

ARKANSAS DEPARTMENT OF TRANSPORTATION



SUBSURFACE INVESTIGATION

STATE JOB NO. 020629

FEDERAL AID PROJECT NO. STPR-0921(3)

HWY. 65 - YELLOW BEND PORT (S)

STATE HIGHWAY 35 SECTION 9, 10, & 11

IN CHICOT & DESHA 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
MATERIALS DIVISION**

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

Job No.	020629	Material Code	SSRVPS
Date Sampled:	4/10/19	Station No.:	LM 0.20
Date Tested:	May 9, 2019	Location:	15'RT
Name of Project:	HWY. 65 - YELLOW BEND PORT (S)		
County:	Code: 9	Name:	CHICOT
Sampled By:	FRAZIER / BATES / JORDAN		
Lab No.:	20191095	Depth:	0-5
Sample ID:	RV 195	AASHTO Class:	A-7-6 (70)
LATITUDE:		Material Type (1 or 2):	2
		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	3.95
Bottom	3.96
Average	3.95
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):	12.18
Initial Volume, AoLo (cu. in):	97.68

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	2673.90
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4. Soil Properties:

Optimum Moisture Content (%):	31.0
Maximum Dry Density (pcf):	84.2
95% of MDD (pcf):	80.0
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	2673.90
Compaction Moisture content (%):	31.1
Compaction Wet Density (pcf):	104.30
Compaction Dry Density (pcf):	79.56
Moisture Content After Mr Test (%):	31.1

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

#VALUE!

7. Resilient Modulus, Mr:

10017(Sc)^{-0.18702}(S3)^{0.06550}

8. Comments

9. Tested By:

GW

Date: May 9, 2019

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

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

Job No.	020629	Material Code	SSRVPS
Date Sampled:	4/10/19	Station No.:	LM 0.20
Date Tested:	May 9, 2019	Location:	15'RT
Name of Project:	HWY. 65 - YELLOW BEND PORT (S)	Depth:	0-5
County:	Code: 9 Name: CHICOT	AASHTO Class:	A-7-6 (70)
Sampled By:	FRAZIER / BATES / JORDAN	Material Type (1 or 2):	2
Lab No.:	20191095	LONGITUDE:	
Sample ID:	RV 195		

PARAMETER	Chamber Confining Pressure	Nominal Maximum Axial Stress	Actual Applied		Actual Applied Contact Load	Actual Applied Max. Axial Stress	Actual Applied Cyclic Stress	Actual Applied Cyclic Stress	Actual Applied Contact Stress	Average Recov Def. LVDT 1 and 2	Resilient Strain	Resilient Modulus
			P _{max} lbs	P _{cyclic} lbs								
DESIGNATION UNIT	S ₃ psi	S _{cyclic} psi	P _{max} lbs	P _{cyclic} lbs	P _{contact} lbs	S _{max} psi	S _{cyclic} psi	S _{contact} psi	H _{avg} in	ε _r in/in	M _r psi	
Sequence 1	6.0	2.0	25.1	22.9	2.2	2.1	1.9	0.2	0.00152	0.00019	9,942	
Sequence 2	6.0	4.0	47.4	45.1	2.3	3.9	3.7	0.2	0.00322	0.00040	9,217	
Sequence 3	6.0	6.0	69.6	66.6	3.0	5.7	5.5	0.2	0.00515	0.00064	8,512	
Sequence 4	6.0	8.0	92.4	87.1	5.3	7.6	7.2	0.4	0.00746	0.00093	7,690	
Sequence 5	6.0	10.0	114.2	106.5	7.7	9.4	8.7	0.6	0.01015	0.00127	6,907	
Sequence 6	4.0	2.0	25.1	23.2	1.9	2.1	1.9	0.2	0.00161	0.00020	9,496	
Sequence 7	4.0	4.0	47.4	45.3	2.1	3.9	3.7	0.2	0.00338	0.00042	8,813	
Sequence 8	4.0	6.0	68.9	66.8	2.1	5.7	5.5	0.2	0.00531	0.00066	8,274	
Sequence 9	4.0	8.0	91.8	87.4	4.4	7.5	7.2	0.4	0.00743	0.00093	7,745	
Sequence 10	4.0	10.0	114.4	107.7	6.7	9.4	8.8	0.6	0.00995	0.00124	7,127	
Sequence 11	2.0	2.0	25.1	23.3	1.8	2.1	1.9	0.1	0.00171	0.00021	8,953	
Sequence 12	2.0	4.0	47.0	45.0	2.0	3.9	3.7	0.2	0.00363	0.00045	8,161	
Sequence 13	2.0	6.0	68.7	66.5	2.1	5.6	5.5	0.2	0.00565	0.00070	7,751	
Sequence 14	2.0	8.0	91.0	87.5	3.5	7.5	7.2	0.3	0.00781	0.00097	7,379	
Sequence 15	2.0	10.0	113.8	108.0	5.8	9.3	8.9	0.5	0.01024	0.00128	6,943	

TESTED BY _____ DATE May 9, 2019

REVIEWED BY _____ DATE _____

GW

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

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

Job No.	020629	Material Code	SSRVPS
Date Sampled:	4/10/19	Station No.:	LM 0.20
Date Tested:	May 9, 2019	Location:	15'RT
Name of Project:	HWY. 65 - YELLOW BEND PORT (S)		
County:	Code: 9	Name:	CHICOT
Sampled By:	FRAZIER / BATES / JORDAN		Depth: 0-5
Lab No.:	20191095	AASHTO Class:	A-7-6 (70)
Sample ID:	RV 195	Material Type (1 or 2):	2
LATITUDE:		LONGITUDE:	

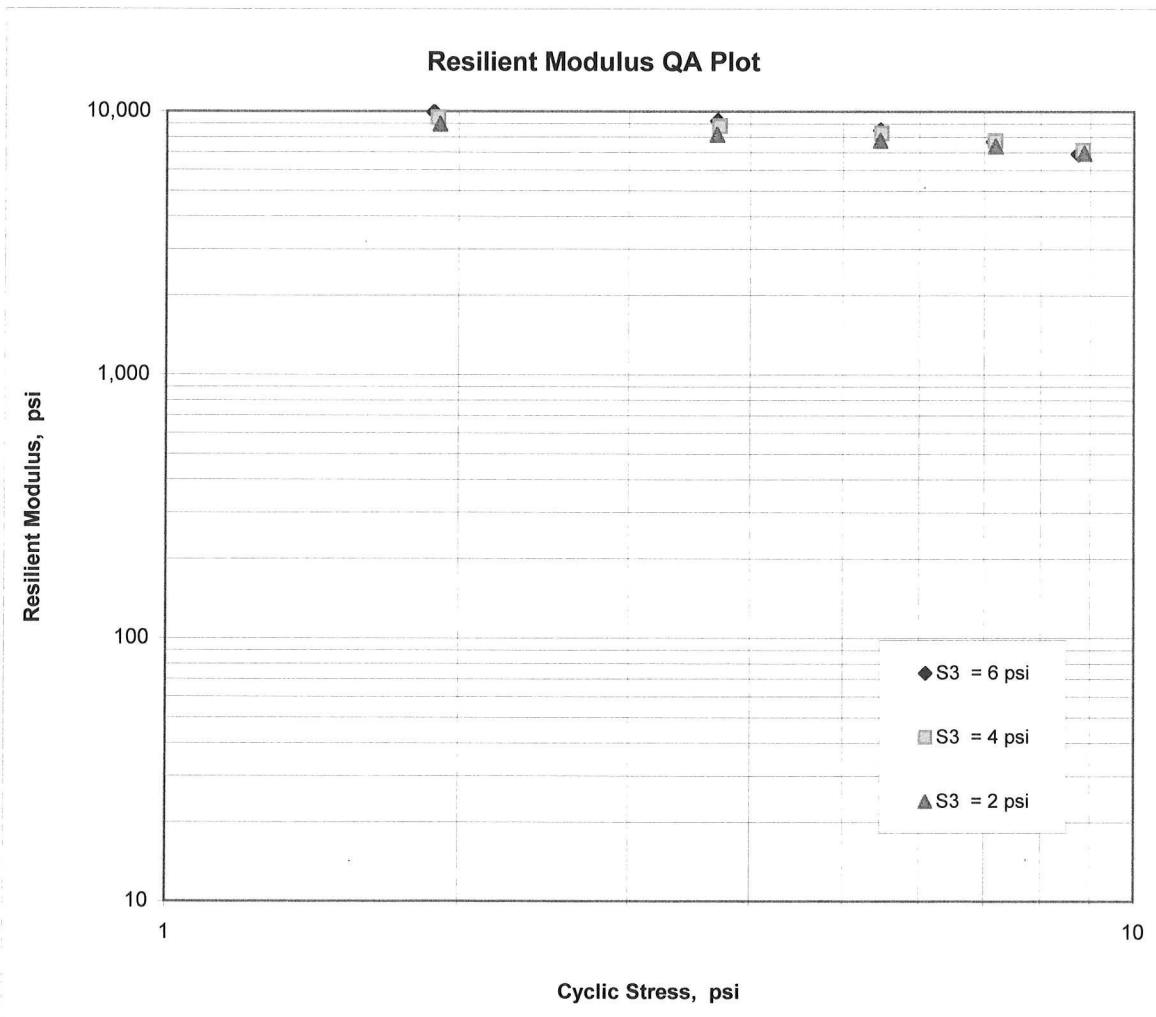
$$M_R = K_1 (S_c)^{K_2} (S_3)^{K_5}$$

$$K_1 = 10,017$$

$$K_2 = -0.18702$$

$$K_5 = 0.06550$$

$$R^2 = 0.91$$



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

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

Job No.	020629	Material Code	SSRVPS
Date Sampled:	4/9/19	Station No.:	LM 0.55
Date Tested:	May 1, 2019	Location:	15'LT
Name of Project:	HWY. 65 - YELLOW BEND PORT (S)		
County:	Code: 9	Name:	CHICOT
Sampled By:	FRAZIER / BATES / JORDAN		
Lab No.:	20191096	Depth:	0-5
Sample ID:	RV196	AASHTO Class:	A-7-6(15)
LATITUDE:		Material Type (1 or 2):	2
		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):	97.19

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	3096.40
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4. Soil Properties:

Optimum Moisture Content (%):	18.0
Maximum Dry Density (pcf):	105.5
95% of MDD (pcf):	100.2
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	3096.40
Compaction Moisture content (%):	18.3
Compaction Wet Density (pcf):	121.40
Compaction Dry Density (pcf):	102.62
Moisture Content After Mr Test (%):	18.3

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

#VALUE!

7. Resilient Modulus, Mr:

11115(Sc)^{-0.23442}(S3)^{0.17259}

8. Comments

9. Tested By:

GW

Date: May 1, 2019

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

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

Job No. 020629 **Material Code** SSRVPS
Date Sampled: 4/9/19 **Station No.:** LM 0.55
Date Tested: May 1, 2019 **Location:** 15'LT
Name of Project: HWY. 65 - YELLOW BEND PORT (S)
County: Code: 9 **Name:** CHICOT
Sampled By: FRAZIER / BATES / JORDAN **Depth:** 0-5
Lab No.: 20191096 **AASHTO Class:** A-7-6(15)
Sample ID: RV196 **Material Type (1 or 2):** 2
LATITUDE: **LONGITUDE:**

PARAMETER	Chamber Confining Pressure	Nominal Maximum Axial Stress	Actual Applied		Actual Applied Contact Load	Actual Applied Cyclic Load	P _{max} lbs	P _{cyclic} lbs	P _{contact} lbs	S _{max} psi	S _{cyclic} psi	S _{contact} psi	Average Recov Def. LVDT 1 and 2	Resilient Strain	Resilient Modulus
			Max. Axial Load	Cyclic Load											
DESIGNATION	S ₃ psi	S _{cyclic} psi	P _{max} lbs	P _{cyclic} lbs	P _{contact} lbs	P _{cyclic} lbs	P _{max} psi	P _{cyclic} psi	P _{contact} psi	S _{max} psi	S _{cyclic} psi	S _{contact} psi	H _{avg} in	ε _r in/in	M _r psi
Sequence 1	6.0	2.0	25.1	22.5	2.6	22.5	2.1	2.6	2.6	2.1	1.9	0.2	0.00116	0.00014	12,791
Sequence 2	6.0	4.0	47.0	44.4	2.6	44.4	3.9	2.6	2.6	3.9	3.7	0.2	0.00245	0.00031	11,981
Sequence 3	6.0	6.0	69.3	65.7	3.5	65.7	5.7	3.5	3.5	5.7	5.4	0.3	0.00405	0.00051	10,730
Sequence 4	6.0	8.0	91.9	85.9	6.0	85.9	7.6	6.0	6.0	7.6	7.1	0.5	0.00598	0.00075	9,509
Sequence 5	6.0	10.0	114.2	105.7	8.4	105.7	9.4	8.4	8.4	9.4	8.7	0.7	0.00812	0.00101	8,620
Sequence 6	4.0	2.0	25.0	22.3	2.8	22.3	2.1	2.8	2.8	2.1	1.8	0.2	0.00125	0.00016	11,827
Sequence 7	4.0	4.0	46.8	44.0	2.8	44.0	3.9	2.8	2.8	3.9	3.6	0.2	0.00274	0.00034	10,614
Sequence 8	4.0	6.0	67.9	65.1	2.8	65.1	5.6	2.8	2.8	5.6	5.4	0.2	0.00446	0.00056	9,662
Sequence 9	4.0	8.0	90.5	85.4	5.1	85.4	7.5	5.1	5.1	7.5	7.0	0.4	0.00639	0.00080	8,841
Sequence 10	4.0	10.0	113.1	105.7	7.5	105.7	9.3	7.5	7.5	9.3	8.7	0.6	0.00860	0.00107	8,133
Sequence 11	2.0	2.0	24.9	22.2	2.7	22.2	2.1	2.7	2.7	2.1	1.8	0.2	0.00140	0.00017	10,514
Sequence 12	2.0	4.0	46.5	43.8	2.7	43.8	3.8	2.7	2.7	3.8	3.6	0.2	0.00305	0.00038	9,509
Sequence 13	2.0	6.0	67.2	64.5	2.7	64.5	5.5	2.7	2.7	5.5	5.3	0.2	0.00491	0.00061	8,692
Sequence 14	2.0	8.0	88.9	84.7	4.1	84.7	7.3	4.1	4.1	7.3	7.0	0.3	0.00698	0.00087	8,034
Sequence 15	2.0	10.0	111.1	104.5	6.5	104.5	9.2	6.5	6.5	9.2	8.6	0.5	0.00925	0.00115	7,483

TESTED BY _____ DATE May 1, 2019
 REVIEWED BY _____ DATE _____
 GW

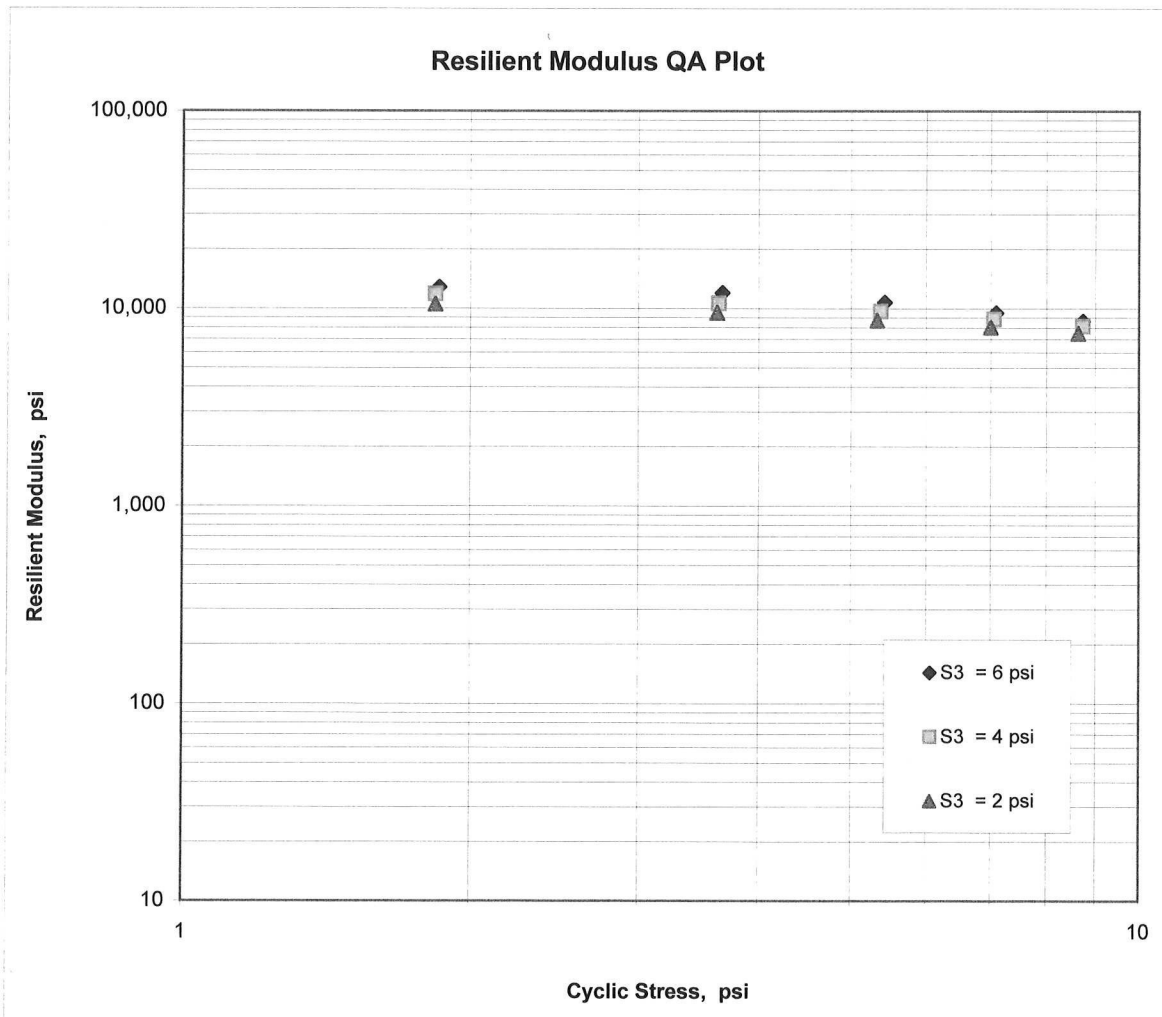
**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION**

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

Job No.	020629	Material Code	SSRVPS
Date Sampled:	4/9/19	Station No.:	LM 0.55
Date Tested:	May 1, 2019	Location:	15'LT
Name of Project:	HWY. 65 - YELLOW BEND PORT (S)		
County:	Code: 9	Name:	CHICOT
Sampled By:	FRAZIER / BATES / JORDAN		
Lab No.:	20191096	Depth:	0-5
Sample ID:	RV196	AASHTO Class:	A-7-6(15)
LATITUDE:		Material Type (1 or 2):	2
		LONGITUDE:	

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

$K_1 = 11,115$
 $K_2 = -0.23442$
 $K_5 = 0.17259$
 $R^2 = 0.95$



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

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

Job No.	020629	Material Code	SSRVPS
Date Sampled:	4/9/2019	Station No.:	LM 1.70
Date Tested:	May 1, 2019	Location:	15'RT
Name of Project:	HWY. 65 - YELLOW BEND PORT (S)		
County:	Code: 9	Name:	CHICOT
Sampled By:	FRAZIER / BATES / JORDAN		
Lab No.:	20191097	Depth:	0-5
Sample ID:	RV197	AASHTO Class:	A-4 (0)
LATITUDE:		Material Type (1 or 2):	2
		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	3.95
Bottom	3.95
Average	3.95
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):	12.18
Initial Volume, AoLo (cu. in):	97.68

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	3024.20
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4. Soil Properties:

Optimum Moisture Content (%):	14.1
Maximum Dry Density (pcf):	106.9
95% of MDD (pcf):	101.6
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	3024.20
Compaction Moisture content (%):	14.0
Compaction Wet Density (pcf):	117.96
Compaction Dry Density (pcf):	103.48
Moisture Content After Mr Test (%):	13.8

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

#VALUE!

7. Resilient Modulus, Mr:

6440(Sc)^{-0.03317(S3)^{0.39973}}

8. Comments

9. Tested By:

GW

Date: May 1, 2019

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

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

Job No. 020629 **Material Code** SSRVPS
Date Sampled: 4/9/2019 **Station No.:** LM 1.70
Date Tested: May 1, 2019 **Location:** 15'RT
Name of Project: HWY. 65 - YELLOW BEND PORT (S)
County: Code: 9 Name: CHICOT
Sampled By: FRAZIER / BATES / JORDAN
Lab No.: 20191097
Sample ID: RV197 **Depth:** 0-5
LATITUDE: **AASHTO Class:** A-4 (0)
LONGITUDE: **Material Type (1 or 2):** 2

PARAMETER	Chamber Confining Pressure	Nominal Maximum Axial Stress	Actual Applied		Actual Applied		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
			P _{max} lbs	P _{cyclic} lbs	P _{contact} lbs	S _{max} psi							
DESIGNATION UNIT	S ₃ psi	S _{cyclic} psi	P _{max} lbs	P _{cyclic} lbs	P _{contact} lbs	S _{max} psi	S _{cyclic} psi	S _{contact} psi	H _{avg} in	ε _r in/in	M _r psi		
Sequence 1	6.0	2.0	25.0	22.5	2.6	2.1	1.8	0.2	0.00112	0.00014	13,174		
Sequence 2	6.0	4.0	47.3	44.7	2.6	3.9	3.7	0.2	0.00233	0.00029	12,624		
Sequence 3	6.0	6.0	70.2	66.7	3.5	5.8	5.5	0.3	0.00349	0.00044	12,582		
Sequence 4	6.0	8.0	94.6	88.6	5.9	7.8	7.3	0.5	0.00474	0.00059	12,322		
Sequence 5	6.0	10.0	118.9	110.6	8.3	9.8	9.1	0.7	0.00588	0.00073	12,386		
Sequence 6	4.0	2.0	25.0	22.4	2.6	2.1	1.8	0.2	0.00131	0.00016	11,260		
Sequence 7	4.0	4.0	46.8	44.0	2.8	3.8	3.6	0.2	0.00280	0.00035	10,371		
Sequence 8	4.0	6.0	68.6	65.7	2.9	5.6	5.4	0.2	0.00427	0.00053	10,131		
Sequence 9	4.0	8.0	92.8	87.6	5.2	7.6	7.2	0.4	0.00563	0.00070	10,245		
Sequence 10	4.0	10.0	117.7	110.0	7.7	9.7	9.0	0.6	0.00684	0.00085	10,594		
Sequence 11	2.0	2.0	24.5	21.8	2.7	2.0	1.8	0.2	0.00169	0.00021	8,506		
Sequence 12	2.0	4.0	45.5	42.8	2.8	3.7	3.5	0.2	0.00359	0.00045	7,845		
Sequence 13	2.0	6.0	66.8	64.0	2.8	5.5	5.3	0.2	0.00543	0.00068	7,758		
Sequence 14	2.0	8.0	90.0	85.7	4.3	7.4	7.0	0.4	0.00694	0.00087	8,124		
Sequence 15	2.0	10.0	113.3	106.6	6.7	9.3	8.8	0.5	0.00839	0.00105	8,364		

TESTED BY _____ DATE May 1, 2019
 REVIEWED BY _____ DATE _____
 GW _____

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No. 020629
Date Sampled: 4/9/2019
Date Tested: May 1, 2019
Name of Project: HWY. 65 - YELLOW BEND PORT (S)
County: Code: 9 Name: CHICOT
Sampled By: FRAZIER / BATES / JORDAN
Lab No.: 20191097
Sample ID: RV197
LATITUDE:

Material Code SSRVPS
Station No.: LM 1.70
Location: 15'RT
Depth: 0-5
AASHTO Class: A-4 (0)
Material Type (1 or 2): 2
LONGITUDE:

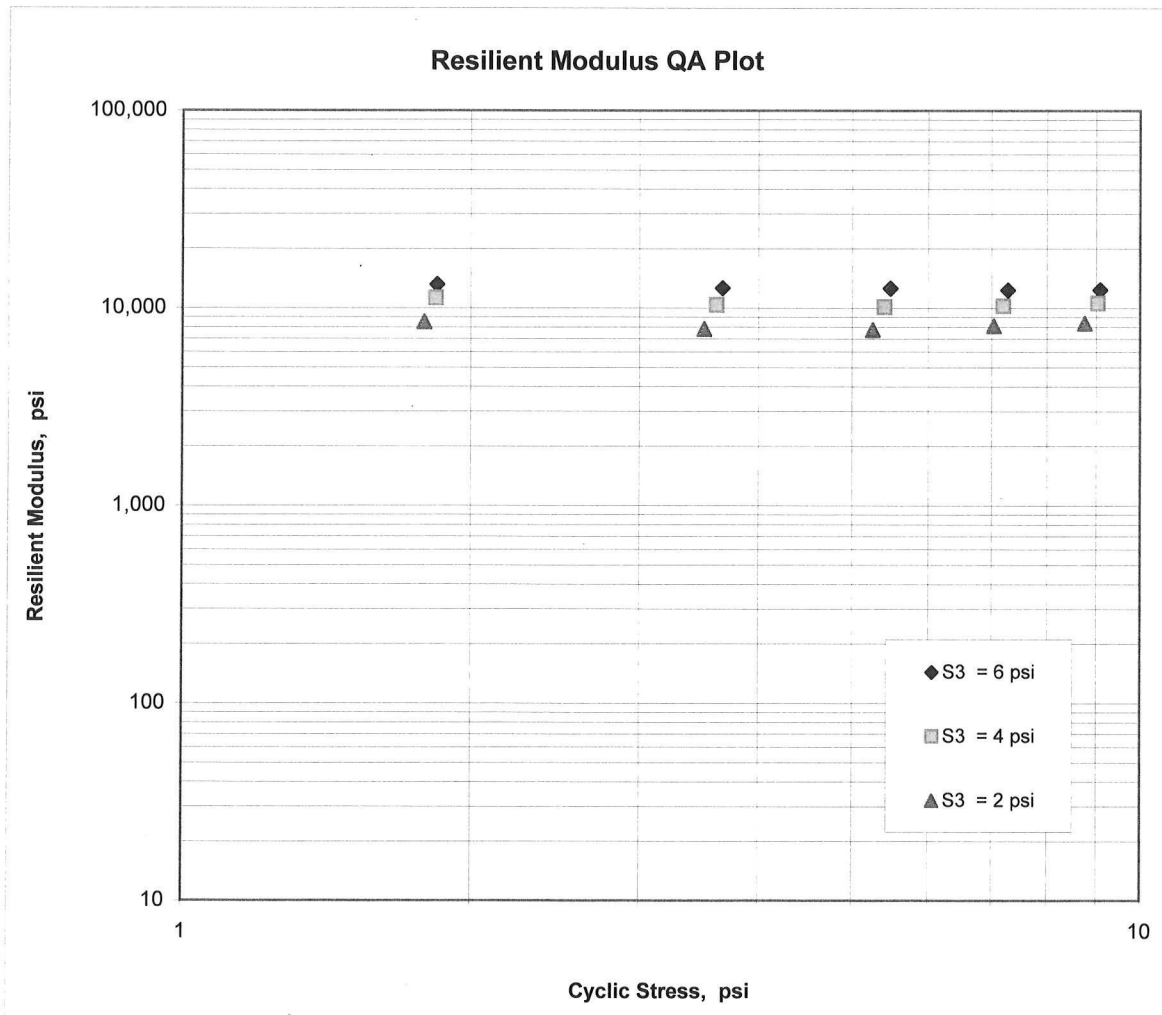
$$M_R = K_1 (S_c)^{K_2} (S_3)^{K_5}$$

$$K_1 = \underline{6,440}$$

$$K_2 = \underline{-0.03317}$$

$$K_5 = \underline{0.39973}$$

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



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

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

Job No.	020629	Material Code	SSRVPS
Date Sampled:	4/9/19	Station No.:	LM 2.02
Date Tested:	May 1, 2019	Location:	15'LT
Name of Project:	HWY. 65 - YELLOW BEND PORT (S)		
County:	Code: 9	Name:	CHICOT
Sampled By:	FRAZIER / BATES / JORDAN		
Lab No.:	20191098	Depth:	0-5
Sample ID:	RV198	AASHTO Class:	A-7-6(32)
LATITUDE:		Material Type (1 or 2):	2
		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):	97.19

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	3029.60
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4. Soil Properties:

Optimum Moisture Content (%):	22.1
Maximum Dry Density (pcf):	98.3
95% of MDD (pcf):	93.4
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	3029.60
Compaction Moisture content (%):	22.4
Compaction Wet Density (pcf):	118.78
Compaction Dry Density (pcf):	97.04
Moisture Content After Mr Test (%):	22.4

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

#VALUE!

7. Resilient Modulus, Mr:

10433(Sc)^{-0.26044}(S3)^{0.12144}

8. Comments

9. Tested By:

GW

Date: May 1, 2019

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

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

Job No. 020629 **Material Code** SSRVPS
Date Sampled: 4/9/19 **Station No.:** LM 2.02
Date Tested: May 1, 2019 **Location:** 15'LT
Name of Project: HWY. 65 - YELLOW BEND PORT (S)
County: Code: 9 **Name:** CHICOT
Sampled By: FRAZIER / BATES / JORDAN **Depth:** 0-5
Lab No.: 20191098 **AASHTO Class:** A-7-6(32)
Sample ID: RV198 **Material Type (1 or 2):** 2
LATITUDE: LONGITUDE:

PARAMETER	Chamber Confining Pressure	Nominal Maximum Axial Stress	Actual Applied		Actual Applied		Actual Applied		Average Recov Def. LVDT 1 and 2	Resilient Strain	Resilient Modulus
			S_3 psi	S_{cyclic} psi	P_{max} lbs	P_{cyclic} lbs	$P_{contact}$ lbs	S_{max} psi			
Sequence 1	6.0	2.0	25.1	22.4	2.7	2.1	1.9	0.2	0.00136	0.00017	10,896
Sequence 2	6.0	4.0	47.1	44.4	2.7	3.9	3.7	0.2	0.00290	0.00036	10,140
Sequence 3	6.0	6.0	69.0	65.5	3.5	5.7	5.4	0.3	0.00485	0.00061	8,936
Sequence 4	6.0	8.0	91.2	85.2	6.0	7.5	7.0	0.5	0.00738	0.00092	7,640
Sequence 5	6.0	10.0	112.1	103.7	8.5	9.3	8.6	0.7	0.01027	0.00128	6,682
Sequence 6	4.0	2.0	25.1	22.3	2.8	2.1	1.8	0.2	0.00148	0.00018	10,009
Sequence 7	4.0	4.0	46.9	44.2	2.8	3.9	3.6	0.2	0.00318	0.00040	9,202
Sequence 8	4.0	6.0	67.9	65.0	2.8	5.6	5.4	0.2	0.00519	0.00065	8,289
Sequence 9	4.0	8.0	90.2	85.0	5.1	7.4	7.0	0.4	0.00759	0.00095	7,415
Sequence 10	4.0	10.0	111.8	104.2	7.6	9.2	8.6	0.6	0.01040	0.00130	6,635
Sequence 11	2.0	2.0	25.2	22.4	2.8	2.1	1.8	0.2	0.00165	0.00021	8,977
Sequence 12	2.0	4.0	46.8	44.1	2.8	3.9	3.6	0.2	0.00348	0.00043	8,390
Sequence 13	2.0	6.0	67.7	65.0	2.7	5.6	5.4	0.2	0.00562	0.00070	7,656
Sequence 14	2.0	8.0	89.3	85.1	4.2	7.4	7.0	0.3	0.00804	0.00100	7,004
Sequence 15	2.0	10.0	110.8	104.2	6.6	9.1	8.6	0.5	0.01082	0.00135	6,377

TESTED BY _____ DATE May 1, 2019
 REVIEWED BY _____ DATE _____
 GW

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

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

Job No.	020629	Material Code	SSRVPS
Date Sampled:	4/9/19	Station No.:	LM 2.02
Date Tested:	May 1, 2019	Location:	15'LT
Name of Project:	HWY. 65 - YELLOW BEND PORT (S)		
County:	Code: 9	Name:	CHICOT
Sampled By:	FRAZIER / BATES / JORDAN		Depth: 0-5
Lab No.:	20191098	AASHTO Class:	A-7-6(32)
Sample ID:	RV198	Material Type (1 or 2):	2
LATITUDE:		LONGITUDE:	

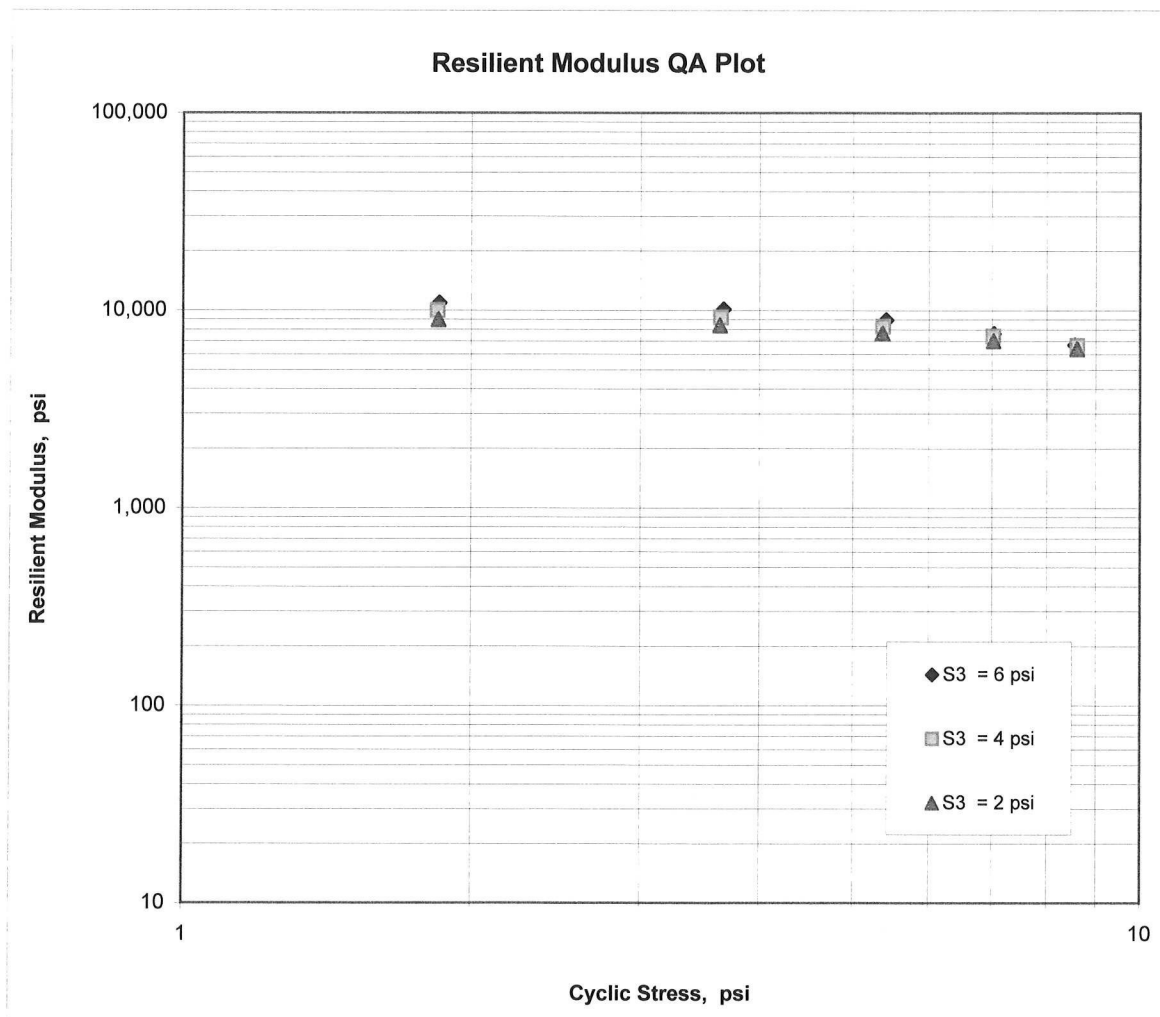
$$M_R = K_1 (S_c)^{K_2} (S_3)^{K_5}$$

$$K_1 = 10,433$$

$$K_2 = -0.26044$$

$$K_5 = 0.12144$$

$$R^2 = 0.89$$



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

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

Job No.	020629	Material Code	SSRVPS
Date Sampled:	4/10/19	Station No.:	LM 2.95
Date Tested:	May 7, 2019	Location:	15' LT
Name of Project:	HWY. 65 - YELLOW BEND PORT (S)		
County:	Code: 9	Name:	CHICOT
Sampled By:	FRAZIER / BATES / JORDAN		
Lab No.:	20191099	Depth:	0-5
Sample ID:	RV 199	AASHTO Class:	A-6 (19)
LATITUDE:		Material Type (1 or 2):	2
		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	3.95
Bottom	3.95
Average	3.95
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):	12.18
Initial Volume, AoLo (cu. in):	97.68

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	3112.70
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4. Soil Properties:

Optimum Moisture Content (%):	16.4
Maximum Dry Density (pcf):	107.5
95% of MDD (pcf):	102.1
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	3112.70
Compaction Moisture content (%):	16.4
Compaction Wet Density (pcf):	121.42
Compaction Dry Density (pcf):	104.31
Moisture Content After Mr Test (%):	16.2

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

#VALUE!

7. Resilient Modulus, Mr:

11220(Sc)^{-0.32482}(S3)^{0.17566}

8. Comments

9. Tested By:

GW _____

Date: May 7, 2019

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

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

Job No. 020629 **Material Code** SSRVPS
Date Sampled: 4/10/19 **Station No.:** LM 2.95
Date Tested: May 7, 2019 **Location:** 15' LT
Name of Project: HWY. 65 - YELLOW BEND PORT (S)
County: Code: 9 Name: CHICOT
Sampled By: FRAZIER / BATES / JORDAN
Lab No.: 20191099
Sample ID: RV 199 **Depth:** 0-5
LATITUDE: **AASHTO Class:** A-6 (19)
 Material Type (1 or 2): 2
 LONGITUDE:

PARAMETER	Chamber Confining Pressure	Nominal Maximum Axial Stress	Actual Applied		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
			P_{max} lbs	P_{cyclic} lbs							
DESIGNATION	S_3 psi	S_{cyclic} psi	P_{max} lbs	P_{cyclic} lbs	$P_{contact}$ lbs	S_{max} psi	S_{cyclic} psi	$S_{contact}$ psi	H_{avg} in	ϵ_r in/in	M_r psi
Sequence 1	6.0	2.0	25.4	22.6	2.8	2.1	1.9	0.2	0.00122	0.00015	12,131
Sequence 2	6.0	4.0	47.5	44.8	2.8	3.9	3.7	0.2	0.00270	0.00034	10,904
Sequence 3	6.0	6.0	69.9	66.3	3.6	5.7	5.4	0.3	0.00458	0.00057	9,532
Sequence 4	6.0	8.0	92.5	86.4	6.0	7.6	7.1	0.5	0.00707	0.00088	8,046
Sequence 5	6.0	10.0	114.0	105.5	8.5	9.4	8.7	0.7	0.00988	0.00123	7,034
Sequence 6	4.0	2.0	25.3	22.5	2.8	2.1	1.8	0.2	0.00133	0.00017	11,169
Sequence 7	4.0	4.0	47.2	44.5	2.7	3.9	3.7	0.2	0.00302	0.00038	9,698
Sequence 8	4.0	6.0	68.5	65.7	2.8	5.6	5.4	0.2	0.00506	0.00063	8,545
Sequence 9	4.0	8.0	91.2	86.0	5.1	7.5	7.1	0.4	0.00748	0.00093	7,569
Sequence 10	4.0	10.0	113.1	105.5	7.6	9.3	8.7	0.6	0.01029	0.00128	6,748
Sequence 11	2.0	2.0	25.3	22.5	2.7	2.1	1.9	0.2	0.00149	0.00019	9,970
Sequence 12	2.0	4.0	47.0	44.2	2.8	3.9	3.6	0.2	0.00336	0.00042	8,676
Sequence 13	2.0	6.0	67.8	65.0	2.8	5.6	5.3	0.2	0.00563	0.00070	7,604
Sequence 14	2.0	8.0	89.1	84.9	4.2	7.3	7.0	0.3	0.00824	0.00103	6,784
Sequence 15	2.0	10.0	111.2	104.5	6.6	9.1	8.6	0.5	0.01119	0.00140	6,148

TESTED BY _____ DATE May 7, 2019
 REVIEWED BY _____ DATE _____
 GW _____

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	020629	Material Code	SSRVPS
Date Sampled:	4/10/19	Station No.:	LM 2.95
Date Tested:	May 7, 2019	Location:	15' LT
Name of Project:	HWY. 65 - YELLOW BEND PORT (S)		
County:	Code: 9	Name:	CHICOT
Sampled By:	FRAZIER / BATES / JORDAN		
Lab No.:	20191099	Depth:	0-5
Sample ID:	RV 199	AASHTO Class:	A-6 (19)
LATITUDE:		Material Type (1 or 2):	2
		LONGITUDE:	

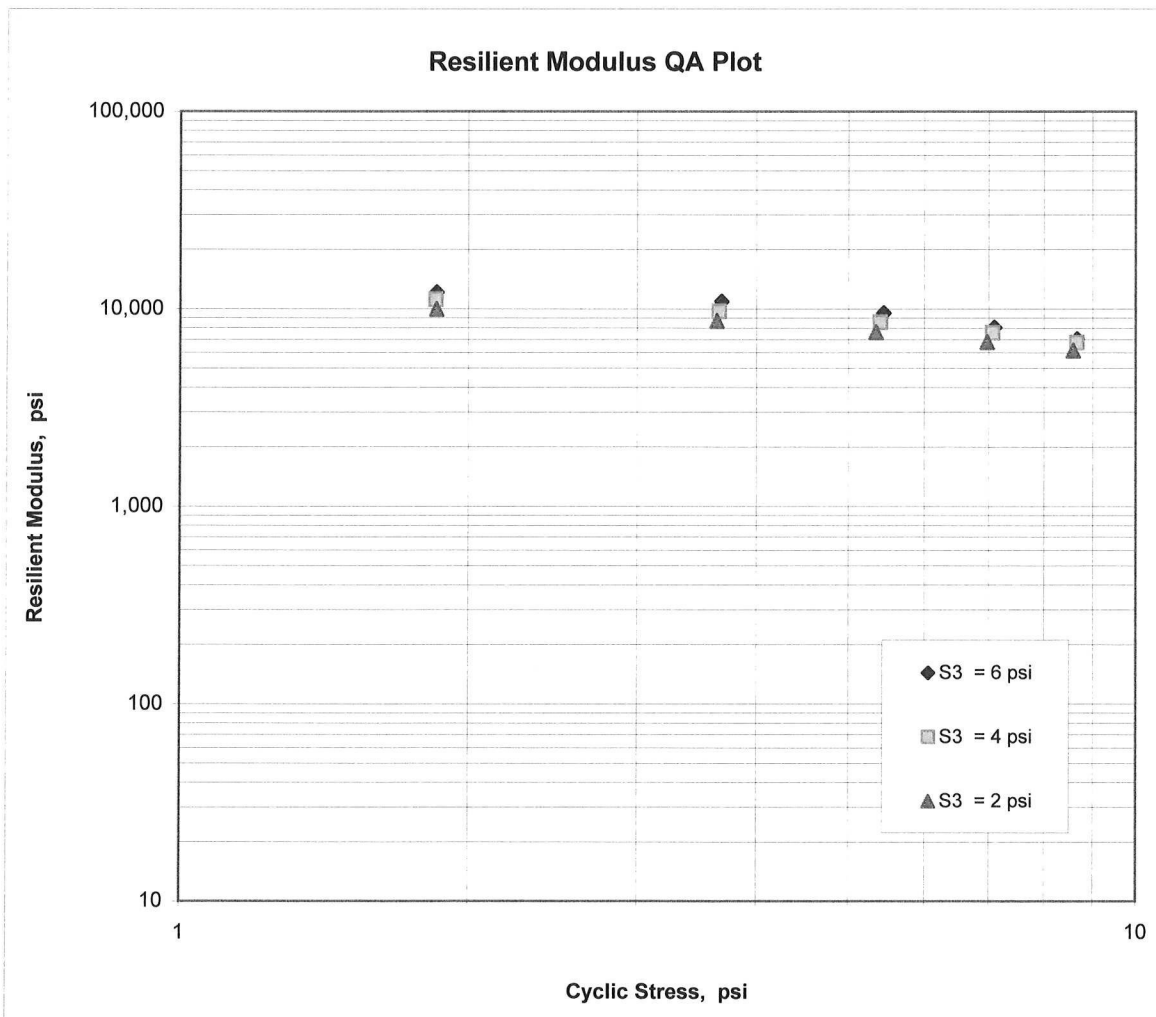
$$M_R = K_1 (S_c)^{K_2} (S_3)^{K_5}$$

$$K_1 = 11,220$$

$$K_2 = -0.32482$$

$$K_5 = 0.17566$$

$$R^2 = 0.95$$



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

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

Job No.	020629	Material Code	SSRVPS
Date Sampled:	4/10/19	Station No.:	LM 3.70
Date Tested:	May 8, 2019	Location:	15'RT
Name of Project:	HWY. 65 - YELLOW BEND PORT (S)		
County:	Code: 9	Name:	CHICOT
Sampled By:	FRAZIER / BATES / JORDAN		
Lab No.:	20191100	Depth:	0-5
Sample ID:	RV 200	AASHTO Class:	A-7-6 (40)
LATITUDE:		Material Type (1 or 2):	2
		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):	97.19

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	2938.10
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4. Soil Properties:

Optimum Moisture Content (%):	21.9
Maximum Dry Density (pcf):	97.3
95% of MDD (pcf):	92.4
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	2938.10
Compaction Moisture content (%):	22.0
Compaction Wet Density (pcf):	115.19
Compaction Dry Density (pcf):	94.42
Moisture Content After Mr Test (%):	22.0

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

7. Resilient Modulus, Mr: 10915(Sc)^{-0.20615(S3)^{0.08707}}

8. Comments

9. Tested By: GW **Date:** May 8, 2019

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

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

Job No.	020629	Material Code	SSRVPS
Date Sampled:	4/10/19	Station No.:	LM 3.70
Date Tested:	May 8, 2019	Location:	15'RT
Name of Project:	HWY. 65 - YELLOW BEND PORT (S)	Depth:	0-5
County:	Code: 9 Name: CHICOT	AASHTO Class:	A-7-6 (40)
Sampled By:	FRAZIER / BATES / JORDAN	Material Type (1 or 2):	2
Lab No.:	20191100	LONGITUDE:	
Sample ID:	RV 200		
LATITUDE:			

PARAMETER	Chamber Confining Pressure	Nominal Maximum Axial Stress	Actual Applied		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
			P _{max} lbs	P _{cyclic} lbs							
DESIGNATION	S ₃	S _{cyclic} psi	P _{max} lbs	P _{cyclic} lbs	P _{contact} lbs	S _{max} psi	S _{cyclic} psi	S _{contact} psi	H _{avg} in	ε _r in/in	M _r psi
Sequence 1	6.0	2.0	25.0	22.2	2.8	2.1	1.8	0.2	0.00133	0.00017	11,077
Sequence 2	6.0	4.0	47.0	44.2	2.8	3.9	3.6	0.2	0.00277	0.00035	10,563
Sequence 3	6.0	6.0	69.1	65.5	3.6	5.7	5.4	0.3	0.00449	0.00056	9,647
Sequence 4	6.0	8.0	91.1	85.1	6.0	7.5	7.0	0.5	0.00677	0.00084	8,322
Sequence 5	6.0	10.0	111.7	103.3	8.5	9.2	8.5	0.7	0.00934	0.00116	7,317
Sequence 6	4.0	2.0	25.0	22.2	2.8	2.1	1.8	0.2	0.00142	0.00018	10,380
Sequence 7	4.0	4.0	46.9	44.1	2.8	3.9	3.6	0.2	0.00295	0.00037	9,896
Sequence 8	4.0	6.0	68.1	65.3	2.8	5.6	5.4	0.2	0.00469	0.00059	9,201
Sequence 9	4.0	8.0	90.6	85.4	5.2	7.5	7.1	0.4	0.00678	0.00085	8,338
Sequence 10	4.0	10.0	111.8	104.2	7.6	9.2	8.6	0.6	0.00922	0.00115	7,484
Sequence 11	2.0	2.0	25.1	22.3	2.8	2.1	1.8	0.2	0.00154	0.00019	9,551
Sequence 12	2.0	4.0	46.9	44.1	2.8	3.9	3.6	0.2	0.00322	0.00040	9,067
Sequence 13	2.0	6.0	67.9	65.1	2.8	5.6	5.4	0.2	0.00505	0.00063	8,531
Sequence 14	2.0	8.0	89.6	85.4	4.3	7.4	7.0	0.4	0.00714	0.00089	7,910
Sequence 15	2.0	10.0	111.3	104.6	6.7	9.2	8.6	0.6	0.00948	0.00118	7,309

TESTED BY _____ DATE May 8, 2019

REVIEWED BY _____ DATE _____

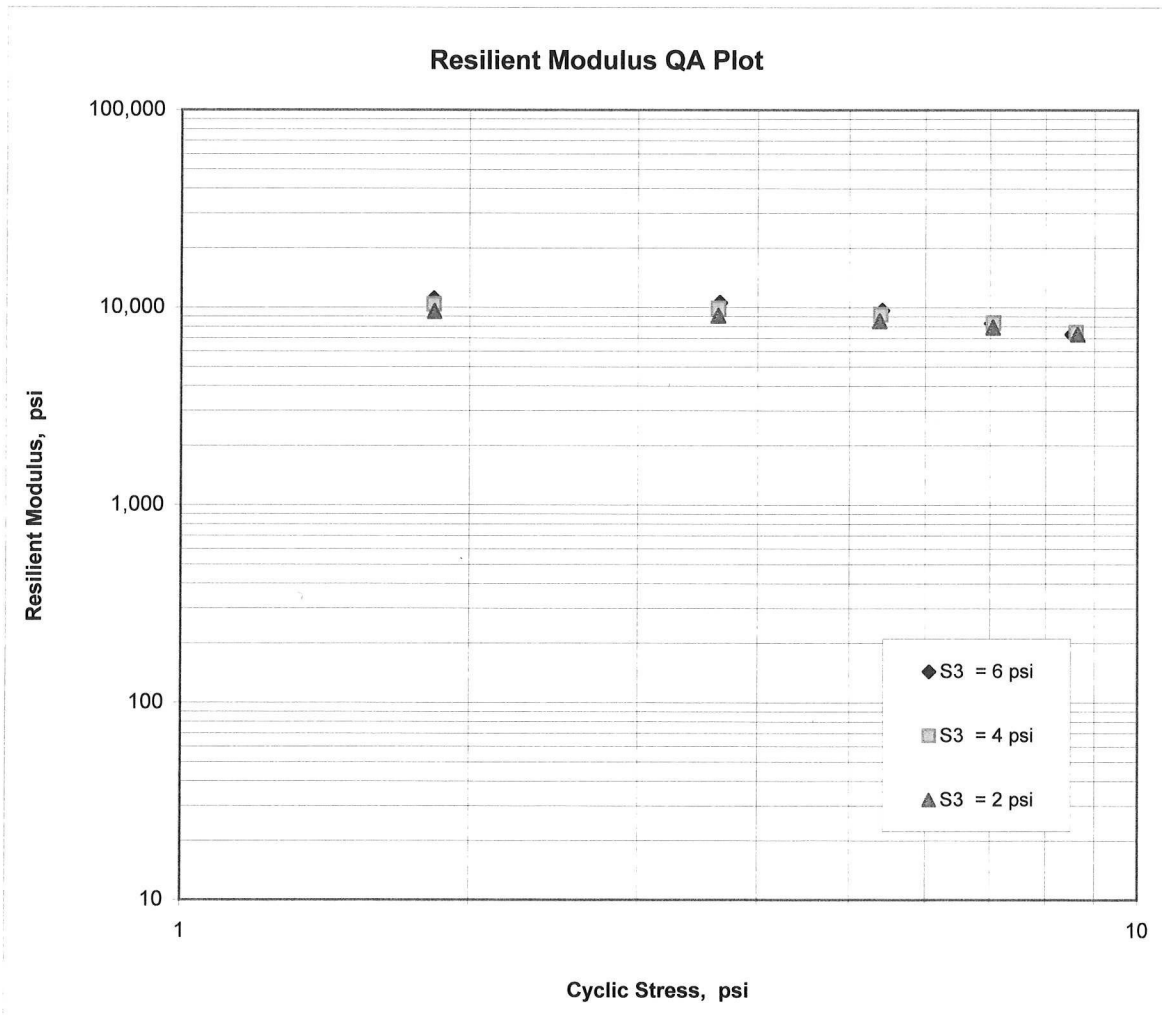
ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	020629	Material Code	SSRVPS
Date Sampled:	4/10/19	Station No.:	LM 3.70
Date Tested:	May 8, 2019	Location:	15'RT
Name of Project:	HWY. 65 - YELLOW BEND PORT (S)		
County:	Code: 9	Name:	CHICOT
Sampled By:	FRAZIER / BATES / JORDAN		
Lab No.:	20191100	Depth:	0-5
Sample ID:	RV 200	AASHTO Class:	A-7-6 (40)
LATITUDE:		Material Type (1 or 2):	2
		LONGITUDE:	

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

$K_1 = \underline{10,915}$
 $K_2 = \underline{-0.20615}$
 $K_5 = \underline{0.08707}$
 $R^2 = \underline{0.83}$



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

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

Job No.	020629	Material Code	SSRVPS
Date Sampled:	4/10/19	Station No.:	LM 4.95
Date Tested:	May 9, 2019	Location:	15'LT
Name of Project:	HWY. 65 - YELLOW BEND PORT (S)		
County:	Code: 9	Name:	CHICOT
Sampled By:	FRAZIER / BATES / JORDAN		
Lab No.:	20191101	Depth:	0-5
Sample ID:	RV 201	AASHTO Class:	A-7-6 (19)
LATITUDE:		Material Type (1 or 2):	2
		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):	97.19

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	3040.50
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4. Soil Properties:

Optimum Moisture Content (%):	19.9
Maximum Dry Density (pcf):	101.7
95% of MDD (pcf):	96.6
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	3040.50
Compaction Moisture content (%):	20.2
Compaction Wet Density (pcf):	119.20
Compaction Dry Density (pcf):	99.17
Moisture Content After Mr Test (%):	20.2

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

#VALUE!

7. Resilient Modulus, Mr:

10064(Sc)^{-0.30598(S3)}^{0.14897}

8. Comments

9. Tested By:

GW

Date: May 9, 2019

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

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

Job No. 020629 **Material Code** SSRVPS
Date Sampled: 4/10/19 **Station No.:** LM 4.95
Date Tested: May 9, 2019 **Location:** 15'LT
Name of Project: HWY. 65 - YELLOW BEND PORT (S)
County: Code: 9 Name: CHICOT
Sampled By: FRAZIER / BATES / JORDAN
Lab No.: 20191101
Sample ID: RV 201
LATITUDE:

Depth: 0-5
AASHTO Class: A-7-6 (19)
Material Type (1 or 2): 2
LONGITUDE:

PARAMETER	Chamber Confining Pressure	S ₃ psi	Nominal Maximum Axial Stress	Actual Applied		P _{contact} lbs	Actual Applied Contact Load	Actual Applied		S _{contact} psi	Average Recov Def. LVDT 1 and 2	Resilient Strain	Resilient Modulus
				P _{max} lbs	P _{cyclic} lbs			S _{max} psi	S _{cyclic} psi				
Sequence 1	6.0	2.0	25.1	22.2	2.8	2.8	2.1	1.8	0.2	0.00141	0.00018	10,460	
Sequence 2	6.0	4.0	47.0	44.2	2.8	2.8	3.9	3.6	0.2	0.00302	0.00038	9,687	
Sequence 3	6.0	6.0	68.8	65.2	3.6	3.6	5.7	5.4	0.3	0.00510	0.00064	8,452	
Sequence 4	6.0	8.0	90.8	84.8	6.0	6.0	7.5	7.0	0.5	0.00783	0.00098	7,172	
Sequence 5	6.0	10.0	111.1	102.7	8.4	8.4	9.2	8.5	0.7	0.01091	0.00136	6,235	
Sequence 6	4.0	2.0	25.0	22.2	2.8	2.8	2.1	1.8	0.2	0.00150	0.00019	9,824	
Sequence 7	4.0	4.0	46.6	43.8	2.8	2.8	3.8	3.6	0.2	0.00331	0.00041	8,751	
Sequence 8	4.0	6.0	67.4	64.6	2.8	2.8	5.6	5.3	0.2	0.00553	0.00069	7,723	
Sequence 9	4.0	8.0	89.3	84.2	5.1	5.1	7.4	6.9	0.4	0.00820	0.00102	6,799	
Sequence 10	4.0	10.0	110.5	103.0	7.5	7.5	9.1	8.5	0.6	0.01133	0.00141	6,014	
Sequence 11	2.0	2.0	25.0	22.2	2.8	2.8	2.1	1.8	0.2	0.00168	0.00021	8,755	
Sequence 12	2.0	4.0	46.4	43.6	2.8	2.8	3.8	3.6	0.2	0.00367	0.00046	7,846	
Sequence 13	2.0	6.0	66.9	64.1	2.8	2.8	5.5	5.3	0.2	0.00606	0.00076	6,998	
Sequence 14	2.0	8.0	87.9	83.7	4.2	4.2	7.3	6.9	0.3	0.00882	0.00110	6,280	
Sequence 15	2.0	10.0	109.0	102.4	6.6	6.6	9.0	8.5	0.5	0.01203	0.00150	5,636	

TESTED BY _____ **DATE** May 9, 2019
REVIEWED BY _____ **DATE** _____

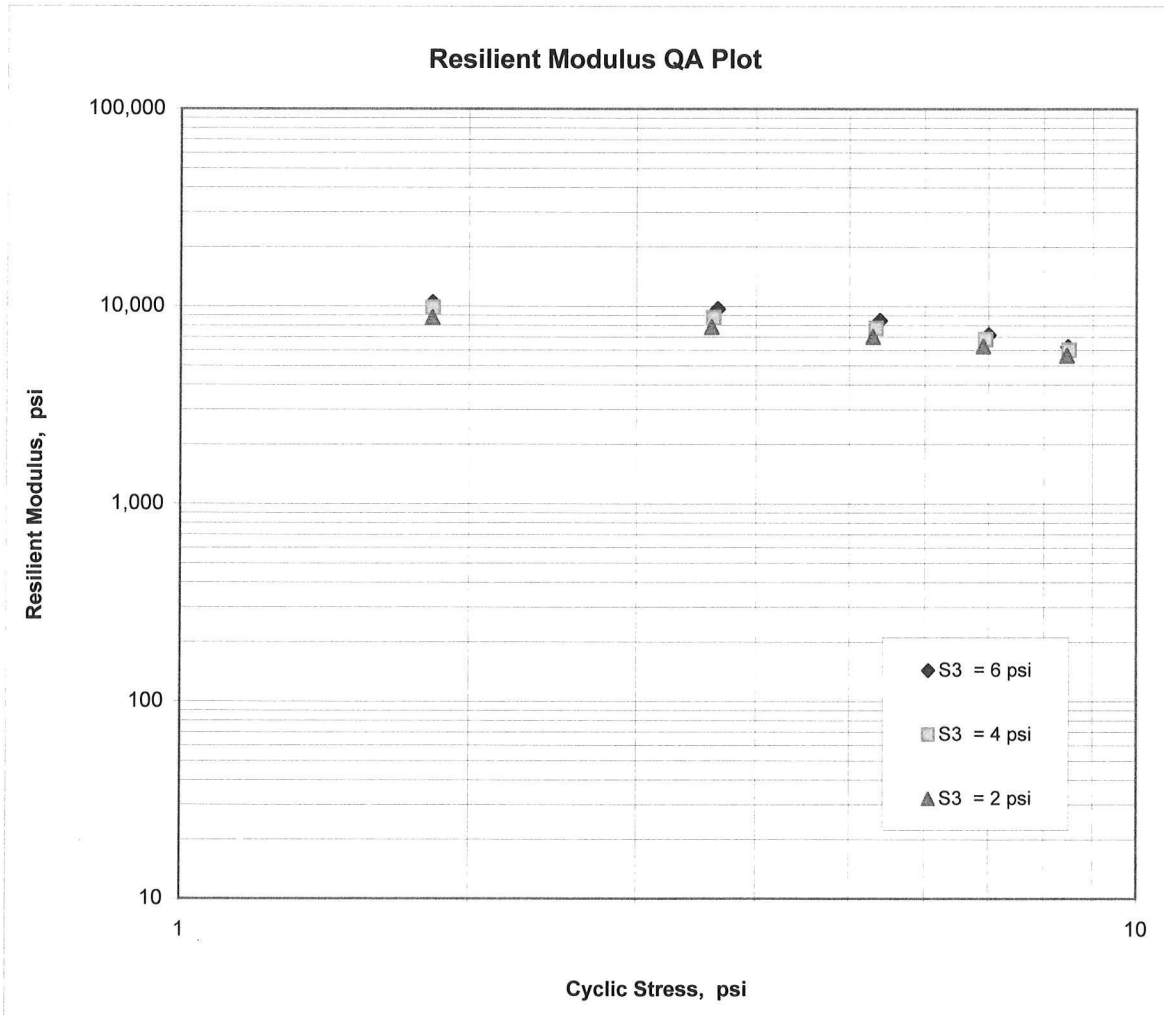
**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION**

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

Job No.	020629	Material Code	SSRVPS
Date Sampled:	4/10/19	Station No.:	LM 4.95
Date Tested:	May 9, 2019	Location:	15'LT
Name of Project:	HWY. 65 - YELLOW BEND PORT (S)		
County:	Code: 9	Name:	CHICOT
Sampled By:	FRAZIER / BATES / JORDAN		Depth: 0-5
Lab No.:	20191101	AASHTO Class:	A-7-6 (19)
Sample ID:	RV 201	Material Type (1 or 2):	2
LATITUDE:		LONGITUDE:	

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

$K_1 = 10,064$
 $K_2 = -0.30598$
 $K_5 = 0.14897$
 $R^2 = 0.92$



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

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

Job No.	020629	Material Code	SSRVPS
Date Sampled:	4/10/19	Station No.:	LM 5.35
Date Tested:	May 7, 2019	Location:	15' RT
Name of Project:	HWY. 65 - YELLOW BEND PORT (S)		
County:	Code: 9	Name:	CHICOT
Sampled By:	FRAZIER / BATES / JORDAN		
Lab No.:	20191102	Depth:	0-5
Sample ID:	RV 202	AASHTO Class:	A-4 (3)
LATITUDE:		Material Type (1 or 2):	2
		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	3.95
Bottom	3.95
Average	3.95
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):	12.18
Initial Volume, AoLo (cu. in):	97.68

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	3122.90
------------------------------	---------

4. Soil Properties:

Optimum Moisture Content (%):	15.7
Maximum Dry Density (pcf):	110.6
95% of MDD (pcf):	105.1
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	3122.90
Compaction Moisture content (%):	15.9
Compaction Wet Density (pcf):	121.81
Compaction Dry Density (pcf):	105.10
Moisture Content After Mr Test (%):	15.7

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

7. Resilient Modulus, Mr: $10528(S_c)^{-0.17057}(S_3)^{0.22875}$

8. Comments

9. Tested By: GW

Date: May 7, 2019

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

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

Job No. 020629 **Material Code** SSRVPS
Date Sampled: 4/10/19 **Station No.:** LM 5.35
Date Tested: May 7, 2019 **Location:** 15' RT
Name of Project: HWY. 65 - YELLOW BEND PORT (S)
County: Code: 9 **Name:** CHICOT
Sampled By: FRAZIER / BATES / JORDAN
Lab No.: 20191102
Sample ID: RV 202
LATITUDE:
Depth: 0-5
AASHTO Class: A-4 (3)
Material Type (1 or 2): 2
LONGITUDE:

PARAMETER	Chamber Confining Pressure	Nominal Maximum Axial Stress	Actual Applied		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
			P _{max} lbs	S _{cyclic} psi									
DESIGNATION	S ₃ psi	S _{cyclic} psi	P _{max} lbs	S _{cyclic} psi	P _{contact} lbs	P _{cyclic} lbs	P _{contact} lbs	S _{max} psi	S _{cyclic} psi	S _{contact} psi	H _{avg} in	ε _r in/in	M _r psi
Sequence 1	6.0	2.0	25.2	22.5	2.8	22.5	2.8	2.1	1.8	0.2	0.00105	0.00013	14,112
Sequence 2	6.0	4.0	47.5	44.7	2.8	44.7	3.9	3.9	3.7	0.2	0.00221	0.00028	13,291
Sequence 3	6.0	6.0	70.2	66.7	3.6	66.7	5.8	5.8	5.5	0.3	0.00354	0.00044	12,413
Sequence 4	6.0	8.0	94.0	88.0	6.0	88.0	7.7	7.7	7.2	0.5	0.00517	0.00064	11,216
Sequence 5	6.0	10.0	117.2	108.7	8.5	108.7	9.6	9.6	8.9	0.7	0.00685	0.00085	10,449
Sequence 6	4.0	2.0	25.2	22.4	2.8	22.4	2.1	2.1	1.8	0.2	0.00117	0.00015	12,640
Sequence 7	4.0	4.0	47.2	44.4	2.8	44.4	3.9	3.9	3.6	0.2	0.00248	0.00031	11,779
Sequence 8	4.0	6.0	69.0	66.3	2.8	66.3	5.7	5.7	5.4	0.2	0.00398	0.00050	10,957
Sequence 9	4.0	8.0	92.8	87.6	5.1	87.6	7.6	7.6	7.2	0.4	0.00560	0.00070	10,299
Sequence 10	4.0	10.0	116.0	108.5	7.6	108.5	9.5	9.5	8.9	0.6	0.00741	0.00092	9,642
Sequence 11	2.0	2.0	25.1	22.3	2.8	22.3	2.1	2.1	1.8	0.2	0.00136	0.00017	10,817
Sequence 12	2.0	4.0	47.0	44.3	2.7	44.3	3.9	3.9	3.6	0.2	0.00287	0.00036	10,145
Sequence 13	2.0	6.0	68.4	65.7	2.8	65.7	5.6	5.6	5.4	0.2	0.00460	0.00057	9,405
Sequence 14	2.0	8.0	90.9	86.6	4.2	86.6	7.5	7.5	7.1	0.3	0.00638	0.00080	8,942
Sequence 15	2.0	10.0	113.7	107.0	6.6	107.0	9.3	9.3	8.8	0.5	0.00837	0.00104	8,417

TESTED BY _____ DATE May 7, 2019
 REVIEWED BY _____ DATE _____
 GW

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION

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

Job No.	020629	Material Code	SSRVPS	
Date Sampled:	4/10/19	Station No.:	LM 5.35	
Date Tested:	May 7, 2019	Location:	15' RT	
Name of Project:	HWY. 65 - YELLOW BEND PORT (S)			
County:	Code: 9	Name:	CHICOT	
Sampled By:	FRAZIER / BATES / JORDAN		Depth:	0-5
Lab No.:	20191102	AASHTO Class:	A-4 (3)	
Sample ID:	RV 202	Material Type (1 or 2):	2	
LATITUDE:		LONGITUDE:		

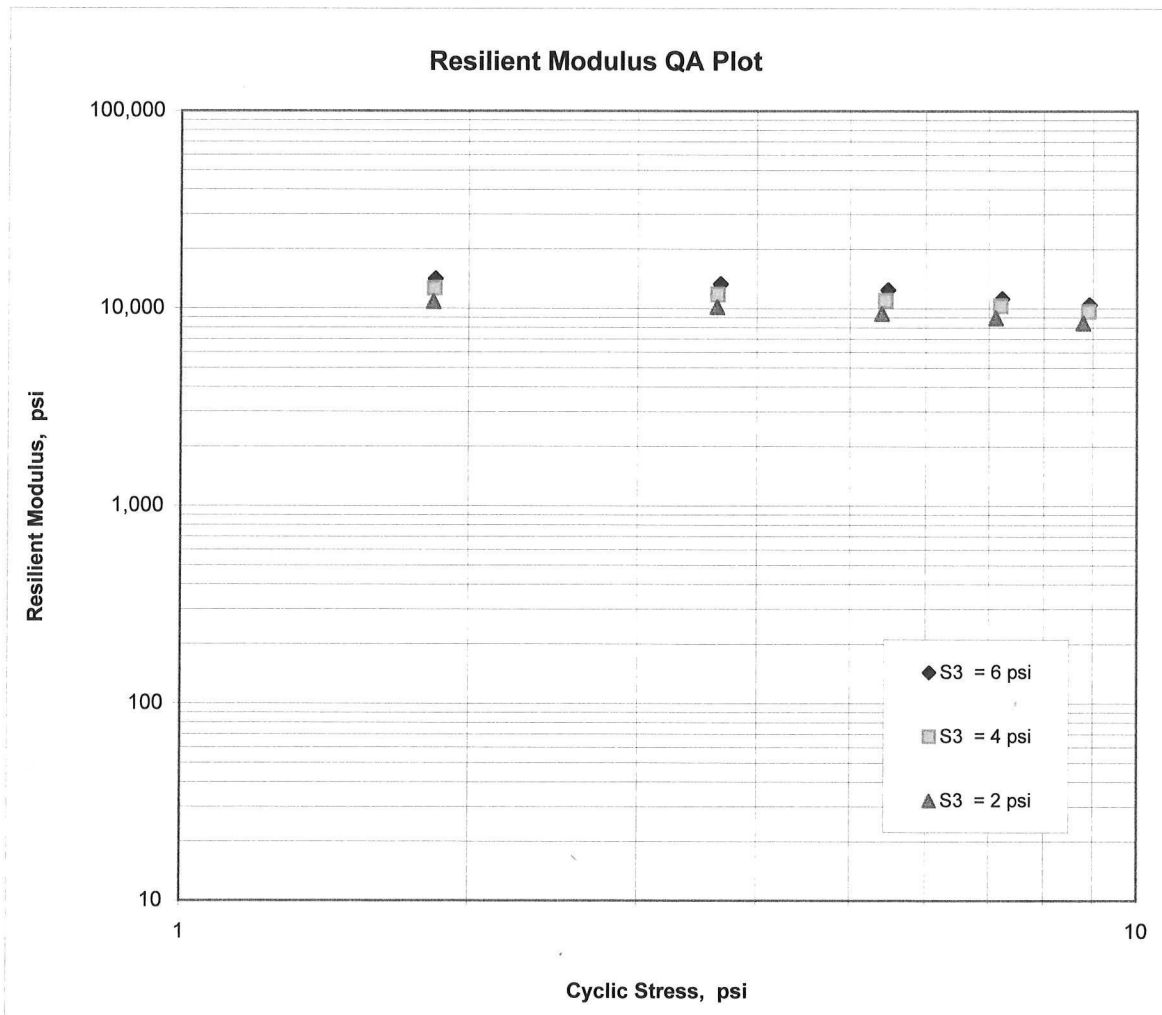
$$M_R = K_1 (S_C)^{K_2} (S_3)^{K_5}$$

$$K_1 = 10,528$$

$$K_2 = -0.17057$$

$$K_5 = 0.22875$$

$$R^2 = 0.97$$



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

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

Job No.	020629	Material Code	SSRVPS
Date Sampled:	4/10/19	Station No.:	LM 6.10
Date Tested:	May 8, 2019	Location:	15'LT
Name of Project:	HWY. 65 - YELLOW BEND PORT (S)		
County:	Code: 9	Name:	CHICOT
Sampled By:	FRAZIER / BATES / JORDAN		
Lab No.:	20191103	Depth:	0-5
Sample ID:	RV 203	AASHTO Class:	A-7-6 (38)
LATITUDE:		Material Type (1 or 2):	2
		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):	97.19

3. Soil Specimen Weight:

Weight of Wet Soil Used (g):	2969.50
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4. Soil Properties:

Optimum Moisture Content (%):	23.7
Maximum Dry Density (pcf):	96.5
95% of MDD (pcf):	91.7
In-Situ Moisture Content (%):	N/A

5. Specimen Properties:

Wet Weight (g):	2969.50
Compaction Moisture content (%):	24.0
Compaction Wet Density (pcf):	116.42
Compaction Dry Density (pcf):	93.89
Moisture Content After Mr Test (%):	23.7

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

#VALUE!

7. Resilient Modulus, Mr:

10289(Sc)^{-0.23052}(S3)^{0.05616}

8. Comments

9. Tested By:

_____ GW _____

Date: May 8, 2019

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

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

Job No. 020629 **Material Code** SSRVPS
Date Sampled: 4/10/19 **Station No.:** LM 6.10
Date Tested: May 8, 2019 **Location:** 15'LT
Name of Project: HWY. 65 - YELLOW BEND PORT (S)
County: Code: 9 **Name:** CHICOT
Sampled By: FRAZIER / BATES / JORDAN **Depth:** 0-5
Lab No.: 201911103 **AASHTO Class:** A-7-6 (38)
Sample ID: RV 203 **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 UNIT	S ₃ psi	S _{cyclic} psi	P _{max} lbs	P _{cyclic} lbs	P _{contact} lbs	S _{max} psi	S _{cyclic} psi	S _{contact} psi	H _{avg} in	ε _r in/in	M _r psi
Sequence 1	6.0	2.0	25.2	22.4	2.8	2.1	1.8	0.2	0.00152	0.00019	9,755
Sequence 2	6.0	4.0	47.1	44.4	2.8	3.9	3.7	0.2	0.00323	0.00040	9,083
Sequence 3	6.0	6.0	69.1	65.5	3.5	5.7	5.4	0.3	0.00528	0.00066	8,220
Sequence 4	6.0	8.0	91.3	85.4	5.9	7.5	7.0	0.5	0.00793	0.00099	7,128
Sequence 5	6.0	10.0	112.0	103.7	8.4	9.2	8.6	0.7	0.01106	0.00138	6,200
Sequence 6	4.0	2.0	25.2	22.5	2.7	2.1	1.9	0.2	0.00162	0.00020	9,215
Sequence 7	4.0	4.0	47.0	44.3	2.7	3.9	3.7	0.2	0.00338	0.00042	8,662
Sequence 8	4.0	6.0	68.1	65.4	2.7	5.6	5.4	0.2	0.00546	0.00068	7,922
Sequence 9	4.0	8.0	90.4	85.4	5.0	7.5	7.1	0.4	0.00790	0.00099	7,155
Sequence 10	4.0	10.0	112.3	104.8	7.5	9.3	8.6	0.6	0.01083	0.00135	6,403
Sequence 11	2.0	2.0	25.2	22.5	2.7	2.1	1.9	0.2	0.00173	0.00022	8,587
Sequence 12	2.0	4.0	47.0	44.3	2.7	3.9	3.7	0.2	0.00358	0.00045	8,187
Sequence 13	2.0	6.0	68.1	65.4	2.7	5.6	5.4	0.2	0.00572	0.00071	7,560
Sequence 14	2.0	8.0	89.9	85.8	4.1	7.4	7.1	0.3	0.00813	0.00101	6,988
Sequence 15	2.0	10.0	111.6	105.1	6.6	9.2	8.7	0.5	0.01095	0.00137	6,349

TESTED BY _____ **DATE** May 8, 2019
REVIEWED BY _____ **DATE** _____

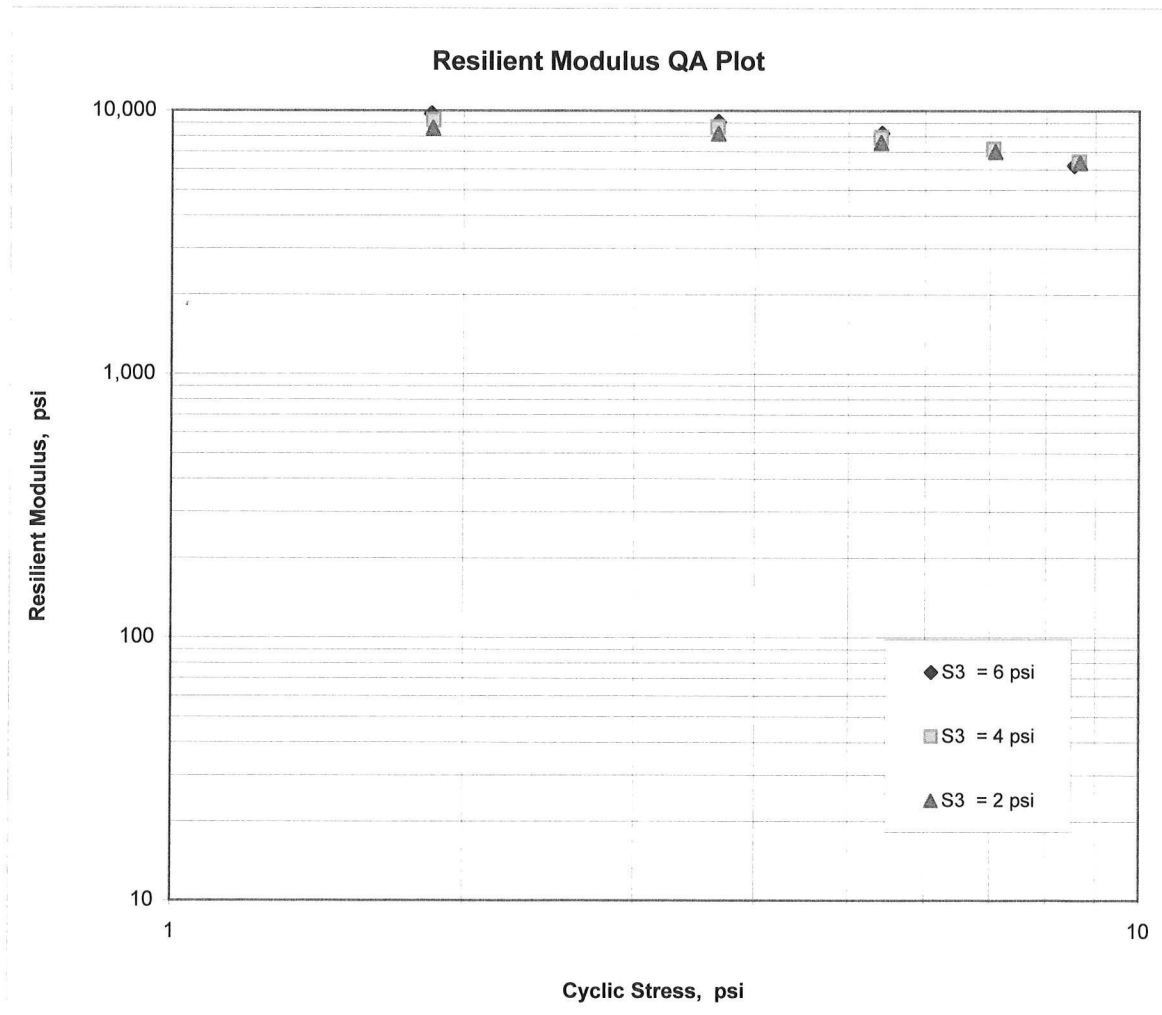
**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
MATERIALS DIVISION**

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

Job No.	020629	Material Code	SSRVPS
Date Sampled:	4/10/19	Station No.:	LM 6.10
Date Tested:	May 8, 2019	Location:	15'LT
Name of Project:	HWY. 65 - YELLOW BEND PORT (S)		
County:	Code: 9	Name:	CHICOT
Sampled By:	FRAZIER / BATES / JORDAN		Depth: 0-5
Lab No.:	20191103	AASHTO Class:	A-7-6 (38)
Sample ID:	RV 203	Material Type (1 or 2):	2
LATITUDE:		LONGITUDE:	

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

$K_1 = 10,289$
 $K_2 = -0.23052$
 $K_5 = 0.05616$
 $R^2 = 0.85$





ARKANSAS DEPARTMENT OF TRANSPORTATION

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

MATERIALS DIVISION

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

May 15, 2019

TO: Mr. Trinity Smith, Engineer of Roadway Design

SUBJECT: Job No. 020629
Hwy. 65 – Yellow Bend Port (S)
Route 35 Sections 9, 10 & 11
Chicot and Desha Counties

Attached is the requested Soil Survey, strength data and Resilient Modulus test results for the above referenced job. The project consists of reconstructing approximately 9.5 miles of Highway 35. Samples were obtained in the existing travel lanes and ditch line. The shoulders were not paved within the project limits

Laboratory results indicate the subgrade soils consist primarily of highly plastic clay with some sand. The subgrade soils may not provide a stable working platform with conventional processing. Stabilization with lime is the most appropriate remediation technique. It is recommended the the addition of 8% lime (by dry weight) mixed to a depth of 16 inches be used for estimation purposes. If the Engineer determines that stabilization is necessary, field trial or local experience may dictate that a stable working platform can be achieved at a lower lime content.

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 at the river port of Yellow Bend.
2. Asphalt Concrete Hot Mix

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

Handwritten signature of Michael C. Benson, Materials Engineer

MCB:pt:bjj
Attachment

cc: State Constr. Eng. – Master File Copy
District 2 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 - 05/13/2019
JOB NUMBER - 020629

SEQUENCE NO. - 1
MATERIAL CODE - SSRV
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 21
DISTRICT NO. - 02

JOB NAME - HWY. 65 - YELLOW BEND PORT(S)

* STATION LIMITS R-VALUE AT 240 psi *

BEGIN JOB - END JOB LESS THAN 5

RESILIENT MODULUS
STA. LM 0.20 6907
STA. LM 0.55 7483
STA. LM 1.70 7758
STA. LM 2.02 6377
STA. LM 2.95 6148

REMARKS -

-
AASHTO TESTS : T190

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

DATE - 05/13/2019
JOB NUMBER - 020629

SEQUENCE NO. - 2
MATERIAL CODE - SSRV
SPEC. YEAR - 2014
SUPPLIER ID. - 1
COUNTY/STATE - 21
DISTRICT NO. - 02

JOB NAME - HWY. 65 - YELLOW BEND PORT(S)

* STATION LIMITS R-VALUE AT 240 psi *

RESILIENT MODULUS	
STA. LM 3.70	7309
STA. LM 4.95	5636
STA. LM 5.35	8417
STA. LM 6.10	6200

REMARKS -

-
AASHTO TESTS : T190

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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE	- 05/13/19	SEQUENCE NO.	- 7
JOB NUMBER	- 020629	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	- 21
SUPPLIER NAME	- STATE	DISTRICT NO.	- 02
NAME OF PROJECT - HWY. 65 - YELLOW BEND PORT(S)			
PROJECT ENGINEER - NOT APPLICABLE			
PIT/QUARRY - ARKANSAS			
LOCATION	- DESHA, COUNTY	DATE SAMPLED	- 04/10/19
SAMPLED BY	- FAULKNER/BATES	DATE RECEIVED	- 04/15/19
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 05/13/19
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS			

LAB NUMBER	- 20191043	- 20191044	- 20191045
SAMPLE ID	- S143	- S144	- S145
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- LM 1.30*	- LM 1.45	- LM 1.45
LOCATION	- 15 RT	- 05 LT	- 15 LT
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BR/GR	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 33 32 42.70	- 33 32 8.30	- 33 32 8.40
LONGITUDE DEG-MIN-SEC	- 91 14 12.40	- 91 19 32.00	- 91 19 32.00
% PASSING	2 IN. -	-	-
	1 1/2 IN. -	-	-
	3/4 IN. -	-	100
	3/8 IN. -	-	88
	NO. 4 - 100	100	81
	NO. 10 -	-	77
	NO. 40 -	-	72
	NO. 80 -	-	68
	NO. 200 - 98	92	64
LIQUID LIMIT	- 50	- ND	- ND
PLASTICITY INDEX	- 33	- NP	- NP
AASHTO SOIL	- A-7-6(35)	- A-4(0)	- A-4(0)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 26.6	- 22.2	- 24.8
ACHM SC (IN)	- ---	- 10.0WX	- ---
PCCP (IN)	- ---	- 4.0	- ---
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- *CHICOT COUNTY
-
-
-

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	- 05/13/19	SEQUENCE NO.	- 8
JOB NUMBER	- 020629	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	- 21
SUPPLIER NAME	- STATE	DISTRICT NO.	- 02
NAME OF PROJECT	- HWY. 65 - YELLOW BEND PORT(S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- DESHA, COUNTY	DATE SAMPLED	- 04/10/19
SAMPLED BY	- FAULKNER/BATES	DATE RECEIVED	- 04/15/19
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 05/13/19
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	- 20191046	- 20191047	- 20191048
SAMPLE ID	- S146	- S147	- S148
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- LM 1.55*	- LM 1.55*	- LM 1.70
LOCATION	- 05 LT	- 15 LT	- 05 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 32 53.80	- 33 32 53.70	- 33 32 9.50
LONGITUDE DEG-MIN-SEC	- 91 14 20.50	- 91 14 20.60	- 91 19 16.50
% PASSING			
2 IN.	-	-	-
1 1/2 IN.	-	-	-
3/4 IN.	-	-	-
3/8 IN.	-	-	-
NO. 4	- 100	- 100	- 100
NO. 10	-	-	- 98
NO. 40	-	-	- 98
NO. 80	-	-	- 97
NO. 200	- 98	- 97	- 88
LIQUID LIMIT	- 39	- 48	- ND
PLASTICITY INDEX	- 21	- 29	- NP
AASHTO SOIL	- A-6 (21)	- A-7-6 (30)	- A-4 (0)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 24.2	- 29.4	- 21.6
ACHM SC (IN)	- 5.5W	- ---	- 6.5WX
AGG.BASE CRS.CL-7 (IN)	- 4.0	- ---	- 3.0
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- *CHICOT COUNTY
-
-
-

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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 05/13/19 SEQUENCE NO. - 9
JOB NUMBER - 020629 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 - 21
SUPPLIER NAME - STATE DISTRICT NO. - 02
NAME OF PROJECT - HWY. 65 - YELLOW BEND PORT(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - DESHA, COUNTY DATE SAMPLED - 04/10/19
SAMPLED BY - FAULKNER/BATES DATE RECEIVED - 04/15/19
SAMPLE FROM - TEST HOLE DATE TESTED - 05/13/19
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	-	20191049	-	20191050	-	20191051
SAMPLE ID	-	S149	-	S150	-	S151
TEST STATUS	-	INFORMATION ONLY	-	INFORMATION ONLY	-	INFORMATION ONLY
STATION	-	LM 1.70	-	LM 1.80*	-	LM 1.80*
LOCATION	-	15 RT	-	05 RT	-	15 RT
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 32 9.30	-	33 33 5.30	-	33 33 5.30
LONGITUDE DEG-MIN-SEC	-	91 19 16.50	-	91 14 27.80	-	91 14 27.70
% PASSING						
	2	IN.	-		-	
	1 1/2	IN.	-		-	
	3/4	IN.	-		-	
	3/8	IN.	-		-	
	NO. 4	-		100	-	100
	NO. 10	-			-	
	NO. 40	-			-	
	NO. 80	-			-	
	NO. 200	-		99	-	94
LIQUID LIMIT	-	ND	-	54	-	37
PLASTICITY INDEX	-	NP	-	31	-	19
AASHTO SOIL	-	A-4(0)	-	A-7-6(35)	-	A-6(18)
UNIFIED SOIL	-		-		-	
% MOISTURE CONTENT	-	22.7	-	29.9	-	28.9
ACHM SC	(IN)	---	-	3.75W	-	---
ACHM BC	(IN)	---	-	2.0	-	---
AGG.BASE CRS.CL-7	(IN)	---	-	4.0	-	---
			-		-	
			-		-	
			-		-	
			-		-	
			-		-	
			-		-	
			-		-	
			-		-	
			-		-	

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED

- *CHICOT COUNTY

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AASHTO TESTS : T24 T88 T89 T90 T265

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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 05/13/19 SEQUENCE NO. - 10
JOB NUMBER - 020629 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 - 21
SUPPLIER NAME - STATE DISTRICT NO. - 02
NAME OF PROJECT - HWY. 65 - YELLOW BEND PORT(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - DESHA, COUNTY DATE SAMPLED - 04/10/19
SAMPLED BY - FAULKNER/BATES DATE RECEIVED - 04/15/19
SAMPLE FROM - TEST HOLE DATE TESTED - 05/13/19
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	20191052	20191053	20191054
SAMPLE ID	S152	S153	S154
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	LM 1.95	LM 1.95	LM 2.02*
LOCATION	05 LT	15 LT	05 LT
DEPTH IN FEET	0-5	0-5	0-5
MAT'L COLOR	BROWN	BROWN	BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	33 32 10.70	33 32 10.80	33 33 11.10
LONGITUDE DEG-MIN-SEC	91 19 1.00	91 19 1.00	91 14 27.90
% PASSING			
2 IN.	-	-	-
1 1/2 IN.	-	-	-
3/4 IN.	-	-	-
3/8 IN.	-	-	-
NO. 4	100	100	100
NO. 10	-	-	-
NO. 40	-	-	-
NO. 80	-	-	-
NO. 200	95	96	98
LIQUID LIMIT	24	32	55
PLASTICITY INDEX	4	14	36
AASHTO SOIL	A-4(2)	A-6(13)	A-7-6(39)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	25.2	25.9	29.3
ACHM SC (IN)	5.0W	---	4.75W
ACHM BC (IN)	1.5	---	---
AGG. BASE CRS. CL-7 (IN)	4.0	---	3.0
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- *CHICOT COUNTY
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AASHTO TESTS : T24 T88 T89 T90 T265
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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS
MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE	- 05/13/19	SEQUENCE NO.	- 11
JOB NUMBER	- 020629	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	- 21
SUPPLIER NAME	- STATE	DISTRICT NO.	- 02
NAME OF PROJECT	- HWY. 65 - YELLOW BEND PORT(S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- DESHA, COUNTY	DATE SAMPLED	- 04/10/01
SAMPLED BY	- FAULKNER/BATES	DATE RECEIVED	- 04/15/19
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 05/13/19
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	- 20191055	- 20191056	- 20191057
SAMPLE ID	- S155	- S156	- S157
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- LM 2.02*	- LM 2.20	- LM 2.20
LOCATION	- 15 LT	- 05 RT	- 15 RT
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 33 11.20	- 33 32 11.90	- 33 32 11.80
LONGITUDE DEG-MIN-SEC	- 91 14 28.00	- 91 18 45.40	- 91 18 45.40
% PASSING			
2 IN.	-	-	-
1 1/2 IN.	-	-	-
3/4 IN.	-	-	-
3/8 IN.	-	-	-
NO. 4	- 100	- 100	- 100
NO. 10	-	-	-
NO. 40	-	-	-
NO. 80	-	-	-
NO. 200	- 91	- 95	- 96
LIQUID LIMIT	- 49	- 54	- 63
PLASTICITY INDEX	- 30	- 32	- 45
AASHTO SOIL	- A-7-6(29)	- A-7-6(34)	- A-7-6(48)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 30.0	- 30.2	- 39.4
ACHM SC (IN)	- ---	- 14.0WX	- ---
AGG.BASE CRS.CL-7 (IN)	- ---	- 4.0	- ---
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- *CHICOT COUNTY
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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS
MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE	- 05/13/19	SEQUENCE NO.	- 12
JOB NUMBER	- 020629	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	- 21
SUPPLIER NAME	- STATE	DISTRICT NO.	- 02
NAME OF PROJECT - HWY. 65 - YELLOW BEND PORT(S)			
PROJECT ENGINEER - NOT APPLICABLE			
PIT/QUARRY - ARKANSAS			
LOCATION	- DESHA, COUNTY	DATE SAMPLED	- 04/10/19
SAMPLED BY	- FAULKNER/BATES	DATE RECEIVED	- 04/15/19
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 05/13/19
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS			
LAB NUMBER	- 20191058	- 20191059	- 20191060
SAMPLE ID	- S158	- S159	- S160
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- LM 2.45	- LM 2.45	- LM 2.70
LOCATION	- 05 LT	- 15 LT	- 05 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 32 13.20	- 33 32 13.30	- 33 32 14.30
LONGITUDE DEG-MIN-SEC	- 91 18 30.00	- 91 18 30.00	- 91 18 14.40
% PASSING	2 IN. -	-	-
	1 1/2 IN. -	-	-
	3/4 IN. -	-	-
	3/8 IN. -	-	-
	NO. 4 - 100	- 100	- 100
	NO. 10 -	-	-
	NO. 40 -	-	-
	NO. 80 -	-	-
	NO. 200 - 97	- 92	- 97
LIQUID LIMIT	- 36	- 37	- 34
PLASTICITY INDEX	- 21	- 22	- 18
AASHTO SOIL	- A-6(20)	- A-6(20)	- A-6(17)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 23.1	- 21.2	- 22.6
ACHM SC (IN)	- 8.0W	- ---	- 7.0WX
ACHM BC (IN)	- 2.0	- ---	- ---
AGG.BASE CRS.CL-7 (IN)	- 2.0	- ---	- 4.0
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- *CHICOT COUNTY
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AASHTO TESTS : T24 T88 T89 T90 T265
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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS
MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE	- 05/13/19	SEQUENCE NO.	- 13
JOB NUMBER	- 020629	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	- 21
SUPPLIER NAME	- STATE	DISTRICT NO.	- 02
NAME OF PROJECT	- HWY. 65 - YELLOW BEND PORT(S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- DESHA, COUNTY	DATE SAMPLED	- 04/10/19
SAMPLED BY	- FAULKNER/BATES	DATE RECEIVED	- 04/15/19
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 05/13/19
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	- 20191061	- 20191062	- 20191063
SAMPLE ID	- S161	- S162	- S163
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- LM 2.70	- LM 2.95	- LM 2.95
LOCATION	- 15 RT	- 05 LT	- 15 LT
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BROWN	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 33 32 14.20	- 33 32 15.70	- 33 32 15.80
LONGITUDE DEG-MIN-SEC	- 91 18 14.40	- 91 17 58.90	- 91 17 59.00
% PASSING	2 IN. -	-	-
	1 1/2 IN. -	-	-
	3/4 IN. -	-	-
	3/8 IN. - 100	-	-
	NO. 4 - 96	- 100	- 100
	NO. 10 - 94	-	-
	NO. 40 - 88	-	-
	NO. 80 - 84	-	-
	NO. 200 - 79	- 92	- 96
LIQUID LIMIT	- 23	- 34	- 34
PLASTICITY INDEX	- 3	- 17	- 17
AASHTO SOIL	- A-4 (0)	- A-6 (15)	- A-6 (16)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 22.4	- 23.1	- 20.1
ACHM SC (IN)	- ---	- 3.5W	- ---
ACHM BC (IN)	- ---	- 1.0	- ---
AGG. BASE CRS. CL-7 (IN)	- ---	- 4.0	- ---
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- *CHICOT COUNTY

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

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE	- 05/13/19	SEQUENCE NO.	- 14
JOB NUMBER	- 020629	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	- 21
SUPPLIER NAME	- STATE	DISTRICT NO.	- 02
NAME OF PROJECT	- HWY. 65 - YELLOW BEND PORT(S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- DESHA, COUNTY	DATE SAMPLED	- 04/10/19
SAMPLED BY	- FAULKNER/BATES	DATE RECEIVED	- 04/15/19
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 05/13/19
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	- 20191064	- 20191065	- 20191066
SAMPLE ID	- S164	- S165	- S166
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- LM 3.20	- LM 3.20	- LM 3.45
LOCATION	- 05 RT	- 15 RT	- 05 LT
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BROWN	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 33 32 16.80	- 33 32 16.80	- 33 32 18.20
LONGITUDE DEG-MIN-SEC	- 91 17 43.20	- 91 17 43.20	- 91 17 27.90
% PASSING	2 IN. -	-	-
	1 1/2 IN. -	-	-
	3/4 IN. - 100	-	-
	3/8 IN. - 90	- 100	-
	NO. 4 - 85	- 97	- 100
	NO. 10 - 81	- 94	-
	NO. 40 - 76	- 90	-
	NO. 80 - 73	- 87	-
	NO. 200 - 66	- 81	- 94
LIQUID LIMIT	- 29	- 31	- 26
PLASTICITY INDEX	- 14	- 13	- 10
AASHTO SOIL	- A-6(7)	- A-6(9)	- A-4(8)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 18.0	- 24.0	- 20.3
ACHM SC (IN)	- 6.0WX	- ---	- 3.0W
ACHM BC (IN)	- ---	- ---	- 1.0
AGG.BASE CRS.CL-7 (IN)	- 4.0	- ---	- 3.0
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- *CHICOT COUNTY
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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS
MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE	- 05/13/19	SEQUENCE NO.	- 17
JOB NUMBER	- 020629	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	- 21
SUPPLIER NAME	- STATE	DISTRICT NO.	- 02
NAME OF PROJECT	- HWY. 65 - YELLOW BEND PORT(S)		
PROJECT ENGINEER	- NOT APPLICABLE		
PIT/QUARRY	- ARKANSAS		
LOCATION	- DESHA, COUNTY	DATE SAMPLED	- 04/10/19
SAMPLED BY	- FAULKNER/BATES	DATE RECEIVED	- 04/15/19
SAMPLE FROM	- TEST HOLE	DATE TESTED	- 05/13/19
MATERIAL DESC.	- SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS		

LAB NUMBER	- 20191073	- 20191074	- 20191075
SAMPLE ID	- S173	- S174	- S175
TEST STATUS	- INFORMATION ONLY	- INFORMATION ONLY	- INFORMATION ONLY
STATION	- LM 4.20	- LM 4.45	- LM 4.45
LOCATION	- 15 RT	- 05 LT	- 15 LT
DEPTH IN FEET	- 0-5	- 0-5	- 0-5
MAT'L COLOR	- BR/GR	- BROWN	- BROWN
MAT'L TYPE	-	-	-
LATITUDE DEG-MIN-SEC	- 33 32 21.70	- 33 32 23.10	- 33 32 23.20
LONGITUDE DEG-MIN-SEC	- 91 16 41.40	- 91 16 25.90	- 91 16 26.00
% PASSING			
2 IN.	-	-	-
1 1/2 IN.	-	-	-
3/4 IN.	- 100	-	-
3/8 IN.	- 99	-	-
NO. 4	- 98	- 100	- 100
NO. 10	- 97	-	-
NO. 40	- 94	-	-
NO. 80	- 91	-	-
NO. 200	- 85	- 98	- 92
LIQUID LIMIT	- 43	- 51	- 56
PLASTICITY INDEX	- 29	- 29	- 33
AASHTO SOIL	- A-7-6(24)	- A-7-6(32)	- A-7-6(34)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	- 25.0	- 29.4	- 24.4
ACHM SC (IN)	- ---	- 10.0WX	- ---
AGG.BASE CRS.CL-7 (IN)	- ---	- 3.0	- ---
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
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AASHTO TESTS : T24 T88 T89 T90 T265
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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS
MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 05/13/19 SEQUENCE NO. - 18
JOB NUMBER - 020629 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 - 21
SUPPLIER NAME - STATE DISTRICT NO. - 02
NAME OF PROJECT - HWY. 65 - YELLOW BEND PORT(S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS
LOCATION - DESHA, COUNTY DATE SAMPLED - 04/10/19
SAMPLED BY - FAULKNER/BATES DATE RECEIVED - 04/15/19
SAMPLE FROM - TEST HOLE DATE TESTED - 05/13/19
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	-	20191076	-	20191077	-	20191078
SAMPLE ID	-	S176	-	S177	-	S178
TEST STATUS	-	INFORMATION ONLY	-	INFORMATION ONLY	-	INFORMATION ONLY
STATION	-	LM 4.70	-	LM 4.70	-	LM 4.95
LOCATION	-	05 RT	-	15 RT	-	05 LT
DEPTH IN FEET	-	0-5	-	0-5	-	0-5
MAT'L COLOR	-	BR/GR	-	BROWN	-	BROWN
MAT'L TYPE	-		-		-	
LATITUDE DEG-MIN-SEC	-	33 32 24.20	-	33 32 24.20	-	33 32 25.50
LONGITUDE DEG-MIN-SEC	-	91 16 10.20	-	91 16 10.20	-	91 15 54.80
% PASSING	2 IN.	-	-	-	-	-
	1 1/2 IN.	-	-	-	-	-
	3/4 IN.	-	-	-	-	-
	3/8 IN.	-	-	100	-	-
	NO. 4	- 100	-	98	-	100
	NO. 10	-	-	96	-	-
	NO. 40	-	-	93	-	-
	NO. 80	-	-	91	-	-
	NO. 200	- 98	-	88	-	91
LIQUID LIMIT	-	53	-	45	-	58
PLASTICITY INDEX	-	32	-	25	-	36
AASHTO SOIL	-	A-7-6(35)	-	A-7-6(23)	-	A-7-6(36)
UNIFIED SOIL	-		-		-	
% MOISTURE CONTENT	-	33.2	-	31.8	-	29.8
ACHM SC	(IN)	- 7.5WX	-	---	-	7.0WX
AGG.BASE CRS.CL-7	(IN)	- 4.0	-	---	-	4.0
		-	-	-	-	-
		-	-	-	-	-
		-	-	-	-	-
		-	-	-	-	-
		-	-	-	-	-
		-	-	-	-	-
		-	-	-	-	-
		-	-	-	-	-
		-	-	-	-	-

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
- *CHICOT COUNTY
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AASHTO TESTS : T24 T88 T89 T90 T265
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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS
MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 05/13/19	SEQUENCE NO. - 19
JOB NUMBER - 020629	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 - 21
SUPPLIER NAME - STATE	DISTRICT NO. - 02
NAME OF PROJECT - HWY. 65 - YELLOW BEND PORT(S)	
PROJECT ENGINEER - NOT APPLICABLE	
PIT/QUARRY - ARKANSAS	
LOCATION - DESHA, COUNTY	DATE SAMPLED - 04/10/19
SAMPLED BY - FAULKNER/BATES	DATE RECEIVED - 04/15/19
SAMPLE FROM - TEST HOLE	DATE TESTED - 05/13/19
MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS	

LAB NUMBER	-	20191079	-	20191080	-	20191081
SAMPLE ID	-	S179	-	S180	-	S182
TEST STATUS	-	INFORMATION ONLY	-	INFORMATION ONLY	-	INFORMATION ONLY
STATION	-	LM 4.95	-	LM 5.20	-	LM 5.20
LOCATION	-	15 LT	-	05 RT	-	15 RT
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 32 25.60	-	33 32 24.30	-	33 32 24.20
LONGITUDE DEG-MIN-SEC	-	91 15 54.80	-	91 15 39.40	-	91 15 39.40
% PASSING						
	2	IN.	-		-	
	1 1/2	IN.	-		-	
	3/4	IN.	-	100	-	
	3/8	IN.	-	99	-	
	NO. 4		-	98	-	100
	NO. 10		-	96	-	
	NO. 40		-	94	-	
	NO. 80		-	92	-	
	NO. 200		-	88	-	95
LIQUID LIMIT	-	38	-	42	-	63
PLASTICITY INDEX	-	21	-	22	-	45
AASHTO SOIL	-	A-6(18)	-	A-7-6(22)	-	A-7-6(47)
UNIFIED SOIL	-		-		-	
% MOISTURE CONTENT	-	25.9	-	37.8	-	32.8
ACHM SC (IN)	-	---	-	11.0W	-	---
AGG.BASE CRS.CL-7 (IN)	-	---	-	4.0	-	---
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
 - *CHICOT COUNTY
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AASHTO TESTS : T24 T88 T89 T90 T265
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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT - LITTLE ROCK, ARKANSAS
 MATERIALS DIVISION

MICHAEL BENSON, MATERIALS ENGINEER

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

DATE - 05/13/19 SEQUENCE NO. - 21
 JOB NUMBER - 020629 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 - 21
 SUPPLIER NAME - STATE DISTRICT NO. - 02
 NAME OF PROJECT - HWY. 65 - YELLOW BEND PORT(S)
 PROJECT ENGINEER - NOT APPLICABLE
 PIT/QUARRY - ARKANSAS
 LOCATION - DESHA, COUNTY DATE SAMPLED - 04/10/19
 SAMPLED BY - FAULKNER/BATES DATE RECEIVED - 04/15/19
 SAMPLE FROM - TEST HOLE DATE TESTED - 05/13/19
 MATERIAL DESC. - SOIL SURVEY - R VALUE- PAVEMENT SOUNDINGS

LAB NUMBER	20191085	20191086	20191087
SAMPLE ID	S185	S186	S187
TEST STATUS	INFORMATION ONLY	INFORMATION ONLY	INFORMATION ONLY
STATION	LM 5.45	LM 5.60*	LM 5.75
LOCATION	15 LT	15 LT	05 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 32 22.30	33 32 3.00	33 32 19.40
LONGITUDE DEG-MIN-SEC	91 15 24.00	91 21 34.40	91 15 5.50
% PASSING			
2 IN.	-	-	-
1 1/2 IN.	-	-	-
3/4 IN.	-	100	-
3/8 IN.	100	98	-
NO. 4	97	93	100
NO. 10	94	91	-
NO. 40	91	86	-
NO. 80	89	91	-
NO. 200	88	83	97
LIQUID LIMIT	59	32	56
PLASTICITY INDEX	38	14	34
AASHTO SOIL	A-7-6(36)	A-6(10)	A-7-6(37)
UNIFIED SOIL	-	-	-
% MOISTURE CONTENT	33.3	35.3	30.7
ACHM SC (IN)	---	---	9.5WX
AGG.BASE CRS.CL-7 (IN)	---	---	4.0
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

REMARKS - W=MULTIPLE LAYERS, X=STRIPPED
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