



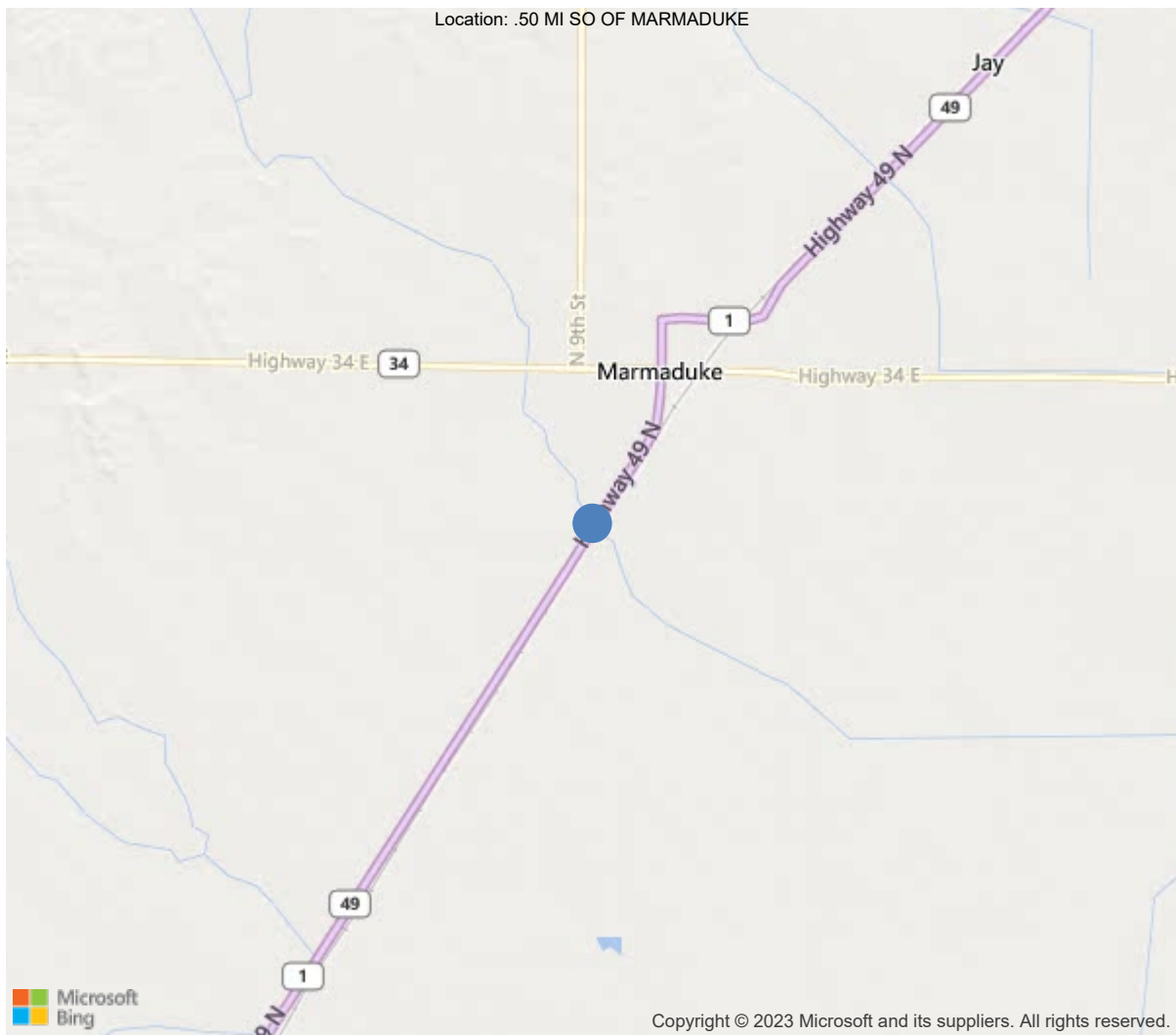
Latitude:36.17596, Longitude:-90.39072

Route:49 Section:02 Log:6.179

Arnold Road ID:28x49x2xA, Arnold Log mile:6.177

District 10, 55 - Greene County

Owner: 1 - State Highway Agency



36.17596, -90.39072



Asset #03086(Routine, Underwater type 2)

US 49-02- LM 6.18 over SLAVENS CREEK

Location: .50 MI SO OF MARMADUKE

Team Lead: Tim Myrick, Inspection Date: 11/03/2022

| IDENTIFICATION | |
|---|--------------------------------|
| (1) State Names | 5 - Arkansas |
| (8) Structure Number | 03086 |
| (5) Inventory Route | 1 |
| (2) Highway Agency District | 10 - District 10 |
| (3) County Code | 55 - Greene County |
| (4) Place Code | 0 |
| (6) Features Intersected | SLAVENS CREEK |
| (7) Facility Carried | US 49-02- LM 6.18 |
| (9) Location | .50 MI SO OF MARMADUKE |
| (11) Mile Point | 6.179 mi |
| (12) Base Highway Network | Yes |
| (13) LRS Inventory Rte & Subrte | 0000049020 |
| (16) Latitude | 36.1759617193087 |
| (17) Longitude | -90.3907206805547 |
| (98) Border Bridge State Code | |
| (99) Border Bridge Structure No. | |
| STRUCTURE TYPE AND MATERIAL | |
| (43) Main Structure Type | 11 |
| Material | 1 - Concrete |
| Type | 1 - Slab |
| (44) Approach Structure Type | 00 |
| Material | 0 - Other |
| Type | 0 - Other |
| (45) No. of Spans in Main Unit | 3 |
| (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 | 1961 |
| (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 | 6500 |
| (30) Year of ADT | 2018 |
| (109) Truck ADT | 6 % |
| (19) Bypass, Detour Length | 3 mi |
| GEOMETRIC DATA | |
| (48) Length of Maximum Span | 25 ft |
| (49) Structure Length | 75 ft |
| (50) Curb or Sidewalk Width | |
| Left | 1.4 ft |
| Right | 1.4 ft |
| (51) Bridge Roadway Width Curb to Curb | 27.9 ft |
| (52) Deck Width Out to Out | 31.5 ft |
| (32) Approach Roadway Width (W/Shoulders) | 40 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 | 27.9 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 | 5 - None present but re-evalua |
| (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 exis |
| (102) Direction of Traffic | 2 - way traffic |
| (103) Temporary Structure | |
| (105) Federal Lands Highways | 0 - N/A |
| (110) Designated National Network | 1 - The inventory route is par |
| (20) Toll | 3 - On free road. The structu |
| (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 | 5 |
| (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 | 42 |
| (65) Inventory Rating Method | 1 - Load Factor(LF) |
| (66) Inventory Rating | |
| Type | |
| Rating | 25 |
| (70) Bridge Posting | 5 - Equal to or above legal loads |
| (41) Structure Open/Posted/Closed | A - Open, no restriction |
| APPRAISAL | |
| (67) Structural Evaluation | 5 |
| (68) Deck Geometry | 2 |
| (69) Clearances, Vertical/Horizontal | N |
| (71) Waterway Adequacy | 8 |
| (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 t |
| PROPOSED IMPROVEMENTS | |
| (75) Type of Work | 31 - Replacement of bridge or |
| (76) Length of Structure Improvement | 101 ft |
| (94) Bridge Improvement Cost | \$ 0 |
| (95) Roadway Improvement Cost | \$ 265 |
| (96) Total Project Cost | \$ 681 |
| (97) Year of Improvement Cost Estimate | 2003 |
| (114) Future ADT | 6960 |
| (115) Year of Future ADT | 2028 |

| INSPECTIONS * | | | |
|--|------------|-------------|------|
| (90) Inspection Date | 11/03/2022 | | |
| (91) Frequency | 24 | | |
| (92) Critical Feature Inspection | Done | Freq. (Mon) | Date |
| A: Fracture Critical Detail | No | | |
| B: Underwater Inspection | No | | |
| 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 (False)

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58 - Deck (7)

Right approach rail at bent 1 end has 40 ft. of collision damage.
Bridge rail posts have a few minor spalls with exposed rebar.
Bridge rail has minor collision damage.
Bridge rail end posts are cracked and have some settlement away from bridge.
Asphalt wearing surface has several cracks over joints & in wheel paths.

59 - Superstructure (7)

Soffit portion of slab has a few small delaminated areas and a longitudinal crack near center line with some efflorescence.

60 - Substructure (7)

Bent 1 abutment has a minor vertical crack.
Bent 1 abutment has delaminated areas and spalls on old scour repair portion.
Caps have a few small spalls with exposed rebar.
Right end of bent 3 cap has some minor abrasion.
Piles at bent 3 have minor abrasion near water level.

61 - Channel/Channel Protection (5)

Bent 4 is undermined up to 1 ft. below and 3 ft. back under abutment with 3 piles exposed.
Large tree & utility pole lodged under bridge drift on Bent 3.
Moderate embankment erosion under spans 1 & 3.
Beaver dam 25' upstream side.

A-46 - Asset Files

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Asset #03086(Routine, Underwater type 2)

US 49-02- LM 6.18 over SLAVENS CREEK

Location: .50 MI SO OF MARMADUKE

Team Lead: Tim Myrick, Inspection Date: 11/03/2022

| ELEMENTS | DESCRIPTION | UNITS | TOTAL | CS1 | CS2 | CS3 | CS4 |
|----------|---|-------|-------|------|-----|-----|-----|
| 38 | RC Slab | SF | 2363 | 2248 | 105 | 10 | 0 |
| 1080 | Delamination/Spall/Patched Area | SF | 28 | 0 | 25 | 3 | 0 |
| 1090 | Exposed Rebar | SF | 7 | 0 | 0 | 7 | 0 |
| 1120 | Efflorescence/Rust Staining | SF | 42 | 0 | 42 | 0 | 0 |
| 1130 | Cracking (RC and Other) | SF | 38 | 0 | 38 | 0 | 0 |
| 510 | Wearing Surfaces | SF | 2100 | 1838 | 0 | 262 | 0 |
| 3220 | Crack (Wearing Surface) | SF | 262 | 0 | 0 | 262 | 0 |
| 215 | Reinforced Concrete Abutment | LF | 80 | 29 | 41 | 10 | 0 |
| 1080 | Delamination/Spall/Patched Area | LF | 30 | 0 | 20 | 10 | 0 |
| 1130 | Cracking (RC and Other) | LF | 1 | 0 | 1 | 0 | 0 |
| 6000 | Scour | LF | 20 | 0 | 20 | 0 | 0 |
| 227 | Reinforced Concrete Pile | EA | 13 | 3 | 10 | 0 | 0 |
| 1190 | Abrasion/Wear (PSC/RC) | EA | 10 | 0 | 10 | 0 | 0 |
| 234 | Reinforced Concrete Pier Cap | LF | 65 | 63 | 1 | 1 | 0 |
| 1080 | Delamination/Spall/Patched Area | LF | 1 | 0 | 1 | 0 | 0 |
| 1090 | Exposed Rebar | LF | 1 | 0 | 0 | 1 | 0 |
| 301 | Pourable Joint Seal | LF | 56 | 56 | 0 | 0 | 0 |
| 330 | Metal Bridge Railing | LF | 150 | 140 | 0 | 10 | 0 |
| 7000 | Damage | LF | 10 | 0 | 0 | 10 | 0 |
| 515 | Steel Protective Coating | SF | 510 | 510 | 0 | 0 | 0 |
| 3440 | Effectiveness (Steel Protective Coatings) | LF | 510 | 510 | 0 | 0 | 0 |



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Deck

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|----------|---------------------------------|-------|-------|------|-----|-----|-----|
| 38 | RC Slab | SF | 2363 | 2248 | 105 | 10 | 0 |
| 1080 | Delamination/Spall/Patched Area | SF | 28 | 0 | 25 | 3 | 0 |
| 1090 | Exposed Rebar | SF | 7 | 0 | 0 | 7 | 0 |
| 1120 | Efflorescence/Rust Staining | SF | 42 | 0 | 42 | 0 | 0 |
| 1130 | Cracking (RC and Other) | SF | 38 | 0 | 38 | 0 | 0 |
| 510 | Wearing Surfaces | SF | 2100 | 1838 | 0 | 262 | 0 |
| 3220 | Crack (Wearing Surface) | SF | 262 | 0 | 0 | 262 | 0 |

58 - Deck (7)

Comment: Right approach rail at bent 1 end has 40 ft. of collision damage.

Bridge rail posts have a few minor spalls with exposed rebar.

Bridge rail has minor collision damage.

Bridge rail end posts are cracked and have some settlement away from bridge.

Asphalt wearing surface has several cracks over joints & in wheel paths.



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Location: .50 MI SO OF MARMADUKE

Team Lead: Tim Myrick, Inspection Date: 11/03/2022

Superstructure

| ELEMENTS | DESCRIPTION | UNITS | TOTAL | | | | |
|----------|-------------|-------|-------|-----|-----|-----|-----|
| | | | | CS1 | CS2 | CS3 | CS4 |

59 - Superstructure (7)

Comment: Soffit portion of slab has a few small delaminated areas and a longitudinal crack near center line with some efflorescence.



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Team Lead: Tim Myrick, Inspection Date: 11/03/2022

Substructure

| ELEMENTS | DESCRIPTION | UNITS | TOTAL | CS1 | CS2 | CS3 | CS4 |
|----------|---------------------------------|-------|-------|-----|-----|-----|-----|
| 215 | Reinforced Concrete Abutment | LF | 80 | 29 | 41 | 10 | 0 |
| 1080 | Delamination/Spall/Patched Area | LF | 30 | 0 | 20 | 10 | 0 |
| 1130 | Cracking (RC and Other) | LF | 1 | 0 | 1 | 0 | 0 |
| 6000 | Scour | LF | 20 | 0 | 20 | 0 | 0 |
| 227 | Reinforced Concrete Pile | EA | 13 | 3 | 10 | 0 | 0 |
| 1190 | Abrasion/Wear (PSC/RC) | EA | 10 | 0 | 10 | 0 | 0 |
| 234 | Reinforced Concrete Pier Cap | LF | 65 | 63 | 1 | 1 | 0 |
| 1080 | Delamination/Spall/Patched Area | LF | 1 | 0 | 1 | 0 | 0 |
| 1090 | Exposed Rebar | LF | 1 | 0 | 0 | 1 | 0 |

60 - Substructure (7)

Comment: Bent 1 abutment has a minor vertical crack.

Bent 1 abutment has delaminated areas and spalls on old scour repair portion.

Caps have a few small spalls with exposed rebar.

Right end of bent 3 cap has some minor abrasion.

Piles at bent 3 have minor abrasion near water level.

61 - Channel/Channel Protection (5)

Comment: Bent 4 is undermined up to 1 ft. below and 3 ft. back under abutment with 3 piles exposed.

Large tree & utility pole lodged under bridge drift on Bent 3.

Moderate embankment erosion under spans 1 & 3.

Beaver dam 25' upstream side.



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Location: .50 MI SO OF MARMADUKE

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Culvert

| ELEMENTS | DESCRIPTION | UNITS | TOTAL | CS1 | CS2 | CS3 | CS4 |
|----------|-------------|-------|-------|-----|-----|-----|-----|
|----------|-------------|-------|-------|-----|-----|-----|-----|



Maintenance Needs

Date Reported: 12/10/2010
Priority: D- Routine
Type of Work: Repair (General)
Status: Monitor
Component: Substructure

Deficiency Description

Bent 4 is undermined up to 1' below and 3' back under abutment with 3 piles exposed.

Remarks



B3



B4



Bent 4 erosion



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US 49-02- LM 6.18 over SLAVENS CREEK

Location: .50 MI SO OF MARMADUKE

Team Lead: Tim Myrick, **Inspection Date:** 11/03/2022

Date Reported: 11/26/2018
Priority: D- Routine
Type of Work: Repair (General)
Status: Monitor
Component: Element

Deficiency Description

Rt approach rail at bent 1 end has 40' of collision damage.
Bridge rail posts have a few minor spalls with rebar exposed. Bridge rail has minor collision damage.

Remarks

Date Reported: 11/05/2020
Priority: C - Important
Type of Work: (Inactive) (Inactive) 1 - Clean
Status: Assigned
Component: Channel

Deficiency Description

Large tree & utility pole lodged under bridge drift on Bent 3.
Moderate embankment erosion under spans 1 & 3.
Beaver dam 25' upstream side.

Remarks

to Greene Co Crew for removal KAW 1-25-21



Upstream beaver dam



Span 2 drift



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Location: .50 MI SO OF MARMADUKE

Team Lead: Tim Myrick, **Inspection Date:** 11/03/2022

Routine Maintenance

Check Box Maintenance Items

| Type of Maintenance | Is recommended? |
|--|-----------------|
| A-54 - Sealable Deck Cracks | |
| A-55 - Deck Washing Needed | |
| A-56 - Joint Cleaning/Flushing Needed | |
| A-57 - Beam End and Bearing Paint Needed | |
| A-58 - Cap Cleaning/Flushing Needed | |
| A-59 - Joint Repair Needed | |
| A-60 - Full Beam Painting Needed | |
| A-61 - Polymer Overlay Advised | |
| A-62 - Hydro and LMC Advised | |



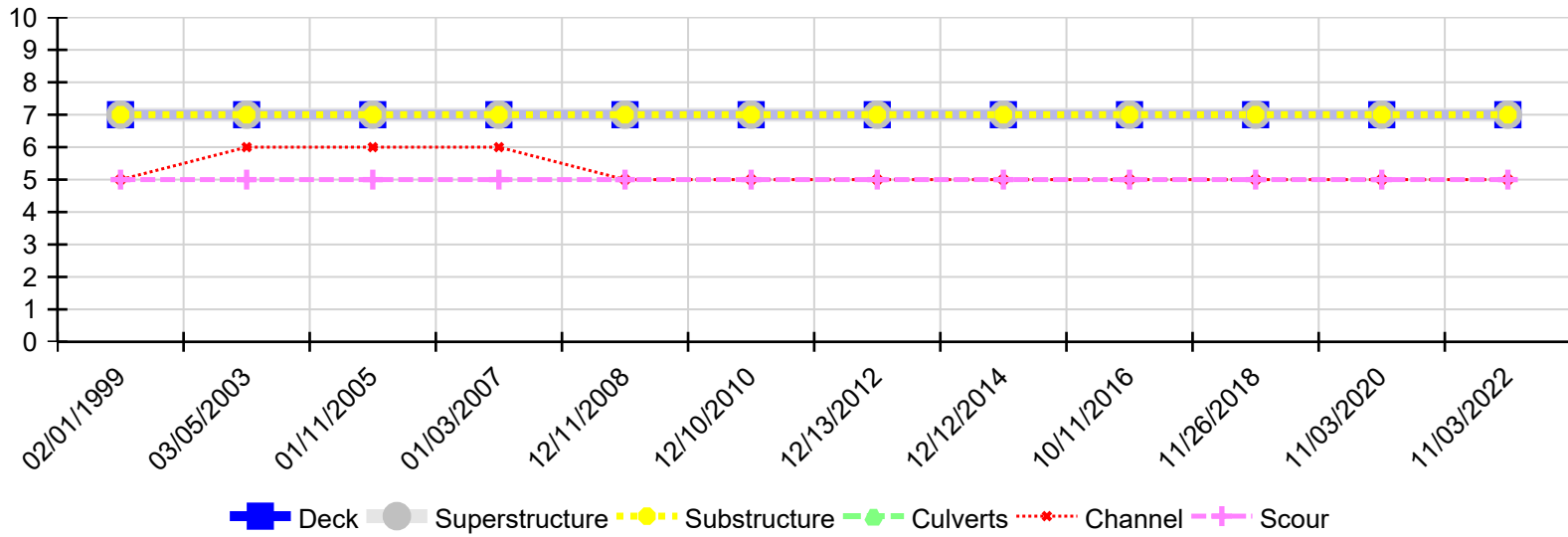
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Location: .50 MI SO OF MARMADUKE

Team Lead: Tim Myrick, Inspection Date: 11/03/2022

Condition History



| Inspection Date | Deck | Superstructure | Substructure | Culverts | Channel | Scour |
|-----------------|------|----------------|--------------|----------|---------|-------|
| 11/03/2022 | 7 | 7 | 7 | N | 5 | 5 |
| 11/03/2020 | 7 | 7 | 7 | N | 5 | 5 |
| 11/26/2018 | 7 | 7 | 7 | N | 5 | 5 |
| 10/11/2016 | 7 | 7 | 7 | N | 5 | 5 |
| 12/12/2014 | 7 | 7 | 7 | N | 5 | 5 |
| 12/13/2012 | 7 | 7 | 7 | N | 5 | 5 |
| 12/10/2010 | 7 | 7 | 7 | N | 5 | 5 |
| 12/11/2008 | 7 | 7 | 7 | N | 5 | 5 |
| 01/03/2007 | 7 | 7 | 7 | N | 6 | 5 |
| 01/11/2005 | 7 | 7 | 7 | N | 6 | 5 |
| 03/05/2003 | 7 | 7 | 7 | N | 6 | 5 |
| 02/01/1999 | 7 | 7 | 7 | N | 5 | 5 |