

ARKANSAS DEPARTMENT OF TRANSPORTATION



SUBSURFACE INVESTIGATION

STATE JOB NO. 080665

FEDERAL AID PROJECT NO. ER-0015(30)

HWY. 154 SLIDE REPAIR (CONWAY CO.) (S)

STATE HIGHWAY 154 SECTION 1

IN CONWAY 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 HWY. & TRANS. DEPARTMENT MATERIALS DIVISION - GEOTECHNICAL SEC.		BORING NO. 1 PAGE 1 OF 2
JOB NO. D08134	Conway County	DATE: March 23, 2010
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park)	Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger &
STATION: 3+85		EQUIPMENT: CME 750 w/CME Automatic
LOCATION: 12' Right of Center Line of Hwy. 154		HAMMER CORRECTION FACTOR: 1.28
LOGGED BY: Steven Faulkner		

COMPLETION DEPTH: 34.6

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.	% T C R	% R Q D
			SURFACE ELEVATION: 626.0 (Assumed)									
5			Moist, Medium Stiff, Brown and Gray Clay with Gravel (Sandstone Fragments)									
10			SHALE - Brown and Gray, Highly Weathered, Medium Hard							17 42-60		
15			SHALE - Brown and Gray, Highly Weathered, Medium Hard with Trace of Sandstone							25 34-36		
20			SANDSTONE - Brown and Gray, Poorly-Cemented							60 (3")		
25			SANDSTONE - Brown and Gray, Medium Bedded, Cemented, with Slight Dip, with Fractured Layers							60 (1")		26
30			SHALE WITH OCCASIONAL SANDSTONE AND WEATHERED SHALE SEAMS- Dark Gray, Laminated, Hard, with Slight Dip									60
35			SHALE WITH FREQUENT SANDSTONE SEAMS- Dark Gray, Laminated, Hard, with Slight Dip and Vertically Fractured Seams									58

REMARKS: Water level was 10.5' at 24 hrs.

ARKANSAS HWY. & TRANS. DEPARTMENT MATERIALS DIVISION - GEOTECHNICAL SEC.	BORING NO. 1 PAGE 2 OF 2
JOB NO. D08134 Conway County JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park) Slide No. 2 STATION: 3+85 LOCATION: 12' Right of Center Line of Hwy. 154 LOGGED BY: Steven Faulkner	DATE: March 23, 2010 TYPE OF DRILLING: Hollow Stem Auger & EQUIPMENT: CME 750 w/CME Automatic HAMMER CORRECTION FACTOR: 1.28

COMPLETION DEPTH: 34.6

D E P T H FT.	S Y M B O L	S A M P L E S	DESCRIPTION OF MATERIAL	SOIL GROUP	P L A S T I C L I M I T	% M O I S T.	L I Q U I D L I M I T	D R Y W E I G H T	L B S P E R C U. F T.	N O. O F B L O W S P E R 6- I N.	% T C R	% R Q
			SURFACE ELEVATION: 626.0 (Assumed)									
			Boring Terminated									
40												
45												
50												
55												
60												
65												
70												

REMARKS: Water level was 10.5' at 24 hrs.

ARKANSAS HWY. & TRANS. DEPARTMENT		BORING NO. 2
MATERIALS DIVISION - GEOTECHNICAL SEC.		PAGE 1 OF 2
JOB NO. D08134	Conway County	DATE: March 23-24, 2010
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park)	Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger &
STATION: 4+35		EQUIPMENT: CME 750 w/CME Automatic
LOCATION: 12' Right of Center Line of Hwy. 154		HAMMER CORRECTION FACTOR: 1.28
LOGGED BY: Steven Faulkner		

COMPLETION DEPTH: 35.5

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.	% T C R	% R Q D
			SURFACE ELEVATION: 620.1 (Assumed)									
5			Moist, Medium Stiff, Brown and Gray Clay with Gravel (Sandstone Fragments) and Cobbles									
10			SHALE - Brown and Gray, Highly Weathered, Soft							6 10-14		
15			SHALE WITH POORLY-CEMENTED SANDSTONE - Brown and Gray, Highly Weathered, Soft							60 (3")		0
			SANDSTONE - Brown and Gray, Medium Bedded, Poorly-Cemented, with Slight Dip and Fractured Layers									0
			SANDSTONE - Brown and Gray, Medium Bedded, Cemented, with Slight Dip and Fractured Layers									0
			SANDSTONE WITH WEATHERED SHALE LAYERS - Brown and Gray, Medium Bedded, Cemented, with Slight Dip and Fractured Layers									0
20			SHALE INTERBEDDED WITH SANDSTONE - Dark Gray, Laminated, Hard, with Slight Dip (Shale); Gray, Laminated, Cemented, with Slight Dip (Sandstone)									10
25			SHALE WITH FREQUENT SANDSTONE AND WEATHERED SHALE LAYERS - Dark Gray, Laminated, Hard, with Slight Dip and Fractured Layers									0
30			SHALE WITH FREQUENT SANDSTONE SEAMS - Dark Gray, Laminated, Hard, with Slight Dip									58
35												

REMARKS: Hole capped off at 3.0' at 24 hrs.

ARKANSAS HWY. & TRANS. DEPARTMENT MATERIALS DIVISION - GEOTECHNICAL SEC.		BORING NO. 2 PAGE 2 OF 2
JOB NO. D08134	Conway County	DATE: March 23-24, 2010
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park)	Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger &
STATION: 4+35		EQUIPMENT: CME 750 w/CME Automatic
LOCATION: 12' Right of Center Line of Hwy. 154		HAMMER CORRECTION FACTOR: 1.28
LOGGED BY: Steven Faulkner		

COMPLETION DEPTH: 35.5

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	% R/D
			SURFACE ELEVATION: 620.1 (Assumed)									
			Boring Terminated									
40												
45												
50												
55												
60												
65												
70												

REMARKS: Hole capped off at 3.0' at 24 hrs.

ARKANSAS HWY. & TRANS. DEPARTMENT		BORING NO. 3
MATERIALS DIVISION - GEOTECHNICAL SEC.		PAGE 1 OF 2
JOB NO. D08134	Conway County	DATE: March 24, 2010
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park)	Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger &
STATION: 4+84		EQUIPMENT: CME 750 w/CME Automatic
LOCATION: 11' Right of Center Line of Hwy. 154		HAMMER CORRECTION FACTOR: 1.28
LOGGED BY: Steven Faulkner		

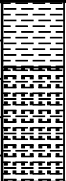
COMPLETION DEPTH: 39.7

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.	% T C R	% R Q D
			SURFACE ELEVATION: 614.4 (Assumed)									
5			Moist, Very Stiff to Stiff, Brown and Gray Clay with Gravel (Sandstone Fragments), Cobbles and some Weathered Shale							8 7-4		
10			Moist, Stiff, Brown and Gray Clay with Gravel (Sandstone Fragments), Cobbles and Organic Matter (Wood)									
15			Moist, Medium Dense, Brown and Gray Gravel (Sandstone Fragments) with Clay and Organic Matter (Wood) SANDSTONE WITH CLAY SEAMS - Brown and Gray, Poorly-Cemented							5 2-10		
20			SANDSTONE - Brown and Gray, Poorly-Cemented *									0
25			SHALE - Brown and Gray, Laminated, Highly Weathered, Medium Hard, with Slight Dip *									0
30			SHALE WITH OCCASIONAL SANDSTONE AND WEATHERED SHALE LAYERS - Dark Gray, Laminated, Hard, with Slight Dip									18
35			SHALE WITH OCCASIONAL SANDSTONE AND WEATHERED SHALE LAYERS - Dark Gray, Laminated, Hard, with Slight Dip									60

REMARKS: Water level was 8.5' at 24 hrs. * Total drilling circulation fluid loss was encountered from 14.7' to 24.7'.

ARKANSAS HWY. & TRANS. DEPARTMENT MATERIALS DIVISION - GEOTECHNICAL SEC.		BORING NO. 3 PAGE 2 OF 2
JOB NO. D08134	Conway County	DATE: March 24, 2010
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park)	Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger &
STATION: 4+84		EQUIPMENT: CME 750 w/CME Automatic
LOCATION: 11' Right of Center Line of Hwy. 154		HAMMER CORRECTION FACTOR: 1.28
LOGGED BY: Steven Faulkner		

COMPLETION DEPTH: 39.7

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: 614.4 (Assumed)									
40			SHALE WITH FREQUENT SANDSTONE LAYERS - Dark Gray, Laminated, Hard, with Slight Dip									68
45			Boring Terminated									
50												
55												
60												
65												
70												

REMARKS: Water level was 8.5' at 24 hrs. * Total drilling circulation fluid loss was encountered from 14.7' to 24.7'.

ARKANSAS HWY. & TRANS. DEPARTMENT MATERIALS DIVISION - GEOTECHNICAL SEC.		BORING NO. 4 PAGE 1 OF 2
JOB NO. D08134	Conway County	DATE: March 24-25, 2010
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park)	Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger &
STATION: 5+34		EQUIPMENT: CME 750 w/CME Automatic
LOCATION: 12' Right of Center Line of Hwy. 154		HAMMER CORRECTION FACTOR: 1.28
LOGGED BY: Steven Faulkner		

COMPLETION DEPTH: 54.6

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.	% T C R	% R Q D
			SURFACE ELEVATION: 609.8 (Assumed)									
5			Moist, Very Stiff, Brown and Gray Clay with Gravel (Sandstone Fragments) and Cobbles									
			SANDSTONE - Brown and Gray, Poorly-Cemented							60 (4")		
10			SANDSTONE WITH POORLY-CEMENTED SEAMS - Brown and Gray, Medium Bedded, Cemented, with Slight Dip and Fractured Layers *									0
15			SANDSTONE WITH POORLY-CEMENTED SEAMS - Brown and Gray, Medium Bedded, Cemented, with Slight Dip and Fractured Layers *									0
20			SANDSTONE WITH POORLY-CEMENTED SEAMS - Brown and Gray, Medium Bedded, Cemented, with Slight Dip and Fractured Layers *									0
25			SHALE WITH FREQUENT SANDSTONE AND WEATHERED SHALE SEAMS- Dark Gray, Laminated, Medium Hard to Hard, with Slight Dip *									0
30			SHALE WITH FREQUENT SANDSTONE AND WEATHERED SHALE SEAMS- Dark Gray, Laminated, Medium Hard to Hard, with Slight Dip *									0
35			SHALE WITH FREQUENT WEATHERED SHALE SEAMS - Dark Gray, Laminated, Hard, with Slight Dip *									0

REMARKS: * Total drilling circulation fluid loss was encountered from 6.3' to 10.3' and from 14.6' to 24.6'.

ARKANSAS HWY. & TRANS. DEPARTMENT MATERIALS DIVISION - GEOTECHNICAL SEC.		BORING NO. 4 PAGE 2 OF 2
JOB NO. D08134	Conway County	DATE: March 24-25, 2010
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park)	Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger &
STATION: 5+34		EQUIPMENT: CME 750 w/CME Automatic
LOCATION: 12' Right of Center Line of Hwy. 154		HAMMER CORRECTION FACTOR: 1.28
LOGGED BY: Steven Faulkner		

COMPLETION DEPTH: 54.6

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.	% T C R	% R Q D
			SURFACE ELEVATION: 609.8 (Assumed) with Slight Dip									24
40			SHALE WITH FREQUENT SANDSTONE AND OCCASIONAL WEATHERED SHALE SEAMS- Dark Gray, Laminated, Hard, with Slight Dip									62
45			SHALE WITH FREQUENT SANDSTONE AND OCCASIONAL WEATHERED SHALE SEAMS- Dark Gray, Laminated, Hard, with Slight Dip and some Vertically Fractured Layers									24
50			SHALE WITH FREQUENT SANDSTONE SEAMS - Dark Gray, Laminated, Hard, with Slight Dip									84
55			Boring Terminated									
60												
65												
70												

REMARKS: * Total drilling circulation fluid loss was encountered from 6.3' to 10.3' and from 14.6' to 24.6'.

ARKANSAS HWY. & TRANS. DEPARTMENT MATERIALS DIVISION - GEOTECHNICAL SEC.	BORING NO. 5 PAGE 1 OF 2
JOB NO. D08134 Conway County	DATE: February 26, 2020
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park) Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger - Diamond Core
STATION: 99+76	EQUIPMENT: CME 75
LOCATION: 13' Right of Construction Centerline	HAMMER CORRECTION FACTOR: 1.37
LOGGED BY: Austin Dillman	

COMPLETION DEPTH: 42

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.	% T C R	% R Q D
			SURFACE ELEVATION: 1031.8									
5			Gravel							7 7-6		
10			Moist, Medium Dense, Brown and Gray Gravel with Clay							3 3-3		
15			Moist, Medium Stiff, Brown and Gray Clay with Gravel									
15			Cobbles and Boulders							10 (0")	82	82
20			SANDSTONE BOULDER - Slightly Weathered, Well Cemented, Light Brown*								32	14
25			SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Slightly Weathered, Medium Hard, Light Brown and Gray								100	100
30											98	98
35			SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Unweathered,								100	100

REMARKS: *Total water loss at approximately 14.7 feet below ground level

ARKANSAS HWY. & TRANS. DEPARTMENT MATERIALS DIVISION - GEOTECHNICAL SEC.	BORING NO. 5 PAGE 2 OF 2
JOB NO. D08134 Conway County JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park) Slide No. 2 STATION: 99+76 LOCATION: 13' Right of Construction Centerline LOGGED BY: Austin Dillman	DATE: February 26, 2020 TYPE OF DRILLING: Hollow Stem Auger - Diamond Core EQUIPMENT: CME 75 HAMMER CORRECTION FACTOR: 1.37

COMPLETION DEPTH: 42

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	% R/D
			SURFACE ELEVATION: 1031.8									
			Medium Hard, Light Brown and Gray									
40											100	100
45			Boring Terminated									
50												
55												
60												
65												
70												

REMARKS: *Total water loss at approximately 14.7 feet below ground level

ARKANSAS HWY. & TRANS. DEPARTMENT		BORING NO. 6
MATERIALS DIVISION - GEOTECHNICAL SEC.		PAGE 1 OF 2
JOB NO. D08134	Conway County	DATE: March 18 & 23, 2010
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park)	Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger &
STATION: 100+97		EQUIPMENT: CME 750 w/CME Automatic
LOCATION: 11' Right of Center Line of Hwy. 154		HAMMER CORRECTION FACTOR: 1.28
LOGGED BY: Casto & Faulkner		

COMPLETION DEPTH: 55

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.	% T C R	% R Q D
			SURFACE ELEVATION: 490.3 (Assumed)									
5		X	Moist, Medium Stiff, Brown and Gray Clay with some Gravel (Sandstone Fragments) and Cobbles							4 2-3		
10		X	Moist, Medium Stiff, Brown and Gray Clay with some Gravel (Sandstone Fragments)							4 8-7		
15		X	SHALE - Brown and Gray, Highly Weathered, Soft							18 17-14		
20		X	SHALE - Brown and Gray, Weathered, Medium Hard							60 (5")		
25		X	SHALE - Brown and Gray, Weathered, Medium Hard							27 55-60 (4")		
30												0
35			SHALE - Brown and Gray, Laminated, Weathered, Medium Hard, with Slight Dip									0

REMARKS: Water level was 18.5' at 24 hrs.

ARKANSAS HWY. & TRANS. DEPARTMENT		BORING NO. 6
MATERIALS DIVISION - GEOTECHNICAL SEC.		PAGE 2 OF 2
JOB NO. D08134	Conway County	DATE: March 18 & 23, 2010
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park)	Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger &
STATION: 100+97		EQUIPMENT: CME 750 w/CME Automatic
LOCATION: 11' Right of Center Line of Hwy. 154		HAMMER CORRECTION FACTOR: 1.28
LOGGED BY: Casto & Faulkner		

COMPLETION DEPTH: 55

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: 490.3 (Assumed)									
40												0
45			SHALE WITH OCCASIONAL WEATHERED SHALE SEAMS - Dark Gray, Laminated, Medium Hard, with Slight Dip									10
50												0
55			SHALE WITH FREQUENT SANDSTONE AND WEATHERED SHALE SEAMS- Dark Gray, Laminated, Hard, with Slight Dip									26
60			Boring Terminated									
65												
70												

REMARKS: Water level was 18.5' at 24 hrs.

ARKANSAS HWY. & TRANS. DEPARTMENT MATERIALS DIVISION - GEOTECHNICAL SEC.		BORING NO. 7 PAGE 1 OF 2
JOB NO. D08134 Conway County	DATE: February 10, 2020	
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park) Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger - Diamond Core	
STATION: 101+12	EQUIPMENT: CME 75	
LOCATION: 15' Right of Centerline	HAMMER CORRECTION FACTOR: 1.28	
LOGGED BY: Austin Dillman		

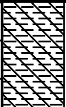
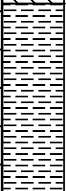
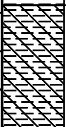
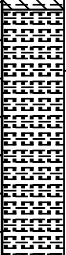
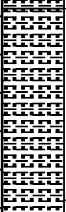
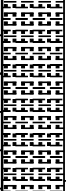
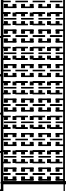
COMPLETION DEPTH: 67.8

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.	% T C R	% R Q D
			SURFACE ELEVATION: 1017.6									
5			Gravel									
10			Moist, Loose, Brown Sand							4 3-4		
15			Moist, Very Stiff, Brown Clay with Gravel (Rock Fragments)							5 8-11		
20			Moist, Hard, Brown Clay							22 19-18		
25			Moist, Stiff, Brown Clay							6 6-9		
30			Moist, Very Stiff, Brown Clay							7 12-17		
35			SHALE - Highly Weathered, Soft, Brown							27 56-60 (11")	82	0
			SHALE - Highly Weathered, Soft, Frequent									

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT		BORING NO. 7
MATERIALS DIVISION - GEOTECHNICAL SEC.		PAGE 2 OF 2
JOB NO. D08134	Conway County	DATE: February 10, 2020
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park)	Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger - Diamond Core
STATION: 101+12		EQUIPMENT: CME 75
LOCATION: 15' Right of Centerline		HAMMER CORRECTION FACTOR: 1.28
LOGGED BY: Austin Dillman		

COMPLETION DEPTH: 67.8

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: 1017.6									
			Clay Layers, Dark Brown								36	0
40			SHALE - Weathered with Highly Weathered Layers and Seams, Medium Hard with Soft Layers and Seams, Occasional Fractures, Gray								66	0
45			SHALE - Highly Weathered, Soft, Brown and Gray								74	26
50			SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Slightly Weathered, Medium Hard, Frequent Fractures, Gray								100	52
55											46	0
60			SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Weathered, Medium Hard with Occasional Soft Layers, Frequent Fractures, Gray								48	0
65											68	0
70			Boring Terminated									

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT		BORING NO. 8
MATERIALS DIVISION - GEOTECHNICAL SEC.		PAGE 1 OF 2
JOB NO. D08134	Conway County	DATE: March 17, 2010
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park)	Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger &
STATION: 101+35		EQUIPMENT: CME 750 w/CME Automatic
LOCATION: 8' Right of Center Line of Hwy. 154		HAMMER CORRECTION FACTOR: 1.28
LOGGED BY: Steven Faulkner		

COMPLETION DEPTH: 35.2

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.	% T C R	% R Q D
			SURFACE ELEVATION: 486.5 (Assumed)									
			Asphalt Pavement (5")									
5			Moist, Stiff, Brown and Gray Clay with some Gravel (Sandstone Fragments)							5 6-8		
10			Moist, Stiff, Brown and Gray Clay with some Gravel (Sandstone Fragments) and Cobbles							11 16-19		
15			SHALE - Brown and Gray, Highly Weathered, Soft							11 13-15		
20			SHALE - Brown and Gray, Highly Weathered, Medium Hard							21 37-44		
25			SHALE - Brown and Gray, Laminated, Weathered, Medium Hard, with Slight Dip							32 60 (2")		0
30			SHALE - Brown and Gray, Laminated, Slightly Weathered, Medium Hard, with Slight Dip									50
35			SHALE - Brown and Gray, Laminated, Weathered, Medium Hard, with Slight Dip									

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT MATERIALS DIVISION - GEOTECHNICAL SEC.	BORING NO. 8 PAGE 2 OF 2
JOB NO. D08134 Conway County JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park) Slide No. 2 STATION: 101+35 LOCATION: 8' Right of Center Line of Hwy. 154 LOGGED BY: Steven Faulkner	DATE: March 17, 2010 TYPE OF DRILLING: Hollow Stem Auger & EQUIPMENT: CME 750 w/CME Automatic HAMMER CORRECTION FACTOR: 1.28

COMPLETION DEPTH: 35.2

D E P T H FT.	S Y M B O L	S A M P L E S	DESCRIPTION OF MATERIAL	SOIL GROUP	P L A S T I C L I M I T	% M O I S T.	L I Q U I D L I M I T	D R Y W E I G H T	L B S P E R C U. F T.	N O. O F B L O W S P E R 6- I N.	% T C R	% R Q D
			SURFACE ELEVATION: 486.5 (Assumed)									
			Boring Terminated									
40												
45												
50												
55												
60												
65												
70												

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT		BORING NO. 9
MATERIALS DIVISION - GEOTECHNICAL SEC.		PAGE 1 OF 1
JOB NO. D08134	Conway County	DATE: February 11, 2020
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park)	Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger - Diamond Core
STATION: 101+54		EQUIPMENT: CME 75
LOCATION: 17' Right of Centerline		HAMMER CORRECTION FACTOR: 1.37
LOGGED BY: Austin Dillman		

COMPLETION DEPTH: 22.3

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.	% T C R	% R Q D
			SURFACE ELEVATION: 1013.0									
			Gravel									
5			Moist, Loose, Dark Brown Gravel with Clay							3 2-3		
			COBBLES AND BOULDERS									
10			SANDSTONE BOULDER - Slightly Weathered, Cemented, Light Gray*								73	54
15			Clay								4	0
20			SHALE - Highly Weathered, Medium Hard, Occasional Fractures, Slightly Dipping, Brown and Gray								68	0
			SHALE - Highly Weathered, Medium Hard with Soft Layers, Occasional Fractures, Slightly Dipping, Brown and Gray**								35	0
25			Boring Terminated									
30												
35												

REMARKS: *Total water loss at approximately 7.5 feet below ground level. **Boring terminated prematurely due to wireline failure.

ARKANSAS HWY. & TRANS. DEPARTMENT		BORING NO. 10
MATERIALS DIVISION - GEOTECHNICAL SEC.		PAGE 1 OF 2
JOB NO. D08134	Conway County	DATE: February 19, 2020
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park)	Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger - Diamond Core
STATION: 101+55		EQUIPMENT: CME 75
LOCATION: 16' Right of Centerline		HAMMER CORRECTION FACTOR: 1.37
LOGGED BY: Austin Dillman		

COMPLETION DEPTH: 47.8

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.	% T C R	% R Q D
			SURFACE ELEVATION: 1013.0									
5			Gravel									
10			Moist, Medium Dense, Brown and Gray Gravel with Clay							3 7-10		
15			Moist, Stiff, Brown Clay with Some Gravel							4 4-5		
20			Moist, Stiff, Brown Clay							3 4-5		
25			SHALE - Highly Weathered, Medium Hard, Light Brown*							20 25-38		
30			SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Highly Weathered, Medium Hard, Frequent Fractures, Brown							56 60 (10")	40	0
35			SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Weathered, Medium Hard, Occasional Fractures, Brown								92	0

REMARKS: *Total water loss at approximately 25.8 feet below ground level.

ARKANSAS HWY. & TRANS. DEPARTMENT MATERIALS DIVISION - GEOTECHNICAL SEC.	BORING NO. 10 PAGE 2 OF 2
JOB NO. D08134 Conway County JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park) Slide No. 2 STATION: 101+55 LOCATION: 16' Right of Centerline LOGGED BY: Austin Dillman	DATE: February 19, 2020 TYPE OF DRILLING: Hollow Stem Auger - Diamond Core EQUIPMENT: CME 75 HAMMER CORRECTION FACTOR: 1.37

COMPLETION DEPTH: 47.8

D E P T H FT.	S Y M B O L	S A M P L E S	DESCRIPTION OF MATERIAL	SOIL GROUP	P L A S T I C L I M I T	% M O I S T.	L I Q U I D L I M I T	D R Y W E I G H T	L B S P E R C U. F T.	N O. O F B L O W S P E R 6- I N.	% T C R	% R Q D
			SURFACE ELEVATION: 1013.0									
40	[Hatched Pattern]		SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Slightly Weathered, Medium Hard, Frequent Fractures, Brown and Gray								98	84
45											82	20
50											64	28
55			Boring Terminated									
60												
65												
70												

REMARKS: *Total water loss at approximately 25.8 feet below ground level.

ARKANSAS HWY. & TRANS. DEPARTMENT		BORING NO. 11
MATERIALS DIVISION - GEOTECHNICAL SEC.		PAGE 1 OF 2
JOB NO. D08134	Conway County	DATE: March 16, 2010
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park)	Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger &
STATION: 101+67		EQUIPMENT: CME 750 w/CME Automatic
LOCATION: 21' Right of Center Line of Hwy. 154		HAMMER CORRECTION FACTOR: 1.28
LOGGED BY: Steven Faulkner		

COMPLETION DEPTH: 35.5

D E P T H	S Y M B O L	S A M P L E S	DESCRIPTION OF MATERIAL	SOIL GROUP	P L A S T I C L I M I T	% M O I S T.	L I Q U I D L I M I T	D R Y W E I G H T	L B S P E R C U. F T.	N O. O F B L O W S P E R 6- I N.	% T C R	% R Q D
			SURFACE ELEVATION: 478.6 (Assumed)									
			Moist, Medium Stiff, Brown and Gray Clay with some Sand									
5			Moist, Very Loose, Reddish Brown Sand							2 2-1		
10			Moist, Very Stiff, Reddish Brown Clay with some Sand							2 6-11		
15			SANDSTONE - Brown, Poorly-Cemented							24 31-36		
20			SHALE - Brown and Gray, Highly Weathered, Medium Hard							48 60 (3")		
25			SHALE - Brown and Gray, Laminated, Weathered to Highly Weathered, Medium Hard, with Slight Dip							60		0
30			SHALE - Brown and Gray, Laminated, Weathered, Medium Hard, with Slight Dip									0
35			SHALE - Brown and Gray, Laminated, Weathered, Medium Hard, with Slight Dip									0

REMARKS: Water level was 11.5' at 24 hrs.

ARKANSAS HWY. & TRANS. DEPARTMENT MATERIALS DIVISION - GEOTECHNICAL SEC.	BORING NO. 11 PAGE 2 OF 2
JOB NO. D08134 Conway County JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park) Slide No. 2 STATION: 101+67 LOCATION: 21' Right of Center Line of Hwy. 154 LOGGED BY: Steven Faulkner	DATE: March 16, 2010 TYPE OF DRILLING: Hollow Stem Auger & EQUIPMENT: CME 750 w/CME Automatic HAMMER CORRECTION FACTOR: 1.28

COMPLETION DEPTH: 35.5

D E P T H FT.	S Y M B O L	S A M P L E S	DESCRIPTION OF MATERIAL	SOIL GROUP	P L A S T I C L I M I T	% M O I S T.	L I Q U I D L I M I T	D R Y W E I G H T	L B S P E R C U. F T.	N O. O F B L O W S P E R 6- I N.	% T C R	% R Q D
			SURFACE ELEVATION: 478.6 (Assumed)									
			Boring Terminated									
40												
45												
50												
55												
60												
65												
70												

REMARKS: Water level was 11.5' at 24 hrs.

ARKANSAS HWY. & TRANS. DEPARTMENT MATERIALS DIVISION - GEOTECHNICAL SEC.	BORING NO. 12 PAGE 1 OF 2
JOB NO. D08134 Conway County	DATE: February 24, 2020
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park) Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger - Diamond Core
STATION: 102+02	EQUIPMENT: CME 75
LOCATION: 14' Right of Centerline	HAMMER CORRECTION FACTOR: 1.28
LOGGED BY: Austin Dillman	

COMPLETION DEPTH: 48.2

D E P T H FT.	S Y M B O L	S A M P L E S	DESCRIPTION OF MATERIAL	SOIL GROUP	P L A S T I C L I M I T	% M O I S T.	L I Q U I D L I M I T	D R Y W E I G H T	L B S P E R C U. F T.	N O. O F B L O W S P E R 6- I N.	% T C R	% R Q D
			SURFACE ELEVATION: 1008.6									
5			Gravel									
10			Moist, Loose, Brown Gravel with Clay							4 6-4		
15			Moist, Very Hard, Brown Clay with Trace Gravel							5 20 (6")		
20			Moist, Stiff, Brown Clay with Trace Gravel (Shale Fragments)							5 7-5		
25			Cobbles and Boulders									
30			SHALE - Highly Weathered, Medium Hard, Light Brown							12 32-36		
35			SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Weathered,							23 37-50	16	0
											94	42

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT MATERIALS DIVISION - GEOTECHNICAL SEC.	BORING NO. 12 PAGE 2 OF 2
JOB NO. D08134 Conway County JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park) Slide No. 2 STATION: 102+02 LOCATION: 14' Right of Centerline LOGGED BY: Austin Dillman	DATE: February 24, 2020 TYPE OF DRILLING: Hollow Stem Auger - Diamond Core EQUIPMENT: CME 75 HAMMER CORRECTION FACTOR: 1.28


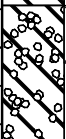
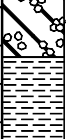
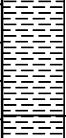
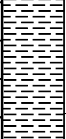


COMPLETION DEPTH: 48.2

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: 1008.6												
			Medium Hard, Occasional Fractures, Light Gray								96	0
40											80	10
45			SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Weathered, Medium Hard, Light Brown and Gray								82	24
50			Boring Terminated									
55												
60												
65												
70												

REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT		BORING NO. 13
MATERIALS DIVISION - GEOTECHNICAL SEC.		PAGE 1 OF 2
JOB NO. D08134	Conway County	DATE: March 16, 2010
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park)	Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger &
STATION: 102+27		EQUIPMENT: CME 750 w/CME Automatic
LOCATION: 22' Right of Center Line of Hwy. 154		HAMMER CORRECTION FACTOR: 1.28
LOGGED BY: Steven Faulkner		

COMPLETION DEPTH: 39.4

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.	% T C R	% R Q D
			SURFACE ELEVATION: 477.3 (Assumed)									
5		⊗	Moist, Medium Stiff, Brown and Gray Clay with some Gravel (Sandstone Fragments)							3 4-4		
10		⊗	Moist, Stiff, Brown and Gray Clay with Gravel (Sandstone Fragments)							3 7-6		
15		⊗	Moist, Soft, Brown and Gray Clay with Gravel (Sandstone Fragments)							1 1-2		
20		⊗	SHALE - Brown and Gray, Highly Weathered, Soft							12 14-16		
25		⊗	SHALE - Brown and Gray, Highly Weathered, Medium Hard							44 60 (2")		
30												0
35			SHALE - Brown and Gray, Laminated, Weathered, Medium Hard, with Slight Dip									0

REMARKS: Water level was 15.5' at 24 hrs.

ARKANSAS HWY. & TRANS. DEPARTMENT MATERIALS DIVISION - GEOTECHNICAL SEC.	BORING NO. 13 PAGE 2 OF 2
JOB NO. D08134 Conway County JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park) Slide No. 2 STATION: 102+27 LOCATION: 22' Right of Center Line of Hwy. 154 LOGGED BY: Steven Faulkner	DATE: March 16, 2010 TYPE OF DRILLING: Hollow Stem Auger & EQUIPMENT: CME 750 w/CME Automatic HAMMER CORRECTION FACTOR: 1.28

COMPLETION DEPTH: 39.4

D E P T H FT.	S Y M B O L	S A M P L E S	DESCRIPTION OF MATERIAL	SOIL GROUP	P L A S T I C L I M I T	% M O I S T.	L I Q U I D L I M I T	D R Y W E I G H T	L B S P E R C U. F T.	N O. O F B L O W S P E R 6 - I N.	% T C R	% R Q D
			SURFACE ELEVATION: 477.3 (Assumed)									
												0
40			Boring Terminated									
45												
50												
55												
60												
65												
70												

REMARKS: Water level was 15.5' at 24 hrs.

ARKANSAS HWY. & TRANS. DEPARTMENT MATERIALS DIVISION - GEOTECHNICAL SEC.	BORING NO. 14 PAGE 1 OF 2
JOB NO. D08134 Conway County	DATE: March 17 & 22, 2010
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park) Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger &
STATION: 102+55	EQUIPMENT: CME 750 w/CME Automatic
LOCATION: 20' Right of Center Line of Hwy. 154	HAMMER CORRECTION FACTOR: 1.28
LOGGED BY: Faulkner & Sloan	

COMPLETION DEPTH: 55

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.	% T C R	% R Q D
			SURFACE ELEVATION: 475.2 (Assumed)									
5		X	Moist, Medium Stiff, Brown and Gray Clay with Gravel (Sandstone Fragments) and Cobbles							2 3-3		
10		X	Moist, Stiff, Brown and Gray Clay with some Gravel (Sandstone Fragments)							10 10-4		
15		X	Moist, Very Hard, Brown and Gray Clay with some Gravel (Sandstone Fragments)							10 28-60 (2")		
20		X	SHALE - Brown and Gray, Highly Weathered, Soft							10 11-21		
25		X	SHALE - Brown and Gray, Highly Weathered, Medium Hard							25 60 (2")		
30			SHALE - Brown and Gray, Laminated, Weathered, Medium Hard, with Slight Dip									0
35												0

REMARKS: Water level was 22.0' at 24 hrs.

ARKANSAS HWY. & TRANS. DEPARTMENT		BORING NO. 14
MATERIALS DIVISION - GEOTECHNICAL SEC.		PAGE 2 OF 2
JOB NO. D08134	Conway County	DATE: March 17 & 22, 2010
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park)	Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger &
STATION: 102+55		EQUIPMENT: CME 750 w/CME Automatic
LOCATION: 20' Right of Center Line of Hwy. 154		HAMMER CORRECTION FACTOR: 1.28
LOGGED BY: Faulkner & Sloan		

COMPLETION DEPTH: 55

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.	% T C R	% R Q D
			SURFACE ELEVATION: 475.2 (Assumed)									
40			SHALE - Brown and Dark Gray, Laminated, Highly Weathered, Medium Hard, with Slight Dip									0
45			SHALE - Brown and Dark Gray, Laminated, Highly Weathered to Weathered, Medium Hard, with Slight Dip									93
50			SHALE - Brown and Dark Gray, Laminated, Highly Weathered, Medium Hard, with Slight Dip									8
55			SHALE WITH FREQUENT GRAY SANDSTONE AND HIGHLY WEATHERED SHALE SEAMS - Brown and Dark Gray, Laminated, Medium Hard, with Slight Dip									18
60			Boring Terminated									
65												
70												

REMARKS: Water level was 22.0' at 24 hrs.

ARKANSAS HWY. & TRANS. DEPARTMENT		BORING NO. 15
MATERIALS DIVISION - GEOTECHNICAL SEC.		PAGE 1 OF 2
JOB NO. D08134	Conway County	DATE: February 25, 2020
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park)	Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger - Diamond Core
STATION: 102+77		EQUIPMENT: CME 75
LOCATION: 14' Right of Construction Centerline		HAMMER CORRECTION FACTOR: 1.37
LOGGED BY: Austin Dillman		

COMPLETION DEPTH: 52.9

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.	% T C R	% R Q D
			SURFACE ELEVATION: 1002.2									
5			Gravel									
10			Moist, Stiff, Brown Clay with Traces Organic Matter							3 6-7		
15			Dry, Hard, Brown Clay							11 16-17		
20			SHALE - Highly Weathered, Very Soft, Brown and Gray							8 10-17		
25			SHALE - Highly Weathered, Soft, Brown and Gray							8 13-21		
30			SHALE - Highly Weathered, Medium Hard, Brown and Gray							13 32-60 (11")		
35			SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Weathered,								60	0

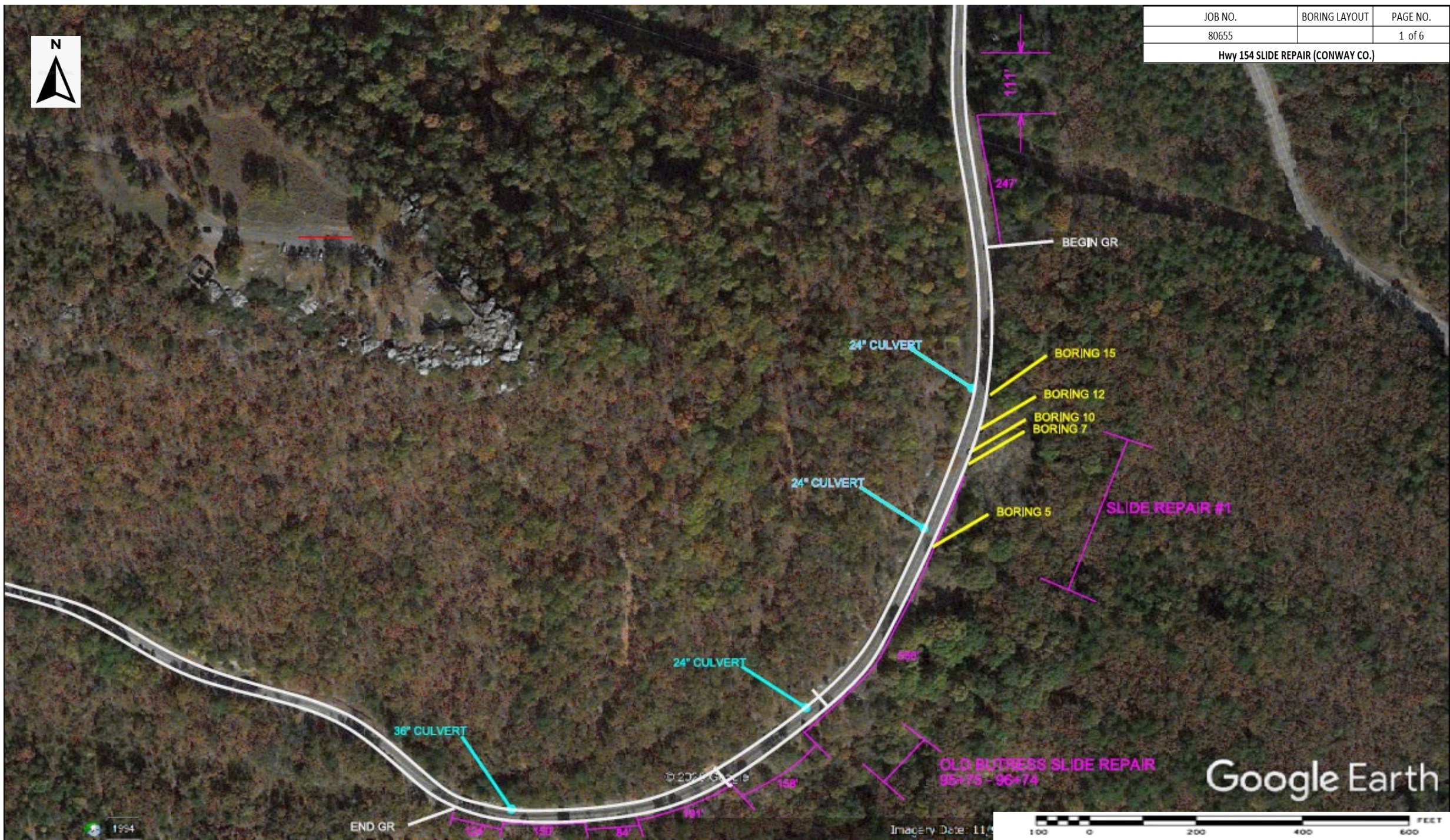
REMARKS:

ARKANSAS HWY. & TRANS. DEPARTMENT		BORING NO. 15
MATERIALS DIVISION - GEOTECHNICAL SEC.		PAGE 2 OF 2
JOB NO. D08134	Conway County	DATE: February 25, 2020
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park)	Slide No. 2	TYPE OF DRILLING: Hollow Stem Auger - Diamond Core
STATION: 102+77		EQUIPMENT: CME 75
LOCATION: 14' Right of Construction Centerline		HAMMER CORRECTION FACTOR: 1.37
LOGGED BY: Austin Dillman		

COMPLETION DEPTH: 52.9

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.	% T C R	% R Q D
			SURFACE ELEVATION: 1002.2									
			Medium Hard, Frequent Fractures, Brown and Gray								72	10
40			SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Slightly Weathered, Medium Hard, Frequent Fractures, Brown and Gray								88	0
45			SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Slightly Weathered, Medium Hard, Occasional Fractures, Brown and Gray								100	76
50											98	72
55			Boring Terminated									
60												
65												
70												

REMARKS:



Google Earth

Imagery Date: 11/19

END GR

OLD BUTRESS SLIDE REPAIR
95+75 - 96+74

SLIDE REPAIR #1

BORING 15

BORING 12

BORING 10
BORING 7

BORING 5

BEGIN GR

24" CULVERT

24" CULVERT

24" CULVERT

36" CULVERT

111'

247'

538'

538'

158'

191'

84'

150'

154'

1994

Hwy 154 SLIDE REPAIR (CONWAY CO.)

ARKANSAS DEPARTMENT OF TRANSPORTATION MATERIALS DIVISION - GEOTECHNICAL SEC.				BORING NO. 5						
JOB NO. Conway County				PAGE 1 OF 2						
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park) Slide No. 2				DATE: February 26, 2020						
STATION: 99+76				TYPE OF DRILLING: Hollow Stem Auger - Diamond Core						
LOCATION: 13' Right of Construction Centerline				EQUIPMENT: CME 75						
LOGGED BY: Austin Dillman				HAMMER CORRECTION FACTOR: 1.37						
COMPLETION DEPTH: 42										
DEPTH FT.	SYMBOLS	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU FT.	NO. OF BLOWS PER 6-IN.	% T C R	% R Q D
		SURFACE ELEVATION: 1031.8								
5		Gravel						7 7-6		
10		Moist, Medium Dense, Brown and Gray Gravel with Clay						3 3-3		
15		Moist, Medium Stiff, Brown and Gray Clay with Gravel						10 (0")	82	82
20		Cobbles and Boulders							32	14
25		SANDSTONE BOULDER - Slightly Weathered, Well Cemented, Light Brown*								
30		SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Slightly Weathered, Medium Hard, Light Brown and Gray							100	100
35		SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Unweathered,							98	98
									100	100
REMARKS: *Total water loss at approximately 14.7 feet below ground level										

ARKANSAS DEPARTMENT OF TRANSPORTATION MATERIALS DIVISION - GEOTECHNICAL SEC.				BORING NO. 5						
JOB NO. Conway County				PAGE 2 OF 2						
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park) Slide No. 2				DATE: February 26, 2020						
STATION: 99+76				TYPE OF DRILLING: Hollow Stem Auger - Diamond Core						
LOCATION: 13' Right of Construction Centerline				EQUIPMENT: CME 75						
LOGGED BY: Austin Dillman				HAMMER CORRECTION FACTOR: 1.37						
COMPLETION DEPTH: 42										
DEPTH FT.	SYMBOLS	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU FT.	NO. OF BLOWS PER 6-IN.	% T C R	% R Q D
		SURFACE ELEVATION: 1031.8								
40		Medium Hard, Light Brown and Gray								
45		Boring Terminated								
50										
55										
60										
65										
70										
									100	100
REMARKS: *Total water loss at approximately 14.7 feet below ground level										

Hwy 154 SLIDE REPAIR (CONWAY CO.)

ARKANSAS DEPARTMENT OF TRANSPORTATION MATERIALS DIVISION - GEOTECHNICAL SEC.		BORING NO. 7 PAGE 1 OF 2								
JOB NO. Conway County		DATE: February 10, 2020								
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park) Slide No. 2		TYPE OF DRILLING: Hollow Stem Auger - Diamond Core								
STATION: 101+12		EQUIPMENT: CME 75								
LOCATION: 15' Right of Centerline		HAMMER CORRECTION FACTOR: 1.28								
LOGGED BY: Austin Dillman		COMPLETION DEPTH: 67.8								
DEPTH FT.	SAMPLES	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT	NO. OF BLOWS PER 6-IN.	% T C R	% R O D
		SURFACE ELEVATION: 1017.6								
5		Gravel						4 3-4		
10		Moist, Loose, Brown Sand						5 8-11		
15		Moist, Very Stiff, Brown Clay with Gravel (Rock Fragments)						22 19-18		
20		Moist, Hard, Brown Clay						6 6-9		
25		Moist, Stiff, Brown Clay						7 12-17		
30		Moist, Very Stiff, Brown Clay						27 56-60 (11")	82	0
35		SHALE - Highly Weathered, Soft, Brown								
		SHALE - Highly Weathered, Soft, Frequent Clay								
REMARKS:										

ARKANSAS DEPARTMENT OF TRANSPORTATION MATERIALS DIVISION - GEOTECHNICAL SEC.		BORING NO. 7 PAGE 2 OF 2								
JOB NO. Conway County		DATE: February 10, 2020								
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park) Slide No. 2		TYPE OF DRILLING: Hollow Stem Auger - Diamond Core								
STATION: 101+12		EQUIPMENT: CME 75								
LOCATION: 15' Right of Centerline		HAMMER CORRECTION FACTOR: 1.28								
LOGGED BY: Austin Dillman		COMPLETION DEPTH: 67.8								
DEPTH FT.	SAMPLES	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT	NO. OF BLOWS PER 6-IN.	% T C R	% R O D
		SURFACE ELEVATION: 1017.6								
40		Layers, Dark Brown							36	0
45		SHALE - Weathered with Highly Weathered Layers and Seams, Medium Hard with Soft Layers and Seams, Occasional Fractures, Gray							66	0
50		SHALE - Highly Weathered, Soft, Brown and Gray							74	26
55		SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Slightly Weathered, Medium Hard, Frequent Fractures, Gray							100	52
60		SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Weathered, Medium Hard with Occasional Soft Layers, Frequent Fractures, Gray							46	0
65									48	0
70									68	0
		Boring Terminated								
REMARKS:										

Hwy 154 SLIDE REPAIR (CONWAY CO.)

ARKANSAS DEPARTMENT OF TRANSPORTATION MATERIALS DIVISION - GEOTECHNICAL SEC.				BORING NO. 10 PAGE 1 OF 2						
JOB NO. Conway County				DATE: February 19, 2020						
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park) Slide No. 2				TYPE OF DRILLING: Hollow Stem Auger - Diamond Core						
STATION: 101+55				EQUIPMENT: CME 75						
LOCATION: 16' Right of Centerline				HAMMER CORRECTION FACTOR: 1.37						
LOGGED BY: Austin Dillman				COMPLETION DEPTH: 47.8						
DEPTH FT.	SYMBOLS	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU FT.	NO. OF BLOWS PER 6-IN.	% T C R	% R Q D
		SURFACE ELEVATION: 1013.0								
5		Gravel								
10		Moist, Medium Dense, Brown and Gray Gravel with Clay					3 7-10			
15		Moist, Stiff, Brown Clay with Some Gravel					4 4-5			
20		Moist, Stiff, Brown Clay					3 4-5			
25		SHALE - Highly Weathered, Medium Hard, Light Brown*					20 25-38			
30		SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Highly Weathered, Medium Hard, Frequent Fractures, Brown					56 60 (10")	40	0	
35		SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Weathered, Medium Hard, Occasional Fractures, Brown						92	0	
REMARKS: *Total water loss at approximately 25.8 feet below ground level.										

ARKANSAS DEPARTMENT OF TRANSPORTATION MATERIALS DIVISION - GEOTECHNICAL SEC.				BORING NO. 10 PAGE 2 OF 2						
JOB NO. Conway County				DATE: February 19, 2020						
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park) Slide No. 2				TYPE OF DRILLING: Hollow Stem Auger - Diamond Core						
STATION: 101+55				EQUIPMENT: CME 75						
LOCATION: 16' Right of Centerline				HAMMER CORRECTION FACTOR: 1.37						
LOGGED BY: Austin Dillman				COMPLETION DEPTH: 47.8						
DEPTH FT.	SYMBOLS	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LBS PER CU FT.	NO. OF BLOWS PER 6-IN.	% T C R	% R Q D
		SURFACE ELEVATION: 1013.0								
40		SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Slightly Weathered, Medium Hard, Frequent Fractures, Brown and Gray							98	84
45									82	20
50									64	28
55										
60										
65										
70		Boring Terminated								
REMARKS: *Total water loss at approximately 25.8 feet below ground level.										

Hwy 154 SLIDE REPAIR (CONWAY CO.)

ARKANSAS DEPARTMENT OF TRANSPORTATION MATERIALS DIVISION - GEOTECHNICAL SEC.		BORING NO. 12 PAGE 1 OF 2									
JOB NO. Conway County		DATE: February 24, 2020									
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park) Slide No. 2		TYPE OF DRILLING: Hollow Stem Auger - Diamond Core									
STATION: 102+02		EQUIPMENT: CME 75									
LOCATION: 14' Right of Centerline		HAMMER CORRECTION FACTOR: 1.28									
LOGGED BY: Austin Dillman		COMPLETION DEPTH: 48.2									
DEPTH FT.	SAMPLES	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT	LEB PER CUFT.	NO. OF BLOWS PER 6-IN.	% T C R	% R Q D
		SURFACE ELEVATION: 1008.6									
5		Gravel						4 6-4			
10		Moist, Loose, Brown Gravel with Clay						5 20 (6")			
15		Moist, Very Hard, Brown Clay with Trace Gravel						5 7-5			
20		Moist, Stiff, Brown Clay with Trace Gravel (Shale Fragments)						12 32-36			
25		Cobbles and Boulders						23 37-50		16	0
30		SHALE - Highly Weathered, Medium Hard, Light Brown								94	42
35		SHALE WITH FREQUENT SANDSTONE									
REMARKS:											

ARKANSAS DEPARTMENT OF TRANSPORTATION MATERIALS DIVISION - GEOTECHNICAL SEC.		BORING NO. 12 PAGE 2 OF 2									
JOB NO. Conway County		DATE: February 24, 2020									
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park) Slide No. 2		TYPE OF DRILLING: Hollow Stem Auger - Diamond Core									
STATION: 102+02		EQUIPMENT: CME 75									
LOCATION: 14' Right of Centerline		HAMMER CORRECTION FACTOR: 1.28									
LOGGED BY: Austin Dillman		COMPLETION DEPTH: 48.2									
DEPTH FT.	SAMPLES	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT	LEB PER CUFT.	NO. OF BLOWS PER 6-IN.	% T C R	% R Q D
		SURFACE ELEVATION: 1008.6									
40		PARTINGS AND SEAMS - Weathered, Medium Hard, Occasional Fractures, Light Gray								96	0
45		SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Weathered, Medium Hard, Light Brown and Gray								82	24
50		Boring Terminated									
55											
60											
65											
70											
REMARKS:											

Hwy 154 SLIDE REPAIR (CONWAY CO.)

ARKANSAS DEPARTMENT OF TRANSPORTATION MATERIALS DIVISION - GEOTECHNICAL SEC.		BORING NO. 15 PAGE 1 OF 2								
JOB NO. Conway County		DATE: February 25, 2020								
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park) Slide No. 2		TYPE OF DRILLING: Hollow Stem Auger - Diamond Core								
STATION: 102+77		EQUIPMENT: CME 75								
LOCATION: 14' Right of Construction Centerline		LOGGED BY: Austin Dillman								
COMPLETION DEPTH: 52.9		HAMMER CORRECTION FACTOR: 1.37								
DEPTH FT.	SAMPLE SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LEBS PER CU FT.	NO. OF BLOWS PER 6-IN.	% T C R	% R O D
		SURFACE ELEVATION: 1002.2								
5		Gravel						3 6-7		
10		Moist, Stiff, Brown Clay with Traces Organic Matter						11 16-17		
15		Dry, Hard, Brown Clay						11 18-20		
20		SHALE - Highly Weathered, Very Soft, Brown and Gray						8 10-17		
25		SHALE - Highly Weathered, Soft, Brown and Gray						8 13-21		
30		SHALE - Highly Weathered, Medium Hard, Brown and Gray						13 32-60 (11")	60	0
35		SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Weathered, Medium								
REMARKS:										

ARKANSAS DEPARTMENT OF TRANSPORTATION MATERIALS DIVISION - GEOTECHNICAL SEC.		BORING NO. 15 PAGE 2 OF 2								
JOB NO. Conway County		DATE: February 25, 2020								
JOB NAME: Hwy. 154 Slide (Near Petit Jean State Park) Slide No. 2		TYPE OF DRILLING: Hollow Stem Auger - Diamond Core								
STATION: 102+77		EQUIPMENT: CME 75								
LOCATION: 14' Right of Construction Centerline		LOGGED BY: Austin Dillman								
COMPLETION DEPTH: 52.9		HAMMER CORRECTION FACTOR: 1.37								
DEPTH FT.	SAMPLE SYMBOL	DESCRIPTION OF MATERIAL	SOIL GROUP	PLASTIC LIMIT	% MOIST.	LIQUID LIMIT	DRY WEIGHT LEBS PER CU FT.	NO. OF BLOWS PER 6-IN.	% T C R	% R O D
		SURFACE ELEVATION: 1002.2								
		Hard, Frequent Fractures, Brown and Gray							72	10
40		SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Slightly Weathered, Medium Hard, Frequent Fractures, Brown and Gray							88	0
45		SHALE WITH FREQUENT SANDSTONE PARTINGS AND SEAMS - Slightly Weathered, Medium Hard, Occasional Fractures, Brown and Gray							100	76
50		Boring Terminated							98	72
55										
60										
65										
70										
REMARKS:										