	98	94	91	87	70	23	08	A-4(3)	S1827	14.8
411+00	20lt	0-5	BROWN	90	87	86	78	62	24	06	A-4(1)	S1828	12.4
419+00	06rt	0-5	BROWN	98	95	91	85	68	24	11	A-6(4)	S1829	15.5
419+00	20rt	0-5	BROWN	100	98	95	86	67	29	16	A-6(8)	S1830	17
427+00	06lt	0-5	BROWN	96	92	88	84	75	28	11	A-6(6)	S1831	19
427+00	19lt	0-5	BROWN	99	99	97	91	73	32	19	A-6(11)	S1832	18.1
435+00	16rt	0-5	BROWN	97	93	88	84	49	ND	NP	A-4(0)	S1833	15.4
435	28rt	0-5	BROWN	95	91	88	86	46	ND	NP	A-4(0)	S1834	14.9
443+00	04rt	0-5	BROWN	97	92	88	84	65	ND	NP	A-4(0)	S1835	16.8
443+00	08lt	0-5	BROWN	98	96	93	91	78	22	03	A-4(0)	S1836	11.9

comments: LOCS. MEASURED FROM CL CONST. Z=AUGER REFUSAL, W=MULTIPLE LAYER X=STRIPPED

Friday, September 27, 2013

STA.#	LOC.	DEPTH	COLOR	#4	#10	#40	#80	#200	L.L.	P.I.	SOIL CLASS	LAB #:	%MOISTURE
				S	I	E	V	E					
451+00	16rt	0-5	BROWN	98	94	90	86	62	21	04	A-4(0)	S1837	13.6
451+00	26rt	0-5	BROWN	99	95	93	90	59	ND	NP	A-4(0)	S1838	12.1
459+00	02rt	0-5	BROWN	93	84	76	67	44	21	04	A-4(0)	S1839	6.6
459+00	14rt	0-5	BROWN	96	92	88	81	64	19	05	A-4(0)	S1840	10.9
467+00	16rt	0-5	BROWN	93	93	89	85	67	20	07	A-4(2)	S1841	17.1
467+00	26rt	0-5	BROWN	92	87	81	77	59	23	08	A-4(2)	S1842	12
475+00	06lt	0-5	BROWN	91	85	79	74	59	29	14	A-6(5)	S1843	14
475+00	16lt	0-5	BROWN	97	92	87	79	57	22	08	A-4(2)	S1844	10.4
484+00	13rt	0-5	BROWN	98	95	92	91	76	24	10	A-4(5)	S1845	20.7
484+00	23rt	0-5	BROWN	100	98	96	94	77	24	09	A-4(4)	S1846	23.6
491+00	30rt	0-5	BROWN	91	86	81	76	47	21	04	A-4(0)	S1847	12.4
499+00	20rt	0-1.5z	BROWN	93	84	75	72	56	24	09	A-4(2)	S1848	10.2
507+00	20rt	0-5	BROWN	91	77	64	60	51	30	17	A-6(5)	S1849	17.1
507+00	CL	0-3z	BROWN	98	94	90	88	75	22	06	A-4(2)	S1850	20.8
515+00	16rt	0-5	BROWN	99	95	91	89	69	ND	NP	A-4(0)	S1851	16.6
515+00	27rt	0-5	BROWN	72	57	46	42	34	26	10	A-2-4(0)	S1852	7.2
523+00	04rt	0-5	BROWN	87	78	67	62	57	38	23	A-6(10)	S1853	23.1
523+00	06lt	0-5	BROWN	5	100	89	73	63	35	18	A-6(9)	S1854	17
531+00	11rt	0-5	BROWN	88	76	66	61	53	29	15	A-6(5)	S1855	18.2
531+00	23rt	0-5	BROWN	90	79	67	62	55	25	08	A-4(2)	S1856	11.1
539+00	06lt	0-5	BROWN	84	73	60	55	49	32	17	A-6(5)	S1857	23.4
539+00	19lt	0-5	BROWN	89	84	77	73	71	44	28	A-7-6(18)	S1858	27.3
547+00	06rt	0-5	BROWN	92	83	72	66	59	26	11	A-6(4)	S1859	16.6
547+00	18rt	0-5	BROWN	97	83	67	61	55	25	08	A-4(2)	S1860	18.2
379+00	55rt	0-5	BROWN	100	98	96	94	94	42	27	A-7-6(26)	S1920	27.9

comments: LOCS. MEASURED FROM CL CONST. Z=AUGER REFUSAL, W=MULTIPLE LAYER
X=STRIPPED

Friday, September 27, 2013

JOB: 090230

JOB NAME: CO.RD 914 - WEST (S)

Arkansas State Highway Transportation Department
Materials Division

DATE TESTED
9/23/2013

COUNTY NO. 8

Michael Benson, Materials Engineer

STA.# LOC.

PAVEMENT SOUNDINGS

STA.#	LOC.	ACHMSC	ACHMBC	AGG.BASE CRS CL-7
355+00	20ft	2.5	12.0	3.0
355+00	32ft	1.75	5.25	6.0
355+00	43ft			
363+00	10ft	2.5	11.0	
363+00	23ft	2.5	9.75	
363+00	39ft			
371+00	20ft	ACHMSC	ACHMBC	AGG.BASE CRS CL-7
387+00	06ft	ACHMSC	ACHMBC	AGG.BASE CRS CL-7
387+00	20ft	9.5W	1.5	12.0
395+00	05ft	ACHMSC	ACHMBC	AGG.BASE CRS CL-7
395+00	18ft	7.75W	1.25	2.0
403+00	06ft	CHIP SEAL	ACHMSC	AGG.BASE CRS CL-7
403+00	18ft	CHIP SEAL	ACHMSC	AGG.BASE CRS CL-7
411+00	06ft	CHIP SEAL	ACHMSC	AGG.BASE CRS CL-7
411+00	20ft	.50	6.25	3.0
419+00	06ft	CHIP SEAL	ACHMSC	AGG.BASE CRS CL-7
419+00	20ft	1.0	7.0W	2.0

comments: LOCs. MEASURED FROM CL CONST. Z=AUGER REFUSAL, W=MULTIPLE LA
X=STRIPPED

427+00	06lt	CHIP SEAL .50	ACHMSC 8.5	ACHMBC 1.0	AGG.BASE CRS CL-7 --
427+00	19lt	CHIP SEAL	ACHMSC	ACHMBC	AGG.BASE CRS CL-7
435+00	16rt	CHIP SEAL	ACHMSC	ACHMBC	AGG.BASE CRS CL-7
435	28rt	CHIP SEAL .50	ACHMSC 5.5W	ACHMBC 2.0	AGG.BASE CRS CL-7 3.0
443+00	04rt	CHIP SEAL	ACHMSC	ACHMBC	AGG.BASE CRS CL-7
443+00	08lt	CHIP SEAL 1.0	ACHMSC 7.0W	ACHMBC 2.0	AGG.BASE CRS CL-7 3.0
451+00	16rt	CHIP SEAL	ACHMSC	ACHMBC	AGG.BASE CRS CL-7
451+00	26rt	CHIP SEAL .50	ACHMSC 8.0W	ACHMBC 1.5	AGG.BASE CRS CL-7 3.0
459+00	02rt	CHIP SEAL	ACHMSC	ACHMBC	AGG.BASE CRS CL-7
459+00	14rt	ACHMSC 10.0W	ACHMSC	ACHMSC	AGG.BASE CRS CL-7 3.0
467+00	16rt	ACHMSC 2.0	ACHMSC 4.0X	ACHMSC 6.0	AGG.BASE CRS CL-7 2.0
467+00	26rt	ACHMSC	ACHMSC	ACHMSC	AGG.BASE CRS CL-7
475+00	06lt	ACHMSC 12.0W	ACHMSC 1.0	AGG.BASE CRS CL-7 3.0	AGG.BASE CRS CL-7
475+00	16lt	ACHMSC	ACHMSC	AGG.BASE CRS CL-7	AGG.BASE CRS CL-7
484+00	13rt	ACHMSC	ACHMSC	AGG.BASE CRS CL-7	AGG.BASE CRS CL-7
484+00	23rt	ACHMSC 8.5W	ACHMSC 4.0	ACHMSC	AGG.BASE CRS CL-7
491+00	30rt	ACHMSC	ACHMSC	ACHMSC	AGG.BASE CRS CL-7
499+00	20rt	ACHMSC	ACHMSC	ACHMSC	AGG.BASE CRS CL-7
507+00	20rt	CHIP SEAL	ACHMSC 9.0W	ACHMBC 3.0	AGG.BASE CRS CL-7 --

comments: LOCS. MEASURED FROM CL CONST. Z=AUGER REFUSAL, W=MULTIPLE LA
X=STRIPPED

STA.# LOC.

PAVEMENT SOUNDINGS

STA.#	LOC.	CL	CHIP SEAL	ACHMSC	ACHMBC	AGG.BASE CRS CL-7
507+00			--	--	--	--
515+00	16rt		CHIP SEAL 1.0	ACHMSC 9.5W	ACHMBC 1.5	AGG.BASE CRS CL-7 2.0
515+00	27rt		ACHMSC	ACHMBC		
523+00	04rt		ACHMSC 11.0W	ACHMSC 1.0		
523+00	06lt		ACHMSC	ACHMBC		
531+00	11rt		ACHMSC 10.0W	ACHMSC 1.5		
531+00	23rt		ACHMSC	ACHMBC		
539+00	06lt		ACHMSC 12.25W	ACHMSC 3.0		
539+00	19lt		ACHMSC	ACHMBC		
547+00	06rt		ACHMSC 10.75W	ACHMSC 2.0		
547+00	18rt		ACHMSC	ACHMBC		
379+00	55rt		ACHMSC	ACHMBC	AGG.BASE CRS CL-7	--

comments: LOCS. MEASURED FROM CL CONST. Z=AUGER REFUSAL, W=MULTIPLE LA
X=STRIPPED

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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 09/27/13 SEQUENCE NO. - 1
JOB NUMBER - 090230 MATERIAL CODE - SSRVPS
FEDERAL AID NO. - TO BE ASSIGNED SPEC. YEAR - 2003
PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1
SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 08
SUPPLIER NAME - STATE DISTRICT NO. - 09
NAME OF PROJECT - CO.RD 914 - WEST (S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CARROLL, COUNTY DATE SAMPLED - 09/10/13
SAMPLED BY - FAULKNER/BOUGHNER DATE RECEIVED - 09/11/13
SAMPLE FROM - TEST HOLE DATE TESTED - 09/23/13
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	-	20134512	-	20134513	-	20134514
SAMPLE ID	-	S1813	-	S1814	-	S1815
TEST STATUS	-	INFORMATION ONLY	-	INFORMATION ONLY	-	INFORMATION ONLY
STATION	-	355+00	-	355+00	-	355+00
LOCATION	-	20rt	-	32rt	-	43rt
DEPTH IN FEET	-	0-5	-	0-5	-	0-5
MAT'L COLOR	-	BROWN	-	BROWN	-	BROWN
MAT'L TYPE	-		-		-	
LATITUDE DEG-MIN-SEC	-	36 19 3.10	-	36 19 3.01	-	36 19 3.00
LONGITUDE DEG-MIN-SEC	-	93 22 27.70	-	93 22 27.80	-	93 22 27.90
% PASSING	2	IN.	-		-	
	1 1/2	IN.	-		-	
	3/4	IN.	-	100	-	100
	3/8	IN.	-	99	-	99
	NO. 4		-	95	-	95
	NO. 10		-	87	-	88
	NO. 40		-	77	-	79
	NO. 80		-	73	-	73
	NO. 200		-	65	-	62
LIQUID LIMIT	-	31	-	40	-	36
PLASTICITY INDEX	-	15	-	20	-	19
AASHTO SOIL	-	A-6(4)	-	A-6(11)	-	A-6(9)
UNIFIED SOIL	-		-		-	
% MOISTURE CONTENT	-	18.7	-	23.2	-	23.5
ACHMSC (IN)	-	2.5	-	1.75	-	--
ACHMBC (IN)	-	12.0	-	5.25	-	--
AGG.BASE CRS CL-7 (IN)	-	3.0	-	6.0	-	--
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	

REMARKS - LOCS. MEASURED FROM CL CONST. Z=AUGER REFUSAL, W=MULTIPLE LAYERS
- X=STRIPPED

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 - 09/24/13 SEQUENCE NO. - 2
JOB NUMBER - 090230 MATERIAL CODE - SSRVPS
FEDERAL AID NO. - TO BE ASSIGNED SPEC. YEAR - 2003
PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1
SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 08
SUPPLIER NAME - STATE DISTRICT NO. - 09
NAME OF PROJECT - CO.RD 914 - WEST (S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CARROLL, COUNTY DATE SAMPLED - 09/10/13
SAMPLED BY - FAULKNER/BOUGHNER DATE RECEIVED - 09/11/13
SAMPLE FROM - TEST HOLE DATE TESTED - 09/23/13
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	20134515	20134516	20134517
SAMPLE ID	S1816	S1817	S1818
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	363+00	363+00	363+00
LOCATION	101t	231t	391t
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BROWN	BROWN	BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	36 18 56.00	36 18 55.90	36 18 55.90
LONGITUDE DEG-MIN-SEC	93 22 24.30	93 22 24.20	93 22 24.00
% PASSING			
2 IN.	-	-	-
1 1/2 IN.	-	-	-
3/4 IN.	100	-	-
3/8 IN.	98	100	-
NO. 4	95	95	100
NO. 10	89	88	-
NO. 40	81	80	-
NO. 80	76	73	-
NO. 200	62	58	90
LIQUID LIMIT	40	34	58
PLASTICITY INDEX	23	19	32
AASHTO SOIL	A-6(12)	A-6(8)	A-7-6(32)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	17.3	22.9	45.7
ACHMSC (IN)	2.5	2.5	--
ACHMBC (IN)	11.0	9.75	--
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

REMARKS - LOCS. MEASURED FROM CL CONST. Z=AUGER REFUSAL, W=MULTIPLE LAYERS
- X=STRIPPED

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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE	- 09/24/13	SEQUENCE NO.	= 3
JOB NUMBER	- 090230	MATERIAL CODE	= SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	= 2003
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	= 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	= 08
SUPPLIER NAME	- STATE	DISTRICT NO.	= 09
NAME OF PROJECT	- CO.RD 914 - WEST (S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- CARROLL, COUNTY	DATE SAMPLED	= 09/10/13
SAMPLED BY	- FAULKNER/BOUGHNER	DATE RECEIVED	= 09/11/13
SAMPLE FROM	- TEST HOLE	DATE TESTED	= 09/23/13
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	- 20134518	- 20134519	- 20134520
SAMPLE ID	- S1819	- S1920	- S1821
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 371+00	- 379+00	- 387+00
LOCATION	- 20rt	- 55rt	- 06rt
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BROWN	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 36 18 48.20	- 36 18 40.40	- 36 18 37.30
LONGITUDE DEG-MIN-SEC	- 93 22 25.80	- 93 22 21.80	- 93 22 12.70
% PASSING	2 IN. -	-	-
	1 1/2 IN. -	-	-
	3/4 IN. - 100	-	-
	3/8 IN. - 98	-	100
	NO. 4 - 95	100	98
	NO. 10 - 88	-	93
	NO. 40 - 81	-	87
	NO. 80 - 78	-	83
	NO. 200 - 72	94	52
LIQUID LIMIT	- 31	- 42	- 22
PLASTICITY INDEX	- 16	- 27	- 04
AASHTO SOIL	- A-6(9)	- A-7-6(26)	- A-4(0)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 25.3	- 27.9	- 18.1
ACHMSC (IN)	- --	- --	- 9.5W
ACHMBC (IN)	- --	- --	- 1.5
AGG.BASE CRS CL-7 (IN)	- --	- --	- 12.0
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

REMARKS - LOCS. MEASURED FROM CL CONST. Z=AUGER REFUSAL, W=MULTIPLE LAYERS
- X=STRIPPED

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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 09/27/13 SEQUENCE NO. - 4
JOB NUMBER - 090230 MATERIAL CODE - SSRVPS
FEDERAL AID NO. - TO BE ASSIGNED SPEC. YEAR - 2003
PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1
SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 08
SUPPLIER NAME - STATE DISTRICT NO. - 09
NAME OF PROJECT - CO.RD 914 - WEST (S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CARROLL, COUNTY DATE SAMPLED - 09/10/13
SAMPLED BY - FAULKNER/BOUGHNER DATE RECEIVED - 09/11/13
SAMPLE FROM - TEST HOLE DATE TESTED - 09/23/13
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	-	20134521	-	20134522	-	20134523
SAMPLE ID	-	S1822	-	S1823	-	S1824
TEST STATUS	-	INFORMATION ONLY	-	INFORMATION ONLY	-	INFORMATION ONLY
STATION	-	387+00	-	395+00	-	395+00
LOCATION	-	20rt	-	05lt	-	18lt
DEPTH IN FEET	-	0-5	-	0-5	-	0-3.5z
MAT'L COLOR	-	BROWN	-	BROWN	-	BROWN
MAT'L TYPE	-	-	-	-	-	-
LATITUDE DEG-MIN-SEC	-	36 18 37.10	-	36 18 34.60	-	36 18 34.70
LONGITUDE DEG-MIN-SEC	-	93 22 12.80	-	93 22 3.80	-	93 22 3.80
% PASSING	2	IN. -	-	-	-	-
	1 1/2	IN. -	-	-	-	-
	3/4	IN. -	-	-	-	-
	3/8	IN. -	-	100	-	100
	NO. 4	- 100	-	99	-	99
	NO. 10	-	-	95	-	94
	NO. 40	-	-	90	-	88
	NO. 80	-	-	88	-	83
	NO. 200	- 91	-	52	-	42
LIQUID LIMIT	-	38	-	ND	-	ND
PLASTICITY INDEX	-	23	-	NP	-	NP
AASHTO SOIL	-	A-6 (21)	-	A-4 (0)	-	A-4 (0)
UNIFIED SOIL	-	-	-	-	-	-
% MOISTURE CONTENT	-	14.1	-	8.1	-	4.0
ACHMSC (IN)	-	--	-	7.75W	-	--
ACHMBC (IN)	-	--	-	1.25	-	--
AGG.BASE CRS CL-7 (IN)	-	--	-	2.0	-	--
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-

REMARKS - LOCS. MEASURED FROM CL CONST. Z=AUGER REFUSAL, W=MULTIPLE LAYERS
- X=STRIPPED

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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE	- 09/24/13	SEQUENCE NO.	- 5
JOB NUMBER	- 090230	MATERIAL CODE	- SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	- 2003
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	- 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	- 08
SUPPLIER NAME	- STATE	DISTRICT NO.	- 09
NAME OF PROJECT	- CO.RD 914 - WEST (S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- CARROLL, COUNTY	DATE SAMPLED	- 09/10/13
SAMPLED BY	- FAULKNER/BOUGHNER	DATE RECEIVED	- 09/11/13
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 09/23/13
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	- 20134524	- 20134525	- 20134526
SAMPLE ID	- S1825	- S1826	- S1827
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 403+00	- 403+00	- 411+00
LOCATION	- 06rt	- 18rt	- 06lt
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BROWN	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 36 18 31.60	- 36 18 31.50	- 36 18 28.80
LONGITUDE DEG-MIN-SEC	- 93 21 55.10	- 93 21 55.10	- 93 21 45.70
% PASSING	2 IN. -	-	-
	1 1/2 IN. -	-	-
	3/4 IN. -	100	-
	3/8 IN. - 100	99	100
	NO. 4 - 98	97	98
	NO. 10 - 95	96	94
	NO. 40 - 92	95	91
	NO. 80 - 90	93	87
	NO. 200 - 77	78	70
LIQUID LIMIT	- 17	- 21	- 23
PLASTICITY INDEX	- 03	- 05	- 08
AASHTO SOIL	- A-4(0)	- A-4(1)	- A-4(3)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 15.5	- 15.1	- 14.8
CHIP SEAL (IN)	- --	- --	- .50
ACHMSC (IN)	- 7.5W	- --	- 6.25
ACHMBC (IN)	- 1.5	- --	- 2.25
AGG.BASE CRS CL-7 (IN)	- --	- --	- 3.0
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

REMARKS - LOCS. MEASURED FROM CL CONST. Z=AUGER REFUSAL, W=MULTIPLE LAYERS
- X=STRIPPED

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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE	- 09/27/13	SEQUENCE NO.	- 6
JOB NUMBER	- 090230	MATERIAL CODE	- SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	- 2003
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	- 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	- 08
SUPPLIER NAME	- STATE	DISTRICT NO.	- 09
NAME OF PROJECT	- CO.RD 914 - WEST (S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- CARROLL, COUNTY	DATE SAMPLED	- 09/10/13
SAMPLED BY	- FAULKNER/BOUGHNER	DATE RECEIVED	- 09/11/13
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 09/23/13
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	- 20134527	- 20134528	- 20134529
SAMPLE ID	- S1828	- S1829	- S1830
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 411+00	- 419+00	- 419+00
LOCATION	- 20lt	- 06rt	- 20rt
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BROWN	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 36 18 28.90	- 36 18 25.60	- 36 18 25.50
LONGITUDE DEG-MIN-SEC	- 93 21 45.70	- 93 21 36.40	- 93 21 36.40
% PASSING	2 IN. -	-	-
	1 1/2 IN. - 100	-	-
	3/4 IN. - 94	- 100	-
	3/8 IN. - 93	- 99	-
	NO. 4 - 90	- 98	- 100
	NO. 10 - 87	- 95	- 98
	NO. 40 - 83	- 91	- 95
	NO. 80 - 78	- 85	- 86
	NO. 200 - 62	- 68	- 67
LIQUID LIMIT	- 24	- 24	- 29
PLASTICITY INDEX	- 06	- 11	- 16
AASHTO SOIL	- A-4 (1)	- A-6 (4)	- A-6 (8)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 12.4	- 15.5	- 17.0
CHIP SEAL (IN)	- --	- 1.0	- --
ACHMSC (IN)	- --	- 7.0W	- --
ACHMBC (IN)	- --	- 1.0	- --
AGG.BASE CRS CL-7 (IN)	- --	- 2.0	- --
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

REMARKS - LOCS. MEASURED FROM CL CONST. Z=AUGER REFUSAL, W=MULTIPLE LAYERS
- X=STRIPPED

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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE	- 09/24/13	SEQUENCE NO.	- 7
JOB NUMBER	- 090230	MATERIAL CODE	- SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	- 2003
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	- 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	- 08
SUPPLIER NAME	- STATE	DISTRICT NO.	- 09
NAME OF PROJECT	- CO.RD 914 - WEST (S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- CARROLL, COUNTY	DATE SAMPLED	- 09/10/13
SAMPLED BY	- FAULKNER/BOUGHNER	DATE RECEIVED	- 09/11/13
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 09/23/13
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	-	20134530	-	20134531	-	20134532
SAMPLE ID	-	S1831	-	S1832	-	S1833
TEST STATUS	-	INFORMATION ONLY	-	INFORMATION ONLY	-	INFORMATION ONLY
STATION	-	427+00	-	427+00	-	435+00
LOCATION	-	061t	-	191t	-	16rt
DEPTH IN FEET	-	0-5	-	0-5	-	0-5
MAT'L COLOR	-	BROWN	-	BROWN	-	BROWN
MAT'L TYPE	-		-		-	
LATITUDE DEG-MIN-SEC	-	36 18 21.90	-	36 18 22.00	-	36 18 17.40
LONGITUDE DEG-MIN-SEC	-	93 21 27.70	-	93 21 27.60	-	93 21 19.20
% PASSING	2	IN.	-		-	
	1 1/2	IN.	-		-	
	3/4	IN.	-	100	-	
	3/8	IN.	-	99	-	100
	NO. 4		-	96	-	97
	NO. 10		-	92	-	93
	NO. 40		-	88	-	88
	NO. 80		-	84	-	84
	NO. 200		-	75	-	49
LIQUID LIMIT	-	28	-	32	-	ND
PLASTICITY INDEX	-	11	-	19	-	NP
AASHTO SOIL	-	A-6(6)	-	A-6(11)	-	A-4(0)
UNIFIED SOIL	-		-		-	
% MOISTURE CONTENT	-	19.0	-	18.1	-	15.4
CHIP SEAL	(IN)	.50	-	--	-	.50
ACHMSC	(IN)	8.5	-	--	-	5.5W
ACHMBC	(IN)	1.0	-	--	-	2.0
AGG.BASE CRS CL-7	(IN)	--	-	--	-	3.0
			-		-	
			-		-	
			-		-	
			-		-	
			-		-	

REMARKS - LOCS. MEASURED FROM CL CONST. Z=AUGER REFUSAL, W=MULTIPLE LAYERS
- X=STRIPPED

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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE	- 09/27/13	SEQUENCE NO.	- 8
JOB NUMBER	- 090230	MATERIAL CODE	- SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	- 2003
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	- 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	- 08
SUPPLIER NAME	- STATE	DISTRICT NO.	- 09
NAME OF PROJECT - CO.RD 914 - WEST (S)			
PROJECT ENGINEER - NOT APPLICABLE			
PIT/QUARRY	- ARKANSAS		
LOCATION	- CARROLL, COUNTY	DATE SAMPLED	- 09/10/13
SAMPLED BY	- FAULKNER/BOUGHNER	DATE RECEIVED	- 09/11/13
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 09/23/13
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS			

LAB NUMBER	- 20134533	- 20134534	- 20134535
SAMPLE ID	- S1834	- S1835	- S1836
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 435	- 443+00	- 443+00
LOCATION	- 28rt	- 04rt	- 081t
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BROWN	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 36 18 17.40	- 36 18 13.50	- 36 18 13.60
LONGITUDE DEG-MIN-SEC	- 93 21 19.30	- 93 21 11.10	- 93 21 11.10
% PASSING	2 IN. -	-	-
	1 1/2 IN. -	-	-
	3/4 IN. - 100	- 100	- 100
	3/8 IN. - 97	- 99	- 99
	NO. 4 - 95	- 97	- 98
	NO. 10 - 91	- 92	- 96
	NO. 40 - 88	- 88	- 93
	NO. 80 - 86	- 84	- 91
	NO. 200 - 46	- 65	- 78
LIQUID LIMIT	- ND	- ND	- 22
PLASTICITY INDEX	- NP	- NP	- 03
AASHTO SOIL	- A-4 (0)	- A-4 (0)	- A-4 (0)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 14.9	- 16.8	- 11.9
CHIP SEAL (IN)	- --	- 1.0	- --
ACHMSC (IN)	- --	- 7.0W	- --
ACHMBC (IN)	- --	- 2.0	- --
AGG.BASE CRS CL-7 (IN)	- --	- 3.0	- --
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

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- X=STRIPPED

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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE	- 09/24/13	SEQUENCE NO.	- 9
JOB NUMBER	- 090230	MATERIAL CODE	- SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	- 2003
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	- 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	- 08
SUPPLIER NAME	- STATE	DISTRICT NO.	- 09
NAME OF PROJECT	- CO.RD 914 - WEST (S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- CARROLL, COUNTY	DATE SAMPLED	- 09/10/13
SAMPLED BY	- FAULKNER/BOUGHNER	DATE RECEIVED	- 09/11/13
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 09/23/13
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	- 20134536	- 20134537	- 20134538
SAMPLE ID	- S1837	- S1838	- S1839
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 451+00	- 451+00	- 459+00
LOCATION	- 16rt	- 26rt	- 02rt
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BROWN	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 36 18 9.40	- 36 18 9.30	- 36 18 5.50
LONGITUDE DEG-MIN-SEC	- 93 21 3.40	- 93 21 3.40	- 93 20 55.20
% PASSING	2 IN. -	-	-
	1 1/2 IN. -	-	-
	3/4 IN. -	-	100
	3/8 IN. - 100	100	99
	NO. 4 - 98	99	93
	NO. 10 - 94	95	84
	NO. 40 - 90	93	76
	NO. 80 - 86	90	67
	NO. 200 - 62	52	44
LIQUID LIMIT	- 21	- ND	- 21
PLASTICITY INDEX	- 04	- NP	- 04
AASHTO SOIL	- A-4 (0)	- A-4 (0)	- A-4 (0)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 13.6	- 12.1	- 6.6
CHIP SEAL (IN)	- .50	- --	- --
ACHMSC (IN)	- 8.0W	- --	- --
ACHMBC (IN)	- 1.5	- --	- --
AGG.BASE CRS CL-7 (IN)	- 3.0	- --	- --
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

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- X=STRIPPED

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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE	- 09/24/13	SEQUENCE NO.	- 10
JOB NUMBER	- 090230	MATERIAL CODE	- SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	- 2003
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	- 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	- 08
SUPPLIER NAME	- STATE	DISTRICT NO.	- 09
NAME OF PROJECT	- CO.RD 914 - WEST (S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- CARROLL, COUNTY	DATE SAMPLED	- 09/10/13
SAMPLED BY	- FAULKNER/BOUGHNER	DATE RECEIVED	- 09/11/13
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 09/23/13
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	- 20134539	- 20134540	- 20134541
SAMPLE ID	- S1840	- S1841	- S1842
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 459+00	- 467+00	- 467+00
LOCATION	- 14rt	- 16rt	- 26rt
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BROWN	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 36 18 5.40	- 36 18 .80	- 36 18 .70
LONGITUDE DEG-MIN-SEC	- 93 20 55.20	- 93 20 46.50	- 93 20 46.50
% PASSING	2 IN. -	-	-
	1 1/2 IN. -	-	-
	3/4 IN. - 100	-	- 100
	3/8 IN. - 99	- 100	- 97
	NO. 4 - 96	- 98	- 92
	NO. 10 - 92	- 93	- 87
	NO. 40 - 88	- 89	- 81
	NO. 80 - 81	- 85	- 77
	NO. 200 - 54	- 67	- 59
LIQUID LIMIT	- 19	- 20	- 23
PLASTICITY INDEX	- 05	- 07	- 08
AASHTO SOIL	- A-4 (0)	- A-4 (2)	- A-4 (2)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 10.9	- 17.1	- 12.0
ACHMSC (IN)	- 10.0W	- 2.0	- --
ACHMSC (IN)	- --	- 4.0X	- --
ACHMSC (IN)	- --	- 6.0	- --
ACHMBC (IN)	- 3.0	- 2.0	- --
AGG.BASE CRS CL-7 (IN)	- 3.0	- 2.0	- --
	-	-	-
	-	-	-
	-	-	-
	-	-	-

REMARKS - LOCS. MEASURED FROM CL CONST. Z=AUGER REFUSAL, W=MULTIPLE LAYERS
- X=STRIPPED

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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 09/24/13 SEQUENCE NO. - 11
 JOB NUMBER - 090230 MATERIAL CODE - SSRVPS
 FEDERAL AID NO. - TO BE ASSIGNED SPEC. YEAR - 2003
 PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1
 SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 08
 SUPPLIER NAME - STATE DISTRICT NO. - 09
 NAME OF PROJECT - CO.RD 914 - WEST (S)
 PROJECT ENGINEER - NOT APPLICABLE
 PIT/QUARRY - ARKANSAS
 LOCATION - CARROLL, COUNTY DATE SAMPLED - 09/10/13
 SAMPLED BY - FAULKNER/BOUGHNER DATE RECEIVED - 09/11/13
 SAMPLE FROM - TEST HOLE DATE TESTED - 09/23/13
 MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	20134542	20134543	20134544
SAMPLE ID	S1843	S1844	S1845
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	475+00	475+00	484+00
LOCATION	061t	161t	13rt
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BROWN	BROWN	BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	36 17 56.40	36 17 56.50	36 17 52.20
LONGITUDE DEG-MIN-SEC	93 20 37.60	93 20 37.60	93 20 28.70
% PASSING			
2 IN.	-	-	-
1 1/2 IN.	-	-	-
3/4 IN.	100	100	100
3/8 IN.	98	98	99
NO. 4	91	97	98
NO. 10	85	92	95
NO. 40	79	87	92
NO. 80	74	79	91
NO. 200	59	57	76
LIQUID LIMIT	29	22	24
PLASTICITY INDEX	14	08	10
AASHTO SOIL	A-6(5)	A-4(2)	A-4(5)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	14.0	10.4	20.7
ACHMSC (IN)	12.0W	--	--
ACHMBC (IN)	1.0	--	--
AGG.BASE CRS CL-7 (IN)	3.0	--	--
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

REMARKS - LOCS. MEASURED FROM CL CONST. Z=AUGER REFUSAL, W=MULTIPLE LAYERS
 - X=STRIPPED
 -
 -

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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE	- 09/24/13	SEQUENCE NO.	- 12
JOB NUMBER	- 090230	MATERIAL CODE	- SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	- 2003
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	- 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	- 08
SUPPLIER NAME	- STATE	DISTRICT NO.	- 09
NAME OF PROJECT	- CO.RD 914 - WEST (S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- CARROLL, COUNTY	DATE SAMPLED	- 09/10/13
SAMPLED BY	- FAULKNER/BOUGHNER	DATE RECEIVED	- 09/11/13
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 09/23/13
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	- 20134545	- 20134546	- 20134547
SAMPLE ID	- S1846	- S1847	- S1848
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 484+00	- 491+00	- 499+00
LOCATION	- 23rt	- 30rt	- 20rt
DEPTH IN FEET	- 0-5	- 0-5	- 0-1.5z
MAT'L COLOR	- BROWN	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 36 17 52.00	- 36 17 50.10	- 36 17 49.90
LONGITUDE DEG-MIN-SEC	- 93 20 28.80	- 93 20 20.10	- 93 20 13.20
% PASSING	2 IN. -	-	-
	1 1/2 IN. -	-	-
	3/4 IN. -	100	100
	3/8 IN. -	96	97
	NO. 4 - 100	91	93
	NO. 10 - 98	86	84
	NO. 40 - 96	81	75
	NO. 80 - 94	76	72
	NO. 200 - 77	47	56
LIQUID LIMIT	- 24	- 21	- 24
PLASTICITY INDEX	- 09	- 04	- 09
AASHTO SOIL	- A-4(4)	- A-4(0)	- A-4(2)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 23.6	- 12.4	- 10.2
ACHMSC	(IN) - 8.5W	- --	- --
ACHMBC	(IN) - 4.0	- --	- --
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

REMARKS - LOCS. MEASURED FROM CL CONST. Z=AUGER REFUSAL, W=MULTIPLE LAYERS
 - X=STRIPPED

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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE	- 09/27/13	SEQUENCE NO.	- 13
JOB NUMBER	- 090230	MATERIAL CODE	- SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	- 2003
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	- 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	- 08
SUPPLIER NAME	- STATE	DISTRICT NO.	- 09
NAME OF PROJECT	- CO.RD 914 - WEST (S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- CARROLL, COUNTY	DATE SAMPLED	- 09/10/13
SAMPLED BY	- FAULKNER/BOUGHNER	DATE RECEIVED	- 09/11/13
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 09/23/13
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	- 20134548	- 20134549	- 20134550
SAMPLE ID	- S1849	- S1850	- S1851
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 507+00	- 507+00	- 515+00
LOCATION	- 20rt	- CL	- 16rt
DEPTH IN FEET	- 0-5	- 0-3z	- 0-5
MAT'L COLOR	- BROWN	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 36 17 49.70	- 36 17 49.80	- 36 17 49.30
LONGITUDE DEG-MIN-SEC	- 93 20 3.70	- 93 20 3.70	- 93 19 53.50
% PASSING	2 IN. -	-	-
	1 1/2 IN. -	-	-
	3/4 IN. -	-	-
	3/8 IN. - 100	- 100	- 100
	NO. 4 - 91	- 98	- 99
	NO. 10 - 77	- 94	- 95
	NO. 40 - 64	- 90	- 91
	NO. 80 - 60	- 88	- 89
	NO. 200 - 51	- 75	- 69
LIQUID LIMIT	- 30	- 22	- ND
PLASTICITY INDEX	- 17	- 06	- NP
AASHTO SOIL	- A-6(5)	- A-4(2)	- A-4(0)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 17.1	- 20.8	- 16.6
CHIP SEAL (IN)	- --	- --	- 1.0
ACHMSC (IN)	- 9.0W	- --	- 9.5W
ACHMBC (IN)	- 3.0	- --	- 1.5
AGG.BASE CRS CL-7 (IN)	- --	- --	- 2.0

REMARKS - LOCS. MEASURED FROM CL CONST. Z=AUGER REFUSAL, W=MULTIPLE LAYERS
- X=STRIPPED

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS

MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE	- 09/27/13	SEQUENCE NO.	= 14
JOB NUMBER	- 090230	MATERIAL CODE	= SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	= 2003
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	= 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	= 08
SUPPLIER NAME	- STATE	DISTRICT NO.	= 09
NAME OF PROJECT - CO.RD 914 - WEST (S)			
PROJECT ENGINEER - NOT APPLICABLE			
PIT/QUARRY	- ARKANSAS		
LOCATION	- CARROLL, COUNTY	DATE SAMPLED	= 09/10/13
SAMPLED BY	- FAULKNER/BOUGHNER	DATE RECEIVED	= 09/11/13
SAMPLE FROM	- TEST HOLE	DATE TESTED	= 09/23/13
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS			

LAB NUMBER	-	20134551	-	20134552	-	20134553
SAMPLE ID	-	S1852	-	S1853	-	S1854
TEST STATUS	-	INFORMATION ONLY	-	INFORMATION ONLY	-	INFORMATION ONLY
STATION	-	515+00	-	523+00	-	523+00
LOCATION	-	27rt	-	04rt	-	061t
DEPTH IN FEET	-	0-5	-	0-5	-	0-5
MAT'L COLOR	-	BROWN	-	BROWN	-	BROWN
MAT'L TYPE	-		-		-	
LATITUDE DEG-MIN-SEC	-	36 17 49.20	-	36 17 49.30	-	36 17 49.30
LONGITUDE DEG-MIN-SEC	-	93 19 53.50	-	93 19 43.60	-	93 19 43.60
% PASSING						
	2	IN.	-		-	
	1	1/2	IN.	-	-	
		3/4	IN.	-	100	
		3/8	IN.	-	91	
	NO.	4		-	72	
	NO.	10		-	57	100
	NO.	40		-	46	89
	NO.	80		-	42	75
	NO.	200		-	34	57
				-		63
LIQUID LIMIT	-	26	-	38	-	35
PLASTICITY INDEX	-	10	-	23	-	18
AASHTO SOIL	-	A-2-4(0)	-	A-6(10)	-	A-6(9)
UNIFIED SOIL	-		-		-	
% MOISTURE CONTENT	-	7.2	-	23.1	-	17.0
ACHMSC	(IN)	--	-	11.0W	-	--
ACHMBC	(IN)	--	-	1.0	-	--
			-		-	
			-		-	
			-		-	
			-		-	
			-		-	
			-		-	
			-		-	
			-		-	
			-		-	
			-		-	
			-		-	

REMARKS - LOCS. MEASURED FROM CL CONST. Z=AUGER REFUSAL, W=MULTIPLE LAYERS
 - X=STRIPPED

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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE	- 09/24/13	SEQUENCE NO.	- 15
JOB NUMBER	- 090230	MATERIAL CODE	- SSRVPS
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	- 2003
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	- 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	- 08
SUPPLIER NAME	- STATE	DISTRICT NO.	- 09
NAME OF PROJECT	- CO.RD 914 - WEST (S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- CARROLL, COUNTY	DATE SAMPLED	- 09/10/13
SAMPLED BY	- FAULKNER/BOUGHNER	DATE RECEIVED	- 09/11/13
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 09/23/13
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	-	20134554	-	20134555	-	20134556
SAMPLE ID	-	S1855	-	S1856	-	S1857
TEST STATUS	-	INFORMATION ONLY	-	INFORMATION ONLY	-	INFORMATION ONLY
STATION	-	531+00	-	531+00	-	539+00
LOCATION	-	11rt	-	23rt	-	06lt
DEPTH IN FEET	-	0-5	-	0-5	-	0-5
MAT'L COLOR	-	BROWN	-	BROWN	-	BROWN
MAT'L TYPE	-		-		-	
LATITUDE DEG-MIN-SEC	-	36 17 48.80	-	36 17 48.70	-	36 17 48.80
LONGITUDE DEG-MIN-SEC	-	93 19 31.70	-	93 19 31.60	-	93 19 21.90
% PASSING	2	IN.	-		-	
	1 1/2	IN.	-		-	
	3/4	IN.	-	100	-	100
	3/8	IN.	-	95	-	95
	NO. 4		-	88	-	84
	NO. 10		-	76	-	73
	NO. 40		-	66	-	60
	NO. 80		-	61	-	55
	NO. 200		-	53	-	49
LIQUID LIMIT	-	29	-	25	-	32
PLASTICITY INDEX	-	15	-	08	-	17
AASHTO SOIL	-	A-6(5)	-	A-4(2)	-	A-6(5)
UNIFIED SOIL	-		-		-	
% MOISTURE CONTENT	-	18.2	-	11.1	-	23.4
ACHMSC	(IN)	- 10.0W	-	--	-	12.25W
ACHMBC	(IN)	- 1.5	-	--	-	3.0
			-		-	
			-		-	
			-		-	
			-		-	
			-		-	
			-		-	

REMARKS - LOCS. MEASURED FROM CL CONST. Z=AUGER REFUSAL, W=MULTIPLE LAYERS
- X=STRIPPED
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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 - 09/27/13 SEQUENCE NO. - 16
JOB NUMBER - 090230 MATERIAL CODE - SSRVPS
FEDERAL AID NO. - TO BE ASSIGNED SPEC. YEAR - 2003
PURPOSE - SOIL SURVEY SAMPLE SUPPLIER ID. - 1
SPEC. REMARKS - NO SPECIFICATION CHECK COUNTY/STATE - 08
SUPPLIER NAME - STATE DISTRICT NO. - 09
NAME OF PROJECT - CO.RD 914 - WEST (S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CARROLL, COUNTY DATE SAMPLED - 09/10/13
SAMPLED BY - FAULKNER/BOUGHNER DATE RECEIVED - 09/11/13
SAMPLE FROM - TEST HOLE DATE TESTED - 09/23/13
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	20134557	20134558	20134559
SAMPLE ID	S1858	S1859	S1860
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	539+00	547+00	547+00
LOCATION	191t	06rt	18rt
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BROWN	BROWN	BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	36 17 48.90	36 17 48.40	36 17 48.30
LONGITUDE DEG-MIN-SEC	93 19 21.90	93 19 12.20	93 19 12.10
% PASSING			
2 IN.	-	-	-
1 1/2 IN.	-	-	-
3/4 IN.	100	100	100
3/8 IN.	94	98	98
NO. 4	89	92	97
NO. 10	84	83	83
NO. 40	77	72	67
NO. 80	73	66	61
NO. 200	71	59	55
LIQUID LIMIT	44	26	25
PLASTICITY INDEX	28	11	08
AASHTO SOIL	A-7-6(18)	A-6(4)	A-4(2)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	27.3	16.6	18.2
ACHMSC (IN)	--	10.75W	--
ACHMBC (IN)	--	2.0	--
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

REMARKS - LOCS. MEASURED FROM CL CONST. Z=AUGER REFUSAL, W=MULTIPLE LAYERS
- X=STRIPPED
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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	- 09/24/13	SEQUENCE NO.	- 1
JOB NUMBER	- 090230	MATERIAL CODE	- RV
FEDERAL AID NO.	- TO BE ASSIGNED	SPEC. YEAR	- 2003
PURPOSE	- SOIL SURVEY SAMPLE	SUPPLIER ID.	- 1
SPEC. REMARKS	- NO SPECIFICATION CHECK	COUNTY/STATE	- 08
SUPPLIER NAME	- STATE	DISTRICT NO.	- 09
NAME OF PROJECT	- CO.RD 914 - WEST (S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- CARROLL, COUNTY	DATE SAMPLED	- 09/10/13
SAMPLED BY	- FAULKNER/BOUGHNER	DATE RECEIVED	- 09/11/13
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 09/23/13
MATERIAL DESC.	- SOIL SURVEY - RESISTANCE R-VALUE	ACTUAL RESULTS	

LAB NUMBER	- 20134560	- 20134561	- 20134562
SAMPLE ID	- RV1861	- RV1862	- RV1863
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 363+00	- 419+00	- 539+00
LOCATION	- 231t	- 20rt	- 191t
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BROWN	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 36 18 55.90	- 36 18 25.50	- 36 17 48.90
LONGITUDE DEG-MIN-SEC	- 93 22 24.20	- 93 21 36.40	- 93 19 21.90
% PASSING	2 IN. -	-	-
	1 1/2 IN. -	-	-
	3/4 IN. - 100	- 100	- 100
	3/8 IN. - 99	- 99	- 84
	NO. 4 - 95	- 98	- 71
	NO. 10 - 91	- 94	- 65
	NO. 40 - 88	- 91	- 60
	NO. 80 - 85	- 83	- 57
	NO. 200 - 81	- 62	- 54
LIQUID LIMIT	- 56	- 21	- 41
PLASTICITY INDEX	- 37	- 09	- 25
AASHTO SOIL	- A-7-6(31)	- A-4(2)	- A-7-6(10)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	-	-	-

REMARKS - LOCS. MEASURED FROM CL CONST.