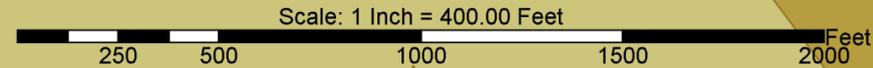


CHANNEL PATROL SURVEY

1. Sounded 31st May, 2024 by Prairie Engineers P.C
2. Horizontal Datum NAD83 (2011) Missouri East, Vertical Datum NGVD 29
3. Depths shown are below Minimum Pool (MP)
4. Legend for the navigation aids can be found at nauticalcharts.noaa.gov/publications/us-chart-1.html
5. Depths shown are below Minimum Pool (MP)
 Red depths are between -9feet, Minimum Pool (MP) and the surface.
 Orange depths are -9.0 to -9.99 feet below Minimum Pool (MP)
 Green depths are -10 to -10.99 feet below Minimum Pool (MP)
 Blue depths are -11 to -12.99 feet below Minimum Pool (MP)
 Black depths are -13 feet and greater are below Minimum Pool (MP)
6. This deliverable complies with the Quality Control Plan developed by Prairie Engineers, P.C. and with the procedures and requirements outlined in the USACE Engineering manual ER 1110-2-1003.

PRELIMINARY



MAY 31st, 2024
INTERPOLATED WATER SURFACE ELEVATION

MILE	MP	WS 09:00	WS 17:00	MP DIFF 09:00AM	MP DIFF 17:00PM
282.90	448.80	454.28	454.38	5.48	5.58
273.5	445.50	450.09	450.22	4.59	4.72

ST. LOUIS

Gage Records 31st May 2024	= 28.28ft
LD24(Upper) @0900hrs	= 16.95ft
Louisiana @0900hrs	= 28.41ft
LD24(Upper) @1700hrs	= 17.05ft
Louisiana @1700hrs	= 17.05ft

DATES OF SURVEY:
MAY 31st 2024

SCALE:
ONE INCH = 400 FEET

FIELD BOOKS:

FILE NO.:

REQUEST NO.:

Approved: Abednego Nkem
REGISTERED PROFESSIONAL ENGINEER

Approved: Tom Frerichs
CIVIL ENGINEERING TECHNICIAN

Approved: Jarrett Lancer
ASST. CHIEF OF SURVEY

Approved: Tristan Harper
CHIEF OF SURVEY

Date: JUNE 1st 2024

US ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

SURVEYED BY
PRAIRIE ENGINEERS, P.C.
404 N. MAIN STREET
COLUMBIA, IL 62236

CHANNEL PATROL SURVEY
OF UPPER MISSISSIPPI RIVER
RIVER MILE 195.0 - 300.0

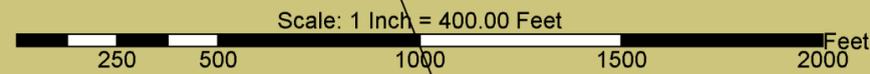
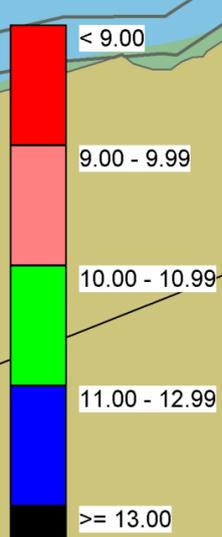
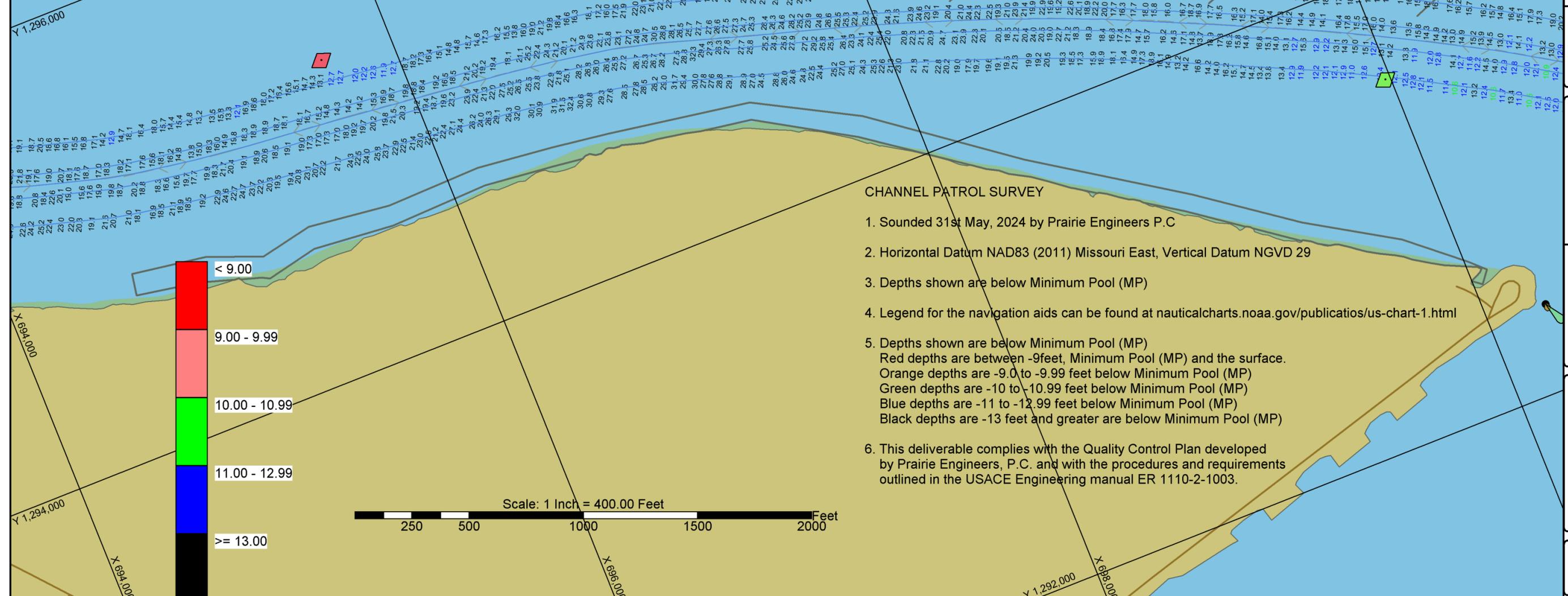
SHEET 65

MAY 31st, 2024
INTERPOLATED WATER SURFACE ELEVATION

MILE	MP	WS 09:00	WS 17:00	MP DIFF 09:00AM	MP DIFF 17:00PM
282.90	448.80	454.28	454.38	5.48	5.58
273.5	445.50	450.09	450.22	4.59	4.72

North

275



CHANNEL PATROL SURVEY

1. Sounded 31st May, 2024 by Prairie Engineers P.C
2. Horizontal Datum NAD83 (2011) Missouri East, Vertical Datum NGVD 29
3. Depths shown are below Minimum Pool (MP)
4. Legend for the navigation aids can be found at nauticalcharts.noaa.gov/publications/us-chart-1.html
5. Depths shown are below Minimum Pool (MP)
 Red depths are between -9feet, Minimum Pool (MP) and the surface.
 Orange depths are -9.0 to -9.99 feet below Minimum Pool (MP)
 Green depths are -10 to -10.99 feet below Minimum Pool (MP)
 Blue depths are -11 to -12.99 feet below Minimum Pool (MP)
 Black depths are -13 feet and greater are below Minimum Pool (MP)
6. This deliverable complies with the Quality Control Plan developed by Prairie Engineers, P.C. and with the procedures and requirements outlined in the USACE Engineering manual ER 1110-2-1003.



ST. LOUIS

Gage Records 31st May 2024	
L024(Upper) @ 0900hrs = 28.28ft	
Louisiana @ 0900hrs = 16.95ft	
L024(Upper) @ 1700hrs = 28.41ft	
Louisiana @ 1700hrs = 17.05ft	

DATES OF SURVEY:
MAY 31st 2024

FILE NO.:
REQUEST NO.:

SCALE:
ONE INCH = 400 FEET

FIELD BOOKS:

Approved: **Abednego Nkomo**
SENIOR PROJECT MANAGER

Approved: **Tom Frerichs**
CIVIL ENGINEERING TECHNICIAN

Approved: **Jarrett Lancer**
CIVIL ENGINEER

Approved: **Tristan Harper**
CHIEF OF SURVEY

Date: JUNE 1st 2024

US ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

SURVEYED BY
PRAIRIE ENGINEERS, P.C.
404 N. MAIN STREET
COLUMBIA, IL 62236

CHANNEL PATROL SURVEY
OF UPPER MISSISSIPPI RIVER
RIVER MILE 195.0 - 300.0

SHEET 66

CHANNEL PATROL SURVEY

1. Sounded 31st May, 2024 by Prairie Engineers P.C
2. Horizontal Datum NAD83 (2011) Missouri East, Vertical Datum NGVD 29
3. Depths shown are below Minimum Pool (MP)
4. Legend for the navigation aids can be found at nauticalcharts.noaa.gov/publications/us-chart-1.html
5. Depths shown are below Minimum Pool (MP)
 Red depths are between -9feet, Minimum Pool (MP) and the surface.
 Orange depths are -9.0 to -9.99 feet below Minimum Pool (MP)
 Green depths are -10 to -10.99 feet below Minimum Pool (MP)
 Blue depths are -11 to -12.99 feet below Minimum Pool (MP)
 Black depths are -13 feet and greater are below Minimum Pool (MP)
6. This deliverable complies with the Quality Control Plan developed by Prairie Engineers, P.C. and with the procedures and requirements outlined in the USACE Engineering manual ER 1110-2-1003.



ST. LOUIS

Gage Records 31st May 2024	
LD24(Upper) @ 0900hrs = 28.28ft	
Louisiana @ 0900hrs = 16.95ft	
LD24(Upper) @ 1700hrs = 28.41ft	
Louisiana @ 1700hrs = 17.05ft	

DATES OF SURVEY:
MAY 31st 2024

SCALE:
ONE INCH = 400 FEET

FILE NO.:
REQUEST NO.:

Approved: **Abhedhgo Nkem**
SENIOR PROJECT MANAGER
 Approved: **Tom Frerichs**
CIVIL ENGINEERING TECHNICIAN
 Approved: **Jarrett Lanier**
ASST. CHIEF OF SURVEY
 Approved: **Tristan Harper**
CHIEF OF SURVEY
 Date: **JUNE 1st 2024**

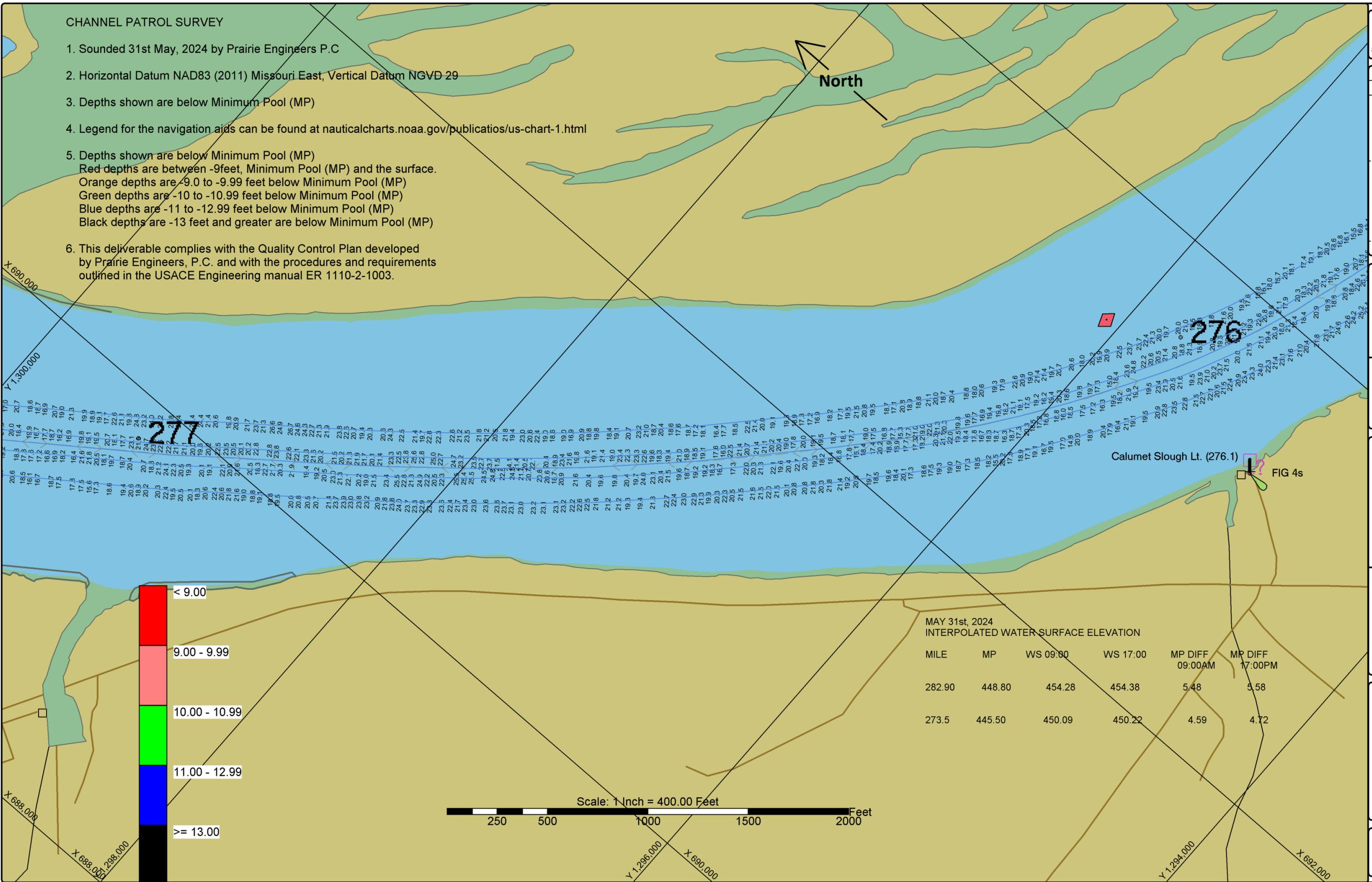
US ARMY CORPS OF ENGINEERS
 ST. LOUIS DISTRICT
 ST. LOUIS, MISSOURI

SURVEYED BY
 PRAIRIE ENGINEERS, P.C.
 404 N. MAIN STREET
 COLUMBIA, IL 62236

CHANNEL PATROL SURVEY
 OF UPPER MISSISSIPPI RIVER
 RIVER MILE 195.0 - 300.0

SHEET 67

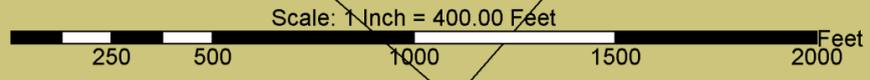
North



Calumet Slough Lt. (276.1) **FIG 4s**

MAY 31st, 2024
 INTERPOLATED WATER SURFACE ELEVATION

MILE	MP	WS 09:00	WS 17:00	MP DIFF 09:00AM	MP DIFF 17:00PM
282.90	448.80	454.28	454.38	5.48	5.58
273.5	445.50	450.09	450.22	4.59	4.72



MAY 31st, 2024
INTERPOLATED WATER SURFACE ELEVATION

MILE	MP	WS 09:00	WS 17:00	MP DIFF 09:00AM	MP DIFF 17:00PM
282.90	448.80	454.28	454.38	5.48	5.58
273.5	445.50	450.09	450.22	4.59	4.72



278

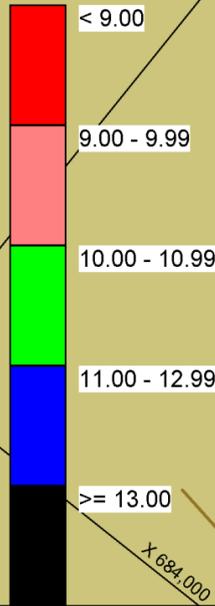
X 686,000

Y 1,306,000

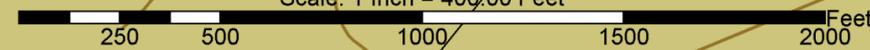
Hot Dbn. (278.5)

CHANNEL PATROL SURVEY

- Sounded 31st May, 2024 by Prairie Engineers P.C
- Horizontal Datum NAD83 (2011) Missouri East, Vertical Datum NGVD 29
- Depths shown are below Minimum Pool (MP)
- Legend for the navigation aids can be found at nauticalcharts.noaa.gov/publications/us-chart-1.html
- Depths shown are below Minimum Pool (MP)
Red depths are between -9feet, Minimum Pool (MP) and the surface.
Orange depths are -9.0 to -9.99 feet below Minimum Pool (MP)
Green depths are -10 to -10.99 feet below Minimum Pool (MP)
Blue depths are -11 to -12.99 feet below Minimum Pool (MP)
Black depths are -13 feet and greater are below Minimum Pool (MP)
- This deliverable complies with the Quality Control Plan developed by Prairie Engineers, P.C. and with the procedures and requirements outlined in the USACE Engineering manual ER 1110-2-1003.



Scale: 1 Inch = 400.00 Feet



X 684,000

Y 1,304,000

X 684,000

Y 1,302,000



ST. LOUIS

Gage Records 31st May 2024	28.28ft
LD24(Upper) @ 0900hrs	= 16.95ft
Louisiana @ 0900hrs	= 28.41ft
LD24(Upper) @ 1700hrs	= 17.05ft
Louisiana @ 1700hrs	= 17.05ft

DATES OF SURVEY:	MAY 31st 2024
SCALE:	ONE INCH = 400 FEET
FIELD BOOKS:	
FILE NO.:	
REQUEST NO.:	

Approved: **Abednego Nkem**
CHIEF OF SURVEY

Approved: **Tom Frerichs**
CIVIL ENGINEERING TECHNICIAN

Approved: **Jarrett Lancer**
ASST. CHIEF OF SURVEY

Approved: **Tristan Harper**
CHIEF OF SURVEY

Date: JUNE 1st 2024

US ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

SURVEYED BY
PRAIRIE ENGINEERS, P.C.
404 N. MAIN STREET
COLUMBIA, IL 62236

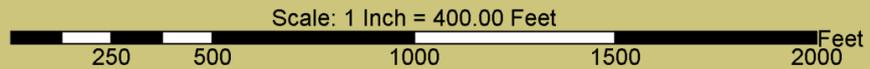
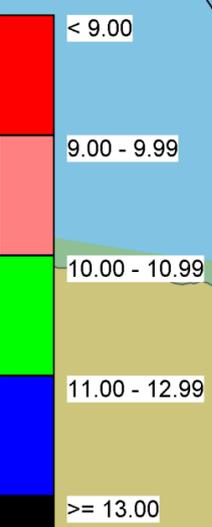
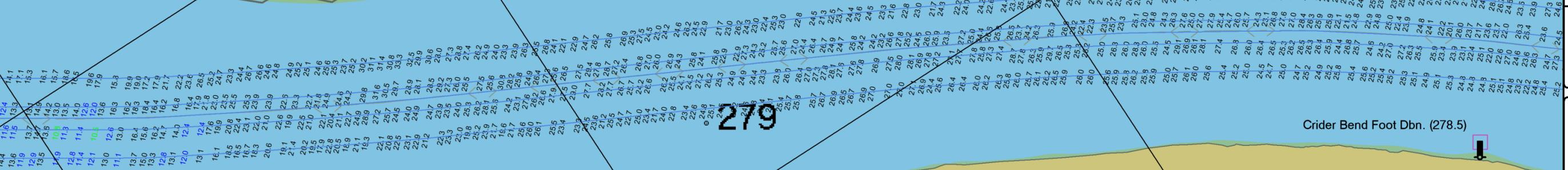
CHANNEL PATROL SURVEY
OF UPPER MISSISSIPPI RIVER

RIVER MILE 195.0 - 300.0

SHEET 68

MAY 31st, 2024
INTERPOLATED WATER SURFACE ELEVATION

MILE	MP	WS 09:00	WS 17:00	MP DIFF 09:00AM	MP DIFF 17:00PM
282.90	448.80	454.28	454.38	5.48	5.58
273.5	445.50	450.09	450.22	4.59	4.72



CHANNEL PATROL SURVEY

1. Sounded 31st May, 2024 by Prairie Engineers P.C
2. Horizontal Datum NAD83 (2011) Missouri East, Vertical Datum NGVD 29
3. Depths shown are below Minimum Pool (MP)
4. Legend for the navigation aids can be found at nauticalcharts.noaa.gov/publications/us-chart-1.html
5. Depths shown are below Minimum Pool (MP)
 Red depths are between -9feet, Minimum Pool (MP) and the surface.
 Orange depths are -9.0 to -9.99 feet below Minimum Pool (MP)
 Green depths are -10 to -10.99 feet below Minimum Pool (MP)
 Blue depths are -11 to -12.99 feet below Minimum Pool (MP)
 Black depths are -13 feet and greater are below Minimum Pool (MP)
6. This deliverable complies with the Quality Control Plan developed by Prairie Engineers, P.C. and with the procedures and requirements outlined in the USACE Engineering manual ER 1110-2-1003.

Crider Bend Foot Dbn. (278.5)



Gage Records 31st May 2024	
LD24(Upper) @0900hrs	= 28.28ft
Louisiana @0900hrs	= 16.95ft
LD24(Upper) @1700hrs	= 28.41ft
Louisiana @1700hrs	= 17.05ft

DATES OF SURVEY: MAY 31st 2024	FILE NO.:
SCALE: ONE INCH = 400 FEET	REQUEST NO.:
FIELD BOOKS: 	

Approved: **Abednego Nkem**
REGISTERED PROFESSIONAL ENGINEER

Approved: **Tom Frerichs**
CIVIL ENGINEERING TECHNICIAN

Approved: **Jarrett Lancer**
ASST. CHIEF OF SURVEY

Approved: **Tristan Harper**
CHIEF OF SURVEY

Date: **JUNE 1st 2024**

US ARMY CORPS OF ENGINEERS
 ST. LOUIS DISTRICT
 ST. LOUIS, MISSOURI

SURVEYED BY
 PRAIRIE ENGINEERS, P.C.
 404 N. MAIN STREET
 COLUMBIA, IL 62236

CHANNEL PATROL SURVEY
 OF UPPER MISSISSIPPI RIVER

RIVER MILE 195.0 - 300.0

SHEET 69

CHANNEL PATROL SURVEY

1. Sounded 31st May, 2024 by Prairie Engineers P.C
2. Horizontal Datum NAD83 (2011) Missouri East, Vertical Datum NGVD 29
3. Depths shown are below Minimum Pool (MP)
4. Legend for the navigation aids can be found at nauticalcharts.noaa.gov/publications/us-chart-1.html
5. Depths shown are below Minimum Pool (MP)
 Red depths are between -9feet, Minimum Pool (MP) and the surface.
 Orange depths are -9.0 to -9.99 feet below Minimum Pool (MP)
 Green depths are -10 to -10.99 feet below Minimum Pool (MP)
 Blue depths are -11 to -12.99 feet below Minimum Pool (MP)
 Black depths are -13 feet and greater are below Minimum Pool (MP)
6. This deliverable complies with the Quality Control Plan developed by Prairie Engineers, P.C. and with the procedures and requirements outlined in the USACE Engineering manual ER 1110-2-1003.

North



ST. LOUIS

Gage Records 31st May 2024	28.28ft
LD24(Upper) @ 0900hrs	= 16.95ft
Louisiana @ 0900hrs	= 28.41ft
LD24(Upper) @ 1700hrs	= 17.05ft
Louisiana @ 1700hrs	

SCALE: ONE INCH = 400 FEET

DATES OF SURVEY: MAY 31st 2024

FIELD BOOKS:

FILE NO.: _____

REQUEST NO.: _____

Approved: **Abednego Nkem**
DEPUTY DISTRICT ENGINEER

Approved: **Tom Frerichs**
CIVIL ENGINEERING TECHNICIAN

Approved: **Jarrett Lancer**
ASST. CHIEF OF SURVEY

Approved: **Tristan Harper**
CHIEF OF SURVEY

Date: JUNE 1st 2024

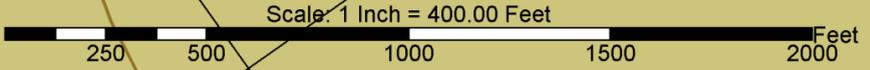
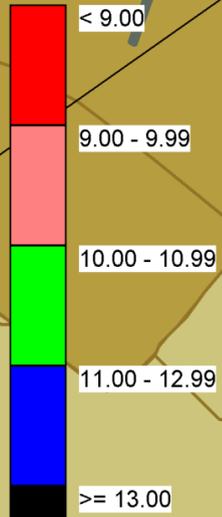
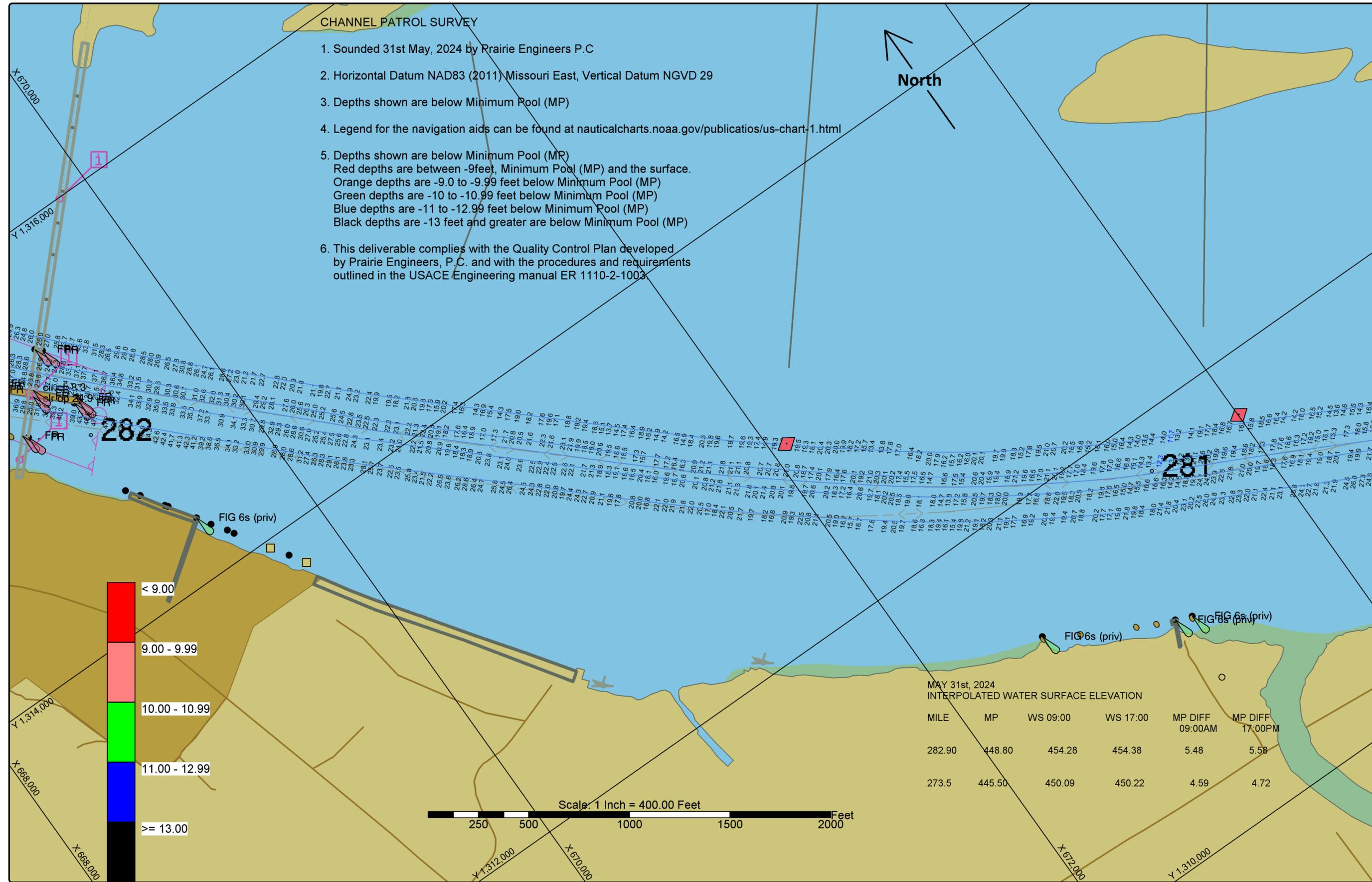
US ARMY CORPS OF ENGINEERS
 ST. LOUIS DISTRICT
 ST. LOUIS, MISSOURI

SURVEYED BY
 PRAIRIE ENGINEERS, P.C.
 404 N. MAIN STREET
 COLUMBIA, IL 62236

CHANNEL PATROL SURVEY
 OF UPPER MISSISSIPPI RIVER

RIVER MILE 195.0 - 300.0

SHEET 71



MAY 31st, 2024
 INTERPOLATED WATER SURFACE ELEVATION

MILE	MP	WS 09:00	WS 17:00	MP DIFF 09:00AM	MP DIFF 17:00PM
282.90	448.80	454.28	454.38	5.48	5.58
273.5	445.50	450.09	450.22	4.59	4.72

CHANNEL PATROL SURVEY

1. Sounded 31st May, 2024 by Prairie Engineers P.C
2. Horizontal Datum NAD83 (2011) Missouri East, Vertical Datum NGVD 29
3. Depths shown are below Minimum Pool (MP)
4. Legend for the navigation aids can be found at nauticalcharts.noaa.gov/publications/us-chart-1.html
5. Depths shown are below Minimum Pool (MP)
 Red depths are between -9feet, Minimum Pool (MP) and the surface.
 Orange depths are -9.0 to -9.99 feet below Minimum Pool (MP)
 Green depths are -10 to -10.99 feet below Minimum Pool (MP)
 Blue depths are -11 to -12.99 feet below Minimum Pool (MP)
 Black depths are -13 feet and greater are below Minimum Pool (MP)
6. This deliverable complies with the Quality Control Plan developed by Prairie Engineers, P.C. and with the procedures and requirements outlined in the USACE Engineering manual ER 1110-2-1003.

North

283

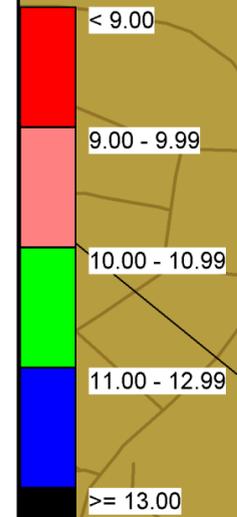
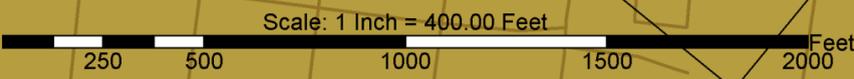
Louisiana Lt. (282.6)

FIG 4s

FR (priv)

**MAY 31st, 2024
INTERPOLATED WATER SURFACE ELEVATION**

MILE	MP	WS 09:00	WS 17:00	MP DIFF 09:00AM	MP DIFF 17:00PM
282.90	448.80	454.28	454.38	5.48	5.58
273.5	445.50	450.09	450.22	4.59	4.72



Gage Records 31st May 2024	
LD24(Upper) @ 0900hrs = 28.28ft	
Louisiana @ 0900hrs = 16.95ft	
LD24(Upper) @ 1700hrs = 28.41ft	
Louisiana @ 1700hrs = 17.05ft	

DATES OF SURVEY:	MAY 31st 2024
SCALE:	ONE INCH = 400 FEET
FIELD BOOKS:	
FILE NO.:	
REQUEST NO.:	

Approved: **Abednego Nkomo**
DEPUTY CHIEF OF SURVEY
 Approved: **Tom Frerichs**
CIVIL ENGINEERING TECHNICIAN
 Approved: **Jarrett Lancer**
ASST. CHIEF OF SURVEY
 Approved: **Tristan Harper**
CHIEF OF SURVEY
 Date: JUNE 1st 2024

US ARMY CORPS OF ENGINEERS
 ST. LOUIS DISTRICT
 ST. LOUIS, MISSOURI

SURVEYED BY
 PRAIRIE ENGINEERS, P.C.
 404 N. MAIN STREET
 COLUMBIA, IL 62236

CHANNEL PATROL SURVEY
 OF UPPER MISSISSIPPI RIVER

RIVER MILE 195.0 - 300.0

SHEET 72



ST. LOUIS

Gage Records 31st May 2024
Louisiana @ 0900hrs = 16.95ft
Mundy @ 0900hrs = 17.90ft
Louisiana @ 1700hrs = 17.05ft
Mundy @ 1700hrs = 17.95ft

DATES OF SURVEY:
MAY 31st 2024

FILE NO.:
REQUEST NO.:

SCALE:
ONE INCH = 400 FEET

FIELD BOOKS:

Approved: **Abednego Nkem**
CHIEF OF DISTRICT

Approved: **Tom Frerichs**
CHIEF ENGINEERING TECHNICIAN

Approved: **Jarrett Lancer**
CHIEF OF SURVEY

Approved: **Tristan Harper**
CHIEF OF SURVEY

Date: JUNE 1st 2024

US ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

SURVEYED BY
PRAIRIE ENGINEERS, P.C.
404 N. MAIN STREET
COLUMBIA, IL 62236

CHANNEL PATROL SURVEY
OF UPPER MISSISSIPPI RIVER

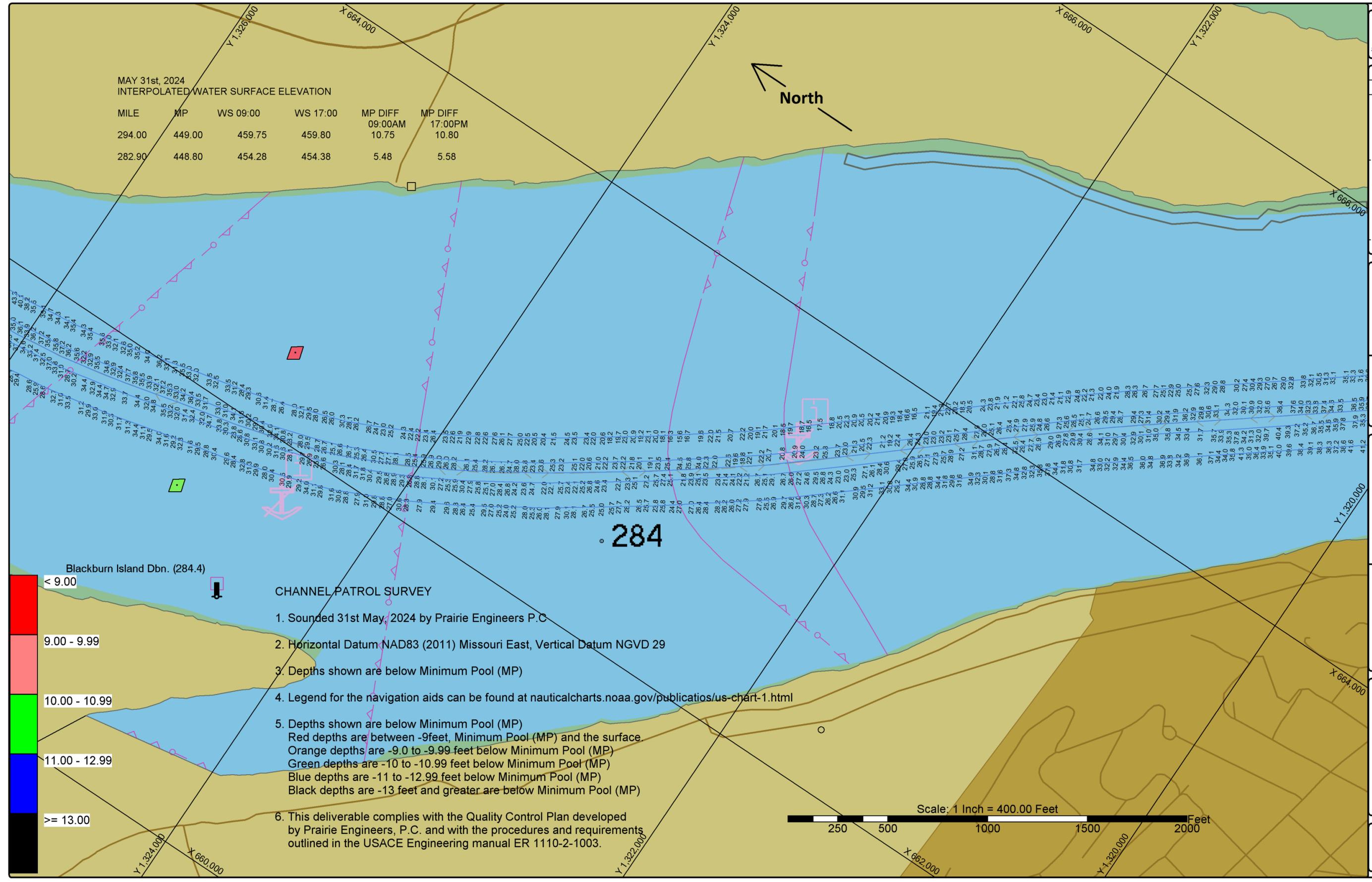
RIVER MILE 195.0 - 300.0

SHEET 73

MAY 31st, 2024
INTERPOLATED WATER SURFACE ELEVATION

MILE	MP	WS 09:00	WS 17:00	MP DIFF 09:00AM	MP DIFF 17:00PM
294.00	449.00	459.75	459.80	10.75	10.80
282.90	448.80	454.28	454.38	5.48	5.58

North



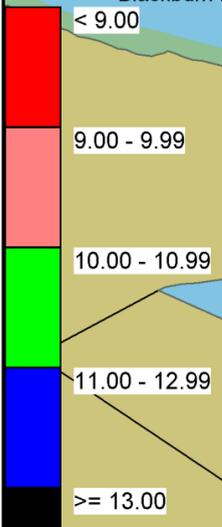
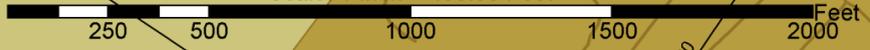
Blackburn Island Dbn. (284.4)

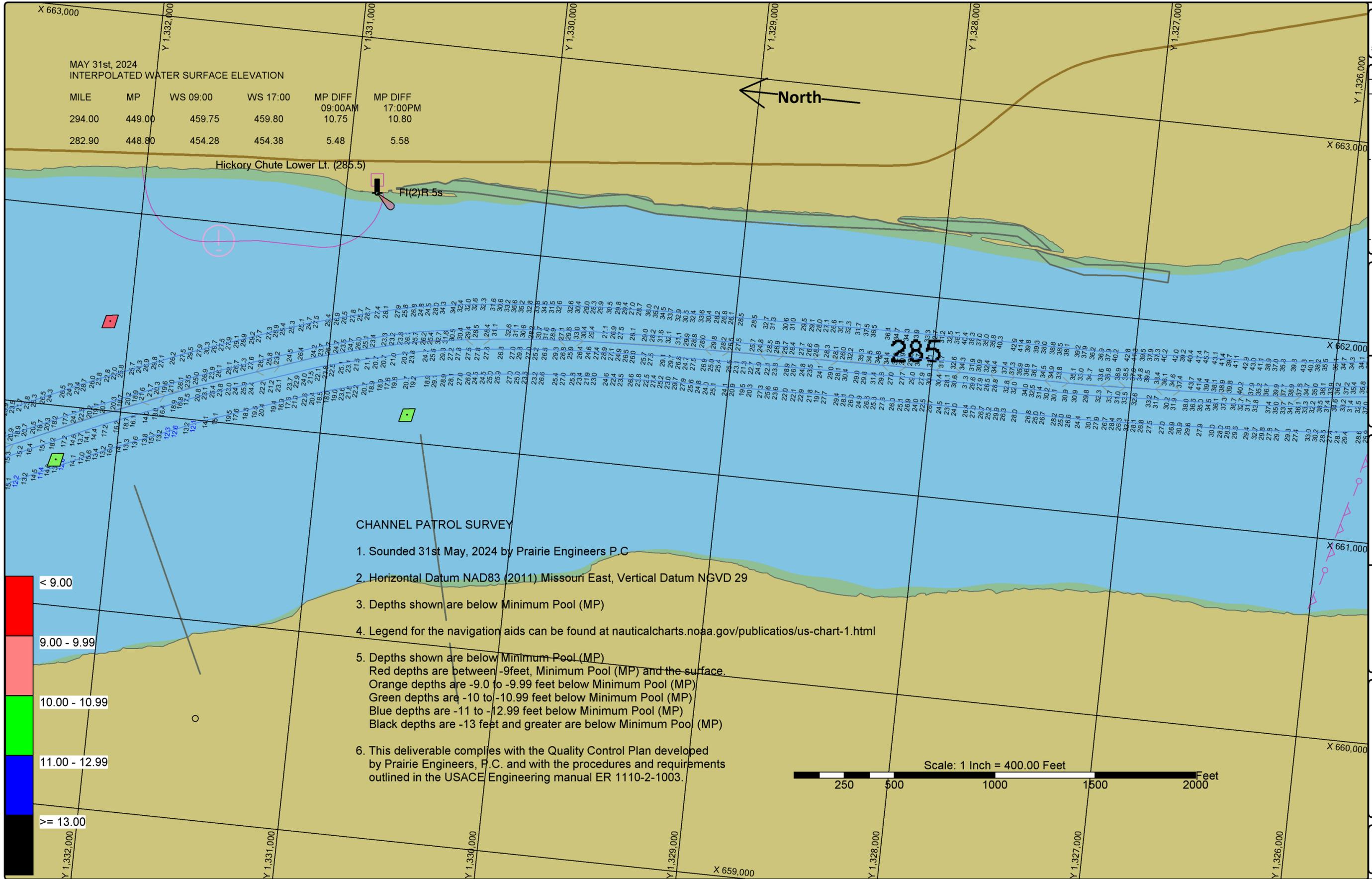
284

CHANNEL PATROL SURVEY

1. Sounded 31st May, 2024 by Prairie Engineers P.C
2. Horizontal Datum NAD83 (2011) Missouri East, Vertical Datum NGVD 29
3. Depths shown are below Minimum Pool (MP)
4. Legend for the navigation aids can be found at nauticalcharts.noaa.gov/publications/us-chart-1.html
5. Depths shown are below Minimum Pool (MP)
 Red depths are between -9feet, Minimum Pool (MP) and the surface
 Orange depths are -9.0 to -9.99 feet below Minimum Pool (MP)
 Green depths are -10 to -10.99 feet below Minimum Pool (MP)
 Blue depths are -11 to -12.99 feet below Minimum Pool (MP)
 Black depths are -13 feet and greater are below Minimum Pool (MP)
6. This deliverable complies with the Quality Control Plan developed by Prairie Engineers, P.C. and with the procedures and requirements outlined in the USACE Engineering manual ER 1110-2-1003.

Scale: 1 Inch = 400.00 Feet







ST. LOUIS

Gage Records 31st May 2024 Louisiana @ 0900hrs = 16.95ft Mundy @ 0900hrs = 17.90ft Louisiana @ 1700hrs = 17.05ft Mundy @ 1700hrs = 17.95ft	DATES OF SURVEY: MAY 31st 2024 FILE NO.: REQUEST NO.:
SCALE: ONE INCH = 400 FEET FIELD BOOKS:	APPROVED: <u>Abednego Nkem</u> <small>REGISTERED PROFESSIONAL ENGINEER</small> APPROVED: <u>Tom Frerichs</u> <small>CIVIL ENGINEERING TECHNICIAN</small> APPROVED: <u>Jarrett Lancer</u> <small>ASST. CHIEF OF SURVEY</small> APPROVED: <u>Tristan Harper</u> <small>CHIEF OF SURVEY</small> Date: <u>JUNE 1st 2024</u>
US ARMY CORPS OF ENGINEERS ST. LOUIS DISTRICT ST. LOUIS, MISSOURI	SURVEYED BY PRAIRIE ENGINEERS, P.C. 404 N. MAIN STREET COLUMBIA, IL 62236
CHANNEL PATROL SURVEY OF UPPER MISSISSIPPI RIVER RIVER MILE 195.0 - 300.0	
SHEET 74	

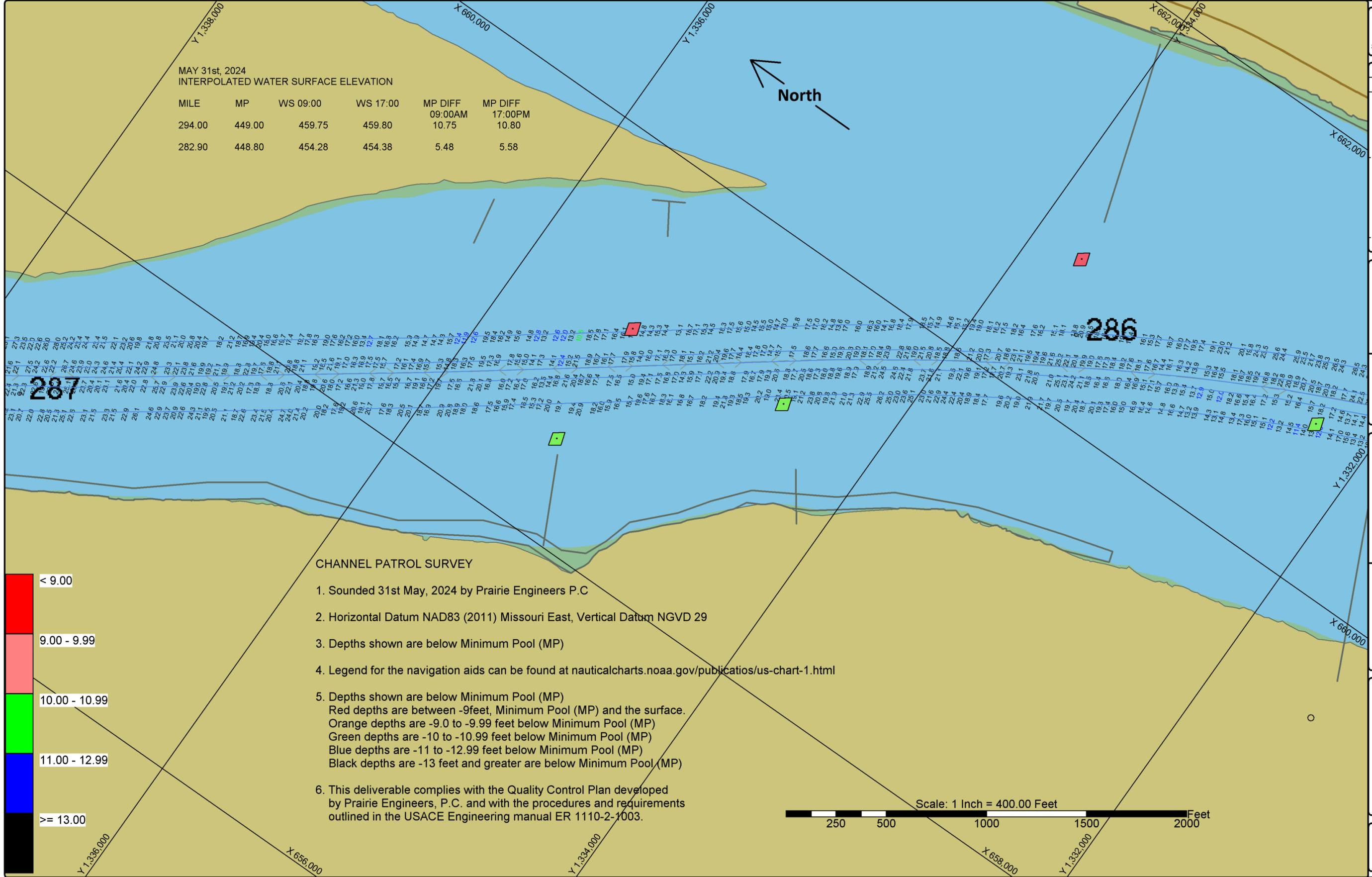


ST. LOUIS

MAY 31st, 2024
INTERPOLATED WATER SURFACE ELEVATION

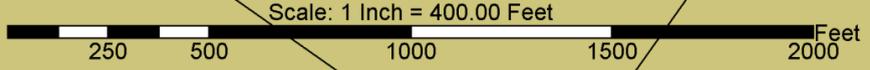
MILE	MP	WS 09:00	WS 17:00	MP DIFF 09:00AM	MP DIFF 17:00PM
294.00	449.00	459.75	459.80	10.75	10.80
282.90	448.80	454.28	454.38	5.48	5.58

North



CHANNEL PATROL SURVEY

- Sounded 31st May, 2024 by Prairie Engineers P.C
- Horizontal Datum NAD83 (2011) Missouri East, Vertical Datum NGVD 29
- Depths shown are below Minimum Pool (MP)
- Legend for the navigation aids can be found at nauticalcharts.noaa.gov/publications/us-chart-1.html
- Depths shown are below Minimum Pool (MP)
Red depths are between -9feet, Minimum Pool (MP) and the surface.
Orange depths are -9.0 to -9.99 feet below Minimum Pool (MP)
Green depths are -10 to -10.99 feet below Minimum Pool (MP)
Blue depths are -11 to -12.99 feet below Minimum Pool (MP)
Black depths are -13 feet and greater are below Minimum Pool (MP)
- This deliverable complies with the Quality Control Plan developed by Prairie Engineers, P.C. and with the procedures and requirements outlined in the USACE Engineering manual ER 1110-2-1003.



Gage Records 31st May 2024	Stations	Time	Value
Louisiana	@0900hrs	= 16.95ft	
Mundy	@0900hrs	= 17.90ft	
Louisiana	@1700hrs	= 17.05ft	
Mundy	@1700hrs	= 17.95ft	

DATES OF SURVEY: MAY 31st 2024	FILE NO.:
SCALE: ONE INCH = 400 FEET	REQUEST NO.:
FIELD BOOKS:	

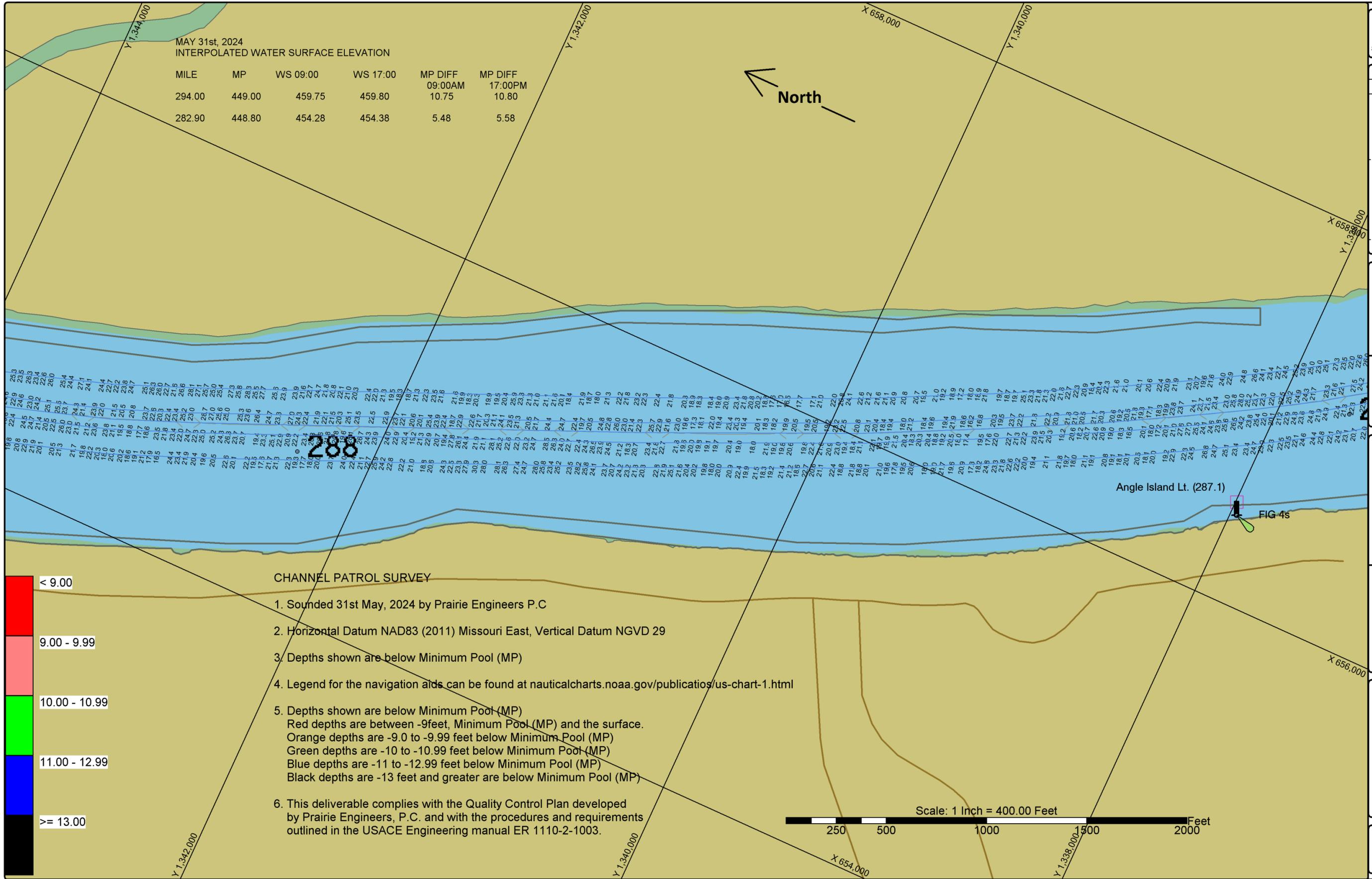
Approved: **Abednego Nkem**
 Approved: **Tom Frerichs**
 Approved: **Jarrett Lancer**
 Approved: **Tristan Harper**
 Date: JUNE 1st 2024

US ARMY CORPS OF ENGINEERS
 ST. LOUIS DISTRICT
 ST. LOUIS, MISSOURI

SURVEYED BY
 PRAIRIE ENGINEERS, P.C.
 404 N. MAIN STREET
 COLUMBIA, IL 62236

CHANNEL PATROL SURVEY
 OF UPPER MISSISSIPPI RIVER
 RIVER MILE 195.0 - 300.0

SHEET 75



Gage Records 31st May 2024	
Louisiana	@ 0900hrs = 16.95ft
Mundy	@ 0900hrs = 17.90ft
Louisiana	@ 1700hrs = 17.05ft
Mundy	@ 1700hrs = 17.95ft

DATES OF SURVEY:
MAY 31st 2024

SCALE:
ONE INCH = 400 FEET

FIELD BOOKS:

FILE NO.:

REQUEST NO.:

Approved: **Abednego Nkem**
RELIEF CHIEF OF SURVEY

Approved: **Tom Frerichs**
CIVIL ENGINEERING TECHNICIAN

Approved: **Jarrett Lancer**
ASST. CHIEF OF SURVEY

Approved: **Tristan Harper**
CHIEF OF SURVEY

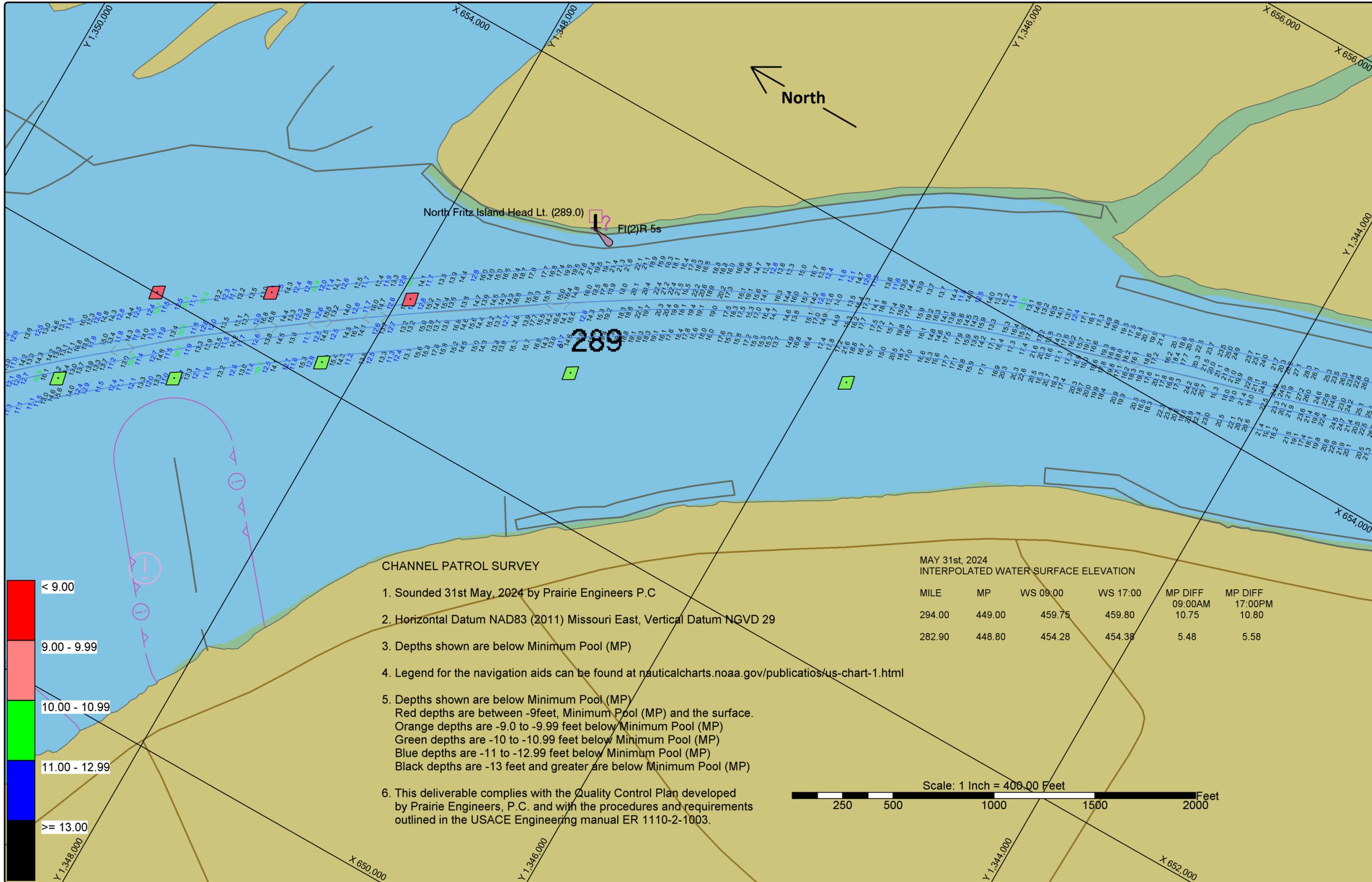
Date: JUNE 1st 2024

US ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

SURVEYED BY
PRAIRIE ENGINEERS, P.C.
404 N. MAIN STREET
COLUMBIA, IL 62236

**CHANNEL PATROL SURVEY
OF UPPER MISSISSIPPI RIVER**

RIVER MILE 195.0 - 300.0



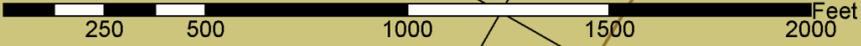
CHANNEL PATROL SURVEY

- Sounded 31st May, 2024 by Prairie Engineers P.C
- Horizontal Datum NAD83 (2011) Missouri East, Vertical Datum NGVD 29
- Depths shown are below Minimum Pool (MP)
- Legend for the navigation aids can be found at nauticalcharts.noaa.gov/publications/us-chart-1.html
- Depths shown are below Minimum Pool (MP)
 Red depths are between -9feet, Minimum Pool (MP) and the surface.
 Orange depths are -9.0 to -9.99 feet below Minimum Pool (MP)
 Green depths are -10 to -10.99 feet below Minimum Pool (MP)
 Blue depths are -11 to -12.99 feet below Minimum Pool (MP)
 Black depths are -13 feet and greater are below Minimum Pool (MP)
- This deliverable complies with the Quality Control Plan developed by Prairie Engineers, P.C. and with the procedures and requirements outlined in the USACE Engineering manual ER 1110-2-1003.

MAY 31st, 2024
INTERPOLATED WATER SURFACE ELEVATION

MILE	MP	WS 09:00	WS 17:00	MP DIFF 09:00AM	MP DIFF 17:00PM
294.00	449.00	459.75	459.80	10.75	10.80
282.90	448.80	454.28	454.38	5.48	5.58

Scale: 1 Inch = 400.00 Feet



Gage Records 31st May 2024	
Louisiana @ 0900hrs = 16.95ft	
Mundy @ 0900hrs = 17.90ft	
Louisiana @ 1700hrs = 17.05ft	
Mundy @ 1700hrs = 17.95ft	

DATES OF SURVEY:	MAY 31st 2024
SCALE:	ONE INCH = 400 FEET
FIELD BOOKS:	
FILE NO.:	
REQUEST NO.:	

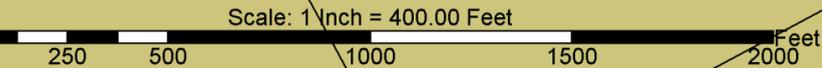
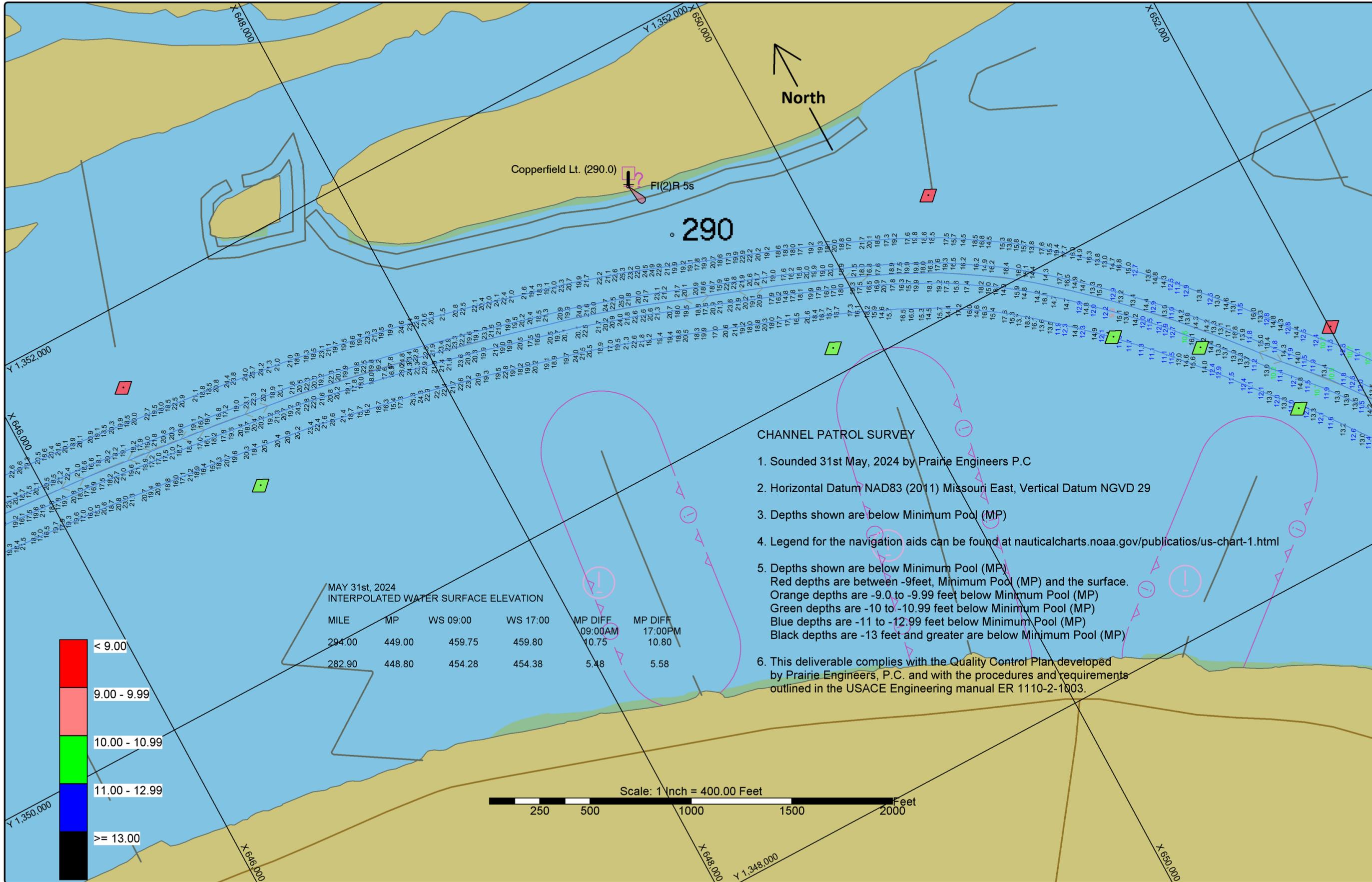
Approved: **Abednego Nkem**
 CIVIL ENGINEER
 Approved: **Tom Frerichs**
 CIVIL ENGINEERING TECHNICIAN
 Approved: **Jarrett Lancer**
 ASST. CHIEF OF SURVEY
 Approved: **Tristan Harper**
 CHIEF OF SURVEY
 Date: JUNE 1st 2024

US ARMY CORPS OF ENGINEERS
 ST. LOUIS DISTRICT
 ST. LOUIS, MISSOURI

SURVEYED BY
 PRAIRIE ENGINEERS, P.C.
 404 N. MAIN STREET
 COLUMBIA, IL 62236

CHANNEL PATROL SURVEY
 OF UPPER MISSISSIPPI RIVER
 RIVER MILE 195.0 - 300.0

SHEET 77



MAY 31st, 2024
INTERPOLATED WATER SURFACE ELEVATION

MILE	MP	WS 09:00	WS 17:00	MP DIFF 09:00AM	MP DIFF 17:00PM
294.00	449.00	459.75	459.80	10.75	10.80
282.90	448.80	454.28	454.38	5.48	5.58

CHANNEL PATROL SURVEY

1. Sounded 31st May, 2024 by Prairie Engineers P.C
2. Horizontal Datum NAD83 (2011) Missouri East, Vertical Datum NGVD 29
3. Depths shown are below Minimum Pool (MP)
4. Legend for the navigation aids can be found at nauticalcharts.noaa.gov/publications/us-chart-1.html
5. Depths shown are below Minimum Pool (MP)
 Red depths are between -9feet, Minimum Pool (MP) and the surface.
 Orange depths are -9.0 to -9.99 feet below Minimum Pool (MP)
 Green depths are -10 to -10.99 feet below Minimum Pool (MP)
 Blue depths are -11 to -12.99 feet below Minimum Pool (MP)
 Black depths are -13 feet and greater are below Minimum Pool (MP)
6. This deliverable complies with the Quality Control Plan developed by Prairie Engineers, P.C. and with the procedures and requirements outlined in the USACE Engineering manual ER 1110-2-1003.



ST. LOUIS

Gage	Records	Time	Elevation
Louisiana	31st May 2024	@ 0900hrs	= 16.95ft
Mundy		@ 0900hrs	= 17.90ft
Louisiana		@ 1700hrs	= 17.05ft
Mundy		@ 1700hrs	= 17.95ft

DATES OF SURVEY:	MAY 31st 2024
FILE NO.:	
REQUEST NO.:	

SCALE:	ONE INCH = 400 FEET
FIELD BOOKS:	

Approved: Abednego Nkomo CHIEF OF SURVEY
Approved: Tom Frerichs CIVIL ENGINEERING TECHNICIAN
Approved: Jarrett Lancer ASST. CHIEF OF SURVEY
Approved: Tristan Harper CHIEF OF SURVEY
Date: JUNE 1st 2024

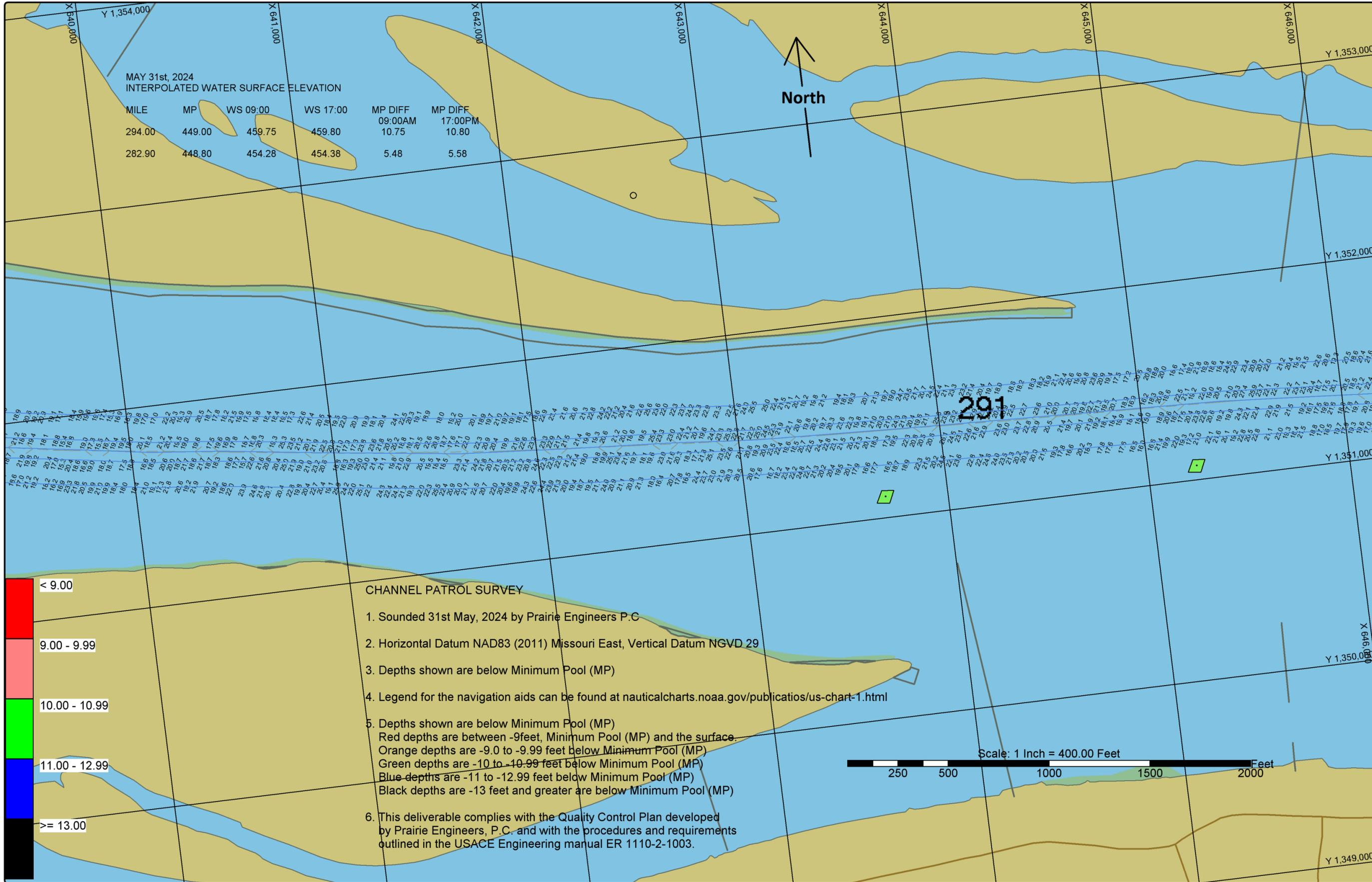
US ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

SURVEYED BY
PRAIRIE ENGINEERS, P.C.
404 N. MAIN STREET
COLUMBIA, IL 62236

CHANNEL PATROL SURVEY
OF UPPER MISSISSIPPI RIVER

RIVER MILE 195.0 - 300.0

SHEET 78



Gage Records 31st May 2024	
Louisiana @ 0900hrs = 16.95ft	
Mundy @ 0900hrs = 17.90ft	
Louisiana @ 1700hrs = 17.05ft	
Mundy @ 1700hrs = 17.95ft	

DATES OF SURVEY:	MAY 31st 2024
SCALE:	ONE INCH = 400 FEET
FIELD BOOKS:	
FILE NO.:	
REQUEST NO.:	

Approved: Abderrahmou Nkomo REGULATORY MANAGER
Approved: Tom Frerichs CIVIL ENGINEERING TECHNICIAN
Approved: Jarrett Lancer ASST. CHIEF OF SURVEY
Approved: Tristan Harper CHIEF OF SURVEY
Date: JUNE 1st 2024

US ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

SURVEYED BY
PRAIRIE ENGINEERS, P.C.
404 N. MAIN STREET
COLUMBIA, IL 62236

CHANNEL PATROL SURVEY
OF UPPER MISSISSIPPI RIVER
RIVER MILE 195.0 - 300.0

SHEET 79

CHANNEL PATROL SURVEY

- Sounded 31st May, 2024 by Prairie Engineers P.C
- Horizontal Datum NAD83 (2011) Missouri East, Vertical Datum NGVD 29
- Depths shown are below Minimum Pool (MP)
- Legend for the navigation aids can be found at nauticalcharts.noaa.gov/publications/us-chart-1.html
- Depths shown are below Minimum Pool (MP)
 Red depths are between -9feet, Minimum Pool (MP) and the surface.
 Orange depths are -9.0 to -9.99 feet below Minimum Pool (MP)
 Green depths are -10 to -10.99 feet below Minimum Pool (MP)
 Blue depths are -11 to -12.99 feet below Minimum Pool (MP)
 Black depths are -13 feet and greater are below Minimum Pool (MP)
- This deliverable complies with the Quality Control Plan developed by Prairie Engineers, P.C. and with the procedures and requirements outlined in the USACE Engineering manual ER 1110-2-1003.

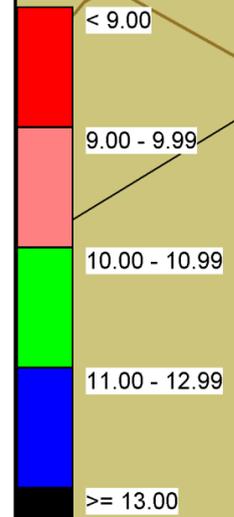
North

93

292

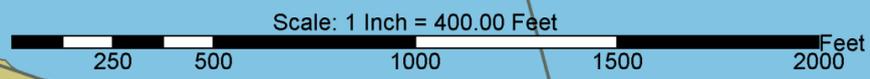
Blackbird Island Lt. (292.0)

FIG 4s



MAY 31st, 2024
 INTERPOLATED WATER SURFACE ELEVATION

MILE	MP	WS 09:00	WS 17:00	MP DIFF 09:00AM	MP DIFF 17:00PM
294.00	449.00	459.75	459.80	10.75	10.80
282.90	448.80	454.28	454.38	5.48	5.58



Gage Records 31st May 2024	
Louisiana @ 0900hrs = 16.95ft	
Mundy @ 0900hrs = 17.90ft	
Louisiana @ 1700hrs = 17.05ft	
Mundy @ 1700hrs = 17.95ft	

DATES OF SURVEY:	MAY 31st 2024
SCALE:	ONE INCH = 400 FEET
FIELD BOOKS:	
FILE NO.:	
REQUEST NO.:	

Approved: **Abednego Nkem**
 CHIEF OF PARTY

Approved: **Tom Frerichs**
 CIVIL ENGINEERING TECHNICIAN

Approved: **Jarrett Lancer**
 ASST. CHIEF OF SURVEY

Approved: **Tristan Harper**
 CHIEF OF SURVEY

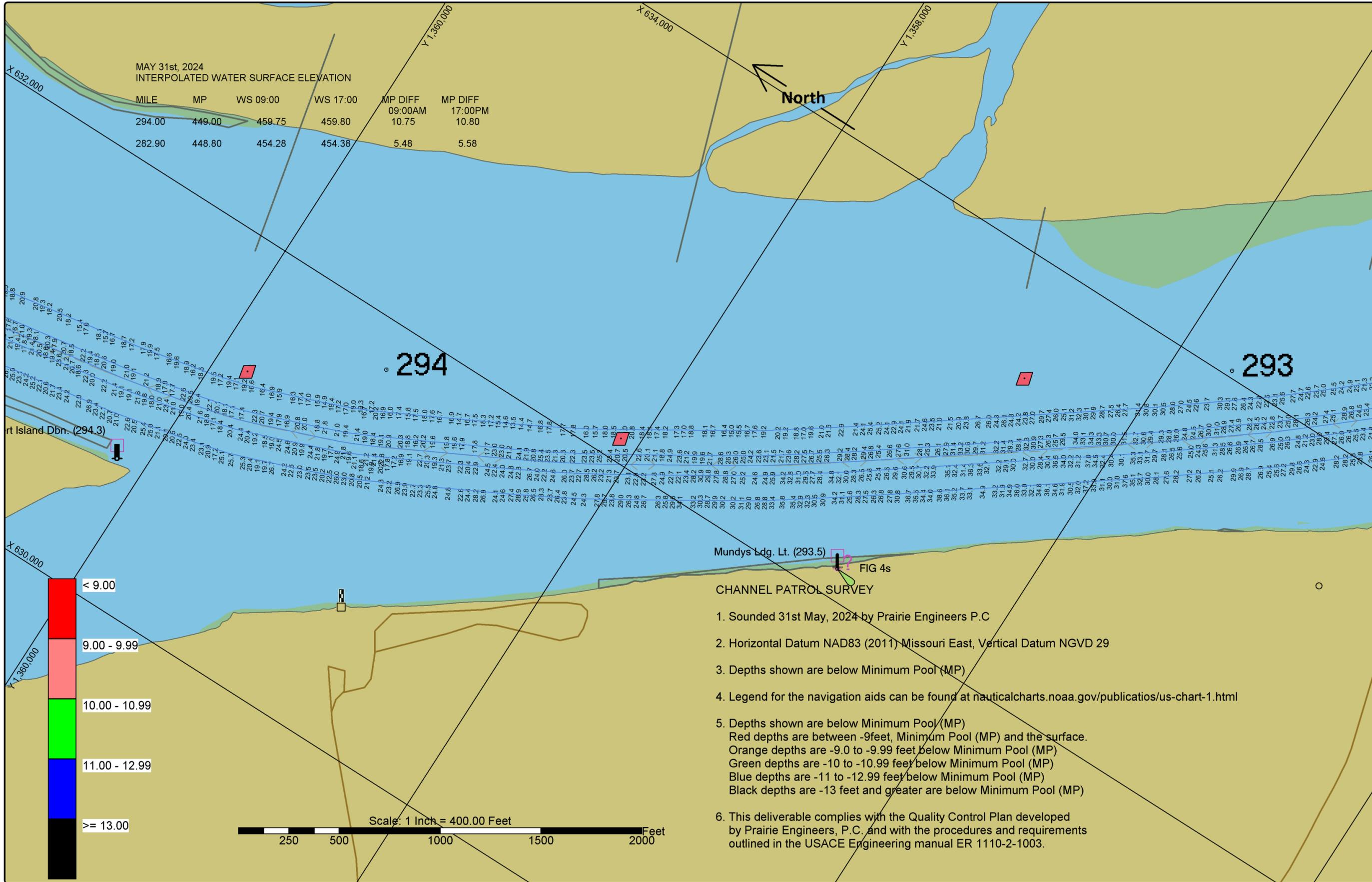
Date: JUNE 1st 2024

US ARMY CORPS OF ENGINEERS
 ST. LOUIS DISTRICT
 ST. LOUIS, MISSOURI

SURVEYED BY
 PRAIRIE ENGINEERS, P.C.
 404 N. MAIN STREET
 COLUMBIA, IL 62236

CHANNEL PATROL SURVEY
 OF UPPER MISSISSIPPI RIVER
 RIVER MILE 195.0 - 300.0

SHEET 80



MAY 31st, 2024
INTERPOLATED WATER SURFACE ELEVATION

MILE	MP	WS 09:00	WS 17:00	MP DIFF 09:00AM	MP DIFF 17:00PM
294.00	449.00	459.75	459.80	10.75	10.80
282.90	448.80	454.28	454.38	5.48	5.58



ST. LOUIS

Gage Records 31st May 2024	
Louisiana @ 0900hrs = 16.95ft	
Mundy @ 0900hrs = 17.90ft	
Louisiana @ 1700hrs = 17.05ft	
Mundy @ 1700hrs = 17.95ft	

DATES OF SURVEY:
MAY 31st 2024

SCALE:
ONE INCH = 400 FEET

FIELD BOOKS:

FILE NO.:

REQUEST NO.:

Approved: **Abednego Nkem**
SUPERVISOR

Approved: **Tom Frerichs**
CHIEF ENGINEERING TECHNICIAN

Approved: **Jarrett Lancer**
ASST. CHIEF OF SURVEY

Approved: **Tristan Harper**
CHIEF OF SURVEY

Date: JUNE 1st 2024

US ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

SURVEYED BY
PRAIRIE ENGINEERS, P.C.
404 N. MAIN STREET
COLUMBIA, IL 62236

CHANNEL PATROL SURVEY
OF UPPER MISSISSIPPI RIVER

RIVER MILE 195.0 - 300.0

SHEET 81

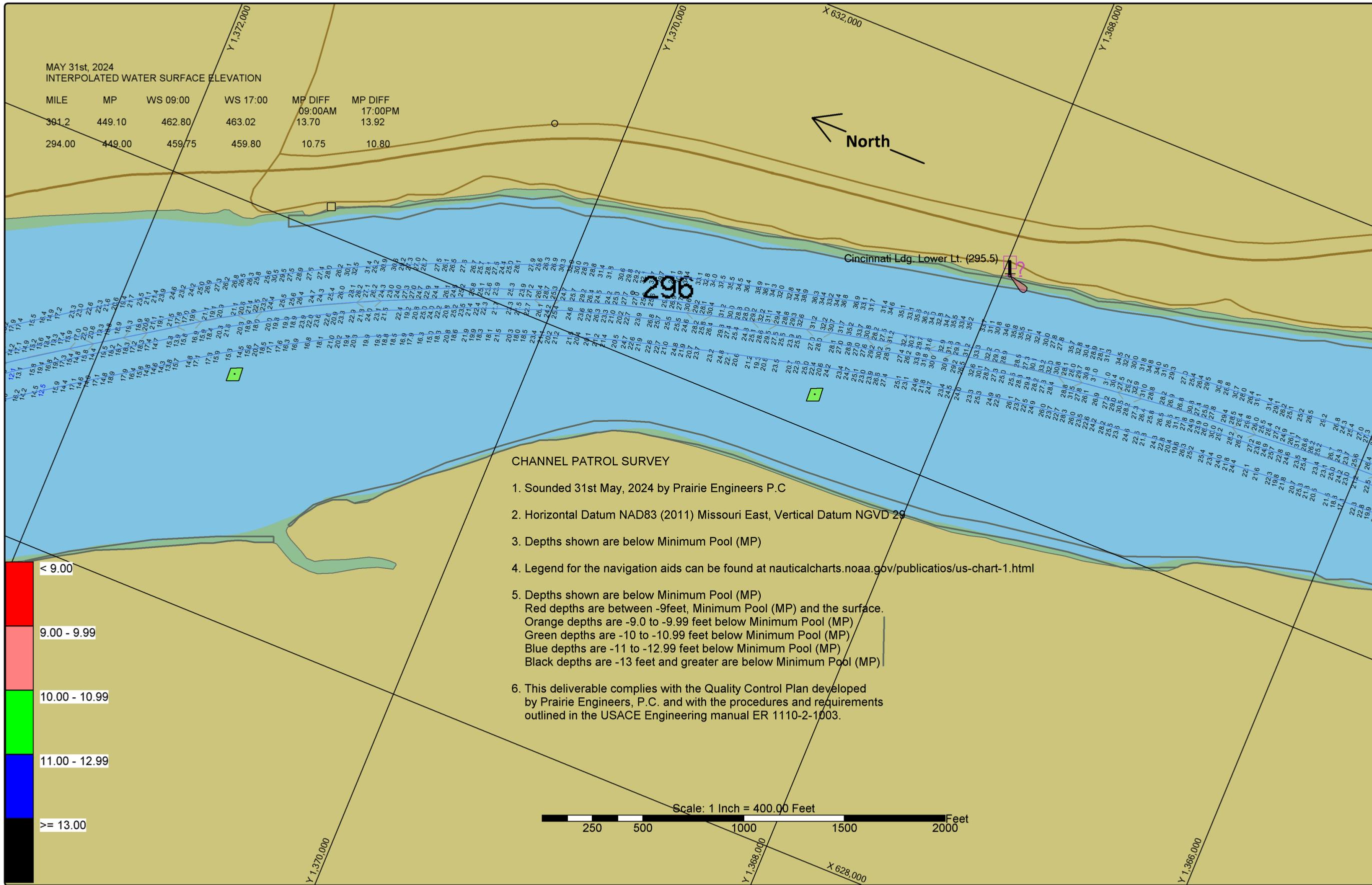
Mundys Ldg. Lt. (293.5)  FIG 4s

CHANNEL PATROL SURVEY

- Sounded 31st May, 2024 by Prairie Engineers P.C
- Horizontal Datum NAD83 (2011) Missouri East, Vertical Datum NGVD 29
- Depths shown are below Minimum Pool (MP)
- Legend for the navigation aids can be found at nauticalcharts.noaa.gov/publicatios/us-chart-1.html
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Blue depths are -11 to -12.99 feet below Minimum Pool (MP)
Black depths are -13 feet and greater are below Minimum Pool (MP)
- This deliverable complies with the Quality Control Plan developed by Prairie Engineers, P.C. and with the procedures and requirements outlined in the USACE Engineering manual ER 1110-2-1003.

MAY 31st, 2024
INTERPOLATED WATER SURFACE ELEVATION

MILE	MP	WS 09:00	WS 17:00	MP DIFF 09:00AM	MP DIFF 17:00PM
391.2	449.10	462.80	463.02	13.70	13.92
294.00	449.00	459.75	459.80	10.75	10.80



CHANNEL PATROL SURVEY

1. Sounded 31st May, 2024 by Prairie Engineers P.C
2. Horizontal Datum NAD83 (2011) Missouri East, Vertical Datum NGVD 29
3. Depths shown are below Minimum Pool (MP)
4. Legend for the navigation aids can be found at nauticalcharts.noaa.gov/publications/us-chart-1.html
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 Blue depths are -11 to -12.99 feet below Minimum Pool (MP)
 Black depths are -13 feet and greater are below Minimum Pool (MP)
6. This deliverable complies with the Quality Control Plan developed by Prairie Engineers, P.C. and with the procedures and requirements outlined in the USACE Engineering manual ER 1110-2-1003.

Scale: 1 Inch = 400.00 Feet



GAGE RECORDS	
STATION	DATE
Mundy	31st May 2024
LD22(Lower)	@ 0900hrs = 17.90ft
LD22(Lower)	@ 1700hrs = 16.70ft

DATES OF SURVEY: MAY 31st 2024	FILE NO.: _____
SCALE: ONE INCH = 400 FEET	REQUEST NO.: _____
FIELD BOOKS: _____	

Approved: Abednego Nkem
 CHIEF OF SURVEY
 Approved: Tom Frerichs
 CHIEF ENGINEERING TECHNICIAN
 Approved: Jarrett Langer
 ASST. CHIEF OF SURVEY
 Approved: Tristan Harper
 CHIEF OF SURVEY
 Date: JUNE 1st 2024

US ARMY CORPS OF ENGINEERS
 ST. LOUIS DISTRICT
 ST. LOUIS, MISSOURI

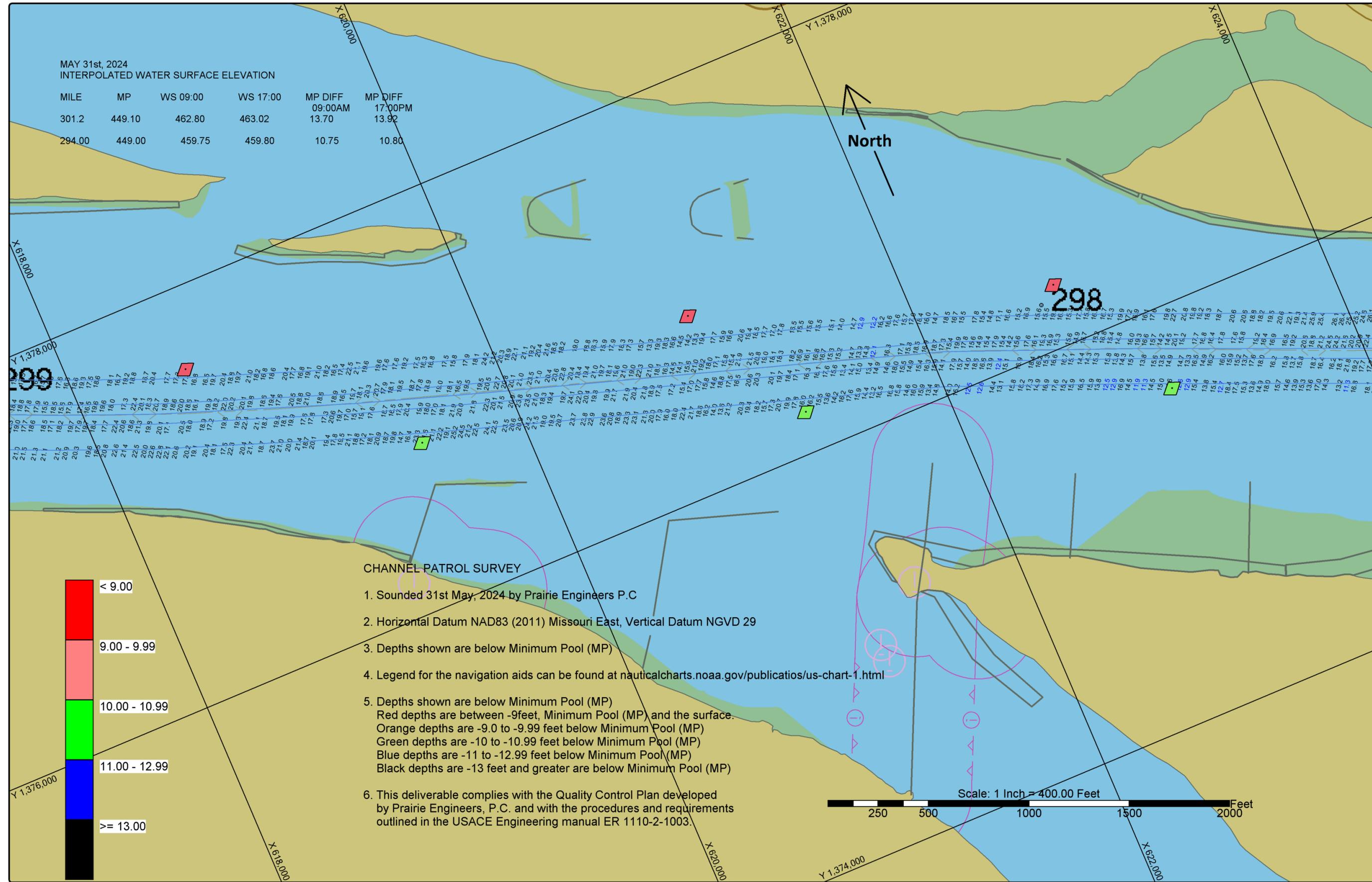
SURVEYED BY
 PRAIRIE ENGINEERS, P.C.
 404 N. MAIN STREET
 COLUMBIA, IL 62236

CHANNEL PATROL SURVEY
 OF UPPER MISSISSIPPI RIVER
 RIVER MILE 195.0 - 300.0

SHEET 83

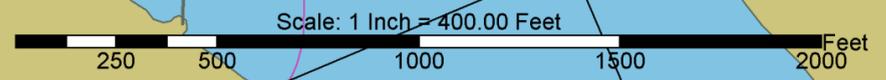
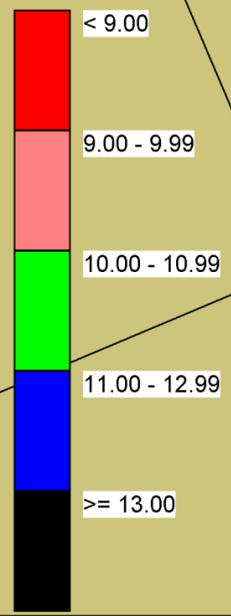
MAY 31st, 2024
INTERPOLATED WATER SURFACE ELEVATION

MILE	MP	WS 09:00	WS 17:00	MP DIFF 09:00AM	MP DIFF 17:00PM
301.2	449.10	462.80	463.02	13.70	13.92
294.00	449.00	459.75	459.80	10.75	10.80



CHANNEL PATROL SURVEY

- Sounded 31st May, 2024 by Prairie Engineers P.C
- Horizontal Datum NAD83 (2011) Missouri East, Vertical Datum NGVD 29
- Depths shown are below Minimum Pool (MP)
- Legend for the navigation aids can be found at nauticalcharts.noaa.gov/publications/us-chart-1.html
- Depths shown are below Minimum Pool (MP)
 Red depths are between -9feet, Minimum Pool (MP) and the surface.
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 Green depths are -10 to -10.99 feet below Minimum Pool (MP)
 Blue depths are -11 to -12.99 feet below Minimum Pool (MP)
 Black depths are -13 feet and greater are below Minimum Pool (MP)
- This deliverable complies with the Quality Control Plan developed by Prairie Engineers, P.C. and with the procedures and requirements outlined in the USACE Engineering manual ER 1110-2-1003.



DATES OF SURVEY:	
DATE	TIME
MAY 31st 2024	

FILE NO.:	
FILE NO.	REQUEST NO.:

GAGE RECORDS	
Gage	Records
Mundy	@ 0900hrs = 17.90ft
LD22(Lower)	@ 0900hrs = 16.70ft
Mundy	@ 1700hrs = 17.95ft
LD22(Lower)	@ 1700hrs = 16.92ft

Approved: Abednego Nkem REGISTERED PROFESSIONAL ENGINEER
Approved: Tom Frerichs CIVIL ENGINEERING TECHNICIAN
Approved: Jarrett Lancer ASST. CHIEF OF SURVEY
Approved: Tristan Harper CHIEF OF SURVEY
Date: JUNE 1st 2024

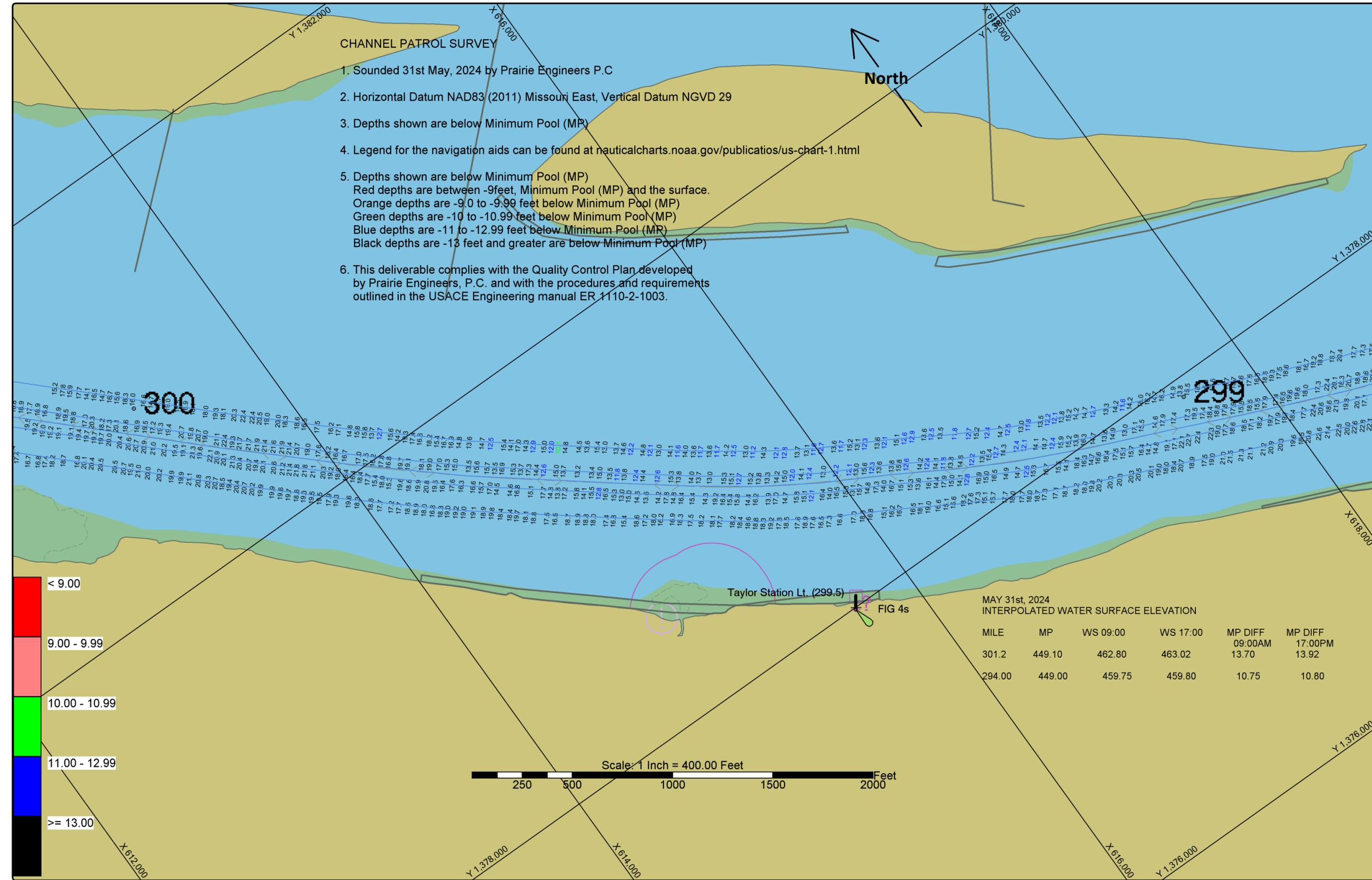
US ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

SURVEYED BY
PRAIRIE ENGINEERS, P.C.
404 N. MAIN STREET
COLUMBIA, IL 62236

CHANNEL PATROL SURVEY
OF UPPER MISSISSIPPI RIVER

RIVER MILE 195.0 - 300.0

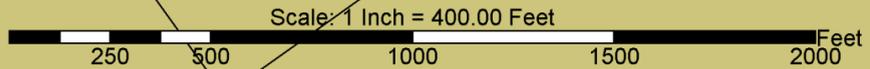
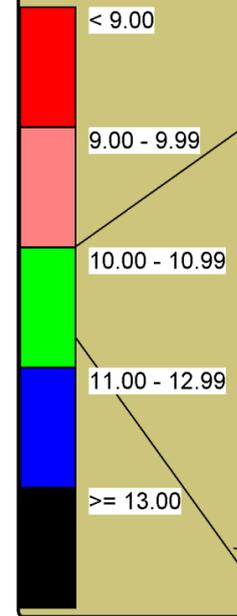
SHEET 85



CHANNEL PATROL SURVEY

1. Sounded 31st May, 2024 by Prairie Engineers P.C
2. Horizontal Datum NAD83 (2011) Missouri East, Vertical Datum NGVD 29
3. Depths shown are below Minimum Pool (MP)
4. Legend for the navigation aids can be found at nauticalcharts.noaa.gov/publications/us-chart-1.html
5. Depths shown are below Minimum Pool (MP)
 Red depths are between -9feet, Minimum Pool (MP) and the surface.
 Orange depths are -9.0 to -9.99 feet below Minimum Pool (MP)
 Green depths are -10 to -10.99 feet below Minimum Pool (MP)
 Blue depths are -11 to -12.99 feet below Minimum Pool (MP)
 Black depths are -13 feet and greater are below Minimum Pool (MP)
6. This deliverable complies with the Quality Control Plan developed by Prairie Engineers, P.C. and with the procedures and requirements outlined in the USACE Engineering manual ER 1110-2-1003.

North



Taylor Station Lt. (299.5)

FIG 4s

MAY 31st, 2024
INTERPOLATED WATER SURFACE ELEVATION

MILE	MP	WS 09:00	WS 17:00	MP DIFF 09:00AM	MP DIFF 17:00PM
301.2	449.10	462.80	463.02	13.70	13.92
294.00	449.00	459.75	459.80	10.75	10.80



ST. LOUIS

Gage Records 31st May 2024	
Mundy @ 0900hrs = 17.90ft	
LD22(Lower) @ 0900hrs = 16.70ft	
Mundy @ 1700hrs = 17.95ft	
LD22(Lower) @ 1700hrs = 16.92ft	

DATES OF SURVEY:	MAY 31st 2024
SCALE:	ONE INCH = 400 FEET
FIELD BOOKS:	
FILE NO.:	
REQUEST NO.:	

Approved: **Abednego Nkem**
SENIOR PROJECT MANAGER

Approved: **Tom Frerichs**
CIVIL ENGINEERING TECHNICIAN

Approved: **Jarrett Lancer**
ASST. CHIEF OF SURVEY

Approved: **Tristan Harper**
CHIEF OF SURVEY

Date: JUNE 1st 2024

US ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT
ST. LOUIS, MISSOURI

SURVEYED BY
PRAIRIE ENGINEERS, P.C.
404 N. MAIN STREET
COLUMBIA, IL 62236

CHANNEL PATROL SURVEY
OF UPPER MISSISSIPPI RIVER
RIVER MILE 195.0 - 300.0