ARKANSAS DEPARTMENT OF TRANSPORTATION

SUBSURFACE INVESTIGATION

STATE JOB NO. CA0704

FEDERAL AID PROJECT NO. ACHNPP-0007(25)

HWY. 79 – SOUTH (WIDENING) (S)

STATE HIGHWAY 167 **SECTION** 4

IN CALHOUN **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 STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

May 8, 2017

TO: Mr. Rick Ellis, Bridge Engineer

SUBJECT: Job No. CA0704
Hwy. 79 – South (Widening) (S)
Route 167, Section 4
Calhoun County

Transmitted herewith are the boring logs with corrected stations and locations for the above referenced project. Please replace these items with those transmitted in the IOM dated August 1, 2016.

Michael C. Benson
Materials Engineer

MCB:rpt:mlg

cc: State Construction Engineer - Master File Copy
District 7 Engineer
G.C. File

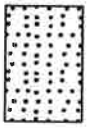
LEGEND

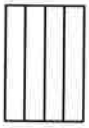
SOIL TYPES

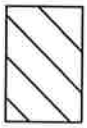
(SHOWN IN SYMBOL COLUMN)

(PREDOMINANT TYPE SHOWN HEAVY)


GRAVEL


SAND

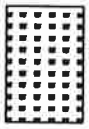

SILT

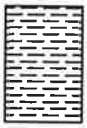

CLAY

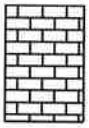

ORGANIC MATTER

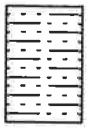
ROCK TYPES

(SHOWN IN SYMBOL COLUMN)


SANDSTONE


SHALE or SILTSTONE


LIMESTONE or DOLOMITE


ALTERNATING LAYERS of SHALE and SANDSTONE


OTHER

SAMPLER TYPES

(SHOWN IN SAMPLE COLUMN)

SHELBY TUBE


UNDISTURBED SAMPLE RECOVERY


DISTURBED SAMPLE RECOVERY


NO RECOVERY

SPLIT SPOON


SAMPLE RECOVERY


NO RECOVERY

ROCK CORING


% RECOVERY INDICATED ON LOGS

TERMS DESCRIBING CONSISTENCY OR CONDITION

GRANULAR SOIL		CLAY		CLAY-SHALE		SHALE	
"N" Value	Density	"N" Value	Consistency	"N" Value	Consistency	"N" Value	Consistency
0-4	Very Loose	0-1	Very Soft	0-1	Very Soft		
5-10	Loose	2-4	Soft	2-4	Soft	31-60	Soft
11-30	Medium Dense	5-8	Medium Stiff	5-8	Medium Stiff	Over 60	
31-50	Dense	9-15	Stiff	9-15	Stiff	More than 2"	
Over 50	Very Dense	16-30	Very Stiff	16-30	Very Stiff	Penetration	
		31-60	Hard	31-60	Hard	in 60 Blows:	Medium Hard
		Over 60	Very Hard	Over 60	Very Hard	Less than 2"	
						Penetration	
						in 60 Blows:	Hard

1. Ground water elevations indicated on boring logs represent ground water elevations at date or time shown on boring log. Absence of water surface implies that no ground water data is available but does not necessarily mean that ground water will not be encountered at locations or within the vertical reaches of these borings.
2. Borings represent subsurface conditions at their respective locations for their respective depths. Variations in conditions between or adjacent to boring locations may be encountered.
3. Terms used for describing soils according to their texture or grain size distribution are in accordance with the Unified Soil Classification System.

Standard Penetration Test – Driving a 2.0" O.D., 1-3/8" I.D. sampler a distance of 1.0 foot into undisturbed soil with a 140 pound hammer free falling a distance of 30 inches. It is customary to drive the spoon 6.0 inches to seat into undisturbed soil, then perform the test. The number of hammer blows for seating the spoon and performing the test are recorded for each 6 inches of penetration on the drill log. The field "N" Value (N_f) can be obtained by adding the bottom two numbers for example: $\frac{6}{8-9} \Rightarrow 8+9=17 blows/ft$. The "N" Value corrected to 60% efficiency (N_{60}) can be obtained by multiplying N_f by the hammer correction factor published on the boring log.

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 1-SB
PAGE 1 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 756+92
LOCATION: 19' Right of Centerline of SB Alignment
LOGGED BY: Coty Campbell

DATE: May 10, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 370.6	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
5			Moist, Soft, Brown Silty Clay						1 2-2		
10			Moist, Stiff, Brown Sandy Clay						3 5-6		
15											
20			Moist, Loose, Brown Clayey Sand with Some Organic Matter with Trace Gravel						2 4-6		
25			Moist, Medium Dense, Brown Silty Sand						6 8-11		
30			Moist, Very Stiff, Reddish Brown Clay						4 8-11		
35			Moist, Medium Stiff, Reddish Brown Clay						1 1-7		

REMARKS: * Cemented layer encountered at a depth of 77.5' to 78.4' below ground level.

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 1-SB
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JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 756+92
LOCATION: 19' Right of Centerline of SB Alignment
LOGGED BY: Coty Campbell

DATE: May 10, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 370.6	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
40			Moist, Stiff, Brown Clay						3 4-7		
45			Moist, Very Stiff, Dark Brown Lignitic Clay						3 6-12		
50			Moist, Very Dense, Brown Silty Sand						24 52-60 (10")		
55			Moist, Medium Dense, Brown Clayey Sand						6 12-14		
60			Moist, Very Dense, Brown Silt						12 26-28		
65			Moist, Dense, Gray Clayey Sand						8 15-19		
70			Moist, Hard, Brown Clay with Some Lignite						10 18-20		

REMARKS: * Cemented layer encountered at a depth of 77.5' to 78.4' below ground level.

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 1-SB
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JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 756+92
LOCATION: 19' Right of Centerline of SB Alignment
LOGGED BY: Coty Campbell

DATE: May 10, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 370.6	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
75			Moist, Hard, Brown Clay						13 18-30		
80			Moist, Dense, Brown Silty Sand *						12 19-23 10 15-25		
85											
90			Moist, Hard, Brown Clay						10 18-21		
95			Moist, Very Hard, Dark Brown Lignitic Clay						14 30-40		
100			Moist, Dense, Brown Silty Sand						12 18-25		
105			Moist, Very Dense, Brown Silty Sand						12 48-50		
			Boring Terminated								

REMARKS: * Cemented layer encountered at a depth of 77.5' to 78.4' below ground level.

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 2-SB
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JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 759+43
LOCATION: 23' Right of Centerline of SB Alignment
LOGGED BY: Coty Campbell

DATE: May 17, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 371.7	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
5		X	Moist, Medium Stiff, Light Gray Sandy Clay						2 3-3		
10		X	Moist, Stiff, Light Gray Clay						2 4-6		
15		X	Moist, Medium Stiff, Light Gray Silty Clay						2 3-4		
20		X	Moist, Medium Dense, Light Gray Sand*						3 6-10		
25		X	Moist, Very Stiff, Reddish Brown Clay						5 10-15		
30		X	Moist, Hard, Light Gray Clay						10 15-20		
35											

REMARKS: * Water loss at 24.2 feet

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 2-SB
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JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 759+43
LOCATION: 23' Right of Centerline of SB Alignment
LOGGED BY: Coty Campbell

DATE: May 17, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 371.7	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
40			Moist, Very Stiff, Brown Silty Clay						10 12-14		
45			Moist, Very Stiff, Light Gray Sandy Clay						10 12-16		
50			Moist, Dense, Light Gray Clayey Sand						11 18-28		
55			Moist, Very Dense, Light Gray Sand						18 30-34		
60			Moist, Very Dense, Light Gray Clayey Sand						14 21-30		
65			Moist, Hard, Light Gray Lignitic Clay						18 25-30		
70			Moist, Hard, Light Gray Sandy Clay						12 19-26		

REMARKS: * Water loss at 24.2 feet

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

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JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 759+43
LOCATION: 23' Right of Centerline of SB Alignment
LOGGED BY: Coty Campbell

DATE: May 17, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 371.7	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
75		X	Moist, Very Dense, Light Gray Sand with Some Lignite						14 19-34		
80		X	Moist, Dense, Light Gray Sand						14 20-24		
85		X	Moist, Very Dense, Light Gray Sand						18 20-39		
90		X	Moist, Very Dense, Light Brown Sand with Some Lignite						15 24-28		
95		X	Moist, Hard, Dark Brown Sandy Clay with Lignite						19 23-31		
100		X	Moist, Dense, Light Gray Sand with Some Clay						14 19-24		
		X	Moist, Very Dense, Light Gray Sand						19 30-42		
105			Boring Terminated								

REMARKS: * Water loss at 24.2 feet

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

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JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 757+09
LOCATION: 13' Right of Centerline of NB Alignment
LOGGED BY: Coty Campbell

DATE: May 11, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Diamond Core
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 356.5	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
5		X	Moist, Stiff, Light Brown Sandy Clay						5 7-7		
10		X	Moist, Medium Dense, Light Brown Sand						4 11-13		
15											
20		X	Moist, Soft, Light Gray Silty Clay						2 1-1		
25		X	Moist, Very Stiff, Light Brown Clay						6 12-13		
30		X	Moist, Very Stiff, Light Gray Clay with Some Lignite						6 10-12		
35		X	Moist, Very Hard, Light Gray Sandy Clay with Some Lignite						14 50-60 (7")		

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

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JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 757+09
LOCATION: 13' Right of Centerline of NB Alignment
LOGGED BY: Coty Campbell

DATE: May 11, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Diamond Core
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 356.5	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
40			Moist, Medium Dense, Light Gray Silty Sand						8 12-18		
45			Moist, Very Dense, Light Gray Silty Sand						11 20-48		
50			Moist, Dense, Light Gray Clayey Sand						9 13-19		
55			Moist, Hard, Dark Brown Lignitic Clay						13 19-21		
60			Moist, Dense, Dark Brown Clayey Sand						11 16-21		
65			Moist, Dense, Light Gray Sand						13 17-26		
70			Moist, Dense, Light Gray Silty Clay with Some Lignite						11 20-20		

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

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JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 757+09
LOCATION: 13' Right of Centerline of NB Alignment
LOGGED BY: Coty Campbell

DATE: May 11, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Diamond Core
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 356.5	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
75			Moist, Hard, Light Gray Silty Clay with Some Lignite						12 25-30		
80			Moist, Hard, Dark Brown Lignitic Clay						17 18-25		
85			Moist, Hard, Light Gray Silty Clay with Some Lignite						10 20-35		
			SANDSTONE - Unweathered, Poorly Cemented, Light Gray						60 (2")		
90			Moist, Very Dense, Light Gray Sand						25 35-44		
95									25 33-39		
100											
			Moist, Hard, Light Gray Silty Clay						23 26-34		
105			Boring Terminated								

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 2-NB
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JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 757+58
LOCATION: 2' Left of Centerline of NB Alignment
LOGGED BY: Coty Campbell

DATE: May 4, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 357.5	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
5			Dry, Stiff, Light Brown Silty Clay						5 4-10		
10			Moist, Medium Dense, Light Brown Clayey Sand						11 12-14		
15											
20			Moist, Soft, Reddish Brown Clay						2 2-2		
25			Moist, Stiff, Brown Clay						2 4-9		
30			Moist, Very Stiff, Dark Brown Lignitic Clay						4 7-11		
35									16 30-45		

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

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JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 757+58
LOCATION: 2' Left of Centerline of NB Alignment
LOGGED BY: Coty Campbell

DATE: May 4, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
			SURFACE ELEVATION: 357.5								
40			Moist, Dense to Very Dense, Light Brown Silty Sand						10 18-21 19 29-60 (9")		
45											
50			Moist, Hard, Brown Sandy Clay						8 15-18		
55			Moist, Hard, Dark Brown Lignitic Clay						11 15-21		
60			Moist, Hard, Brown Sandy Clay with Trace Lignite						9 14-21		
65			Moist, Dense, Brown Silty Sand						8 18-24 1 16-30		
70											

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

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JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 757+58
LOCATION: 2' Left of Centerline of NB Alignment
LOGGED BY: Coty Campbell

DATE: May 4, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 357.5	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
75			Moist, Hard, Brown Sandy Clay						8 18-23		
80			Moist, Hard, Dark Brown Lignitic Clay						20 25-35		
85			Moist, Hard, Dark Brown Clay with Lignite						10 26-30		
90			Moist, Hard, Brown Sandy Clay with Some Lignite						10 17-20		
95			Moist, Very Dense, Brown Silty Sand						19 31-55		
100									17 30-48		
			Moist, Hard, Brown Sandy Clay						12 19-30		
105			Boring Terminated								

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 3-NB
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JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 757+60
LOCATION: 30' Right of Centerline of NB Alignment
LOGGED BY: Coty Campbell

DATE: April 28, 2016 and May 3, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 354.8	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
5		X	Moist, Very Stiff, Light Brown Silty Clay						6 10-12		
10		X	Moist, Medium Dense, Light Brown Clayey Sand						6 11-14		
15		X	Moist, Stiff, Brown Clay						3 5-5		
20		X	Moist, Very Stiff, Light Brown Clay						3 6-13		
25		X	Moist, Very Dense, Light Gray Sand with Silt						13 21-45		
30		X	Wet, Very Dense, Light Gray Sand						25 60 (4")		
35											

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 3-NB
PAGE 2 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 757+60
LOCATION: 30' Right of Centerline of NB Alignment
LOGGED BY: Coty Campbell

DATE: April 28, 2016 and May 3, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
			SURFACE ELEVATION: 354.8								
40			Moist, Very Stiff to Hard, Gray Silty Clay						9 12-25 7 12-16		
45											
50			Moist, Hard, Gray Clay with Some Lignite						9 15-18 10 14-20		
55											
60			Moist, Hard, Gray Sandy Clay						11 16-22		
65			Moist, Very Dense, Gray Silty Sand						8 17-34		
70			Moist, Dense, Gray Sand						9 18-29		

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 3-NB
PAGE 3 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 757+60
LOCATION: 30' Right of Centerline of NB Alignment
LOGGED BY: Coty Campbell

DATE: April 28, 2016 and May 3, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 354.8	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
75			Moist, Hard, Gray Clay						12 15-24		
80			Moist, Hard, Dark Brown Lignitic Clay						18 25-34		
85			Moist, Hard, Gray Clay with Some Sand and Trace Lignite						16 22-31		
90			Moist, Dense to Very Dense, Gray Silty Sand						9 17-25		
95									19 22-54		
100			Moist, Hard, Gray Silty Clay with Trace Lignite						18 22-25		
105			Moist, Hard, Gray Clay						11 20-30		
			Boring Terminated								

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 4-NB
PAGE 1 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 759+13
LOCATION: 17' Right of Centerline of NB Alignment
LOGGED BY: Coty Campbell

DATE: May 18, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 360.3	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
5		X	Moist, Stiff, Light Brown Sandy Clay with Some Organics						3 4-9		
10		X	Moist, Medium Dense, Light Gray Sand						8 10-12		
15											
20		X	Moist, Soft, Gray Silty Clay						1 2-2		
25		X	Moist, Very Stiff, Light Brown Clay						5 8-9		
30		X	Moist, Very Stiff, Brown Clay						11 13-16		
35		X							9 9-18		

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 4-NB
PAGE 2 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 759+13
LOCATION: 17' Right of Centerline of NB Alignment
LOGGED BY: Coty Campbell

DATE: May 18, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 360.3	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
40			Moist, Medium Dense, Light Gray Clayey Sand						8 9-12		
45			Moist, Dense, Light Gray Sand						12 16-20		
50			Moist, Medium Dense, Light Gray Clayey Silt						8 11-19		
55			Moist, Very Stiff, Dark Brown Silty Clay with Lignite						12 12-18		
60			Moist, Very Hard, Light Gray Clayey Sand with Some Lignite						16 18-28		
65			Moist, Dense, Light Gray Sand						16 19-30		
70			Moist, Dense, Light Gray Sand						12 16-19		

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 4-NB
PAGE 3 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 759+13
LOCATION: 17' Right of Centerline of NB Alignment
LOGGED BY: Coty Campbell

DATE: May 18, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 360.3	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
75			Moist, Dense, Light Gray Sand						12 16-23		
80			Moist, Hard, Light Gray Silty Clay with Some Lignite						19 24-32		
85			Moist, Hard, Light Gray Lignitic Clay						13 16-19		
90			Moist, Very Dense, Light Gray Silty Clay						11 17-19		
95			Moist, Dense, Light Gray Sand						11 17-25		
100			Moist, Dense, Light Gray Sand with Some Lignite						12 60 (4")		
			Moist, Dense, Light Gray Sand						18 20-30		
105			Boring Terminated								

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 5-NB
PAGE 1 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 759+60
LOCATION: 21' Right of Centerline of NB Alignment
LOGGED BY: Coty Campbell

DATE: May 23, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 353.2	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
5		X	Moist, Medium Dense, Light Gray Sand with Some Clay						4 5-6		
10		X	Moist, Stiff, Light Gray Silty Clay						4 6-5		
15		X	Moist, Stiff, Light Brown Clay						4 5-6		
20		X	Moist, Stiff, Dark Brown Clay with Organic Matter						4 6-7		
25		X	Moist, Hard, Light Gray Sandy Clay						12 20-40		
30		X	Moist, Dense, Light Gray Clayey Sand						16 20-25		
35											

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 5-NB
PAGE 2 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 759+60
LOCATION: 21' Right of Centerline of NB Alignment
LOGGED BY: Coty Campbell

DATE: May 23, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 353.2	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
40			Moist, Dense, Light Gray Clayey Silt						12 17-19		
45			Moist, Hard, Light Gray Sandy Clay						12 16-24		
50			Moist, Very Stiff, Light Gray Clay with Lignite						9 12-17		
55			Moist, Hard, Light Gray Silty Clay						11 15-20		
60			Moist, Dense, Light Gray Sand						12 14-18		
65									11 17-25		
70			Moist, Very Dense, Light Gray Sand						14 22-30		

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 5-NB
PAGE 3 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 759+60
LOCATION: 21' Right of Centerline of NB Alignment
LOGGED BY: Coty Campbell

DATE: May 23, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 353.2	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
75			Moist, Hard, Light Gray Lignitic Clay						14 20-25		
80			Moist, Hard, Dark Brown Lignitic Clay						15 21-34		
85			Moist, Dense, Dark Brown Sand with Some Lignite						14 19-20		
90			Moist, Very Dense, Light Gray Sand						11 25-30		
95									18 28-32		
100			Moist, Very Dense, Light Gray Silty Sand						14 20-34		
			Moist, Very Hard, Light Gray Clay						16 27-41		
105			Boring Terminated								

REMARKS:

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

August 1, 2016

TO: Mr. Rick Ellis, Bridge Engineer

SUBJECT: Job No. CA0704
Hwy. 79 – South (Widening) (S)
Route 167 Section 4
Calhoun County

Transmitted herewith are a brief summary of the geology and site conditions and the logs of the borings conducted for the structures and approaches of the above referenced project. The samples obtained by the Standard Penetration Tests were brought to the laboratory and visually classified by experienced lab personnel to confirm the field identifications.

Preliminary design submitted by Bridge Division indicates that all bents will be founded on piling. The intermediate bent footings were inaccessible for drilling due to their proximity to the railroad tracks and steep slope. Subsurface conditions do not very widely across the site.

A slope stability analysis was performed for this project, utilizing 2:1 bridge end slopes. Seismic analysis included a coefficient of horizontal acceleration of 0.129 as provided by Bridge Design. This configuration provides for a satisfactory Factor of Safety for seismic and static conditions.

If you have any questions concerning these recommendations, please contact the Geotechnical Section.

Michael C. Benson
Materials Engineer

MCB:rpt:mlg
cc: State Construction Engineer - Master File Copy
District 7 Engineer
G.C. File

GEOLOGY AND SITE CONDITIONS
Job No CA0704.

HWY. 79-South (Widening) (S)
Calhoun County
Route 167 Section 4

Site Conditions

The existing Route 167 Bridge is located southwest of Fordyce Arkansas in Calhoun County. It is approximately 270 feet long, running north to south, crossing over the Union Pacific Railroad. The bridge superstructure consists of cast in place concrete decking supported by 4 steel girders with concrete end bents. Concrete octagonal trestle pilings support the north and south ends of the bridge under spans 1 and 5 and double columned interior bents support spans 2, 3, and 4. There are steel guardrails leading up to the bridge and concrete walls with steel tubing on the bridge. Concrete drainage culverts exist at all four corners of the bridge and wire fencing parallels the railroad on both the north and south end of the bridge. Signs indicating leased hunting land exist on the east side of the bridge, north and south of the railroad, and densely wooded pine plantations exist on both sides of the bridge. No noticeable utilities were found in or around the project alignment.

Site Geology

The project is located in Eocene Claiborne Deposits (map symbol Tc). The Claiborne is composed of medium to very fine-grained sands, silts, and silty clays. The sands tend to be light to dark-gray, white, brown, or red, depending on the degree of weathering. The silts and clays are light to dark-gray and sometimes variegated. Intervals enriched in carbonaceous material are dark-brown to black. Silts in the Claiborne are usually clayey, the clays are normally silty or sandy, and lignite beds are also common in this formation. The deposits recovered at the job site most likely represents the Cockfield Formation of the Claiborne Group which is composed of sand, silt, carbonaceous clay, and lignite. The thickness of the Claiborne ranges from a thin edge to 1,500 feet.

The Saline River Fault Zone (SRFZ) is located to the east of the job site. This fault zone parallels the Saline River and extends from the Rison area to the Greenville, Mississippi area. This fault most likely extends further in both directions; however, there is currently insufficient evidence to say how far this fault zone extends. Based on the best available evidence, the most recent large rupture of the SRFZ occurred approximately 800 years ago and the largest magnitude earthquakes were most likely in the 6.0 to 6.5 range.

Subsurface Conditions

Based on the results of the borings, the subsurface stratigraphy may be generalized as follows:

0 to 35 feet: Moist, soft to very stiff, brown **silty to sandy clay** to moist, medium dense to dense, brown **clayey sand**. There is a distinct 10 foot layer of **clay** in all borings except for boring 7 that varies from 15 to 25 feet deep.

35 to 45 feet: Moist, stiff to very hard, gray **silty to sandy clay** with occasional **lignite**.

45 to 85 feet: Moist, medium dense to very dense, brown to light gray **silty sand to sand** and very stiff to very hard **silty to sandy clay** with some **lignite**.

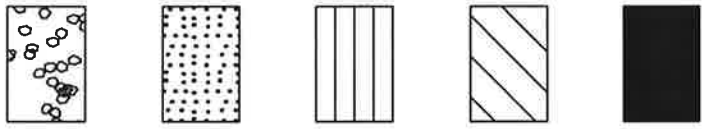
85 to 101.5 feet: Moist, dense to very dense, brown to light gray **silty sand to sand** and moist hard to very hard, light gray **silty and lignitic clay**.

LEGEND

SOIL TYPES

(SHOWN IN SYMBOL COLUMN)

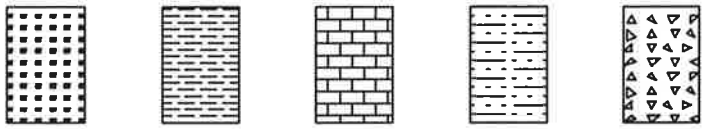
(PREDOMINANT TYPE SHOWN HEAVY)



GRAVEL | SAND | SILT | CLAY | ORGANIC MATTER

ROCK TYPES

(SHOWN IN SYMBOL COLUMN)



SANDSTONE | SHALE or SILTSTONE | LIMESTONE or DOLOMITE | ALTERNATING LAYERS of SHALE and SANDSTONE | OTHER

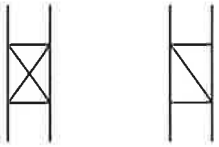
SAMPLER TYPES

(SHOWN IN SAMPLE COLUMN)

SHELBY TUBE

UNDISTURBED SAMPLE RECOVERY | DISTURBED SAMPLE RECOVERY | NO RECOVERY

SPLIT SPOON



SAMPLE RECOVERY | NO RECOVERY

ROCK CORING

% RECOVERY INDICATED ON LOGS

TERMS DESCRIBING CONSISTENCY OR CONDITION

GRANULAR SOIL		CLAY		CLAY-SHALE		SHALE	
'N' Value	Density	'N' Value	Consistency	'N' Value	Consistency	'N' Value	Consistency
0-4	Very Loose	0-1	Very Soft	0-1	Very Soft		
5-10	Loose	2-4	Soft	2-4	Soft	31-60	Soft
11-30	Medium Dense	5-8	Medium Stiff	5-8	Medium Stiff	Over 60	
31-50	Dense	9-15	Stiff	9-15	Stiff	More than 2"	
Over 50	Very Dense	16-30	Very Stiff	16-30	Very Stiff	Penetration	
		31-60	Hard	31-60	Hard	in 60 Blows:	Medium Hard
		Over 60	Very Hard	Over 60	Very Hard	Less than 2"	
						Penetration	
						in 60 Blows:	Hard

1. Ground water elevations indicated on boring logs represent ground water elevations at date or time shown on boring log. Absence of water surface implies that no ground water data is available but does not necessarily mean that ground water will not be encountered at locations or within the vertical reaches of these borings.
2. Borings represent subsurface conditions at their respective locations for their respective depths. Variations in conditions between or adjacent to boring locations may be encountered.
3. Terms used for describing soils according to their texture or grain size distribution are in accordance with the Unified Soil Classification System.

Standard Penetration Test – Driving a 2.0" O.D., 1-3/8" I.D. sampler a distance of 1.0 foot into undisturbed soil with a 140 pound hammer free falling a distance of 30 inches. It is customary to drive the spoon 6.0 inches to seat into undisturbed soil, then perform the test. The number of hammer blows for seating the spoon and performing the test are recorded for each 6 inches of penetration on the drill log. The field "N" Value (N_f) can be obtained by adding the bottom two numbers for example: $\frac{6}{8-9} \Rightarrow 8+9=17 blows/ft$. The "N" Value corrected to 60% efficiency (N_{60}) can be obtained by multiplying N_f by the hammer correction factor published on the boring log.

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 1-NB
PAGE 1 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 757+09
LOCATION: 13' Right of Construction Centerline
LOGGED BY: Coty Campbell

DATE: May 11, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Diamond Core
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

SURFACE ELEVATION: 356.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
5			Moist, Stiff, Light Brown Sandy Clay						5 7-7		
10			Moist, Medium Dense, Light Brown Sand						4 11-13		
15											
20			Moist, Soft, Light Gray Silty Clay						2 1-1		
25			Moist, Very Stiff, Light Brown Clay						6 12-13		
30			Moist, Very Stiff, Light Gray Clay with Some Lignite						6 10-12		
35			Moist, Very Hard, Light Gray Sandy Clay with Some Lignite						14 50-60 (7")		

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 1-NB
PAGE 2 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 757+09
LOCATION: 13' Right of Construction Centerline
LOGGED BY: Coty Campbell

DATE: May 11, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Diamond Core
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 356.5	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
40		X	Moist, Medium Dense, Light Gray Silty Sand						8 12-18		
45		X	Moist, Very Dense, Light Gray Silty Sand						11 20-48		
50		X	Moist, Dense, Light Gray Clayey Sand						9 13-19		
55		X	Moist, Hard, Dark Brown Lignitic Clay						13 19-21		
60		X	Moist, Dense, Dark Brown Clayey Sand						11 16-21		
65		X	Moist, Dense, Light Gray Sand						13 17-26		
70		X	Moist, Dense, Light Gray Silty Clay with Some Lignite						11 20-20		

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 1-NB
PAGE 3 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 757+09
LOCATION: 13' Right of Construction Centerline
LOGGED BY: Coty Campbell

DATE: May 11, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Diamond Core
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 356.5	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
75			Moist, Hard, Light Gray Silty Clay with Some Lignite						12 25-30		
80			Moist, Hard, Dark Brown Lignitic Clay						17 18-25		
85			Moist, Hard, Light Gray Silty Clay with Some Lignite						10 20-35		
			SANDSTONE - Unweathered, Poorly Cemented, Light Gray						60 (2")		
90			Moist, Very Dense, Light Gray Sand						25 35-44		
95									25 33-39		
100			Moist, Hard, Light Gray Silty Clay						23 26-34		
105			Boring Terminated								

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 1-SB
PAGE 1 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 756+92
LOCATION: 19' Right of Construction Centerline
LOGGED BY: Coty Campbell

DATE: May 10, 2016
TYPE OF DRILLING: Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 370.6	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
5		X	Moist, Soft, Brown Silty Clay						1 2-2		
10		X	Moist, Stiff, Brown Sandy Clay						3 5-6		
15											
20		X	Moist, Loose, Brown Clayey Sand with Some Organic Matter with Trace Gravel						2 4-6		
25		X	Moist, Medium Dense, Brown Silty Sand						6 8-11		
30		X	Moist, Very Stiff, Reddish Brown Clay						4 8-11		
35		X	Moist, Medium Stiff, Reddish Brown Clay						1 1-7		

REMARKS: * Cemented layer encountered at a depth of 77.5' to 78.4' below ground level.

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 1-SB
PAGE 2 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 756+92
LOCATION: 19' Right of Construction Centerline
LOGGED BY: Coty Campbell

DATE: May 10, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 370.6	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
40			Moist, Stiff, Brown Clay						3 4-7		
45			Moist, Very Stiff, Dark Brown Lignitic Clay						3 6-12		
50			Moist, Very Dense, Brown Silty Sand						24 52-60 (10")		
55			Moist, Medium Dense, Brown Clayey Sand						6 12-14		
60			Moist, Very Dense, Brown Silt						12 26-28		
65			Moist, Dense, Gray Clayey Sand						8 15-19		
70			Moist, Hard, Brown Clay with Some Lignite						10 18-20		

REMARKS: * Cemented layer encountered at a depth of 77.5' to 78.4' below ground level.

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 1-SB
PAGE 3 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 756+92
LOCATION: 19' Right of Construction Centerline
LOGGED BY: Coty Campbell

DATE: May 10, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 370.6	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
75			Moist, Hard, Brown Clay						13 18-30		
80			Moist, Dense, Brown Silty Sand *						12 19-23 10 15-25		
85											
90			Moist, Hard, Brown Clay						10 18-21		
95			Moist, Very Hard, Dark Brown Lignitic Clay						14 30-40		
100			Moist, Dense, Brown Silty Sand						12 18-25		
105			Moist, Very Dense, Brown Silty Sand						12 48-50		
			Boring Terminated								

REMARKS: * Cemented layer encountered at a depth of 77.5' to 78.4' below ground level.

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 2-NB
PAGE 1 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 757+58
LOCATION: 2' Left of Construction Centerline
LOGGED BY: Coty Campbell

DATE: May 4, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
			SURFACE ELEVATION: 357.5								
5			Dry, Stiff, Light Brown Silty Clay						5 4-10		
10			Moist, Medium Dense, Light Brown Clayey Sand						11 12-14		
15											
20			Moist, Soft, Reddish Brown Clay						2 2-2		
25			Moist, Stiff, Brown Clay						2 4-9		
30			Moist, Very Stiff, Dark Brown Lignitic Clay						4 7-11		
35									16 30-45		

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 2-NB
PAGE 2 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 757+58
LOCATION: 2' Left of Construction Centerline
LOGGED BY: Coty Campbell

DATE: May 4, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 357.5	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
40			Moist, Dense to Very Dense, Light Brown Silty Sand						10 18-21 19 29-60 (9")		
45											
50			Moist, Hard, Brown Sandy Clay						8 15-18		
55			Moist, Hard, Dark Brown Lignitic Clay						11 15-21		
60			Moist, Hard, Brown Sandy Clay with Trace Lignite						9 14-21		
65			Moist, Dense, Brown Silty Sand						8 18-24 1 16-30		
70											

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 2-NB
PAGE 3 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 757+58
LOCATION: 2' Left of Construction Centerline
LOGGED BY: Coty Campbell

DATE: May 4, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
			SURFACE ELEVATION: 357.5								
75			Moist, Hard, Brown Sandy Clay						8 18-23		
80			Moist, Hard, Dark Brown Lignitic Clay						20 25-35		
85			Moist, Hard, Dark Brown Clay with Lignite						10 26-30		
90			Moist, Hard, Brown Sandy Clay with Some Lignite						10 17-20		
95			Moist, Very Dense, Brown Silty Sand						19 31-55		
100			Moist, Very Dense, Brown Silty Sand						17 30-48		
			Moist, Hard, Brown Sandy Clay						12 19-30		
105			Boring Terminated								

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 2-SB
PAGE 1 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 759+43
LOCATION: 23' Right of Construction Centerline
LOGGED BY: Coty Campbell

DATE: May 17, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
			SURFACE ELEVATION: 371.7								
5		X	Moist, Medium Stiff, Light Gray Sandy Clay						2 3-3		
10		X	Moist, Stiff, Light Gray Clay						2 4-6		
15		X	Moist, Medium Stiff, Light Gray Silty Clay						2 3-4		
20		X	Moist, Medium Dense, Light Gray Sand*						3 6-10		
25		X	Moist, Very Stiff, Reddish Brown Clay						5 10-15		
30		X	Moist, Hard, Light Gray Clay						10 15-20		
35											

REMARKS: * Water loss at 24.2 feet

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 2-SB
PAGE 2 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 759+43
LOCATION: 23' Right of Construction Centerline
LOGGED BY: Coty Campbell

DATE: May 17, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 371.7	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
40		X	Moist, Very Stiff, Brown Silty Clay						10 12-14		
45		X	Moist, Very Stiff, Light Gray Sandy Clay						10 12-16		
50		X	Moist, Dense, Light Gray Clayey Sand						11 18-28		
55		X	Moist, Very Dense, Light Gray Sand						18 30-34		
60		X	Moist, Very Dense, Light Gray Clayey Sand						14 21-30		
65		X	Moist, Hard, Light Gray Lignitic Clay						18 25-30		
70		X	Moist, Hard, Light Gray Sandy Clay						12 19-26		

REMARKS: * Water loss at 24.2 feet

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 2-SB
PAGE 3 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 759+43
LOCATION: 23' Right of Construction Centerline
LOGGED BY: Coty Campbell

DATE: May 17, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 371.7	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
75		X	Moist, Very Dense, Light Gray Sand with Some Lignite						14 19-34		
80		X	Moist, Dense, Light Gray Sand						14 20-24		
85		X	Moist, Very Dense, Light Gray Sand						18 20-39		
90		X	Moist, Very Dense, Light Brown Sand with Some Lignite						15 24-28		
95		X	Moist, Hard, Dark Brown Sandy Clay with Lignite						19 23-31		
100		X	Moist, Dense, Light Gray Sand with Some Clay						14 19-24		
105		X	Moist, Very Dense, Light Gray Sand						19 30-42		
			Boring Terminated								

REMARKS: * Water loss at 24.2 feet

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 3-NB
PAGE 1 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 757+60
LOCATION: 30' Right of Construction Centerline
LOGGED BY: Coty Campbell

DATE: April 28, 2016 and May 3, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.37

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 354.8	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
5			Moist, Very Stiff, Light Brown Silty Clay						6 10-12		
10			Moist, Medium Dense, Light Brown Clayey Sand						6 11-14		
15											
20			Moist, Stiff, Brown Clay						3 5-5		
25			Moist, Very Stiff, Light Brown Clay						3 6-13		
30			Moist, Very Dense, Light Gray Sand with Silt						13 21-45		
35			Wet, Very Dense, Light Gray Sand						25 60 (4")		

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 3-NB
PAGE 2 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 757+60
LOCATION: 30' Right of Construction Centerline
LOGGED BY: Coty Campbell

DATE: April 28, 2016 and May 3, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.37

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 354.8	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
40			Moist, Very Stiff to Hard, Gray Silty Clay						9 12-25 7 12-16		
45											
50			Moist, Hard, Gray Clay with Some Lignite						9 15-18 10 14-20		
55											
60			Moist, Hard, Gray Sandy Clay						11 16-22		
65			Moist, Very Dense, Gray Silty Sand						8 17-34		
70			Moist, Dense, Gray Sand						9 18-29		

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 3-NB
PAGE 3 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 757+60
LOCATION: 30' Right of Construction Centerline
LOGGED BY: Coty Campbell

DATE: April 28, 2016 and May 3, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.37

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 354.8	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
75			Moist, Hard, Gray Clay						12 15-24		
80			Moist, Hard, Dark Brown Lignitic Clay						18 25-34		
85			Moist, Hard, Gray Clay with Some Sand and Trace Lignite						16 22-31		
90			Moist, Dense to Very Dense, Gray Silty Sand						9 17-25		
95									19 22-54		
100			Moist, Hard, Gray Silty Clay with Trace Lignite						18 22-25		
			Moist, Hard, Gray Clay						11 20-30		
105			Boring Terminated								

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 4-NB
PAGE 1 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 758+65
LOCATION: 15' Right of Construction Centerline
LOGGED BY: Coty Campbell

DATE: May 18, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750
HAMMER CORRECTION FACTOR:

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 360.3	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
5		X	Moist, Stiff, Light Brown Sandy Clay with Some Organics						3 4-9		
10		X	Moist, Medium Dense, Light Gray Sand						8 10-12		
15											
20		X	Moist, Soft, Gray Silty Clay						1 2-2		
25		X	Moist, Very Stiff, Light Brown Clay						5 8-9		
30		X	Moist, Very Stiff, Brown Clay						11 13-16		
35		X							9 9-18		

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 4-NB
PAGE 2 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 758+65
LOCATION: 15' Right of Construction Centerline
LOGGED BY: Coty Campbell

DATE: May 18, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750
HAMMER CORRECTION FACTOR:

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
			SURFACE ELEVATION: 360.3								
40			Moist, Medium Dense, Light Gray Clayey Sand						8 9-12		
45			Moist, Dense, Light Gray Sand						12 16-20		
50			Moist, Medium Dense, Light Gray Clayey Silt						8 11-19		
55			Moist, Very Stiff, Dark Brown Silty Clay with Lignite						12 12-18		
60			Moist, Very Hard, Light Gray Clayey Sand with Some Lignite						16 18-28		
65			Moist, Dense, Light Gray Sand						16 19-30		
70			Moist, Dense, Light Gray Sand						12 16-19		

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 4-NB
PAGE 3 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 758+65
LOCATION: 15' Right of Construction Centerline
LOGGED BY: Coty Campbell

DATE: May 18, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750
HAMMER CORRECTION FACTOR:

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 360.3	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
75		X	Moist, Dense, Light Gray Sand						12 16-23		
80		X	Moist, Hard, Light Gray Silty Clay with Some Lignite						19 24-32		
85		X	Moist, Hard, Light Gray Lignitic Clay						13 16-19		
90		X	Moist, Very Dense, Light Gray Silty Clay						11 17-19		
95		X	Moist, Dense, Light Gray Sand						11 17-25		
100		X	Moist, Dense, Light Gray Sand with Some Lignite						12 60 (4")		
		X	Moist, Dense, Light Gray Sand						18 20-30		
105			Boring Terminated								

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 5-NB
PAGE 1 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 759+60
LOCATION: 21' Right of Construction Centerline
LOGGED BY: Coty Campbell

DATE: May 23, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 353.2	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
5			Moist, Medium Dense, Light Gray Sand with Some Clay						4 5-6		
10			Moist, Stiff, Light Gray Silty Clay						4 6-5		
15											
20			Moist, Stiff, Light Brown Clay						4 5-6		
25			Moist, Stiff, Dark Brown Clay with Organic Matter						4 6-7		
30			Moist, Hard, Light Gray Sandy Clay						12 20-40		
35			Moist, Dense, Light Gray Clayey Sand						16 20-25		

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 5-NB
PAGE 2 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 759+60
LOCATION: 21' Right of Construction Centerline
LOGGED BY: Coty Campbell

DATE: May 23, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 353.2	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
40			Moist, Dense, Light Gray Clayey Silt						12 17-19		
45			Moist, Hard, Light Gray Sandy Clay						12 16-24		
50			Moist, Very Stiff, Light Gray Clay with Lignite						9 12-17		
55			Moist, Hard, Light Gray Silty Clay						11 15-20		
60			Moist, Dense, Light Gray Sand						12 14-18		
65									11 17-25		
70			Moist, Very Dense, Light Gray Sand						14 22-30		

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT
MATERIALS DIVISION - GEOTECHNICAL SEC.

BORING NO. 5-NB
PAGE 3 OF 3

JOB NO. CA0704 Calhoun County
JOB NAME: Hwy. 79 - South (Widening) (S)
Route 167 Section 4
STATION: 759+60
LOCATION: 21' Right of Construction Centerline
LOGGED BY: Coty Campbell

DATE: May 23, 2016
TYPE OF DRILLING:
Hollow Stem Auger - Rotary Wash
EQUIPMENT: CME 750

HAMMER CORRECTION FACTOR: 1.23

COMPLETION DEPTH: 101.5

DEPTH FT.	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL SURFACE ELEVATION: 353.2	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU.FT.	NO. OF BLOWS PER 6-IN.	% TCR	% RQD
75			Moist, Hard, Light Gray Lignitic Clay						14 20-25		
80			Moist, Hard, Dark Brown Lignitic Clay						15 21-34		
85			Moist, Dense, Dark Brown Sand with Some Lignite						14 19-20		
90			Moist, Very Dense, Light Gray Sand						11 25-30		
95									18 28-32		
100			Moist, Very Dense, Light Gray Silty Sand						14 20-34		
105			Moist, Very Hard, Light Gray Clay						16 27-41		
			Boring Terminated								

REMARKS:

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

March 10, 2016

TO: Mr. Trinity Smith, Engineer of Roadway Design

SUBJECT: Job No. CA0704
Hwy. 79 – South (Widening) (S)
Route 167 Section 4
Calhoun County

Transmitted herewith are the requested Soil Survey, Strength Data, and Resilient Modulus test results for the above referenced job. The project consists of widening approximately 5.9 miles of Highway 167 from 2 lanes to 5 lanes. Samples were obtained in the existing travel lanes, shoulder, and ditch line. Sample locations were measured from centerline of the existing roadway and are noted as such on the logs.

Based on laboratory results of samples obtained, the subgrade soils consist primarily of non-plastic sands to low plasticity clayey sands with isolated locations of highly plastic clays. The subgrade soils are expected to provide a stable working platform with conventional processing if the weather is favorable during construction.

Base on currently available cross-sections the maximum embankment height is approximately 8 feet. The cross-sections indicate that embankments will be constructed within the existing ditch line. All soft unstable organic material should be undercut prior to embankment construction, anticipated to be no more than 2 feet. The embankments may be constructed with locally available unspecified material utilizing a 3:1 slope configuration.

The proposed cut slopes are acceptable as shown.

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 Malvern.

2. Asphalt Concrete Hot Mix

Type	Asphalt Cement %	Mineral Aggregate %
Surface Course	5.3	94.7
Binder Course	4.3	95.7
Base Course	4.0	96.0

Michael C. Benson
Materials Engineer

MCB:pt:bjj
Attachment
cc: State Constr. Eng. – Master File Copy
District 7 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 - 03/10/2016
JOB NUMBER - CA0704

SEQUENCE NO. - 1
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

JOB NAME - HWY.79 - SOUTH (WIDENING)(S)

STATION LIMITS	R-VALUE AT 240 psi
BEGIN JOB - END JOB	10
RESILIENT MODULUS	
STA.502+00	7322
STA.549+00	7693
STA.589+00	8703
STA.627+00	5317
STA.692+00	7613
STA.750+00	7582

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.	CA0704	**Material Code**	SSRVPS
Date Sampled:	3/1/16	**Station No.:**	502+00
Date Tested:	March 1, 2016	**Location:**	24'LT
Name of Project:	HWY. 79 - SOUTH (WIDENING)(S)		
County:	**Code:** 7 **Name:** CALHOUN		
Sampled By:	DICKERSON	**Depth:**	0-5
Lab No.:	20160340	**AASHTO Class:**	A-4(0)
Sample ID:	RV096	**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	3.94
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):	97.24

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	3216.30

4. Soil Properties:

Optimum Moisture Content (%):	11.7
Maximum Dry Density (pcf):	117.5
95% of MDD (pcf):	111.6
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	3216.30
Compaction Moisture content (%):	12.1
Compaction Wet Density (pcf):	126.03
Compaction Dry Density (pcf):	112.43
Moisture Content After Mr Test (%):	11.7

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

7. Resilient Modulus, Mr: 6606(Sc)^-0.12040(S3)^0.46247

8. Comments

9. Tested By: C.GARRETT **Date:** March 1, 2016

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	CA0704	**Material Code**	SSRVPS
Date Sampled:	3/1/16	**Station No.:**	502+00
Date Tested:	March 1, 2016	**Location:**	24'LT
Name of Project:	HWY. 79 - SOUTH (WIDENING)(S)		
County:	**Code:** 7 **Name:** CALHOUN		
Sampled By:	DICKERSON	**Depth:**	0-5
Lab No.:	20160340	**AASHTO Class:**	A-4(0)
Sample ID:	RV096	**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	25.0	22.1	2.9	2.1	1.8	0.2	0.00104	0.00013	14,126
Sequence 2	6.0	4.0	47.0	44.2	2.9	3.9	3.6	0.2	0.00219	0.00027	13,339
Sequence 3	6.0	6.0	69.6	65.8	3.7	5.7	5.4	0.3	0.00340	0.00042	12,789
Sequence 4	6.0	8.0	93.2	87.1	6.2	7.7	7.2	0.5	0.00478	0.00060	12,038
Sequence 5	6.0	10.0	116.8	108.1	8.6	9.6	8.9	0.7	0.00616	0.00077	11,607
Sequence 6	4.0	2.0	24.7	21.8	2.9	2.0	1.8	0.2	0.00124	0.00015	11,611
Sequence 7	4.0	4.0	46.1	43.2	2.9	3.8	3.6	0.2	0.00274	0.00034	10,408
Sequence 8	4.0	6.0	67.2	64.3	2.9	5.5	5.3	0.2	0.00430	0.00054	9,894
Sequence 9	4.0	8.0	90.5	85.2	5.3	7.5	7.0	0.4	0.00585	0.00073	9,638
Sequence 10	4.0	10.0	113.8	106.1	7.7	9.4	8.7	0.6	0.00738	0.00092	9,514
Sequence 11	2.0	2.0	24.1	21.2	2.9	2.0	1.7	0.2	0.00160	0.00020	8,742
Sequence 12	2.0	4.0	44.2	41.2	2.9	3.6	3.4	0.2	0.00356	0.00044	7,656
Sequence 13	2.0	6.0	64.0	61.0	3.0	5.3	5.0	0.2	0.00551	0.00069	7,322
Sequence 14	2.0	8.0	86.0	81.5	4.5	7.1	6.7	0.4	0.00727	0.00091	7,419
Sequence 15	2.0	10.0	107.7	100.8	7.0	8.9	8.3	0.6	0.00906	0.00113	7,355

TESTED BY C.GARRETT DATE March 1, 2016

REVIEWED BY _____ DATE _____

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

MATERIALS DIVISION

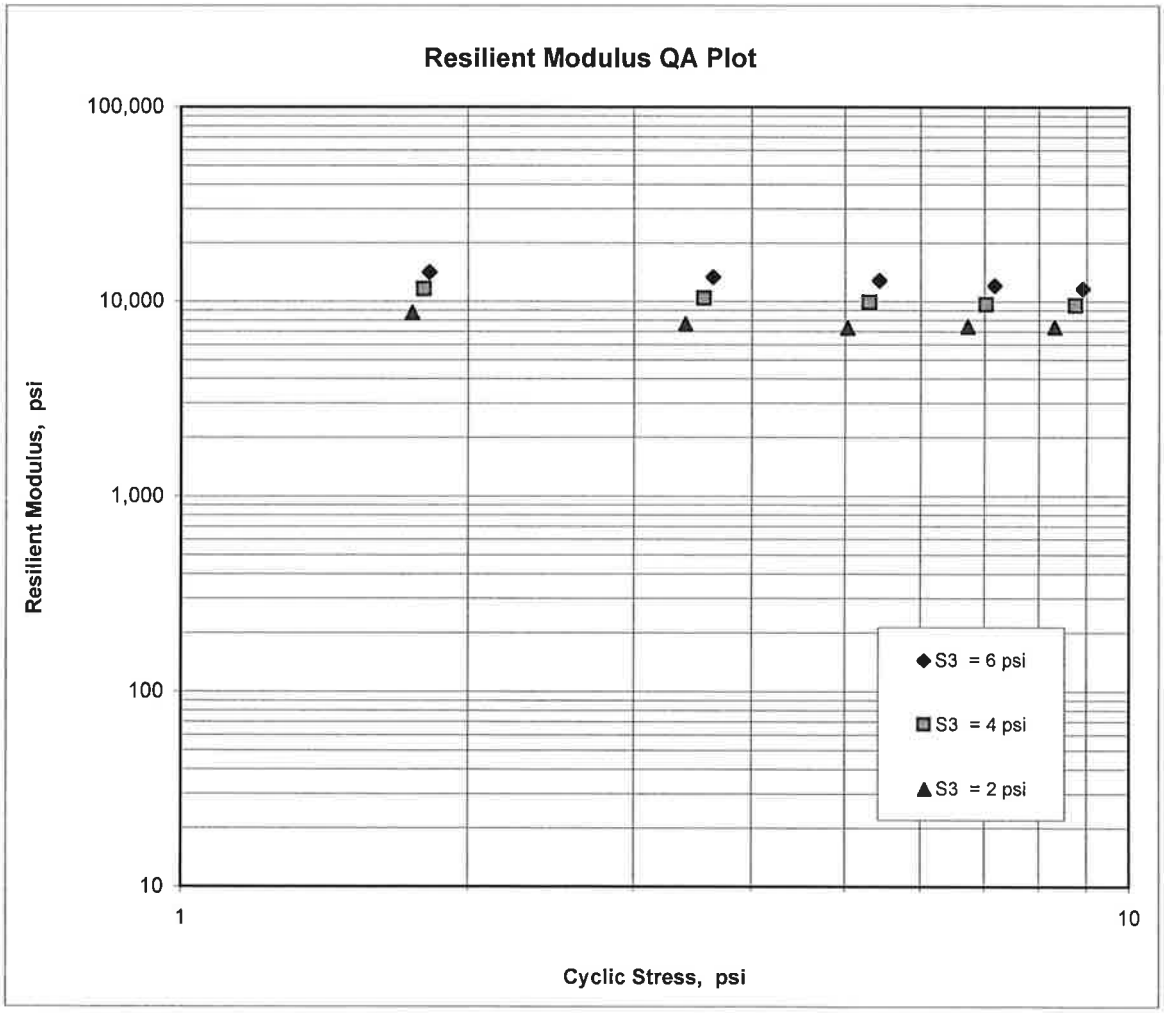
AASHTO T 307-99 - RESILIENT MODULUS OF SUBGRADE SOILS

RECOMPACTED / THINWALL TUBE SAMPLES

Job No.	CA0704	**Material Code**	SSRVPS
Date Sampled:	3/1/16	**Station No.:**	502+00
Date Tested:	March 1, 2016	**Location:**	24'LT
Name of Project:	HWY. 79 - SOUTH (WIDENING)(S)		
County:	**Code:** 7 **Name:** CALHOUN		
Sampled By:	DICKERSON	**Depth:**	0-5
Lab No.:	20160340	**AASHTO Class:**	A-4(0)
Sample ID:	RV096	**Material Type (1 or 2):**	2
LATITUDE:		**LONGITUDE:**	

$$M_R = K1\ (S_C)^{K2}\ (S_3)^{K5}$$

K1 =	6,606
K2 =	-0.12040
K5 =	0.46247
R^2 =	0.99



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	CA0704	**Material Code**	SSRVPS
Date Sampled:	3/1/16	**Station No.:**	549+00
Date Tested:	March 1, 2016	**Location:**	24'LT
Name of Project:	HWY. 79 - SOUTH (WIDENING)(S)		
County:	**Code:** 7 **Name:** CALHOUN		
Sampled By:	DICKERSON	**Depth:**	0-5
Lab No.:	20160341	**AASHTO Class:**	A-4(0)
Sample ID:	RV097	**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	3.94
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):	97.24

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	3163.70

4. Soil Properties:

Optimum Moisture Content (%):	12.1
Maximum Dry Density (pcf):	114.9
95% of MDD (pcf):	109.2
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	3163.70
Compaction Moisture content (%):	12.3
Compaction Wet Density (pcf):	123.97
Compaction Dry Density (pcf):	110.39
Moisture Content After Mr Test (%):	12.3

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

7. Resilient Modulus, Mr: 6855(Sc)^-0.10360(S3)^0.45252

8. Comments _____

9. Tested By: G.WENDLAND **Date:** March 1, 2016

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	CA0704	**Material Code**	SSRVPS
Date Sampled:	3/1/16	**Station No.:**	549+00
Date Tested:	March 1, 2016	**Location:**	24'LT
Name of Project:	HWY. 79 - SOUTH (WIDENING)(S)		
County:	**Code:** 7 **Name:** CALHOUN		
Sampled By:	DICKERSON	**Depth:**	0-5
Lab No.:	20160341	**AASHTO Class:**	A-4(0)
Sample ID:	RV097	**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	25.1	22.4	2.7	2.1	1.8	0.2	0.00102	0.00013	14,463
Sequence 2	6.0	4.0	47.1	44.3	2.7	3.9	3.7	0.2	0.00212	0.00026	13,841
Sequence 3	6.0	6.0	69.9	66.4	3.6	5.8	5.5	0.3	0.00326	0.00041	13,457
Sequence 4	6.0	8.0	93.8	87.8	6.0	7.7	7.2	0.5	0.00454	0.00057	12,801
Sequence 5	6.0	10.0	117.6	109.3	8.4	9.7	9.0	0.7	0.00587	0.00073	12,317
Sequence 6	4.0	2.0	24.7	22.0	2.7	2.0	1.8	0.2	0.00122	0.00015	11,993
Sequence 7	4.0	4.0	46.2	43.5	2.7	3.8	3.6	0.2	0.00266	0.00033	10,799
Sequence 8	4.0	6.0	67.5	64.7	2.8	5.6	5.3	0.2	0.00416	0.00052	10,293
Sequence 9	4.0	8.0	91.5	86.4	5.1	7.5	7.1	0.4	0.00561	0.00070	10,181
Sequence 10	4.0	10.0	114.9	107.4	7.5	9.5	8.9	0.6	0.00705	0.00088	10,075
Sequence 11	2.0	2.0	24.2	21.6	2.6	2.0	1.8	0.2	0.00155	0.00019	9,235
Sequence 12	2.0	4.0	44.5	41.7	2.8	3.7	3.4	0.2	0.00344	0.00043	8,017
Sequence 13	2.0	6.0	64.5	61.7	2.8	5.3	5.1	0.2	0.00531	0.00066	7,693
Sequence 14	2.0	8.0	86.9	82.6	4.3	7.2	6.8	0.4	0.00705	0.00088	7,752
Sequence 15	2.0	10.0	110.2	103.4	6.8	9.1	8.5	0.6	0.00860	0.00107	7,957

TESTED BY J.WENDLAND DATE March 1, 2016

REVIEWED BY _____ DATE _____

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

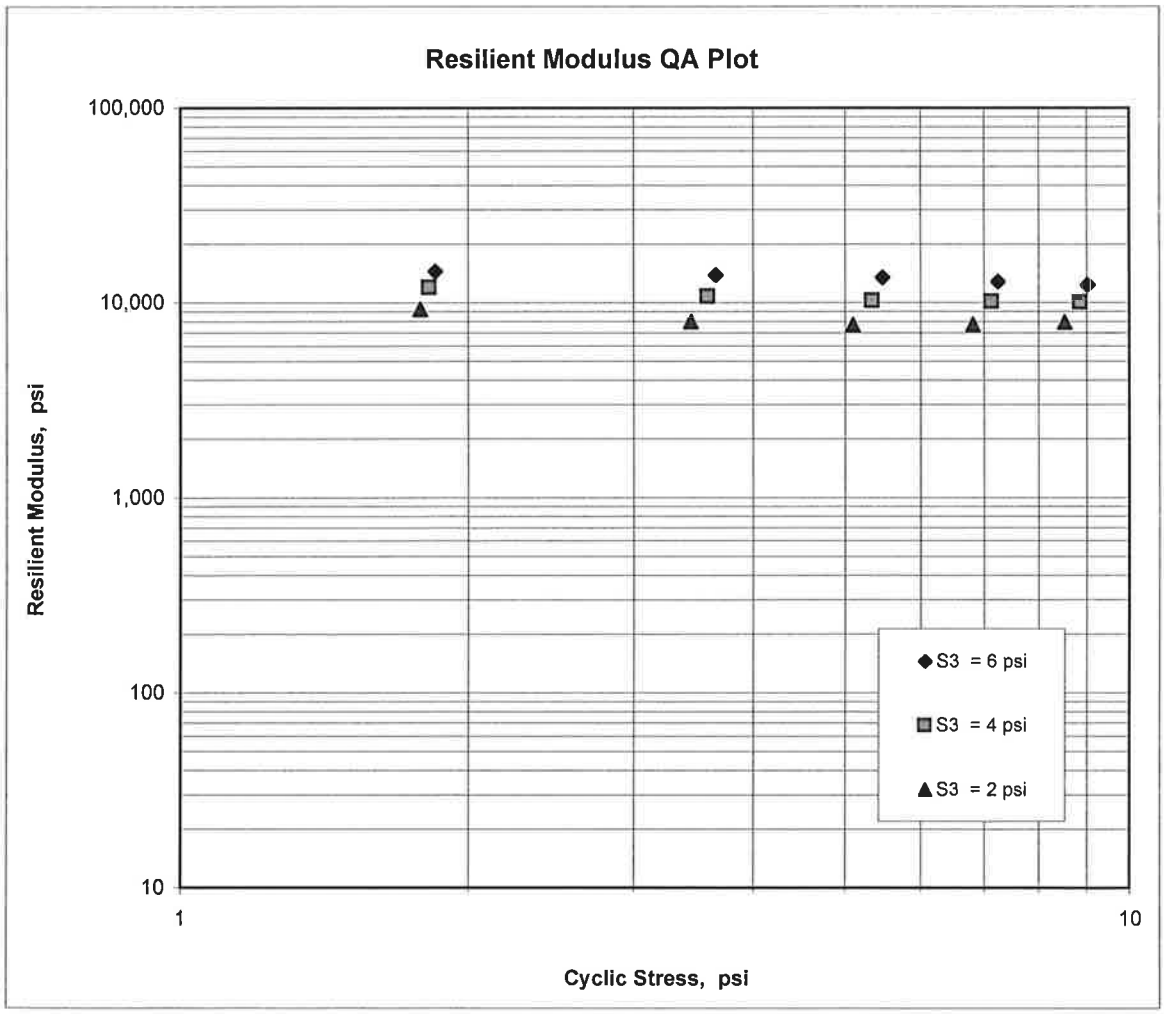
MATERIALS DIVISION

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

Job No.	CA0704	**Material Code**	SSRVPS
Date Sampled:	3/1/16	**Station No.:**	549+00
Date Tested:	March 1, 2016	**Location:**	24'LT
Name of Project:	HWY. 79 - SOUTH (WIDENING)(S)		
County:	**Code:** 7 **Name:** CALHOUN		
Sampled By:	DICKERSON	**Depth:**	0-5
Lab No.:	20160341	**AASHTO Class:**	A-4(0)
Sample ID:	RV097	**Material Type (1 or 2):**	2
LATITUDE:		**LONGITUDE:**	

$$M_R = K1\ (S_C)^{K2}\ (S_3)^{K5}$$

K1 = 6,855
K2 = -0.10360
K5 = 0.45252
R^2 = 0.98



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	CA0704	**Material Code**	SSRVPS
Date Sampled:	3/2/16	**Station No.:**	589+00
Date Tested:	March 2, 2016	**Location:**	24' RT
Name of Project:	HWY. 79 - SOUTH (WIDENING)(S)		
County:	**Code:** 7 **Name:** CALHOUN		
Sampled By:	D.DICKERSON	**Depth:**	0-5
Lab No.:	20160342	**AASHTO Class:**	A-4 (0)
Sample ID:	RV098	**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	3.96
Middle	3.93
Bottom	3.94
Average	3.94
Membrane Thickness (in):	0.01
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):	12.14
Initial Volume, AoLo (cu. in):	97.52

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	3249.70

4. Soil Properties:

Optimum Moisture Content (%):	12.3
Maximum Dry Density (pcf):	118.6
95% of MDD (pcf):	112.7
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	3249.70
Compaction Moisture content (%):	12.8
Compaction Wet Density (pcf):	126.97
Compaction Dry Density (pcf):	112.56
Moisture Content After Mr Test (%):	12.1

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

7. Resilient Modulus, Mr: 11160(Sc)^-0.21812(S3)^0.34432

8. Comments

9. Tested By: G.WENDLAND **Date:** March 2, 2016

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	CA0704	**Material Code**	SSRVPS
Date Sampled:	3/2/16	**Station No.:**	589+00
Date Tested:	March 2, 2016	**Location:**	24' RT
Name of Project:	HWY. 79 - SOUTH (WIDENING)(S)		
County:	**Code:** 7 **Name:** CALHOUN		
Sampled By:	D.DICKERSON	**Depth:**	0-5
Lab No.:	20160342	**AASHTO Class:**	A-4 (0)
Sample ID:	RV098	**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	25.0	22.3	2.6	2.1	1.8	0.2	0.00084	0.00011	17,493
Sequence 2	6.0	4.0	46.9	44.3	2.6	3.9	3.6	0.2	0.00176	0.00022	16,666
Sequence 3	6.0	6.0	69.3	65.8	3.5	5.7	5.4	0.3	0.00282	0.00035	15,451
Sequence 4	6.0	8.0	92.7	86.7	6.0	7.6	7.1	0.5	0.00422	0.00053	13,594
Sequence 5	6.0	10.0	115.2	106.6	8.6	9.5	8.8	0.7	0.00578	0.00072	12,204
Sequence 6	4.0	2.0	24.9	22.1	2.8	2.1	1.8	0.2	0.00098	0.00012	14,923
Sequence 7	4.0	4.0	46.5	43.7	2.8	3.8	3.6	0.2	0.00212	0.00026	13,665
Sequence 8	4.0	6.0	67.8	65.0	2.9	5.6	5.3	0.2	0.00341	0.00043	12,587
Sequence 9	4.0	8.0	90.9	85.7	5.2	7.5	7.1	0.4	0.00491	0.00061	11,545
Sequence 10	4.0	10.0	113.4	105.7	7.7	9.3	8.7	0.6	0.00650	0.00081	10,750
Sequence 11	2.0	2.0	24.7	21.9	2.7	2.0	1.8	0.2	0.00117	0.00015	12,452
Sequence 12	2.0	4.0	45.8	43.0	2.8	3.8	3.5	0.2	0.00257	0.00032	11,064
Sequence 13	2.0	6.0	66.4	63.6	2.8	5.5	5.2	0.2	0.00414	0.00052	10,150
Sequence 14	2.0	8.0	87.7	83.4	4.3	7.2	6.9	0.4	0.00591	0.00074	9,338
Sequence 15	2.0	10.0	109.5	102.7	6.8	9.0	8.5	0.6	0.00780	0.00097	8,703

TESTED BY J.WENDLAND DATE March 2, 2016
REVIEWED BY _____ DATE _____

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

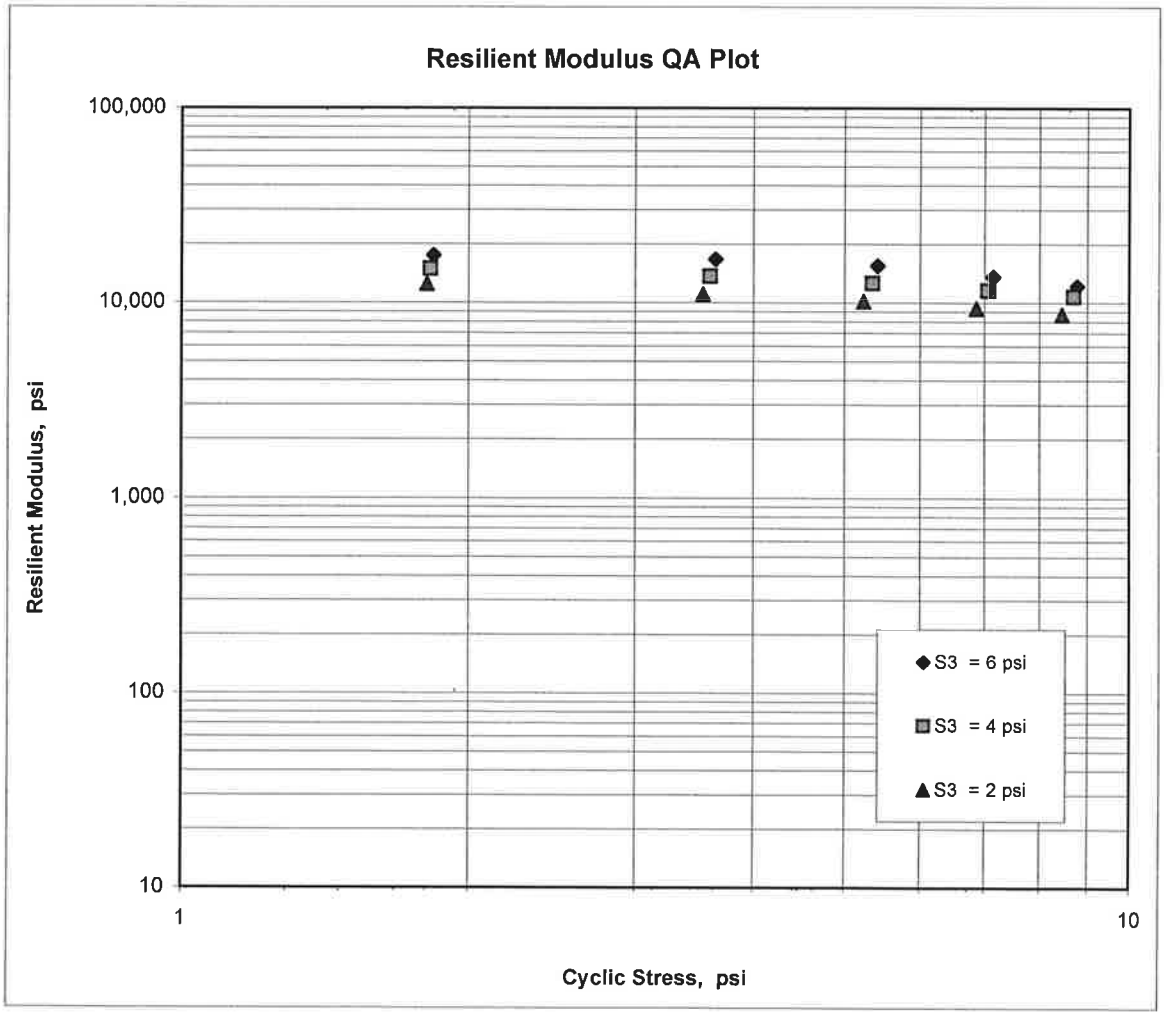
MATERIALS DIVISION

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

Job No.	CA0704	**Material Code**	SSRVPS
Date Sampled:	3/2/16	**Station No.:**	589+00
Date Tested:	March 2, 2016	**Location:**	24' RT
Name of Project:	HWY. 79 - SOUTH (WIDENING)(S)		
County:	**Code:** 7 **Name:** CALHOUN		
Sampled By:	D.DICKERSON	**Depth:**	0-5
Lab No.:	20160342	**AASHTO Class:**	A-4 (0)
Sample ID:	RV098	**Material Type (1 or 2):**	2
LATITUDE:		**LONGITUDE:**	

$$M_R = K1\,(S_C)^{K2}\,(S_3)^{K5}$$

K1 = 11,160
K2 = -0.21812
K5 = 0.34432
R^2 = 0.96



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	CA0704	**Material Code**	SSRVPS
Date Sampled:	3/2/16	**Station No.:**	627+00
Date Tested:	March 2, 2016	**Location:**	24' LT
Name of Project:	HWY. 79 - SOUTH (WIDENING)(S)		
County:	**Code:** 7 **Name:** CALHOUN		
Sampled By:	D.DICKERSON	**Depth:**	0-5
Lab No.:	20160343	**AASHTO Class:**	A-2-4 (0)
Sample ID:	RV099	**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	3.94
Middle	3.94
Bottom	3.95
Average	3.94
Membrane Thickness (in):	0.01
Height of Specimen, Cap and Base (in):	5.6
Height of Cap and Base (in):	0.00
Initial Length, Lo (in):	5.6
Initial Area, Ao (sq. in):	12.14
Initial Volume, AoLo (cu. in):	68.01

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	3302.90

4. Soil Properties:

Optimum Moisture Content (%):	10.4
Maximum Dry Density (pcf):	122.8
95% of MDD (pcf):	116.7
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	3302.90
Compaction Moisture content (%):	10.2
Compaction Wet Density (pcf):	185.04
Compaction Dry Density (pcf):	167.91
Moisture Content After Mr Test (%):	10.2

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

7. Resilient Modulus, Mr: 4540(Sc)^-0.10193(S3)^0.47811

8. Comments

9. Tested By: G.WENDLAND **Date:** March 2, 2016

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	CA0704	**Material Code**	SSRVPS
Date Sampled:	3/2/16	**Station No.:**	627+00
Date Tested:	March 2, 2016	**Location:**	24' LT
Name of Project:	HWY. 79 - SOUTH (WIDENING)(S)		
County:	**Code:** 7 **Name:** CALHOUN		
Sampled By:	D.DICKERSON	**Depth:**	0-5
Lab No.:	20160343	**AASHTO Class:**	A-2-4 (0)
Sample ID:	RV099	**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	25.0	22.3	2.7	2.1	1.8	0.2	0.00101	0.00018	10,247
Sequence 2	6.0	4.0	47.2	44.5	2.7	3.9	3.7	0.2	0.00212	0.00038	9,697
Sequence 3	6.0	6.0	70.0	66.5	3.5	5.8	5.5	0.3	0.00331	0.00059	9,269
Sequence 4	6.0	8.0	93.7	87.8	5.9	7.7	7.2	0.5	0.00463	0.00083	8,740
Sequence 5	6.0	10.0	117.7	109.3	8.4	9.7	9.0	0.7	0.00589	0.00105	8,555
Sequence 6	4.0	2.0	24.8	22.2	2.6	2.0	1.8	0.2	0.00124	0.00022	8,278
Sequence 7	4.0	4.0	46.2	43.5	2.7	3.8	3.6	0.2	0.00272	0.00049	7,383
Sequence 8	4.0	6.0	67.5	64.7	2.7	5.6	5.3	0.2	0.00424	0.00076	7,045
Sequence 9	4.0	8.0	91.6	86.4	5.2	7.5	7.1	0.4	0.00566	0.00101	7,034
Sequence 10	4.0	10.0	115.0	107.2	7.8	9.5	8.8	0.6	0.00707	0.00126	6,989
Sequence 11	2.0	2.0	24.2	21.4	2.8	2.0	1.8	0.2	0.00162	0.00029	6,075
Sequence 12	2.0	4.0	44.5	41.6	2.9	3.7	3.4	0.2	0.00357	0.00064	5,379
Sequence 13	2.0	6.0	65.2	62.3	3.0	5.4	5.1	0.2	0.00538	0.00096	5,337
Sequence 14	2.0	8.0	87.5	83.1	4.5	7.2	6.8	0.4	0.00720	0.00129	5,317
Sequence 15	2.0	10.0	109.8	102.8	7.1	9.0	8.5	0.6	0.00887	0.00158	5,344

TESTED BY ŀ.WENDLAND DATE March 2, 2016

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.	CA0704	**Material Code**	SSRVPS
Date Sampled:	3/2/16	**Station No.:**	627+00
Date Tested:	March 2, 2016	**Location:**	24' LT
Name of Project:	HWY. 79 - SOUTH (WIDENING)(S)		
County:	**Code:** 7 **Name:** CALHOUN		
Sampled By:	D.DICKERSON	**Depth:**	0-5
Lab No.:	20160343	**AASHTO Class:**	A-2-4 (0)
Sample ID:	RV099	**Material Type (1 or 2):**	2
LATITUDE:		**LONGITUDE:**	

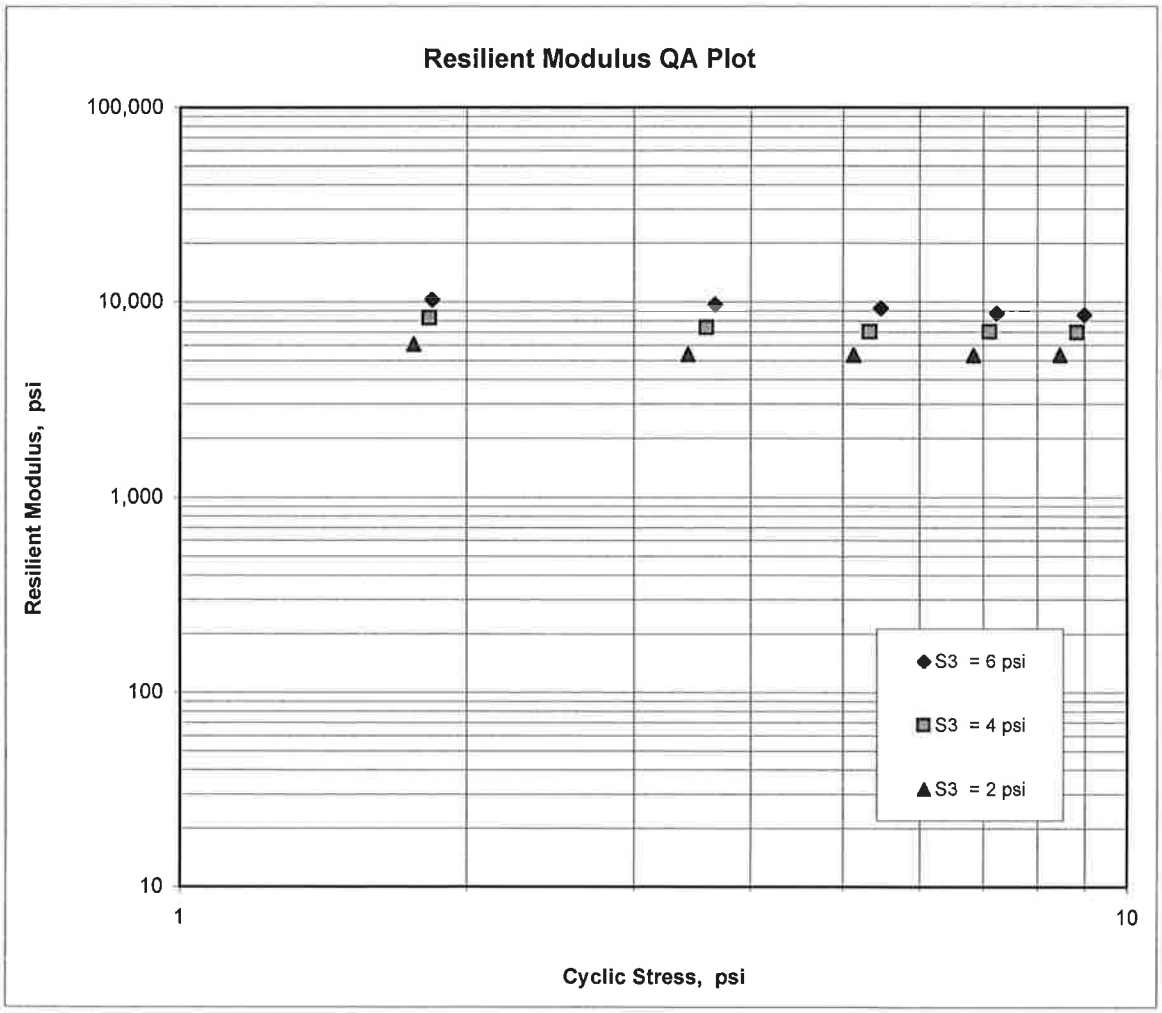
$$M_R = K1\,(S_C)^{K2}\,(S_3)^{K5}$$

K1 = 4,540

K2 = -0.10193

K5 = 0.47811

R^2 = 0.98



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	CA0704	**Material Code**	SSRVPS
Date Sampled:	3/3/16	**Station No.:**	692+00
Date Tested:	March 3, 2016	**Location:**	24'LT
Name of Project:	HWY. 79 - SOUTH (WIDENING)(S)		
County:	**Code:** 7 **Name:** CALHOUN		
Sampled By:	D.DICKERSON	**Depth:**	0-5
Lab No.:	20160344	**AASHTO Class:**	A-4(0)
Sample ID:	RV100	**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	3.96
Middle	3.96
Bottom	3.95
Average	3.96
Membrane Thickness (in):	0.01
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):	12.23
Initial Volume, AoLo (cu. in):	97.94

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	3229.40

4. Soil Properties:

Optimum Moisture Content (%):	14.1
Maximum Dry Density (pcf):	114.4
95% of MDD (pcf):	108.7
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	3229.40
Compaction Moisture content (%):	14.4
Compaction Wet Density (pcf):	125.64
Compaction Dry Density (pcf):	109.82
Moisture Content After Mr Test (%):	14.3

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

7. Resilient Modulus, Mr: 9381(Sc)^-0.21460(S3)^0.36221

8. Comments

9. Tested By: C.GARRETT **Date:** March 3, 2016

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	CA0704	**Material Code**	SSRVPS
Date Sampled:	3/3/16	**Station No.:**	692+00
Date Tested:	March 3, 2016	**Location:**	24'LT
Name of Project:	HWY. 79 - SOUTH (WIDENING)(S)		
County:	**Code:** 7 **Name:** CALHOUN		
Sampled By:	D.DICKERSON	**Depth:**	0-5
Lab No.:	20160344	**AASHTO Class:**	A-4(0)
Sample ID:	RV100	**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	25.0	22.5	2.5	2.0	1.8	0.2	0.00097	0.00012	15,284
Sequence 2	6.0	4.0	47.2	44.7	2.5	3.9	3.7	0.2	0.00209	0.00026	14,024
Sequence 3	6.0	6.0	69.9	66.6	3.3	5.7	5.4	0.3	0.00331	0.00041	13,172
Sequence 4	6.0	8.0	93.4	87.6	5.9	7.6	7.2	0.5	0.00482	0.00060	11,906
Sequence 5	6.0	10.0	116.5	108.2	8.4	9.5	8.8	0.7	0.00635	0.00079	11,152
Sequence 6	4.0	2.0	25.0	22.4	2.5	2.0	1.8	0.2	0.00111	0.00014	13,308
Sequence 7	4.0	4.0	46.4	43.9	2.6	3.8	3.6	0.2	0.00248	0.00031	11,606
Sequence 8	4.0	6.0	67.5	64.9	2.6	5.5	5.3	0.2	0.00401	0.00050	10,605
Sequence 9	4.0	8.0	91.0	86.0	4.9	7.4	7.0	0.4	0.00564	0.00070	9,993
Sequence 10	4.0	10.0	114.2	106.7	7.5	9.3	8.7	0.6	0.00728	0.00091	9,600
Sequence 11	2.0	2.0	24.6	22.2	2.5	2.0	1.8	0.2	0.00133	0.00017	10,907
Sequence 12	2.0	4.0	45.5	43.0	2.6	3.7	3.5	0.2	0.00300	0.00037	9,380
Sequence 13	2.0	6.0	65.5	62.9	2.6	5.4	5.1	0.2	0.00491	0.00061	8,389
Sequence 14	2.0	8.0	87.3	83.0	4.3	7.1	6.8	0.3	0.00678	0.00085	8,020
Sequence 15	2.0	10.0	109.7	102.8	6.9	9.0	8.4	0.6	0.00885	0.00110	7,613

TESTED BY C.GARRETT DATE March 3, 2016

REVIEWED BY _____ DATE _____

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

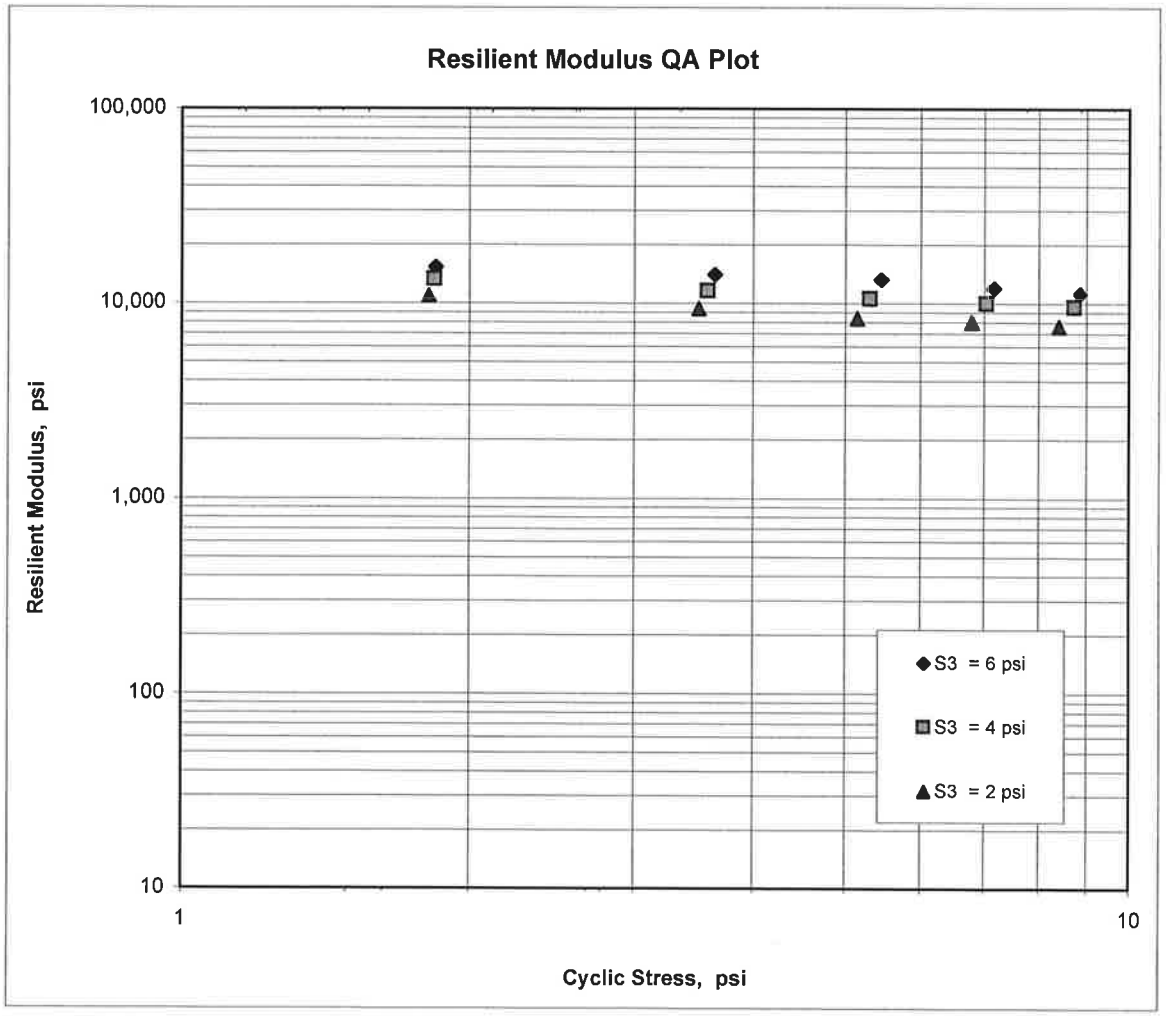
MATERIALS DIVISION

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

Job No.	CA0704	**Material Code**	SSRVPS
Date Sampled:	3/3/16	**Station No.:**	692+00
Date Tested:	March 3, 2016	**Location:**	24'LT
Name of Project:	HWY. 79 - SOUTH (WIDENING)(S)		
County:	**Code:** 7 **Name:** CALHOUN		
Sampled By:	D.DICKERSON	**Depth:**	0-5
Lab No.:	20160344	**AASHTO Class:**	A-4(0)
Sample ID:	RV100	**Material Type (1 or 2):**	2
LATITUDE:		**LONGITUDE:**	

$$M_R = K1\,(S_C)^{K2}\,(S_3)^{K5}$$

K1 = 9,381
K2 = -0.21460
K5 = 0.36221
R^2 = 0.99



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	CA0704	**Material Code**	SSRVPS
Date Sampled:	3/3/16	**Station No.:**	750+00
Date Tested:	March 3, 2016	**Location:**	24' RT
Name of Project:	HWY. 79 - SOUTH (WIDENING)(S)		
County:	**Code:** 7 **Name:** CALHOUN		
Sampled By:	D.DICKERSON	**Depth:**	0-5
Lab No.:	20160345	**AASHTO Class:**	A-6 (17)
Sample ID:	RV101	**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	3.94
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):	12.14
Initial Volume, AoLo (cu. in):	97.40

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	2950.00

4. Soil Properties:

Optimum Moisture Content (%):	22.0
Maximum Dry Density (pcf):	97.9
95% of MDD (pcf):	93.0
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	2950.00
Compaction Moisture content (%):	22.1
Compaction Wet Density (pcf):	115.40
Compaction Dry Density (pcf):	94.51
Moisture Content After Mr Test (%):	22.1

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

7. Resilient Modulus, Mr: 13104(Sc)^-0.28098(S3)^0.11043

8. Comments

9. Tested By: G.WENDLAND **Date:** March 3, 2016

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	CA0704	**Material Code**	SSRVPS
Date Sampled:	3/3/16	**Station No.:**	750+00
Date Tested:	March 3, 2016	**Location:**	24' RT
Name of Project:	HWY. 79 - SOUTH (WIDENING)(S)		
County:	**Code:** 7 **Name:** CALHOUN		
Sampled By:	D.DICKERSON	**Depth:**	0-5
Lab No.:	20160345	**AASHTO Class:**	A-6 (17)
Sample ID:	RV101	**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	24.9	22.1	2.8	2.1	1.8	0.2	0.00111	0.00014	13,170
Sequence 2	6.0	4.0	46.6	43.8	2.9	3.8	3.6	0.2	0.00236	0.00029	12,230
Sequence 3	6.0	6.0	68.5	64.9	3.6	5.6	5.3	0.3	0.00390	0.00049	10,982
Sequence 4	6.0	8.0	90.1	84.0	6.1	7.4	6.9	0.5	0.00606	0.00076	9,159
Sequence 5	6.0	10.0	110.4	101.9	8.5	9.1	8.4	0.7	0.00873	0.00109	7,710
Sequence 6	4.0	2.0	24.8	22.1	2.7	2.0	1.8	0.2	0.00120	0.00015	12,154
Sequence 7	4.0	4.0	46.4	43.5	2.8	3.8	3.6	0.2	0.00259	0.00032	11,085
Sequence 8	4.0	6.0	67.3	64.4	2.8	5.5	5.3	0.2	0.00422	0.00053	10,083
Sequence 9	4.0	8.0	89.0	83.9	5.1	7.3	6.9	0.4	0.00622	0.00078	8,908
Sequence 10	4.0	10.0	109.9	102.2	7.6	9.0	8.4	0.6	0.00864	0.00108	7,814
Sequence 11	2.0	2.0	24.9	22.1	2.7	2.0	1.8	0.2	0.00131	0.00016	11,129
Sequence 12	2.0	4.0	46.1	43.4	2.7	3.8	3.6	0.2	0.00279	0.00035	10,274
Sequence 13	2.0	6.0	66.7	63.9	2.8	5.5	5.3	0.2	0.00454	0.00057	9,302
Sequence 14	2.0	8.0	87.9	83.6	4.3	7.2	6.9	0.4	0.00655	0.00082	8,426
Sequence 15	2.0	10.0	108.9	102.2	6.7	9.0	8.4	0.5	0.00890	0.00111	7,582

TESTED BY :.WENDLAND DATE March 3, 2016

REVIEWED BY _____ DATE _____

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

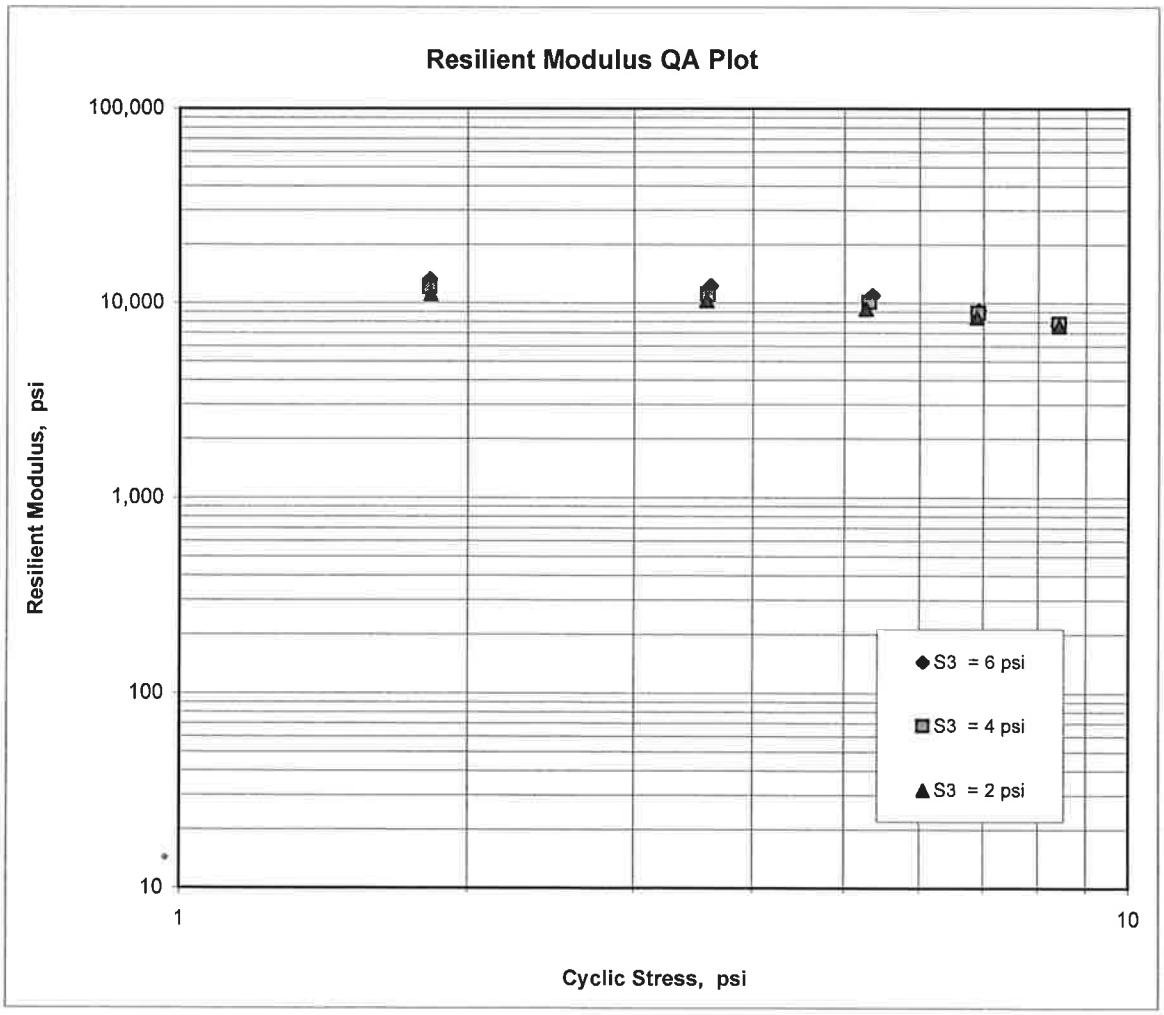
MATERIALS DIVISION

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

Job No.	CA0704	**Material Code**	SSRVPS
Date Sampled:	3/3/16	**Station No.:**	750+00
Date Tested:	March 3, 2016	**Location:**	24' RT
Name of Project:	HWY. 79 - SOUTH (WIDENING)(S)		
County:	**Code:** 7 **Name:** CALHOUN		
Sampled By:	D.DICKERSON	**Depth:**	0-5
Lab No.:	20160345	**AASHTO Class:**	A-6 (17)
Sample ID:	RV101	**Material Type (1 or 2):**	2
LATITUDE:		**LONGITUDE:**	

$$M_R = K1\,(S_C)^{K2}\,(S_3)^{K5}$$

K1 = 13,104
K2 = -0.28098
K5 = 0.11043
R^2 = 0.87



JOB: **CA0704**

JOB NAME: **HWY.79 - SOUTH (WIDENING)(S)**

COUNTY NO. **7** *DATE TESTED* **2/22/2016**

Arkansas State Highway Transporation Department

Materials Division

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 S*					
502+00	24' LT	0-5	GR/BR	95	89	83	78	61	18	02	A-4(0)	RV096	
549+00	24' LT	0-5	GR/BR	98	96	94	89	71	ND	NP	A-4(0)	RV097	
589+00	24' RT	0-5	BROWN	84	79	73	62	46	21	06	A-4(0)	RV098	
627+00	24' LT	0-5	BROWN	92	83	74	58	32	ND	NP	A-2-4(0)	RV099	
692+00	24' LT	0-5	BROWN	98	96	94	92	51	12	06	A-4(0)	RV100	
750+00	24' RT	0-5	BR/GR	95	91	88	83	78	40	24	A-6(17)	RV101	
477+00	06' RT	0-5	BR/GR	99	95	86	73	54	ND	NP	A-4(0)	S007	15.9
477+00	15' RT	0-5	BR/GR	89	78	67	57	39	ND	NP	A-4(0)	S008	14.9
477+00	24' RT	0-5	BR/GR	98	93	86	71	46	ND	NP	A-4(0)	S009	13.4
485+00	06' LT	0-5	BR/GR	99	94	82	69	54	29	13	A-6(4)	S010	18.1
485+00	15' LT	0-5	BR/GR	97	90	79	69	50	21	06	A-4(0)	S011	20.8
493+00	06' RT	0-5	BR/GR	92	79	62	47	36	19	05	A-4(0)	S012	15
493+00	15' RT	0-5	BR/GR	90	81	70	59	47	ND	NP	A-4(0)	S013	16.1
502+00	06' LT	0-5	BR/GR	96	87	74	64	50	ND	NP	A-4(0)	S014	15
502+00	15' LT	0-5	BR/GR	96	90	79	70	56	ND	NP	A-4(0)	S015	16.2
502+00	24' LT	0-5	GR/BR	96	93	89	84	66	19	03	A-4(0)	S016	16.5
509+00	06' RT	0-5	BR/GR	97	90	77	63	47	21	06	A-4(0)	S017	16.7
509+00	15' RT	0-5	BR/GR	98	93	82	71	52	ND	NP	A-4(0)	S018	17.9
517+00	06' LT	0-5	BR/GR	90	77	66	54	40	ND	NP	A-4(0)	S019	16.9
517+00	15' LT	0-5	BR/GR	98	95	86	76	57	17	02	A-4(0)	S020	18.7
517+00	24' LT	0-5	BR/GR	99	96	92	84	63	ND	NP	A-4(0)	S021	17.8
533+00	15' LT	0-5	BR/GR	97	94	87	76	56	17	03	A-4(0)	S025	15.2
525+00	06' RT	0-5	BR/GR	97	94	87	76	56	17	03	A-4(0)	S025	15.2
533+00	24' LT	0-5	BR/GR	99	96	94	89	64	ND	NP	A-4(0)	S026	19.6
525+00	15' RT	0-5	BR/GR	99	96	94	89	64	ND	NP	A-4(0)	S026	19.6
533+00	06' LT	0-5	BR/GR	99	95	86	77	62	20	04	A-4(0)	S027	19

comments: W=MULTIPLE LAYERS, X=STRIPPED
LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

Friday, March 04, 2016

STA.#	LOC.	DEPTH	COLOR	#4	#10	#40	#80	#200	L.L.	P.I.	SOIL CLASS	LAB #:	%MOISTURE
				S	I	E	V	E S					
541+00	06' RT	0-5	BR/GR	99	95	86	77	62	20	04	A-4(0)	S027	19
541+00	15' RT	0-5	BR/GR	97	92	83	73	57	23	06	A-4(1)	S028	20.6
549+00	06' LT	0-5	BR/GR	97	89	77	66	54	20	05	A-4(0)	S029	17.8
549+00	15' LT	0-5	BR/GR	99	94	85	75	59	ND	NP	A-4(0)	S030	16
549+00	24' LT	0-5	GR/BR	99	95	93	81	68	ND	NP	A-4(0)	S031	15.6
557+00	06' RT	0-5	GR/BR	98	93	87	70	52	ND	NP	A-4(0)	S032	14.7
557+00	15' RT	0-5	BR/GR	93	85	75	62	46	ND	NP	A-4(0)	S033	18.2
565+00	06' LT	0-5	BR/GR	91	77	63	52	41	ND	NP	A-4(0)	S034	18.7
565+00	15' LT	0-5	BR/GR	99	91	76	65	54	22	06	A-4(1)	S035	17.7
565+00	24' LT	0-5	BROWN	98	96	93	86	72	30	13	A-6(7)	S036	22.5
573+00	06' RT	0-5	BROWN	97	92	85	74	49	ND	NP	A-4(0)	S037	11.4
573+00	15' RT	0-5	BR/GR	92	82	72	62	42	ND	NP	A-4(0)	S038	16.2
581+00	06' LT	0-5	BR/GR	97	91	84	74	61	21	07	A-4(1)	S039	18.7
581+00	15' LT	0-5	BR/GR	99	97	93	88	73	22	08	A-4(3)	S040	21.9
581+00	24' LT	0-5	BROWN	97	94	91	84	69	20	04	A-4(0)	S041	19.8
589+00	06' RT	0-5	BR/GR	99	97	89	76	56	18	03	A-4(0)	S042	10.8
589+00	15' RT	0-5	BR/GR	90	80	69	56	41	16	01	A-4(0)	S043	12.2
589+00	24' RT	0-5	BROWN	97	95	89	74	48	20	04	A-4(0)	S044	18.3
598+00	06' LT	0-5	BR/GR	75	58	40	24	17	ND	NP	A-1-B(0)	S045	15
598+00	15' LT	0-5	BR/GR	97	92	80	68	54	19	04	A-4(0)	S046	13
605+00	06' RT	0-5	BR/GR	93	85	73	63	46	20	05	A-4(0)	S047	17.6
605+00	15' RT	0-5	BR/GR	77	59	40	26	19	ND	NP	A-1-B(0)	S048	10.7
605+00	24' RT	0-5	BROWN	95	87	79	67	56	22	06	A-4(1)	S049	21.8
613+00	06' LT	0-5	BR/GR	91	83	70	57	46	ND	NP	A-4(0)	S050	16.9
613+00	15' LT	0-5	BR/GR	99	95	83	65	49	19	05	A-4(0)	S051	19
613+00	24' LT	0-5	BR/GR	90	81	70	66	55	22	07	A-4(1)	S052	18.7
621+00	06' RT	0-5	BR/GR	86	73	59	44	33	19	05	A-2-4(0)	S053	13
621+00	15' RT	0-5	BR/GR	89	78	64	50	38	ND	NP	A-4(0)	S054	12.1

comments: W=MULTIPLE LAYERS, X=STRIPPED
LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

STA.#	LOC.	DEPTH	COLOR	#4	#10	#40	#80	#200	L.L.	P.I.	SOIL CLASS	LAB #:	%MOISTURE
				S	I	E	V	E S					
627+00	06' LT	0-5	BR/GR	96	92	81	65	47	ND	NP	A-4(0)	S055	12.9
627+00	15' LT	0-5	BR/GR	95	89	76	61	43	17	02	A-4(0)	S056	10.9
627+00	24' LT	0-5	BROWN	98	94	77	67	54	ND	NP	A-4(0)	S057	14.4
637+00	06' RT	0-5	BR/GR	84	76	65	52	36	ND	NP	A-4(0)	S058	11.1
637+00	15' RT	0-5	BR/GR	88	78	64	48	35	ND	NP	A-2-4(0)	S059	12.9
648+00	09' LT	0-5	BR/GR	96	91	85	79	66	25	08	A-4(3)	S060	18.6
648+00	18' LT	0-5	BR/GR	97	90	78	68	58	19	03	A-4(0)	S061	18.1
648+00	30' LT	0-5	BR/GR	98	93	88	81	68	23	08	A-4(3)	S062	15.1
653+00	06' RT	0-5	BROWN	98	96	92	83	59	22	07	A-4(1)	S063	18.5
653+00	15' RT	0-5	BR/GR	97	93	88	81	67	24	10	A-4(4)	S064	19.4
661+00	06' LT	0-5	BROWN	99	97	93	87	74	37	24	A-6(15)	S065	19.7
661+00	15' LT	0-5	BR/GR	96	92	86	79	66	33	19	A-6(10)	S066	24.2
661+00	24' LT	0-5	BR/GR	96	92	88	79	64	26	12	A-6(5)	S067	16.8
671+00	06' RT	0-5	BR/GR	99	97	92	88	79	53	35	A-7-6(28)	S068	36.6
671+00	15' RT	0-5	BR/GR	98	95	87	81	72	48	33	A-7-6(22)	S069	21.6
677+00	06' LT	0-5	BR/GR	93	86	78	71	57	40	26	A-6(11)	S070	21.9
677+00	15' LT	0-5	BR/GR	97	93	82	72	58	30	17	A-6(6)	S071	29.6
677+00	24' LT	0-5	BROWN	98	95	92	82	57	24	08	A-4(2)	S072	20.9
692+00	06' LT	0-5	BR/GR	96	91	86	78	57	23	06	A-4(1)	S073	22.8
692+00	15' LT	0-5	BR/GR	97	96	94	91	52	23	06	A-4(0)	S074	17.6
692+00	24' LT	0-5	BROWN	99	96	91	85	58	27	11	A-6(4)	S075	18.4
701+00	06' RT	0-5	BROWN	98	95	90	84	67	27	11	A-6(5)	S076	22
701+00	15' RT	0-5	BR/GR	97	93	84	76	63	27	11	A-6(4)	S077	24.7
709+00	06' LT	0-5	BR/GR	97	91	79	67	52	27	10	A-4(2)	S078	23.4
709+00	15' LT	0-5	BR/GR	98	95	88	81	67	30	13	A-6(6)	S079	22.2
709+00	24' LT	0-5	BROWN	99	99	99	97	74	26	09	A-4(4)	S080	18.3
717+00	06' RT	0-5	BR/GR	99	93	86	76	54	37	19	A-6(7)	S081	26
717+00	15' RT	0-5	BROWN	99	96	90	84	65	26	10	A-4(4)	S082	24.7

comments: W=MULTIPLE LAYERS, X=STRIPPED
LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

Friday, March 04, 2016

STA.#	LOC.	DEPTH	COLOR	#4 SIEVE	#10 SIEVE	#40 SIEVE	#80 SIEVE	#200 SIEVE	L.L.	P.I.	SOIL CLASS	LAB #:	%MOISTURE
725+00	06' LT	0-5	BR/GR	98	96	86	69	55	37	20	A-6(8)	S083	25
725+00	18' LT	0-5	BR/GR	96	89	79	71	52	26	11	A-6(3)	S084	22.8
725+00	29' LT	0-5	BR/GR	88	84	76	66	50	32	14	A-6(4)	S085	17.6
732+00	06' RT	0-5	BR/GR	98	94	89	81	64	31	17	A-6(8)	S086	30.1
732+00	15' RT	0-5	BROWN	98	94	85	73	58	23	09	A-4(2)	S087	21.9
741+00	06' LT	0-5	BR/GR	94	88	81	68	53	22	06	A-4(0)	S088	17.4
741+00	15' LT	0-5	BR/GR	99	95	84	73	58	23	08	A-4(2)	S089	15.6
741+00	24' LT	0-5	BR/GR	89	76	64	50	39	22	07	A-4(0)	S090	18.7
750+00	06' RT	0-5	BR/GR	95	91	85	79	74	50	34	A-7-6(24)	S091	31.6
750+00	15' RT	0-5	BROWN	90	82	72	62	56	44	29	A-7-6(12)	S092	26.2
750+00	24' RT	0-5	BR/GR	84	78	71	60	53	43	28	A-7-6(11)	S093	31.4
756+00	06' LT	0-5	BR/GR	98	91	85	80	71	34	16	A-6(9)	S094	30.8
756+00	15' LT	0-5	BR/GR	96	90	81	74	69	41	24	A-7-6(15)	S095	27.2

comments: W=MULTIPLE LAYERS, X=STRIPPED
LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

Friday, March 04, 2016

JOB: CA0704
JOB NAME: HWY.79 - SOUTH (WIDENING)(S)

COUNTY NO. 7

Arkansas State Highway Transporation Department
Materials Division
Michael Benson, Materials Engineer

DATE TESTED
2/22/2016

PAVEMENT SOUNDINGS

STA.#	LOC.				
477+00	15' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		4.0W	--	--	**8.0**
477+00	24' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		--	--	--	--
477+00	06' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		5.0W	**1.75**	**4.5**	**4.0**
485+00	06' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		5.50W	**2.5W**	**3.5**	**9.0**
485+00	15' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		4.0	--	--	**8.0**
493+00	06' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		5.0WX	**1.5X**	**4.0**	**10.0**
493+00	15' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		3.5	--	--	**8.0**
502+00	06' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		4.25WX	**3.25WX**	**3.5**	**8.0**
502+00	15' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		4.0	--	--	**8.0**
502+00	24' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		--	--	--	--
509+00	06' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		5.25W	**2.75**	**2.5**	**9.0**
509+00	15' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		4.0	--	--	**8.0**
517+00	15' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		4.0	--	--	**8.0**
517+00	24' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		--	--	--	--
517+00	06' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		3.0WX	**5.0WX**	**4.0**	**7.0**
525+00	06' RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5	
		3.50	--	**8.0**	
525+00	15' RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5	
		--	--	--	

comments: W=MULTIPLE LAYERS, X=STRIPPED
LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

Friday, March 04, 2016

STA.#	LOC.				
533+00	06' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5	
		7.50WX	**2.5X**	**5.0**	
533+00	15' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5	
		3.50	**--**	**8.0**	
533+00	24' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5	
		--	**--**	**--**	
541+00	15' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		4.0W	**--**	**--**	**9.0**
541+00	06' RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5	
		7.50WX	**2.5X**	**5.0**	
549+00	24' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		--	**--**	**--**	**--**
549+00	15' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		3.5W	**--**	**--**	**8.0**
549+00	06' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		5.0W	**2.0X**	**4.0**	**8.0**
557+00	06' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		5.0WX	**2.5X**	**4.0**	**7.0**
557+00	15' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		4.5W	**--**	**--**	**8.0**
565+00	06' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		4.0W	**3.0**	**4.0**	**5.0**
565+00	15' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		3.0	**--**	**--**	**6.0**
565+00	24' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		--	**--**	**--**	**--**
573+00	06' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		5.5WX	**2.0X**	**4.0**	**7.0**
573+00	15' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		4.5	**--**	**--**	**8.0**
581+00	06' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		4.5WX	**2.0X**	**--**	**5.0**
581+00	15' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		3.5	**--**	**--**	**9.0**
581+00	24' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		--	**--**	**--**	**--**
589+00	06' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5
		5.0WX	**2.5**	**4.5**	**7.0**

comments: W=MULTIPLE LAYERS, X=STRIPPED
LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

STA.#	LOC.	PAVEMENT SOUNDINGS				
589+00	15' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5	
		5.0	--	--	**8.0**	
589+00	24' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5	
		--	--	--	--	
598+00	06' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5	
		5.5W	**4.0**	**4.0**	**5.0**	
598+00	15' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5	
		4.0	--	--	**7.0**	
605+00	06' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5	
		5.0WX	**2.0**	**2.0**	**8.0**	
605+00	15' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5	
		3.5W	--	--	**6.0**	
605+00	24' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5	
		--	--	--	--	
613+00	24' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5	
		--	--	--	--	
613+00	15' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5	
		4.0	--	--	**8.0**	
613+00	06' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5	
		5.0W	**2.0**	**4.5**	**5.0**	
621+00	06' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5	
		5.5	**1.5**	**5.0**	**8.0**	
621+00	15' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5	
		3.5	--	--	**8.0**	
627+00	06' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5	
		5.0W	**2.0**	**4.0**	**5.0**	
627+00	15' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5	
		4.0	--	--	**8.0**	
627+00	24' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5	
		--	--	--	--	
637+00	06' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5	
		3.0WX	**8.5WX**	**4.0**	**8.0**	
637+00	15' RT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5	
		3.75W	--	--	**8.0**	
648+00	18' LT	ACHMSC	ACHMBC	ACHMSC	SOIL CEMENT	AGG.BASE CRS CL-5
		4.0	--	--	--	**8.0**
648+00	30' LT	ACHMSC	ACHMBC	ACHMSC	SOIL CEMENT	AGG.BASE CRS CL-5
		--	--	--	-	--

comments: W=MULTIPLE LAYERS, X=STRIPPED
LOCATIONS MEASURED FROM C.L.OF EXISTING RDWY

648+00	09' LT	ACHMSC	ACHMBC	SOIL CEMENT	AGG.BASE CRS CL-5	
		6.5WX	**9.5W**	**--**	**3.0**	
653+00	15' RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5		
		4.0	**--**	**8.0**		
653+00	06' RT	ACHMSC	ACHMBC	ACHMSC	SOIL CEMENT	AGG.BASE CRS CL-5
		2.5	**8.5**	**2.0**	**4.0**	**4.0**
661+00	06' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5		
		5.0W	**9.0W**	**4.0**		
661+00	15' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5		
		3.75	**--**	**8.0**		
661+00	24' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5		
		--	**--**	**--**		
671+00	06' RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5		
		5.0W	**8.0**	**3.0**		
671+00	15' RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5		
		4.0W	**--**	**8.0**		
677+00	24' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5		
		--	**--**	**--**		
677+00	06' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5		
		8.0W	**6.25W**	**4.0**		
677+00	15' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5		
		4.0	**--**	**8.0**		
692+00	24' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5		
		--	**--**	**--**		
692+00	15' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5		
		3.0WX	**--**	**8.0**		
692+00	06' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5		
		6.0WX	**6.5WX**	**6.0**		
701+00	06' RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5		
		5.25W	**9.0W**	**4.0**		
701+00	15' RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5		
		3.5W	**--**	**9.0**		
709+00	06' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5		
		7.0WX	**4.0WX**	**4.0**		
709+00	15' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5		
		2.5	**--**	**9.0**		
709+00	24' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5		
		--	**--**	**--**		

comments: W=MULTIPLE LAYERS, X=STRIPPED
LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

STA.#	LOC.	PAVEMENT SOUNDINGS		
717+00	06' RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5
		3.5WX	**8.0WX**	**8.0**
717+00	15' RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5
		5.0W	**--**	**10.0**
725+00	18' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5
		3.0	**--**	**8.0**
725+00	29' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5
		--	**--**	**--**
725+00	06' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5
		7.0W	**4.5W**	**5.0**
732+00	15' RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5
		4.5	**--**	**8.0**
732+00	06' RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5
		3.5W	**8.0W**	**4.0**
741+00	06' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5
		9.0W	**5.0W**	**4.0**
741+00	15' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5
		3.5	**--**	**8.0**
741+00	24' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5
		--	**--**	**--**
750+00	06' RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5
		6.0WX	**5.5WX**	**3.0**
750+00	15' RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5
		2.25	**--**	**--**
750+00	24' RT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5
		--	**--**	**--**
756+00	15' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5
		2.5	**--**	**6.0**
756+00	06' LT	ACHMSC	ACHMBC	AGG.BASE CRS CL-5
		6.0WX	**7.0WX**	**3.0**

comments: W=MULTIPLE LAYERS, X=STRIPPED
LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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

DATE - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 1
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160251	20160252	20160253
SAMPLE ID	S007	S008	S009
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	477+00	477+00	477+00
LOCATION	06' RT	15' RT	24' RT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BR/GR	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 42 49.50	33 42 49.50	33 42 49.50
LONGITUDE DEG-MIN-SEC	92 28 15.50	92 28 15.40	92 28 15.30
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.		100	
3/8 IN.	100	98	100
NO. 4	99	89	98
NO. 10	95	78	93
NO. 40	86	67	86
NO. 80	73	57	71
NO. 200	54	39	46
LIQUID LIMIT	ND	ND	ND
PLASTICITY INDEX	NP	NP	NP
AASHTO SOIL	A-4(0)	A-4(0)	A-4(0)
UNIFIED SOIL			
% MOISTURE CONTENT	15.9	14.9	13.4
ACHMSC (IN)	5.0W	4.0W	--
ACHMBC (IN)	1.75	--	--
SOIL CEMENT (IN)	4.5	--	--
AGG.BASE CRS CL-5 (IN)	4.0	8.0	--

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY.

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 2
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160254	20160255	20160256
SAMPLE ID	S010	S011	S012
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	485+00	485+00	493+00
LOCATION	06' LT	15' LT	06' RT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BR/GR	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 42 57.00	33 42 57.00	33 43 5.00
LONGITUDE DEG-MIN-SEC	92 28 18.40	92 28 18.50	92 28 18.90
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.			100
3/8 IN.	100	100	98
NO. 4	99	97	92
NO. 10	94	90	79
NO. 40	82	79	62
NO. 80	69	69	47
NO. 200	54	50	36
LIQUID LIMIT	29	21	19
PLASTICITY INDEX	13	06	05
AASHTO SOIL	A-6(4)	A-4(0)	A-4(0)
UNIFIED SOIL			
% MOISTURE CONTENT	18.1	20.8	15.0
ACHMSC (IN)	5.50W	4.0	5.0WX
ACHMBC (IN)	2.5W	--	1.5X
SOIL CEMENT (IN)	3.5	--	4.0
AGG.BASE CRS CL-5 (IN)	9.0	8.0	10.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY.

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 3
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160257	20160258	20160259
SAMPLE ID	S013	S014	S015
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	493+00	502+00	502+00
LOCATION	15' RT	06' LT	15' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BR/GR	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 43 5.00	33 43 13.50	33 43 13.50
LONGITUDE DEG-MIN-SEC	92 28 18.90	92 28 19.40	92 28 19.50
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.	100		100
3/8 IN.	99	100	99
NO. 4	90	96	96
NO. 10	81	87	90
NO. 40	70	74	79
NO. 80	59	64	70
NO. 200	47	50	56
LIQUID LIMIT	ND	ND	ND
PLASTICITY INDEX	NP	NP	NP
AASHTO SOIL	A-4(0)	A-4(0)	A-4(0)
UNIFIED SOIL			
% MOISTURE CONTENT	16.1	15.0	16.2
ACHMSC (IN)	3.5	4.25WX	4.0
ACHMBC (IN)	--	3.25WX	--
SOIL CEMENT (IN)	--	3.5	--
AGG.BASE CRS CL-5 (IN)	8.0	8.0	8.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY.

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 4
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160260	20160261	20160262
SAMPLE ID	S016	S017	S018
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	502+00	509+00	509+00
LOCATION	24' LT	06' RT	15' RT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	GR/BR	BR/GR	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 43 13.50	33 43 20.40	33 43 20.40
LONGITUDE DEG-MIN-SEC	92 28 19.60	92 28 19.40	92 28 19.40
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.	100		
3/8 IN.	99	100	100
NO. 4	96	97	98
NO. 10	93	90	93
NO. 40	89	77	82
NO. 80	84	63	71
NO. 200	66	47	52
LIQUID LIMIT	19	21	ND
PLASTICITY INDEX	03	06	NP
AASHTO SOIL	A-4(0)	A-4(0)	A-4(0)
UNIFIED SOIL			
% MOISTURE CONTENT	16.5	16.7	17.9
ACHMSC (IN)	--	5.25W	4.0
ACHMBC (IN)	--	2.75	--
SOIL CEMENT (IN)	--	2.5	--
AGG.BASE CRS CL-5 (IN)	--	9.0	8.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY.

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 5
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160263	20160264	20160265
SAMPLE ID	S019	S020	S021
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	517+00	517+00	517+00
LOCATION	06' LT	15' LT	24' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BR/GR	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 43 28.20	33 43 28.20	33 43 28.20
LONGITUDE DEG-MIN-SEC	92 28 20.70	92 28 20.90	92 28 21.00
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.	100		
3/8 IN.	99	100	100
NO. 4	90	98	99
NO. 10	77	95	96
NO. 40	66	86	92
NO. 80	54	76	84
NO. 200	40	57	63
LIQUID LIMIT	ND	17	ND
PLASTICITY INDEX	NP	02	NP
AASHTO SOIL	A-4(0)	A-4(0)	A-4(0)
UNIFIED SOIL			
% MOISTURE CONTENT	16.9	18.7	17.8
ACHMSC (IN)	3.0WX	4.0	--
ACHMBC (IN)	5.0WX	--	--
SOIL CEMENT (IN)	4.0	--	--
AGG.BASE CRS CL-5 (IN)	7.0	8.0	--

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 6
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160266	20160267	20160268
SAMPLE ID	S025	S026	S027
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	525+00	525+00	533+00
LOCATION	06' RT	15' RT	06' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BR/GR	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 43 35.80	33 43 35.80	33 43 43.40
LONGITUDE DEG-MIN-SEC	92 28 23.10	92 28 23.00	92 28 25.70
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.			
3/8 IN.	100	100	100
NO. 4	97	99	99
NO. 10	94	96	95
NO. 40	87	94	86
NO. 80	76	89	77
NO. 200	56	64	62
LIQUID LIMIT	17	ND	20
PLASTICITY INDEX	03	NP	04
AASHTO SOIL	A-4(0)	A-4(0)	A-4(0)
UNIFIED SOIL			
% MOISTURE CONTENT	15.2	19.6	19.0
ACHMSC (IN)	3.50	--	7.50WX
ACHMBC (IN)	--	--	2.5X
AGG.BASE CRS CL-5 (IN)	8.0	--	5.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 8
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160272	20160273	20160274
SAMPLE ID	S028	S029	S030
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	541+00	549+00	549+00
LOCATION	15' RT	06' LT	15' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BR/GR	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 43 51.20	33 43 59.00	33 43 59.10
LONGITUDE DEG-MIN-SEC	92 28 27.90	92 28 28.80	92 28 28.90
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.			
3/8 IN.	100	100	100
NO. 4	97	97	99
NO. 10	92	89	94
NO. 40	83	77	85
NO. 80	73	66	75
NO. 200	57	54	59
LIQUID LIMIT	23	20	ND
PLASTICITY INDEX	06	05	NP
AASHTO SOIL	A-4(1)	A-4(0)	A-4(0)
UNIFIED SOIL			
% MOISTURE CONTENT	20.6	17.8	16.0
ACHMSC (IN)	4.0W	5.0W	3.5W
ACHMBC (IN)	--	2.0X	--
SOIL CEMENT (IN)	--	4.0	--
AGG.BASE CRS CL-5 (IN)	9.0	8.0	8.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 9
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160275	20160276	20160277
SAMPLE ID	S031	S032	S033
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	549+00	557+00	557+00
LOCATION	24' LT	06' RT	15' RT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	GR/BR	GR/BR	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 43 59.10	33 44 7.00	33 44 7.00
LONGITUDE DEG-MIN-SEC	92 28 29.10	92 28 29.40	92 28 29.20
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.			100
3/8 IN.	100	100	98
NO. 4	99	98	93
NO. 10	95	93	85
NO. 40	93	87	75
NO. 80	81	70	62
NO. 200	68	52	46
LIQUID LIMIT	ND	ND	ND
PLASTICITY INDEX	NP	NP	NP
AASHTO SOIL	A-4(0)	A-4(0)	A-4(0)
UNIFIED SOIL			
% MOISTURE CONTENT	15.6	14.7	18.2
ACHMSC (IN)	--	5.0WX	4.5W
ACHMBC (IN)	--	2.5X	--
SOIL CEMENT (IN)	--	4.0	--
AGG.BASE CRS CL-5 (IN)	--	7.0	8.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 10
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160278	20160279	20160280
SAMPLE ID	S034	S035	S036
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	565+00	565+00	565+00
LOCATION	06' LT	15' LT	24' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BR/GR	BROWN
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 44 14.80	33 44 14.80	33 44 14.80
LONGITUDE DEG-MIN-SEC	92 28 30.20	92 28 30.30	92 28 30.40
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.			100
3/8 IN.	100	100	99
NO. 4	91	99	98
NO. 10	77	91	96
NO. 40	63	76	93
NO. 80	52	65	86
NO. 200	41	54	72
LIQUID LIMIT	ND	22	30
PLASTICITY INDEX	NP	06	13
AASHTO SOIL	A-4(0)	A-4(1)	A-6(7)
UNIFIED SOIL			
% MOISTURE CONTENT	18.7	17.7	22.5
ACHMSC (IN)	4.0W	3.0	--
ACHMBC (IN)	3.0	--	--
SOIL CEMENT (IN)	4.0	--	--
AGG.BASE CRS CL-5 (IN)	5.0	6.0	--

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L.OF EXISTING RDWY

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 - 02/24/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 11
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160281	20160282	20160283
SAMPLE ID	S037	S038	S039
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	573+00	573+00	581+00
LOCATION	06' RT	15' RT	06' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BROWN	BR/GR	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 44 22.80	33 44 22.80	33 44 30.70
LONGITUDE DEG-MIN-SEC	92 28 30.50	92 28 30.40	92 28 30.90
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.			
3/8 IN.	100	100	100
NO. 4	97	92	97
NO. 10	92	82	91
NO. 40	85	72	84
NO. 80	74	62	74
NO. 200	49	42	61
LIQUID LIMIT	ND	ND	21
PLASTICITY INDEX	NP	NP	07
AASHTO SOIL	A-4(0)	A-4(0)	A-4(1)
UNIFIED SOIL			
% MOISTURE CONTENT	11.4	16.2	18.7
ACHMSC (IN)	5.5WX	4.5	4.5WX
ACHMBC (IN)	2.0X	--	2.0X
SOIL CEMENT (IN)	4.0	--	--
AGG.BASE CRS CL-5 (IN)	7.0	8.0	5.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 12
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160284	20160285	20160286
SAMPLE ID	S040	S041	S042
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	581+00	581+00	589+00
LOCATION	15' LT	24' LT	06' RT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BROWN	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 44 30.70	33 44 30.70	33 44 38.50
LONGITUDE DEG-MIN-SEC	92 28 31.10	92 28 31.20	92 28 32.60
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.			
3/8 IN.	100	100	100
NO. 4	99	97	99
NO. 10	97	94	97
NO. 40	93	91	89
NO. 80	88	84	76
NO. 200	73	69	56
LIQUID LIMIT	22	20	18
PLASTICITY INDEX	08	04	03
AASHTO SOIL	A-4(3)	A-4(0)	A-4(0)
UNIFIED SOIL			
% MOISTURE CONTENT	21.9	19.8	10.8
ACHMSC (IN)	3.5	--	5.0WX
ACHMBC (IN)	--	--	2.5
SOIL CEMENT (IN)	--	--	4.5
AGG.BASE CRS CL-5 (IN)	9.0	--	7.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 13
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160287	20160288	20160289
SAMPLE ID	S043	S044	S045
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	589+00	589+00	598+00
LOCATION	15' RT	24' RT	06' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BROWN	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 44 38.50	33 44 38.50	33 44 45.90
LONGITUDE DEG-MIN-SEC	92 28 32.50	92 28 32.40	92 28 38.30
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.			100
3/8 IN.	100	100	90
NO. 4	90	97	75
NO. 10	80	95	58
NO. 40	69	89	40
NO. 80	56	74	24
NO. 200	41	48	17
LIQUID LIMIT	16	20	ND
PLASTICITY INDEX	01	04	NP
AASHTO SOIL	A-4(0)	A-4(0)	A-1-B(0)
UNIFIED SOIL			
% MOISTURE CONTENT	12.2	18.3	15.0
ACHMSC (IN)	5.0	--	5.5W
ACHMBC (IN)	--	--	4.0
SOIL CEMENT (IN)	--	--	4.0
AGG.BASE CRS CL-5 (IN)	8.0	--	5.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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	- 02/22/16	SEQUENCE NO.	- 14
JOB NUMBER	- CA0704	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	- 07
SUPPLIER NAME	- STATE	DISTRICT NO.	- 07
NAME OF PROJECT	- HWY.79 - SOUTH (WIDENING)(S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- CALHOUN COUNTY	DATE SAMPLED	- 01/14/16
SAMPLED BY	- T.FRAZIER	DATE RECEIVED	- 01/15/16
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 02/22/16

MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	- 20160290	- 20160291	- 20160292
SAMPLE ID	- S046	- S047	- S048
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- 598+00	- 605+00	- 605+00
LOCATION	- 15' LT	- 06' RT	- 15' RT
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BR/GR	- BR/GR	- BR/GR
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 33 44 45.90	- 33 44 51.80	- 33 44 51.80
LONGITUDE DEG-MIN-SEC	- 92 28 38.40	92 28 42.70	92 28 42.60
% PASSING 2 IN.	-	-	-
1 1/2 IN.	-	-	-
3/4 IN.	- 100	- 100	- 100
3/8 IN.	- 99	- 99	- 92
NO. 4	- 97	- 93	- 77
NO. 10	- 92	- 85	- 59
NO. 40	- 80	- 73	- 40
NO. 80	- 68	- 63	- 26
NO. 200	- 54	46	19
LIQUID LIMIT	- 19	- 20	- ND
PLASTICITY INDEX	- 04	- 05	- NP
AASHTO SOIL	- A-4(0)	- A-4(0)	- A-1-B(0)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 13.0	17.6	10.7
ACHMSC (IN)	- 4.0	- 5.0WX	- 3.5W
ACHMBC (IN)	- --	- 2.0	- --
SOIL CEMENT (IN)	- --	- 2.0	- --
AGG.BASE CRS CL-5 (IN)	- 7.0	- 8.0	- 6.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L.OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 15
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160293	20160294	20160295
SAMPLE ID	S049	S050	S051
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	605+00	613+00	613+00
LOCATION	24' RT	06' LT	15' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BROWN	BR/GR	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 44 51.80	33 44 59.10	33 44 59.10
LONGITUDE DEG-MIN-SEC	92 28 42.60	92 28 46.30	92 28 46.50
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.			
3/8 IN.	100	100	100
NO. 4	95	91	99
NO. 10	87	83	95
NO. 40	79	70	83
NO. 80	67	57	65
NO. 200	56	46	49
LIQUID LIMIT	22	ND	19
PLASTICITY INDEX	06	NP	05
AASHTO SOIL	A-4(1)	A-4(0)	A-4(0)
UNIFIED SOIL			
% MOISTURE CONTENT	21.8	16.9	19.0
ACHMSC (IN)	--	5.0W	4.0
ACHMBC (IN)	--	2.0	--
SOIL CEMENT (IN)	--	4.5	--
AGG.BASE CRS CL-5 (IN)	--	5.0	8.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 16
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160296	20160297	20160298
SAMPLE ID	S052	S053	S054
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	613+00	621+00	621+00
LOCATION	24' LT	06' RT	15' RT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BR/GR	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 44 59.10	33 45 7.10	33 45 7.10
LONGITUDE DEG-MIN-SEC	92 28 46.50	92 28 46.70	92 28 46.60
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.	100	100	100
3/8 IN.	99	99	98
NO. 4	90	86	89
NO. 10	81	73	78
NO. 40	70	59	64
NO. 80	66	44	50
NO. 200	55	33	38
LIQUID LIMIT	22	19	ND
PLASTICITY INDEX	07	05	NP
AASHTO SOIL	A-4(1)	A-2-4(0)	A-4(0)
UNIFIED SOIL			
% MOISTURE CONTENT	18.7	13.0	12.1
ACHMSC (IN)	--	5.5	3.5
ACHMBC (IN)	--	1.5	--
SOIL CEMENT (IN)	--	5.0	--
AGG.BASE CRS CL-5 (IN)	--	8.0	8.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 17
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160299	20160300	20160301
SAMPLE ID	S055	S056	S057
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	627+00	627+00	627+00
LOCATION	06' LT	15' LT	24' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BR/GR	BROWN
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 45 13.10	33 45 13.10	33 45 13.10
LONGITUDE DEG-MIN-SEC	92 28 46.80	92 28 46.90	92 28 47.10
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.		100	100
3/8 IN.	100	99	98
NO. 4	96	95	98
NO. 10	92	89	94
NO. 40	81	76	77
NO. 80	65	61	67
NO. 200	47	43	54
LIQUID LIMIT	ND	17	ND
PLASTICITY INDEX	NP	02	NP
AASHTO SOIL	A-4(0)	A-4(0)	A-4(0)
UNIFIED SOIL			
% MOISTURE CONTENT	12.9	10.9	14.4
ACHMSC (IN)	5.0W	4.0	--
ACHMBC (IN)	2.0	--	--
SOIL CEMENT (IN)	4.0	--	--
AGG.BASE CRS CL-5 (IN)	5.0	8.0	--

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/24/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 18
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160302	20160303	20160304
SAMPLE ID	S058	S059	S060
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	637+00	637+00	648+00
LOCATION	06' RT	15' RT	09' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BR/GR	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 45 23.00	33 45 23.00	33 45 34.10
LONGITUDE DEG-MIN-SEC	92 28 46.50	92 28 46.50	92 28 46.10
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.		100	
3/8 IN.	100	96	100
NO. 4	84	88	96
NO. 10	76	78	91
NO. 40	65	64	85
NO. 80	52	48	79
NO. 200	36	35	66
LIQUID LIMIT	ND	ND	25
PLASTICITY INDEX	NP	NP	08
AASHTO SOIL	A-4(0)	A-2-4(0)	A-4(3)
UNIFIED SOIL			
% MOISTURE CONTENT	11.1	12.9	18.6
ACHMSC (IN)	3.0WX	3.75W	6.5WX
ACHMBC (IN)	8.5WX	--	9.5W
SOIL CEMENT (IN)	4.0	--	--
AGG.BASE CRS CL-5 (IN)	8.0	8.0	3.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 19
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160305	20160306	20160307
SAMPLE ID	S061	S062	S063
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	648+00	648+00	653+00
LOCATION	18' LT	30' LT	06' RT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BR/GR	BROWN
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 45 34.00	33 45 34.00	33 45 38.50
LONGITUDE DEG-MIN-SEC	92 28 46.20	92 28 46.30	92 28 44.90
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.			100
3/8 IN.	100	100	99
NO. 4	97	98	98
NO. 10	90	93	96
NO. 40	78	88	92
NO. 80	68	81	83
NO. 200	58	68	59
LIQUID LIMIT	19	23	22
PLASTICITY INDEX	03	08	07
AASHTO SOIL	A-4(0)	A-4(3)	A-4(1)
UNIFIED SOIL			
% MOISTURE CONTENT	18.1	15.1	18.5
ACHMSC (IN)	4.0	--	2.5
ACHMBC (IN)	--	--	8.5
ACHMSC (IN)	--	--	2.0
SOIL CEMENT (IN)	--	-	4.0
AGG.BASE CRS CL-5 (IN)	8.0	--	4.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L.OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 20
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160308	20160309	20160310
SAMPLE ID	S064	S065	S066
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	653+00	661+00	661+00
LOCATION	15' RT	06' LT	15' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BROWN	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 45 38.50	33 45 46.30	33 45 46.30
LONGITUDE DEG-MIN-SEC	92 28 44.90	92 28 42.30	92 28 42.40
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.	100	100	100
3/8 IN.	98	99	98
NO. 4	97	99	96
NO. 10	93	97	92
NO. 40	88	93	86
NO. 80	81	87	79
NO. 200	67	74	66
LIQUID LIMIT	24	37	33
PLASTICITY INDEX	10	24	19
AASHTO SOIL	A-4(4)	A-6(15)	A-6(10)
UNIFIED SOIL			
% MOISTURE CONTENT	19.4	19.7	24.2
ACHMSC (IN)	4.0	5.0W	3.75
ACHMBC (IN)	--	9.0W	--
AGG.BASE CRS CL-5 (IN)	8.0	4.0	8.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 21
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160311	20160312	20160313
SAMPLE ID	S067	S068	S069
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	661+00	671+00	671+00
LOCATION	24' LT	06' RT	15' RT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BR/GR	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 45 46.30	33 45 55.60	33 45 55.50
LONGITUDE DEG-MIN-SEC	92 28 42.60	92 28 37.30	92 28 37.20
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.			
3/8 IN.	100	100	100
NO. 4	96	99	98
NO. 10	92	97	95
NO. 40	88	92	87
NO. 80	79	88	81
NO. 200	64	79	72
LIQUID LIMIT	26	53	48
PLASTICITY INDEX	12	35	33
AASHTO SOIL	A-6(5)	A-7-6(28)	A-7-6(22)
UNIFIED SOIL			
% MOISTURE CONTENT	16.8	36.6	21.6
ACHMSC (IN)	--	5.0W	4.0W
ACHMBC (IN)	--	8.0	--
AGG.BASE CRS CL-5 (IN)	--	3.0	8.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 22
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160314	20160315	20160316
SAMPLE ID	S070	S071	S072
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	677+00	677+00	677+00
LOCATION	06' LT	15' LT	24' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BR/GR	BROWN
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 46 1.00	33 46 1.10	33 46 1.10
LONGITUDE DEG-MIN-SEC	92 28 34.50	92 28 34.70	92 28 34.70
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.	100		
3/8 IN.	96	100	100
NO. 4	93	97	98
NO. 10	86	93	95
NO. 40	78	82	92
NO. 80	71	72	82
NO. 200	57	58	57
LIQUID LIMIT	40	30	24
PLASTICITY INDEX	26	17	08
AASHTO SOIL	A-6(11)	A-6(6)	A-4(2)
UNIFIED SOIL			
% MOISTURE CONTENT	21.9	29.6	20.9
ACHMSC (IN)	8.0W	4.0	--
ACHMBC (IN)	6.25W	--	--
AGG.BASE CRS CL-5 (IN)	4.0	8.0	--

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 23
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160317	20160318	20160319
SAMPLE ID	S073	S074	S075
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	692+00	692+00	692+00
LOCATION	06' LT	15' LT	24' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BR/GR	BROWN
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 46 14.10	33 46 14.10	33 46 14.10
LONGITUDE DEG-MIN-SEC	92 28 27.50	92 28 27.70	92 28 27.90
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.	100	100	
3/8 IN.	99	99	100
NO. 4	96	97	99
NO. 10	91	96	96
NO. 40	86	94	91
NO. 80	78	91	85
NO. 200	57	52	58
LIQUID LIMIT	23	23	27
PLASTICITY INDEX	06	06	11
AASHTO SOIL	A-4(1)	A-4(0)	A-6(4)
UNIFIED SOIL			
% MOISTURE CONTENT	22.8	17.6	18.4
ACHMSC (IN)	6.0WX	3.0WX	--
ACHMBC (IN)	6.5WX	--	--
AGG.BASE CRS CL-5 (IN)	6.0	8.0	--

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 24
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160320	20160321	20160322
SAMPLE ID	S076	S077	S078
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	701+00	701+00	709+00
LOCATION	06' RT	15' RT	06' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BROWN	BR/GR	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 46 22.20	33 46 22.10	33 46 29.40
LONGITUDE DEG-MIN-SEC	92 28 23.10	92 28 23.10	92 28 19.40
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.		100	100
3/8 IN.	100	99	98
NO. 4	98	97	97
NO. 10	95	93	91
NO. 40	90	84	79
NO. 80	84	76	67
NO. 200	67	63	52
LIQUID LIMIT	27	27	27
PLASTICITY INDEX	11	11	10
AASHTO SOIL	A-6(5)	A-6(4)	A-4(2)
UNIFIED SOIL			
% MOISTURE CONTENT	22.0	24.7	23.4
ACHMSC (IN)	5.25W	3.5W	7.0WX
ACHMBC (IN)	9.0W	--	4.0WX
AGG.BASE CRS CL-5 (IN)	4.0	9.0	4.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/24/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 25
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160323	20160324	20160325
SAMPLE ID	S079	S080	S081
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	709+00	709+00	717+00
LOCATION	15' LT	24' LT	06' RT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BROWN	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 46 29.40	33 46 29.50	33 46 36.60
LONGITUDE DEG-MIN-SEC	92 28 19.60	92 28 19.70	92 28 15.50
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.			
3/8 IN.	100	100	100
NO. 4	98	99	99
NO. 10	95	99	93
NO. 40	88	99	86
NO. 80	81	97	76
NO. 200	67	74	54
LIQUID LIMIT	30	26	37
PLASTICITY INDEX	13	09	19
AASHTO SOIL	A-6(6)	A-4(4)	A-6(7)
UNIFIED SOIL			
% MOISTURE CONTENT	22.2	18.3	26.0
ACHMSC (IN)	2.5	--	3.5WX
ACHMBC (IN)	--	--	8.0WX
AGG.BASE CRS CL-5 (IN)	9.0	--	8.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 26
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160326	20160327	20160328
SAMPLE ID	S082	S083	S084
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	717+00	725+00	725+00
LOCATION	15' RT	06' LT	18' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BROWN	BR/GR	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 46 36.60	33 46 44.00	33 46 44.00
LONGITUDE DEG-MIN-SEC	92 28 15.40	92 28 11.70	92 28 11.90
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.			100
3/8 IN.	100	100	99
NO. 4	99	98	96
NO. 10	96	96	89
NO. 40	90	86	79
NO. 80	84	69	71
NO. 200	65	55	52
LIQUID LIMIT	26	37	26
PLASTICITY INDEX	10	20	11
AASHTO SOIL	A-4(4)	A-6(8)	A-6(3)
UNIFIED SOIL			
% MOISTURE CONTENT	24.7	25.0	22.8
ACHMSC (IN)	5.0W	7.0W	3.0
ACHMBC (IN)	--	4.5W	--
AGG.BASE CRS CL-5 (IN)	10.0	5.0	8.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 27
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160329	20160330	20160331
SAMPLE ID	S085	S086	S087
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	725+00	732+00	732+00
LOCATION	29' LT	06' RT	15' RT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BR/GR	BROWN
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 46 44.10	33 46 50.20	33 46 50.20
LONGITUDE DEG-MIN-SEC	92 28 11.90	92 28 8.30	92 28 8.20
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.	100		
3/8 IN.	95	100	100
NO. 4	88	98	98
NO. 10	84	94	94
NO. 40	76	89	85
NO. 80	66	81	73
NO. 200	50	64	58
LIQUID LIMIT	32	31	23
PLASTICITY INDEX	14	17	09
AASHTO SOIL	A-6(4)	A-6(8)	A-4(2)
UNIFIED SOIL			
% MOISTURE CONTENT	17.6	30.1	21.9
ACHMSC (IN)	--	3.5W	4.5
ACHMBC (IN)	--	8.0W	--
AGG.BASE CRS CL-5 (IN)	--	4.0	8.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 28
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160332	20160333	20160334
SAMPLE ID	S088	S089	S090
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	741+00	741+00	741+00
LOCATION	06' LT	15' LT	24' LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BR/GR	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 46 58.50	33 46 58.50	33 46 58.60
LONGITUDE DEG-MIN-SEC	92 28 4.10	92 28 4.30	92 28 4.50
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.	100		100
3/8 IN.	99	100	98
NO. 4	94	99	89
NO. 10	88	95	76
NO. 40	81	84	64
NO. 80	68	73	50
NO. 200	53	58	39
LIQUID LIMIT	22	23	22
PLASTICITY INDEX	06	08	07
AASHTO SOIL	A-4(0)	A-4(2)	A-4(0)
UNIFIED SOIL			
% MOISTURE CONTENT	17.4	15.6	18.7
ACHMSC (IN)	9.0W	3.5	--
ACHMBC (IN)	5.0W	--	--
AGG.BASE CRS CL-5 (IN)	4.0	8.0	--

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 29
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160335	20160336	20160337
SAMPLE ID	S091	S092	S093
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	750+00	750+00	750+00
LOCATION	06' RT	15' RT	24' RT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BR/GR	BROWN	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 47 7.30	33 47 7.30	33 47 7.30
LONGITUDE DEG-MIN-SEC	92 28 2.40	92 28 2.30	92 28 2.20
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.		100	100
3/8 IN.	100	96	90
NO. 4	95	90	84
NO. 10	91	82	78
NO. 40	85	72	71
NO. 80	79	62	60
NO. 200	74	56	53
LIQUID LIMIT	50	44	43
PLASTICITY INDEX	34	29	28
AASHTO SOIL	A-7-6(24)	A-7-6(12)	A-7-6(11)
UNIFIED SOIL			
% MOISTURE CONTENT	31.6	26.2	31.4
ACHMSC (IN)	6.0WX	2.25	--
ACHMBC (IN)	5.5WX	--	--
AGG.BASE CRS CL-5 (IN)	3.0	--	--

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

SEQUENCE NO. - 30
MATERIAL CODE - SSRVPS
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160338	20160339
SAMPLE ID	S094	S095
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY
STATION	756+00	756+00
LOCATION	06' LT	15' LT
DEPTH IN FEET	0-5	0-5
MAT'L COLOR	BR/GR	BR/GR
MAT'L TYPE		
LATITUDE DEG-MIN-SEC	33 47 13.20	33 47 13.20
LONGITUDE DEG-MIN-SEC	92 28 2.90	92 28 3.00
% PASSING 2 IN.		
1 1/2 IN.		
3/4 IN.		100
3/8 IN.	100	99
NO. 4	98	96
NO. 10	91	90
NO. 40	85	81
NO. 80	80	74
NO. 200	71	69
LIQUID LIMIT	34	41
PLASTICITY INDEX	16	24
AASHTO SOIL	A-6(9)	A-7-6(15)
UNIFIED SOIL		
% MOISTURE CONTENT	30.8	27.2
ACHMSC (IN)	6.0WX	2.5
ACHMBC (IN)	7.0WX	--
AGG.BASE CRS CL-5 (IN)	3.0	6.0

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - RESISTANCE R-VALUE ACTUAL RESULTS

SEQUENCE NO. - 1
MATERIAL CODE - RV
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160340	20160341	20160342
SAMPLE ID	RV096	RV097	RV098
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	502+00	549+00	589+00
LOCATION	24' LT	24' LT	24' RT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	GR/BR	GR/BR	BROWN
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 43 13.50	33 43 59.10	33 44 38.50
LONGITUDE DEG-MIN-SEC	92 28 19.60	92 28 29.10	92 28 32.40
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.			100
3/8 IN.	100	100	98
NO. 4	95	98	84
NO. 10	89	96	79
NO. 40	83	94	73
NO. 80	78	89	62
NO. 200	61	71	46
LIQUID LIMIT	18	ND	21
PLASTICITY INDEX	02	NP	06
AASHTO SOIL	A-4(0)	A-4(0)	A-4(0)
UNIFIED SOIL			
% MOISTURE CONTENT			

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

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 - 02/22/16
JOB NUMBER - CA0704
FEDERAL AID NO.- TO BE ASSIGNED
PURPOSE - SOIL SURVEY SAMPLE
SPEC. REMARKS - NO SPECIFICATION CHECK
SUPPLIER NAME - STATE
NAME OF PROJECT - HWY.79 - SOUTH (WIDENING)(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - CALHOUN COUNTY
SAMPLED BY - T.FRAZIER
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY - RESISTANCE R-VALUE ACTUAL RESULTS

SEQUENCE NO. - 2
MATERIAL CODE - RV
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 07
DISTRICT NO. - 07

DATE SAMPLED - 01/14/16
DATE RECEIVED - 01/15/16
DATE TESTED - 02/22/16

LAB NUMBER	20160343	20160344	20160345
SAMPLE ID	RV099	RV100	RV101
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	627+00	692+00	750+00
LOCATION	24' LT	24' LT	24' RT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BROWN	BROWN	BR/GR
MAT'L TYPE			
LATITUDE DEG-MIN-SEC	33 45 13.10	33 46 14.10	33 47 7.30
LONGITUDE DEG-MIN-SEC	92 28 47.10	92 28 27.90	92 28 2.20
% PASSING 2 IN.			
1 1/2 IN.			
3/4 IN.	100		100
3/8 IN.	99	100	98
NO. 4	92	98	95
NO. 10	83	96	91
NO. 40	74	94	88
NO. 80	58	92	83
NO. 200	32	51	78
LIQUID LIMIT	ND	12	40
PLASTICITY INDEX	NP	06	24
AASHTO SOIL	A-2-4(0)	A-4(0)	A-6(17)
UNIFIED SOIL			
% MOISTURE CONTENT			

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
LOCATIONS MEASURED FROM C.L. OF EXISTING RDWY

AASHTO TESTS : T24 T88 T89 T90 T265