



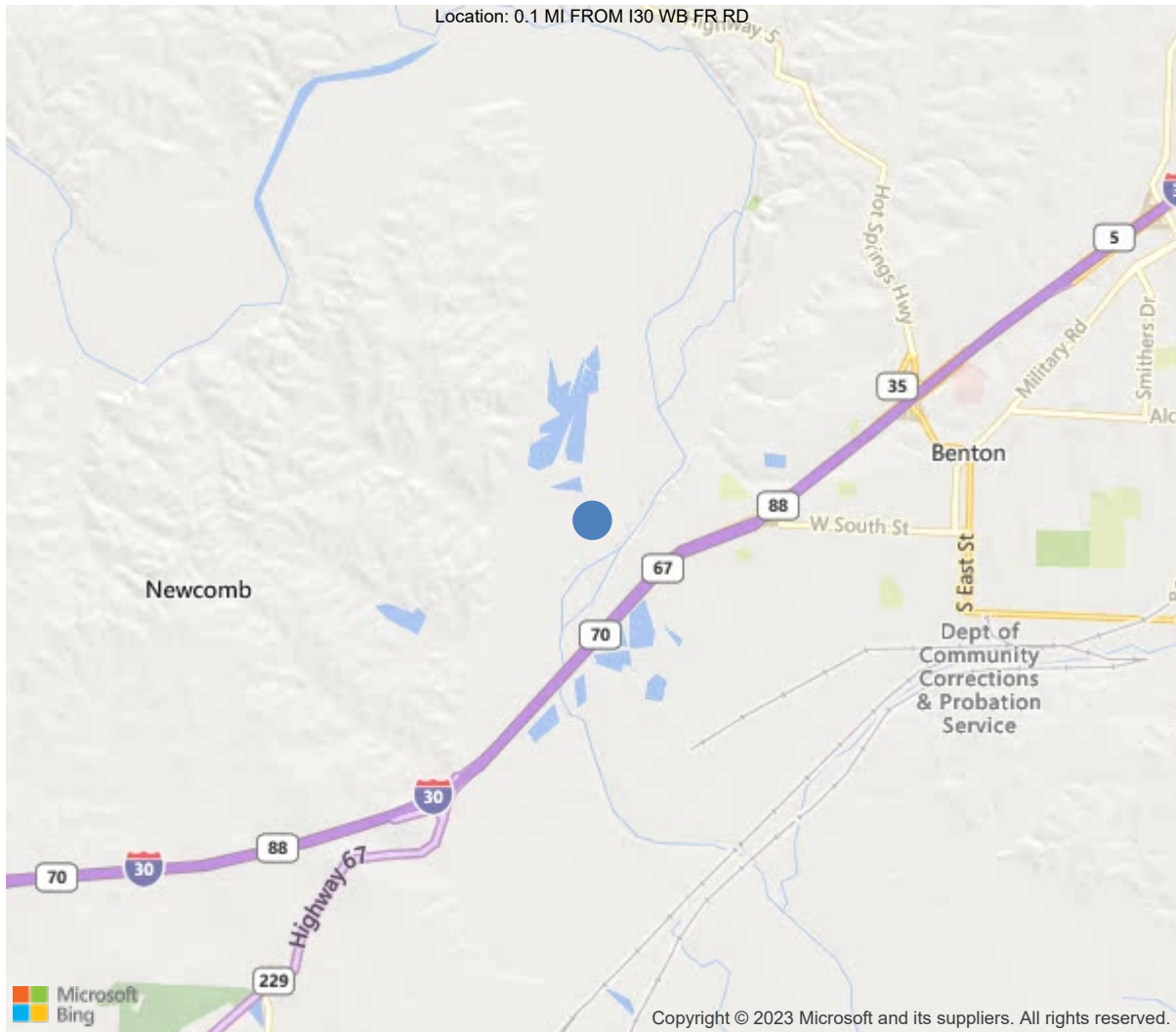
Latitude:34.56429, Longitude:-92.61864

Route:229 Section:05 Log:1.67

Arnold Road ID:62x229x5xA, Arnold Log mile:1.708

District 06, 125 - Saline County

Owner: 1 - State Highway Agency



34.56429, -92.61864



Asset #06715(Routine)

SH 229-5 Log 1.67 over SALINE RIVER

Location: 0.1 MI FROM I30 WB FR RD

Team Lead: Keith Harris, Inspection Date: 11/28/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	06715
(5) Inventory Route	1
(2) Highway Agency District	06 - District 06
(3) County Code	125 - Saline County
(4) Place Code	5290
(6) Features Intersected	SALINE RIVER
(7) Facility Carried	SH 229-5 Log 1.67
(9) Location	0.1 MI FROM I30 WB FR RD
(11) Mile Point	1.67 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	34.56429
(17) Longitude	-92.61864
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	42
Material	4 - Steel continuous
Type	2 - Stringer/Multi-beam or girder
(44) Approach Structure Type	42
Material	4 - Steel continuous
Type	2 - Stringer/Multi-beam or girder
(45) No. of Spans in Main Unit	3
(46) No. of Approach Spans	16
(107) Deck Structure Type	1 - Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	1 - Monolithic Concrete (concurrently pl
Type of Membrane	0 - None
Type of Deck Protection	1 - Epoxy Coated Reinforcing
AGE AND SERVICE	
(27) Year Built	1999
(106) Year Reconstructed	0
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	3300
(30) Year of ADT	2018
(109) Truck ADT	10 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	125 ft
(49) Structure Length	1229 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	29.5 ft
(52) Deck Width Out to Out	32.6 ft
(32) Approach Roadway Width (W/Shoulders)	32.2 ft
(33) Bridge Median	0 - No median
(34) Skew	0 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	30.5 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	99.9 ft
Ref:	
(56) Min Lat Underclear LT	0 ft
NAVIGATION DATA	
(38) Navigation Control	0 - No navigation control on w
(111) Pier Protection	1 - Navigation protection not
(39) Navigation Vertical Clearance	0 ft
(116) Vert-Lift Bridge Nav Min Vert Clear	0 ft
(40) Navigation Horizontal Clearance	0 ft

CLASSIFICATION	
(112) NBIS Bridge Length	Y
(104) Highway System	0
(26) Functional Class	16 - Urban Minor Arterial
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	N - No parallel structure exists
(102) Direction of Traffic	2 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0 - N/A
(110) Designated National Network	0 - The inventory route is not
(20) Toll	3 - On free road. The structure
(21) Maintain	1 - State Highway Agency
(22) Owner	1 - State Highway Agency
(37) Historical Significance	5 - Bridge is not eligible for
CONDITION	
(58) Deck	7
(59) Superstructure	7
(60) Substructure	7
(61) Channel & Channel Protection	8
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	5 - MS 18 / HS 20
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	60
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	36
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	7
(68) Deck Geometry	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	1 - Inspected feature meets current
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	1 - Inspected feature meets current
(36D) Approach Guardrail Ends	0 - Inspected feature does not meet
(113) Scour Critical Bridges	5 - Bridge foundations determined t
PROPOSED IMPROVEMENTS	
(75) Type of Work	
(76) Length of Structure Improvement	0 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 0
(96) Total Project Cost	\$ 0
(97) Year of Improvement Cost Estimate	
(114) Future ADT	3711
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	11/28/2022		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	Yes	60	08/06/2022
C: Other Special Inspection			
* The inspection date and frequency information in this box contains the current NBI date and frequency information. Please refer to the report header for the date this inspection was conducted.			

**General Observation**

Logged eastbound

59 - Superstructure (7 - GOOD CONDITION - some minor problems.)

Superstructure is in good condition

60 - Substructure (7 - GOOD CONDITION - some minor problems.)

Cracks in both abutment. Bent 20 large cracks in top of back wall.
Substructure in good condition

A-46 - Asset Files

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A-114 - Underwater Inspection General Observation

Engineer of Record: Samuel Williams, PE

Team Leader: Samuel Williams, PE

Team Members: BG, AC, KD

Total Substructure Units: 20

Substructure Units in Water: Bents 18-19

Inventory Direction: S to N

Direction of Flow: W to E

Deepest Water Depth: 5.0 ft

Water Velocity: 0.0 FPS

Attachments: Channel Profile/Contour Map, Soundings Table, Inspection Procedures, Stamped Final Report

A-115 - Underwater Inspection Channel/Channel Protection (8 - Banks are protected or well vegetated. River control devices such as spur dikes and embankment protection are not required or are in a stable condition.)

Overall, the channel is in very good condition. The upstream channel is well aligned with the substructure units. There is minor timber debris at the base of the piers that does not adversely affect flow through the channel. The banks upstream and downstream of the bridge are stable and well vegetated. The south bank under the bridge has riprap at the shoreline and is well vegetated on the remainder of the slope. The north bank has riprap armoring on the full slope on the west side of the bridge and the remainder of the slope is partially vegetated.

A-116 - Underwater Inspection Substructure Condition (8 - VERY GOOD CONDITION - no problems noted.)

Overall the substructure units are in very good condition with no defects.

A-117 - Underwater Scour Condition (8 - Bridge foundations determined to be stable for the assessed or calculated scour condition. Scour is determined to be above top of footing (Example A) by assessment (i.e., bridge foundations are on rock formations that have been determined to resist scour within the service life of the bridge4), by calculation or by installation of properly designed countermeasures (see HEC 23).)

Based on field observations and available data, there are no signs of scour at the bridge site.

A-B.C.11 - B.C.11 Scour Condition Rating (New NBIS) (7 - Some minor scour.)

Some minor scour around bents 6,7,8

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	40048	32218	7830	0	0
1120	Efflorescence/Rust Staining	SF	456	0	456	0	0
1130	Cracking (RC and Other)	SF	7374	0	7374	0	0
(12) All spans have longitudinal cracks and transverse cracks with light efflorescence in the soffit overhangs.							
107	Steel Open Girder/Beam	LF	5801	5801	0	0	0
515	Steel Protective Coating	SF	43519	0	43519	0	0
3430	Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)	LF	43519	0	43519	0	0
(107) All beams and girders are light to dark brown with a granular texture							
205	Reinforced Concrete Column	EA	33	31	2	0	0
1130	Cracking (RC and Other)	EA	2	0	2	0	0
(205) 2022 Underwater - There were no significant defects observed during this inspection. No change to element quantities.							
215	Reinforced Concrete Abutment	LF	66	36	17	13	0
1130	Cracking (RC and Other)	LF	30	0	17	13	0
(215) Top of back wall at bent 20 has transverse cracks. Scattered cracks in both abutments.							
234	Reinforced Concrete Pier Cap	LF	532	485	47	0	0
1130	Cracking (RC and Other)	LF	47	0	47	0	0
(234) Caps at bents 2 thru 16 have map cracks on the ends. All caps have small scattered cracks in the steps of caps.							
300	Strip Seal Expansion Joint	LF	177	0	177	0	0
2350	Debris Impaction	LF	177	0	177	0	0
(300) Strip seal are half full of debris							
310	Elastomeric Bearing	EA	116	116	0	0	0
(310) No problems noted.							
331	Reinforced Concrete Bridge Railing	LF	2454	1350	1104	0	0
1130	Cracking (RC and Other)	LF	1104	0	1104	0	0
(331) Scattered cracks in both rails							

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Team Lead: Keith Harris, **Inspection Date:** 11/28/2022

Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	40048	32218	7830	0	0
1120	Efflorescence/Rust Staining	SF	456	0	456	0	0
1130	Cracking (RC and Other)	SF	7374	0	7374	0	0
(12) All spans have longitudinal cracks and transverse cracks with light efflorescence in the soffit overhangs.							



Asset #06715(Routine)

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Location: 0.1 MI FROM I30 WB FR RD

Team Lead: Keith Harris, Inspection Date: 11/28/2022

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4
107	Steel Open Girder/Beam	LF	5801	5801	0	0	0
515	Steel Protective Coating	SF	43519	0	43519	0	0
3430	Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)	LF	43519	0	43519	0	0
(107) All beams and girders are light to dark brown with a granular texture							

59 - Superstructure (7 - GOOD CONDITION - some minor problems.)

Comment: Superstructure is in good condition



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Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	33	31	2	0	0
1130	Cracking (RC and Other)	EA	2	0	2	0	0
(205) 2022 Underwater - There were no significant defects observed during this inspection. No change to element quantities.							
215	Reinforced Concrete Abutment	LF	66	36	17	13	0
1130	Cracking (RC and Other)	LF	30	0	17	13	0
(215) Top of back wall at bent 20 has transverse cracks. Scattered cracks in both abutments.							
234	Reinforced Concrete Pier Cap	LF	532	485	47	0	0
1130	Cracking (RC and Other)	LF	47	0	47	0	0
(234) Caps at bents 2 thru 16 have map cracks on the ends. All caps have small scattered cracks in the steps of caps.							

60 - Substructure (7 - GOOD CONDITION - some minor problems.)

Comment: Cracks in both abutment. Bent 20 large cracks in top of back wall.

Substructure in good condition



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Location: 0.1 MI FROM I30 WB FR RD

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Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



UPSTREAM ELEVATION



Elevation



Approach



Soffit view



Deck overview



PIER 18



PIER 19



Bent 17 local scour



Scour around bents 6,7&8



Span 2: longitudinal cracks common in all spans



Bent 20 large crack in top of back wall



Span 19



Asset #06715(Routine)

SH 229-5 Log 1.67 over SALINE RIVER

Location: 0.1 MI FROM I30 WB FR RD

Team Lead: Keith Harris, Inspection Date: 11/28/2022

Maintenance Needs



Asset #06715(Routine)

SH 229-5 Log 1.67 over SALINE RIVER

Location: 0.1 MI FROM I30 WB FR RD

Team Lead: Keith Harris, Inspection Date: 11/28/2022

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	No
A-55 - Deck Washing Needed	No
A-56 - Joint Cleaning/Flushing Needed	Yes
A-57 - Beam End and Bearing Paint Needed	No
A-58 - Cap Cleaning/Flushing Needed	No
A-59 - Joint Repair Needed	No
A-60 - Full Beam Painting Needed	No
A-61 - Polymer Overlay Advised	Yes
A-62 - Hydro and LMC Advised	No



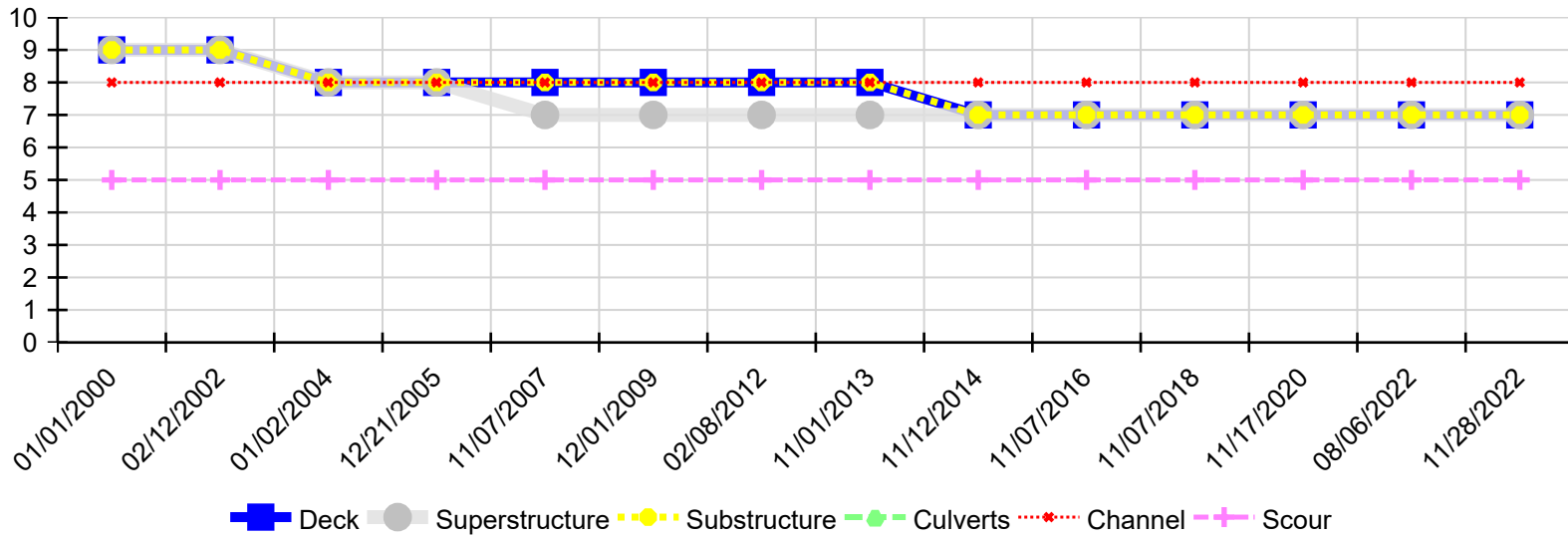
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Team Lead: Keith Harris, Inspection Date: 11/28/2022

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
11/28/2022	7	7	7	N	8	5
08/06/2022	7	7	7	N	8	5
11/17/2020	7	7	7	N	8	5
11/07/2018	7	7	7	N	8	5
11/07/2016	7	7	7	N	8	5
11/12/2014	7	7	7	N	8	5
11/01/2013	8	7	8	N	8	5
02/08/2012	8	7	8	N	8	5
12/01/2009	8	7	8	N	8	5
11/07/2007	8	7	8	N	8	5
12/21/2005	8	8	8	N	8	5
01/02/2004	8	8	8	N	8	5
02/12/2002	9	9	9	N	8	5
01/01/2000	9	9	9	N	8	5