



Latitude:34.70827, Longitude:-91.55499

Route:63 Section:11 Log:8.51

Arnold Road ID:59x63x11xA, Arnold Log mile:8.567

District 06, 117 - Prairie County

Owner: 1 - State Highway Agency

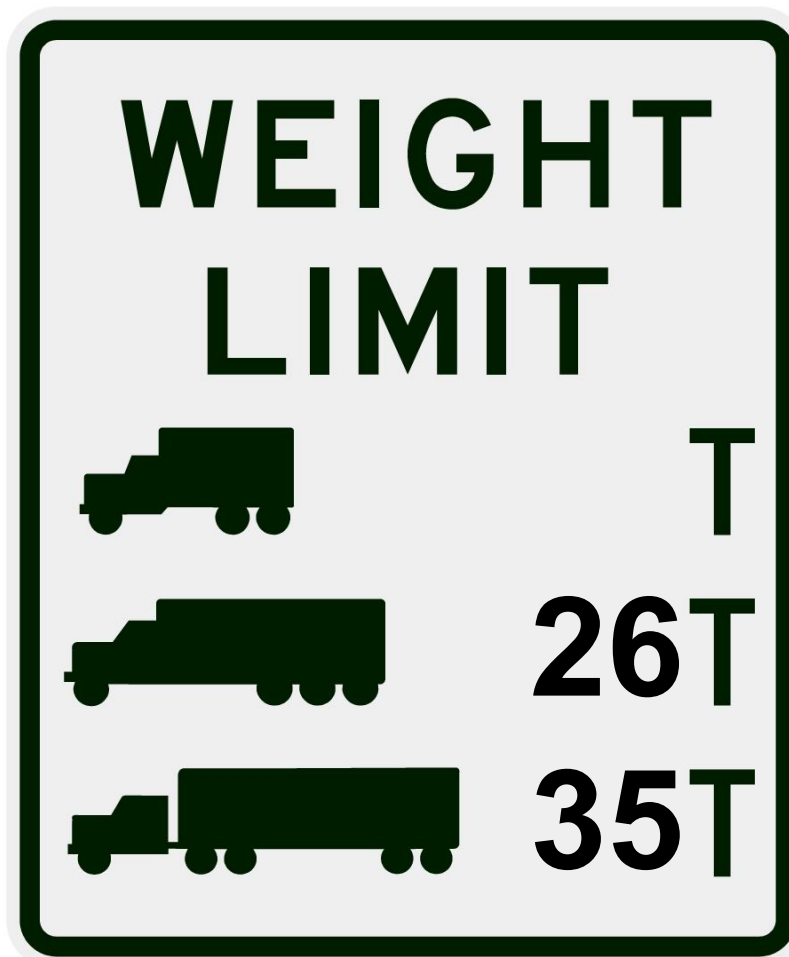
Bridge Posting Information

41 - Structure Open/Posted/Closed: P - Posted for load (may include other restrictions such as temporary bridges which are load posted)

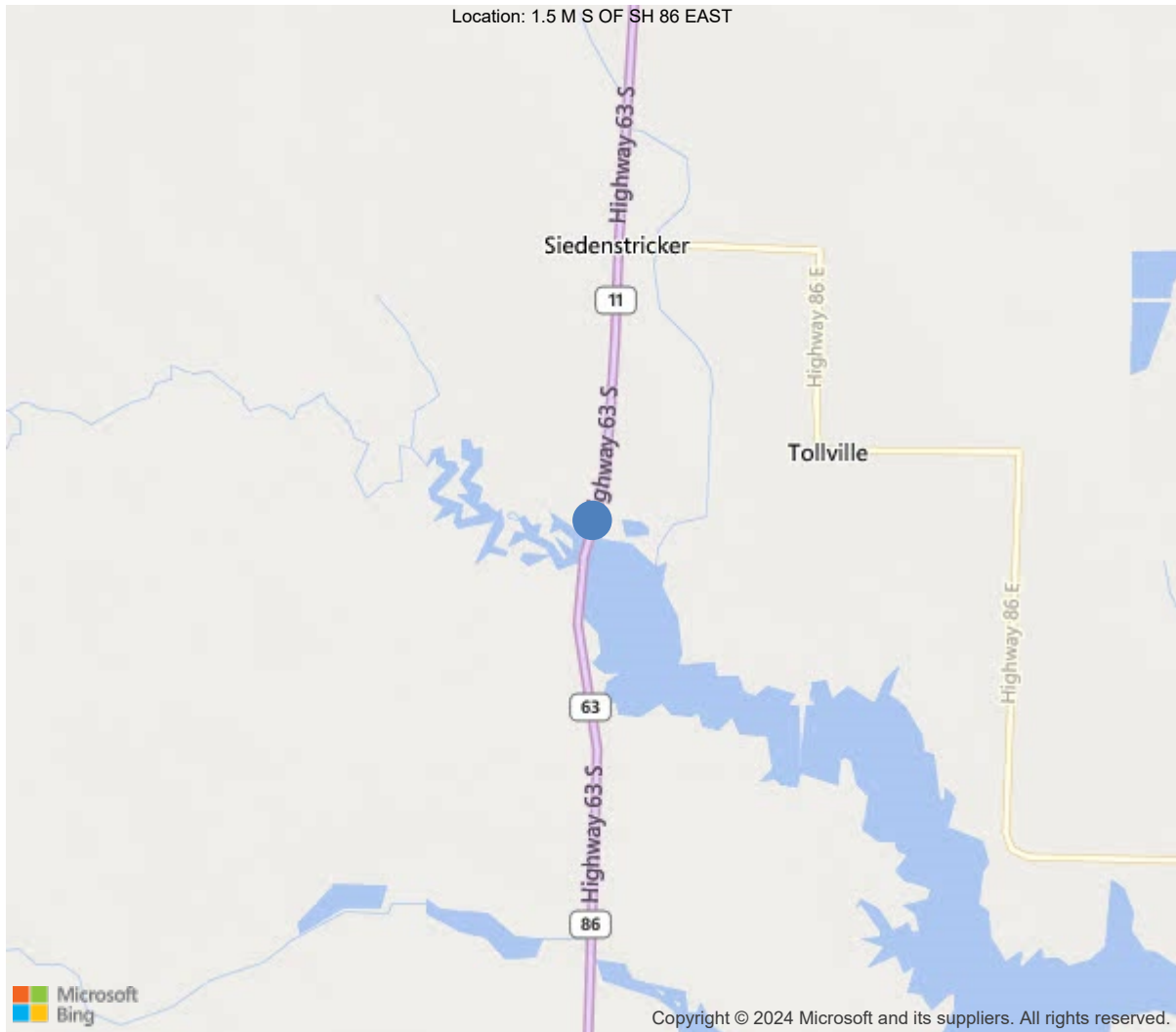
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	22		
Code 9 (31 Tons)	26	26	26
Code 5 (40 Tons)	35	35	35

If calculated Capacity is less than the Legal Load Listed, the Bridge Legally Requires Posting Signs to be installed by the Bridge Owner



30"x36" AR



34.70827, -91.55499



Asset #01860(Routine)

US 63 Log 8.51 over LAGRUE CREEK

Location: 1.5 M S OF SH 86 EAST

Team Lead: Bryan Saunders, Inspection Date: 05/23/2023

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	01860
(5) Inventory Route	1
(2) Highway Agency District	06 - District 06
(3) County Code	117 - Prairie County
(4) Place Code	0
(6) Features Intersected	LAGRUE CREEK
(7) Facility Carried	US 63 Log 8.51
(9) Location	1.5 M S OF SH 86 EAST
(11) Mile Point	8.51 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000063110
(16) Latitude	34.70827
(17) Longitude	-91.55499
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	32
Material	3 - Steel
Type	2 - Stringer/Multi-beam or girder
(44) Approach Structure Type	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	4
(46) No. of Approach Spans	0
(107) Deck Structure Type	1 - Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	6 - Bituminous
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1934
(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	3700
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	8 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	25 ft
(49) Structure Length	101 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	24 ft
(52) Deck Width Out to Out	25.5 ft
(32) Approach Roadway Width (W/Shoulders)	29.9 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	24 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	6 - Rural 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	5
(59) Superstructure	4
(60) Substructure	5
(61) Channel & Channel Protection	6
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	2 - M 13.5 / H 15
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	37
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	22
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	P - Posted for load (may include
APPRAISAL	
(67) Structural Evaluation	
(68) Deck Geometry	2
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	7
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	0 - Inspected feature does not meet
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	0 - Inspected feature does not meet
(113) Scour Critical Bridges	5 - Bridge foundations determined to
PROPOSED IMPROVEMENTS	
(75) Type of Work	31 - Replacement of bridge or
(76) Length of Structure Improvement	128 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 156
(96) Total Project Cost	\$ 454
(97) Year of Improvement Cost Estimate	2003
(114) Future ADT	4362
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	05/23/2023		
(91) Frequency	12		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection	No		
* 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

Channel profile added 5-11-21

Section loss & Section loss repairs sketch linked.

Small boat need for inspection.

Logged south bound

special inspection due to NBI 59 rating of 4

A-51 - Inspection Direction (1 - N to S)

Approach looking south

A-57 - Beam End and Bearing Painting Needed (Y)

Beam End at 1&5 have active corrosion and bent 5 beam 3 has a 2x2 hole at the hunch area

A-58 - Cap Cleaning/Flushing Needed (Y)

Caps have dirt and debris

A-59 - Joint Repair Needed (Y)

joints are allowing asphalt and debris to flow through

A-60 - Full Beam Painting Needed (Y)

paint system has failed



Asset #01860(Routine)

US 63 Log 8.51 over LAGRUE CREEK

Location: 1.5 M S OF SH 86 EAST

Team Lead: Bryan Saunders, Inspection Date: 05/23/2023

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	2436	1608	680	148	0
1080	Delamination/Spall/Patched Area	SF	132	0	105	27	0
1090	Exposed Rebar	SF	121	0	0	121	0
1120	Efflorescence/Rust Staining	SF	575	0	575	0	0
510	Wearing Surfaces	SF	2400	2136	264	0	0
3210	Delam/Spall/Patched Area/Pothole	SF	24	0	24	0	0
3220	Crack (Wearing Surface)	SF	240	0	240	0	0
(12) * All spans have transverse cracks with rust stains, small delaminations and spalls with exposed rebar. * Deck over bent 2 beam 1,2,3,4 and 5 moving up to 1/4" due to not being composite to superstructure. (1090-12) Exposed rebar in all spans of the soffit (510-12) Small pot holes at bent 2 in wearing surface Scattered cracks in wearing surface							
107	Steel Open Girder/Beam	LF	508	0	103	404	1
1000	Corrosion	LF	508	0	103	404	1
515	Steel Protective Coating	SF	2710	0	375	1485	850
3440	Effectiveness (Steel Protective Coatings)	LF	2710	0	375	1485	850
(107) Span 1 beam 1,2 & 5, bent 5 beams 1,2,3,4 & 5 have active rust on the bottom flange and lower web with pitting up to 3/16" deep. See section loss sketch Scattered areas of active areas of rust along the top flanges of all beams. Added 2021 bent 5 beam 3 has a 1" hole in haunch area. State forces have repaired section loss at beams, bent 1 span 1 beams 3 & 4, bent 2 span 1 beam 1, bent 4 span 3 & 4 beam 1, bent 4 span 3 & 4 beam 5. See section loss repair sketch. (515-107) All paint systems have failed							
215	Reinforced Concrete Abutment	LF	96	0	96	0	0
1130	Cracking (RC and Other)	LF	10	0	10	0	0
1190	Abrasion/Wear (PSC/RC)	LF	86	0	86	0	0
(215) Cracks in both abutments							
227	Reinforced Concrete Pile	EA	12	0	10	2	0
1190	Abrasion/Wear (PSC/RC)	EA	12	0	10	2	0
(227) All piles have light abrasion. Bent 3 pile 1 has moderate abrasion. (1190-227) Bent 3 pile 1 an 4							
234	Reinforced Concrete Pier Cap	LF	72	59	11	2	0

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1090	Exposed Rebar	LF	2	0	0	2	0
1130	Cracking (RC and Other)	LF	11	0	11	0	0
(234) Bent 4, ahead face has a spall with exposed rebar.							
311	Movable Bearing	EA	20	0	0	20	0
1000	Corrosion	EA	20	0	0	20	0
(311) All bearings have moderate to severe corrosion							
313	Fixed Bearing	EA	20	0	0	20	0
1000	Corrosion	EA	20	0	0	20	0
(313) All bearings have moderate to severe corrosion							
331	Reinforced Concrete Bridge Railing	LF	200	151	9	34	6
1080	Delamination/Spall/Patched Area	LF	9	0	9	0	0
7000	Damage	LF	40	0	0	34	6
(331) Both bridge rails have minor damage Left bridge rail in span 4 has traffic damage. 6' of rail is missing. 5 post are damaged							

Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	2436	1608	680	148	0
1080	Delamination/Spall/Patched Area	SF	132	0	105	27	0
1090	Exposed Rebar	SF	121	0	0	121	0
1120	Efflorescence/Rust Staining	SF	575	0	575	0	0
510	Wearing Surfaces	SF	2400	2136	264	0	0
3210	Delam/Spall/Patched Area/Pothole	SF	24	0	24	0	0
3220	Crack (Wearing Surface)	SF	240	0	240	0	0
(12) * All spans have transverse cracks with rust stains, small delaminations and spalls with exposed rebar.							
* Deck over bent 2 beam 1,2,3,4 and 5 moving up to 1/4" due to not being composite to superstructure.							
(1090-12) Exposed rebar in all spans of the soffit							
(510-12) Small pot holes at bent 2 in wearing surface							
Scattered cracks in wearing surface							

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
107	Steel Open Girder/Beam	LF	508	0	103	404	1
1000	Corrosion	LF	508	0	103	404	1
515	Steel Protective Coating	SF	2710	0	375	1485	850
3440	Effectiveness (Steel Protective Coatings)	LF	2710	0	375	1485	850
<p>(107) Span 1 beam 1,2 & 5, bent 5 beams 1,2,3,4 & 5 have active rust on the bottom flange and lower web with pitting up to 3/16" deep. See section loss sketch Scattered areas of active areas of rust along the top flanges of all beams. Added 2021 bent 5 beam 3 has a 1" hole in haunch area. State forces have repaired section loss at beams, bent 1 span 1 beams 3 & 4,bent 2 span 1 beam 1, bent 4 span 3 & 4 beam 1,bent 4 span 3 & 4 beam 5. See section loss repair sketch.</p> <p>(515-107) All paint systems have failed</p>							

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
215	Reinforced Concrete Abutment	LF	96	0	96	0	0
1130	Cracking (RC and Other)	LF	10	0	10	0	0
1190	Abrasion/Wear (PSC/RC)	LF	86	0	86	0	0
(215) Cracks in both abutments							
227	Reinforced Concrete Pile	EA	12	0	10	2	0
1190	Abrasion/Wear (PSC/RC)	EA	12	0	10	2	0
(227) All piles have light abrasion. Bent 3 pile 1 has moderate abrasion.							
(1190-227) Bent 3 pile 1 an 4							
234	Reinforced Concrete Pier Cap	LF	72	59	11	2	0
1090	Exposed Rebar	LF	2	0	0	2	0
1130	Cracking (RC and Other)	LF	11	0	11	0	0
(234) Bent 4, ahead face has a spall with exposed rebar.							



Elevation



Approach



Load posting looking north



Load posting looking south



Downstream



Upstream



deck view



soffit view



large potholes in the wearing surface over bent 2



Deck over bent 2 beam 1,2,3,4 and 5 moving up to 1/4" due to not being composite to superstructure.



Bent 1 beam 1



Bearings at bent 3



Bent 5 beam 3 has a 1"x1" hole in the haunch area



Abrasion at columns



Bent 5



Exposed rebar on left side of span 2

Maintenance Needs

Date Reported: 05/12/2021

Priority: A - Safety deficiency; requires prompt action

Status: Forward State

Type of Work: Repair (General)

Component: Element

Deficiency Description

Left bridge rail in span in span 4 has been damaged from traffic impact. 6' of rail is missing. 5 post are damaged.
Right bridge rail in spans 3&4 have broken post.

Remarks



Left bridge rail in span in span 4 has been damaged from traffic impact. 6' of rail is missing. 5 post are damaged.



Right bridge rail in spans 3&4 have broken post.

Maintenance Needs

Date Reported: 06/20/2012

Priority: B - Pressing

Type of Work: (Inactive) (Inactive) 0 - N/A

Status: Monitor

Component:

Deficiency Description

Span 1 beam 1,2 & 5, bent 5 beams 1,2,3,4 & 5 have active rust on the bottom flange and lower web with pitting up to 3/16" deep.

Added 2021, bent 5 beam 3 has a 1" hole in haunch area

Remarks



Bent 5 beam 3 has a 1"x1" hole in the haunch area



Bent 5 beam 3



Bent 5 beam 2



bent 5 beam 3 has a 1" hole in haunch area



Span 5 beam 5



Bent 5 beam 3



bent 5 beam 3 has a 1" hole in haunch area



Span 1 @ bent 1: bottom flange with measurable section loss.





Bent 5, span 4, girder 1: beam end with measurable section loss.



Bent 5, span 4, girder 5: 1/4" section loss to the bottom flange 25" out from backwall. Full flange thickness is 1/2".



Bent 1, span 1, girder 1



Asset #01860(Routine)

US 63 Log 8.51 over LAGRUE CREEK

Location: 1.5 M S OF SH 86 EAST

Team Lead: Bryan Saunders, Inspection Date: 05/23/2023

Maintenance Needs

Date Reported: 05/30/2023

Priority: B - Pressing

Type of Work: Deck Repair

Status: Open

Component: Deck

Deficiency Description

large potholes in the wearing surface over bent 2

Remarks



large potholes in the wearing surface over bent 2

Maintenance Needs

Date Reported: 05/12/2021

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Approach

Deficiency Description

Erosion at north end of bridge at right wing wall
Erosion is causing a void under on the right side of approach roadway at south end of bridge.

Remarks



Erosion at north end of bridge at right wing wall



Erosion is causing a void under on the right side of approach roadway at south end of bridge.



Erosion is causing a void under on the right side of approach roadway at south end of bridge.



Erosion at north end of bridge at right wing wall



Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	No
A-55 - Deck Washing Needed	Yes
A-56 - Joint Cleaning/Flushing Needed	Yes
A-57 - Beam End and Bearing Paint Needed	Yes
A-58 - Cap Cleaning/Flushing Needed	Yes
A-59 - Joint Repair Needed	Yes
A-60 - Full Beam Painting Needed	Yes
A-61 - Polymer Overlay Advised	No
A-62 - Hydro and LMC Advised	No
A-63 Missing/Incorrect Log Mile Signage	No
A-64 - Vegetation Removal Requested	

A-54 - Sealable Deck Cracks (No)

A-55 - Deck Washing Needed (Yes)

A-56 - Joint Cleaning/Flushing Needed (Yes)



Asset #01860(Routine)

US 63 Log 8.51 over LAGRUE CREEK

Location: 1.5 M S OF SH 86 EAST

Team Lead: Bryan Saunders, Inspection Date: 05/23/2023

A-57 - Beam End and Bearing Painting Needed (Yes)

Beam End at 1&5 have active corrosion and bent 5 beam 3 has a 2x2 hole at the hunch area

A-58 - Cap Cleaning/Flushing Needed (Yes)

Caps have dirt and debris

A-59 - Joint Repair Needed (Yes)

joints are allowing asphalt and debris to flow through

A-60 - Full Beam Painting Needed (Yes)

paint system has failed

A-61 - Polymer Overlay Advised (No)

A-62 - Hydro and LMC Advised (No)

A-63 - Missing/Incorrect Log Mile Signage (No)

A-64 - Vegetation Removal Requested



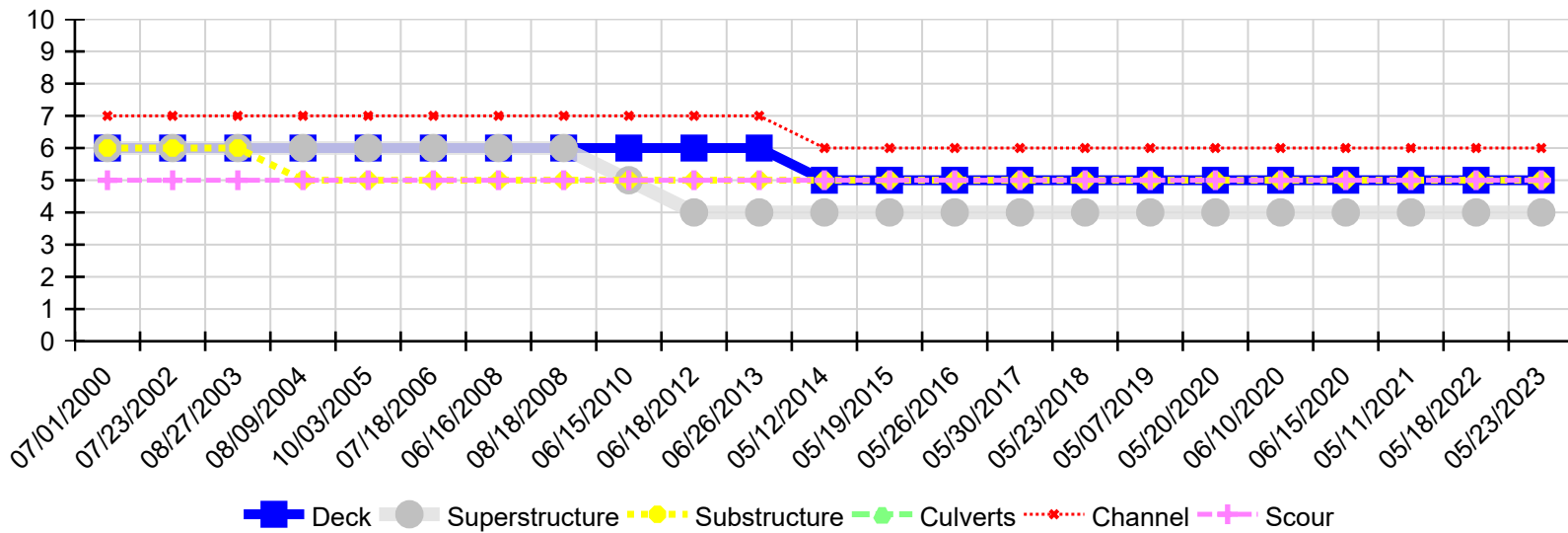
Asset #01860(Routine)

US 63 Log 8.51 over LAGRUE CREEK

Location: 1.5 M S OF SH 86 EAST

Team Lead: Bryan Saunders, Inspection Date: 05/23/2023

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
05/23/2023	5	4	5	N	6	5
05/18/2022	5	4	5	N	6	5
05/11/2021	5	4	5	N	6	5
06/15/2020	5	4	5	N	6	5
06/10/2020	5	4	5	N	6	5
05/20/2020	5	4	5	N	6	5
05/07/2019	5	4	5	N	6	5
05/23/2018	5	4	5	N	6	5
05/30/2017	5	4	5	N	6	5
05/26/2016	5	4	5	N	6	5
05/19/2015	5	4	5	N	6	5
05/12/2014	5	4	5	N	6	5
06/26/2013	6	4	5	N	7	5
06/18/2012	6	4	5	N	7	5
06/15/2010	6	5	5	N	7	5
08/18/2008	6	6	5	N	7	5
06/16/2008	6	6	5	N	7	5
07/18/2006	6	6	5	N	7	5
10/03/2005	6	6	5	N	7	5
08/09/2004	6	6	5	N	7	5
08/27/2003	6	6	6	N	7	5
07/23/2002	6	6	6	N	7	5
07/01/2000	6	6	6	N	7	5