

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
Revised July 18, 2013

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

| | | |
|--|--|---|
| ¹ Operator Name and Address Mack Energy Corporation P.O. Box 960 Artesia, NM 88210 | | ² OGRID Number 013837 |
| | | ³ API Number 30-025-33678 |
| ⁴ Property Code 336007 | ⁵ Property Name McDonald SWD | ⁶ Well No. 1 |

7. Surface Location

| UL - Lot | Section | Township | Range | Lot Idn | Feet from | N/S Line | Feet From | E/W Line | County |
|----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| I | 9 | 15S | 32E | | 1334 | South | 987 | East | Lea |

8. Proposed Bottom Hole Location

| UL - Lot | Section | Township | Range | Lot Idn | Feet from | N/S Line | Feet From | E/W Line | County |
|----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| | | | | | | | | | |

9. Pool Information

| | | |
|-----------------|-----------|--------------------|
| SWD; San Andres | Pool Name | Pool Code 96121 |
|-----------------|-----------|--------------------|

Additional Well Information

| | | | | |
|-------------------------------------|---------------------------------------|--|-----------------------------------|---|
| ¹¹ Work Type Re-Entry | ¹² Well Type SWD | ¹³ Cable/Rotary | ¹⁴ Lease Type State | ¹⁵ Ground Level Elevation 4303.7' |
| ¹⁶ Multiple | ¹⁷ Proposed Depth 5650' | ¹⁸ Formation San Andres | ¹⁹ Contractor | ²⁰ Spud Date 7/1/2023 |
| Depth to Ground water | | Distance from nearest fresh water well | | Distance to nearest surface water |

We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

| Type | Hole Size | Casing Size | Casing Weight/ft | Setting Depth | Sacks of Cement | Estimated TOC |
|--------------|-----------|-------------|------------------|---------------|-----------------|-------------------|
| Surface | 17 1/2" | 13 3/8" | 48# | 4500' | 500sx | 0'- In Place 1997 |
| Intermediate | 11" | 8 5/8" | 32# | 4050' | 1400sx | 0'- In Place 1997 |
| Production | 7 7/8" | 5 1/2" | 20# & 17# | 12,500' | 1950sx | 0'- In Place 1997 |

Casing/Cement Program: Additional Comments

| |
|---|
| Re-Entry drill out plugs to 5,650', Perf & Acidize. Put well on injection |
|---|

22. Proposed Blowout Prevention Program

| Type | Working Pressure | Test Pressure | Manufacturer |
|------------|------------------|---------------|--------------|
| Double Ram | 3000 | 3000 | |

| | | |
|---|----------------------------------|------------------|
| ²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable. Signature: <i>Deana Weaver</i> Printed name: Deana Weaver Title: Regulatory Tech II E-mail Address: dweaver@mec.com Date: 4/24/2023 Phone: 575-748-1288 | OIL CONSERVATION DIVISION | |
| | Approved By: | |
| | Title: | |
| | Approved Date: | Expiration Date: |
| | Conditions of Approval Attached | |

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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
 AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | | | | |
|--|--|--|--|--|---|
| ¹ API Number 30-025-33678 | | ² Pool Code 96121 | | ³ Pool Name SWD; San Andres | |
| ⁴ Property Code 336007 | | ⁵ Property Name McDONALD SWD | | | ⁶ Well Number 1 |
| ⁷ OGRID No. 13837 | | ⁸ Operator Name MACK ENERGY CORPORATION | | | ⁹ Elevation 4303.7 |

¹⁰ Surface Location

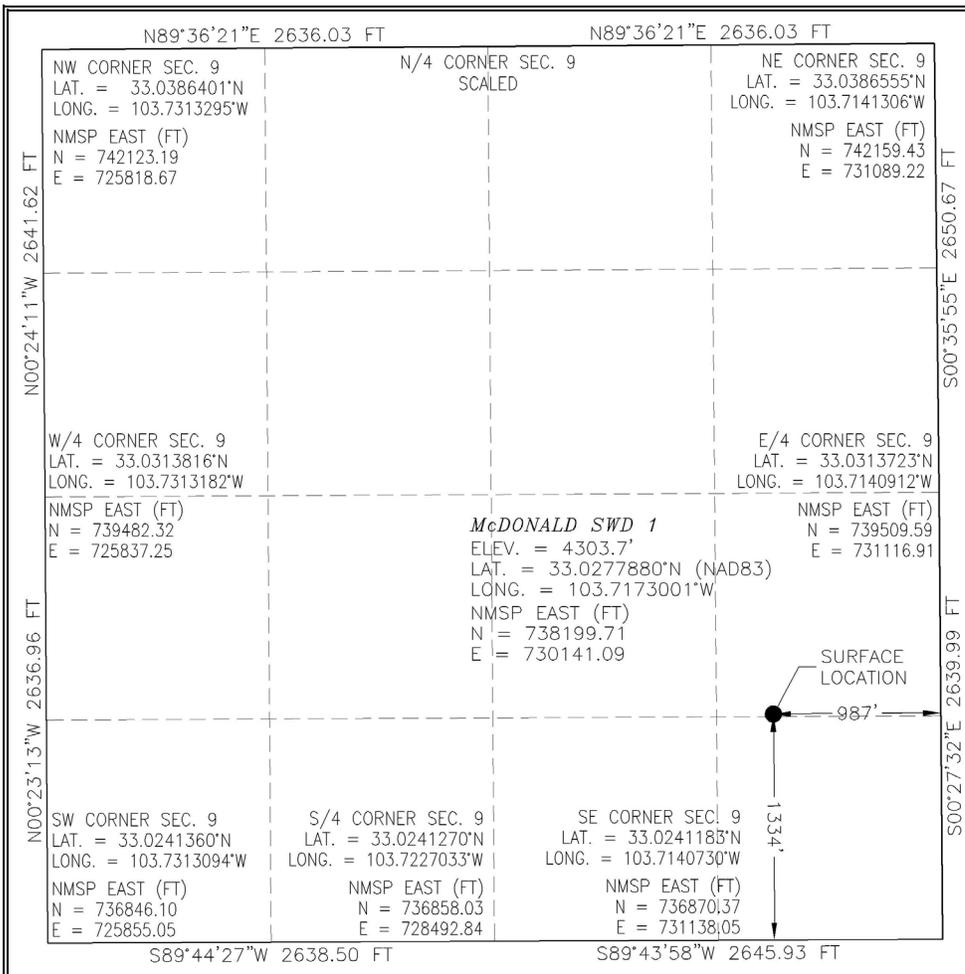
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|----------|-------------|-------------|---------|---------------|------------------|---------------|----------------|------------|
| I | 9 | 15 S | 32 E | | 1334 | SOUTH | 987 | EAST | LEA |

¹¹ Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |

| | | | |
|--|-------------------------------|----------------------------------|-------------------------|
| ¹² Dedicated Acres 40 | ¹³ Joint or Infill | ¹⁴ Consolidation Code | ¹⁵ Order No. |
|--|-------------------------------|----------------------------------|-------------------------|

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Deana Weaver 3/6/2023
Signature Date

Deana Weaver
Printed Name

dweaver@mec.com
E-mail Address

¹⁸ SURVEYOR CERTIFICATION

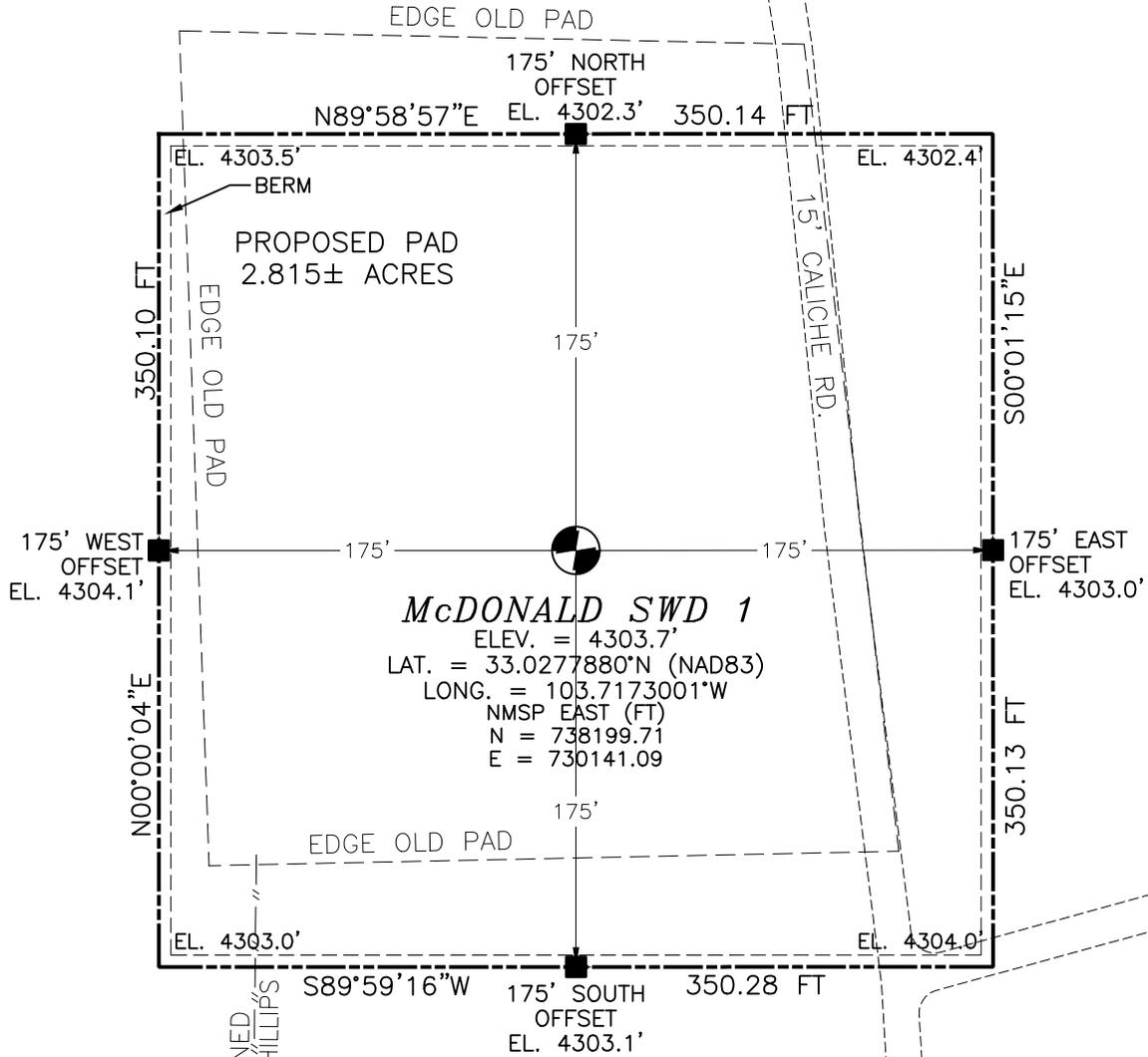
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

FEBRUARY 12, 2023
Date of Survey

[Signature]
Signature and Seal of Professional Surveyor:

Certificate Number: 12797
Professional Surveyor License No. 9656

SECTION 9, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
SITE MAP



0 8 40 80 160
SCALE 1" = 80'

DIRECTIONS TO LOCATION
FROM THE INTERSECTION ST. HWY. 249 & ST. HWY. 172, GO NORTH ON ST. HWY. 172 APPROX. 0.9 MILES, GO NORTHEAST ON CALICHE ROAD APPROX. 50', GO NORTH APPROX. 0.73 MILES, GO EAST APPROX. 0.96 MILES, GO SOUTH APPROX. APPROX. 0.23 MILES, GO EAST APPROX. 405', GO SOUTHWEST APPROX. 392', GO EAST APPROX. 0.92 MILES, GO NORTH APPROX. 0.88 MILES, GO NORTHEAST APPROX. 0.37 MILES, GO EAST APPROX. 405', GO NORTH APPROX. 340', GO NORTHEAST APPROX. 201', GO EAST APPROX. 201', CONTINUE EAST APPROX. 1.9 MILES, GO SOUTH APPROX. 1.9 MILES TO NORTH EDGE OF PAD FOR THIS LOCATION

I, FILMON F. JARAMILLO, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR, CERTIFY THAT I DIRECTED AND SUPERVISED THIS SURVEY, THAT THE DATA AND CALCULATIONS ARE TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THAT I AM AWARE OF THE MINIMUM STANDARDS FOR SURVEYING PRACTICES.

FILMON F. JARAMILLO, REGISTERED PROFESSIONAL SURVEYOR NO. 7891

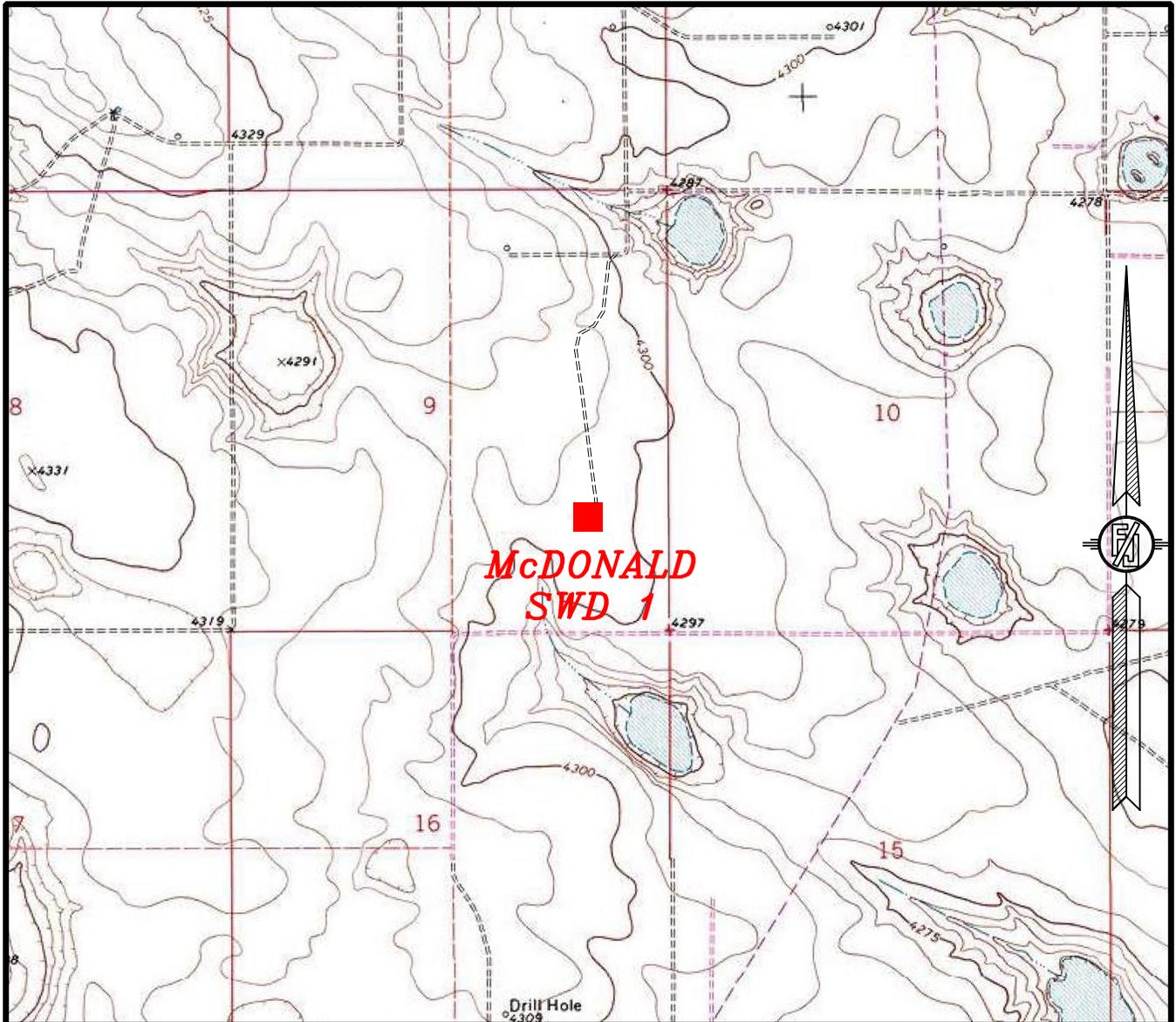
MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO (575) 234-3327

MACK ENERGY CORPORATION
McDONALD SWD 1
LOCATED 1334 FT. FROM THE SOUTH LINE
AND 987 FT. FROM THE EAST LINE OF
SECTION 9, TOWNSHIP 15 SOUTH,
RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

FEBRUARY 12, 2023

SURVEY NO. 9656

SECTION 9, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
LOCATION VERIFICATION MAP



USGS QUAD MAP:
DEAN RANCH

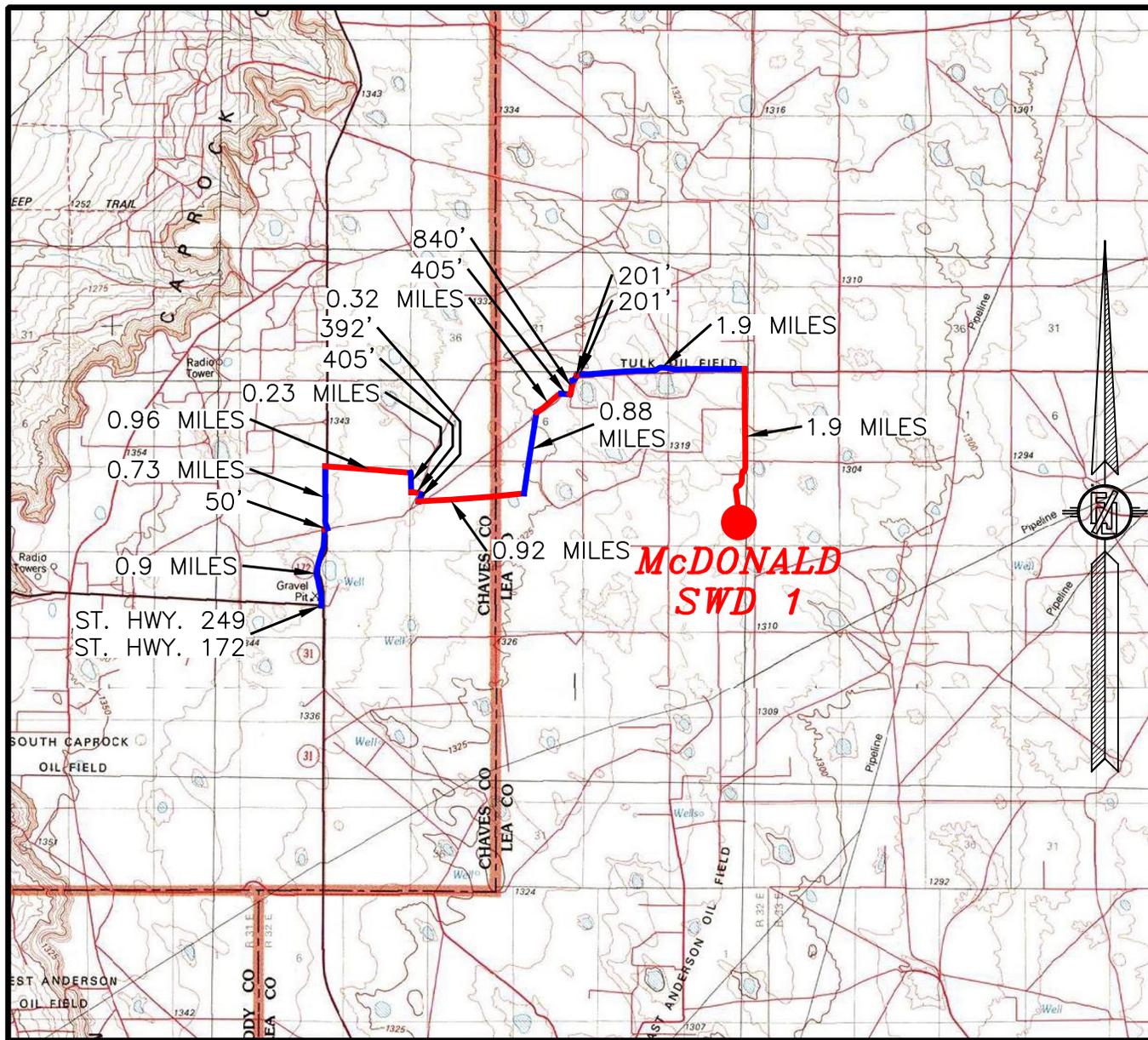
NOT TO SCALE

MACK ENERGY CORPORATION
McDONALD SWD 1
LOCATED 1334 FT. FROM THE SOUTH LINE
AND 987 FT. FROM THE EAST LINE OF
SECTION 9, TOWNSHIP 15 SOUTH,
RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

FEBRUARY 12, 2023

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO SURVEY NO. 9656
(575) 234-3327

SECTION 9, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M. LEA COUNTY, STATE OF NEW MEXICO VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

DIRECTIONS TO LOCATION

FROM THE INTERSECTION ST. HWY. 249 & ST. HWY. 172, GO NORTH ON ST. HWY. 172 APPROX. 0.9 MILES, GO NORTHEAST ON CALICHE ROAD APPROX. 50', GO NORTH APPROX. 0.73 MILES, GO EAST APPROX. 0.96 MILES, GO SOUTH APPROX. APPROX. 0.23 MILES, GO EAST APPROX. 405', GO SOUTHWEST APPROX. 392', GO EAST APPROX. 0.92 MILES, GO NORTH APPROX. 0.88 MILES, GO NORTHEAST APPROX. 0.32 MILES, GO EAST APPROX. 405', GO NORTH APPROX. 840', GO NORTHEAST APPROX. 201', GO EAST APPROX. 201', CONTINUE EAST APPROX. 1.9 MILES, GO SOUTH APPROX 1.9 MILES TO NORTH EDGE OF PAD FOR THIS LOCATION.

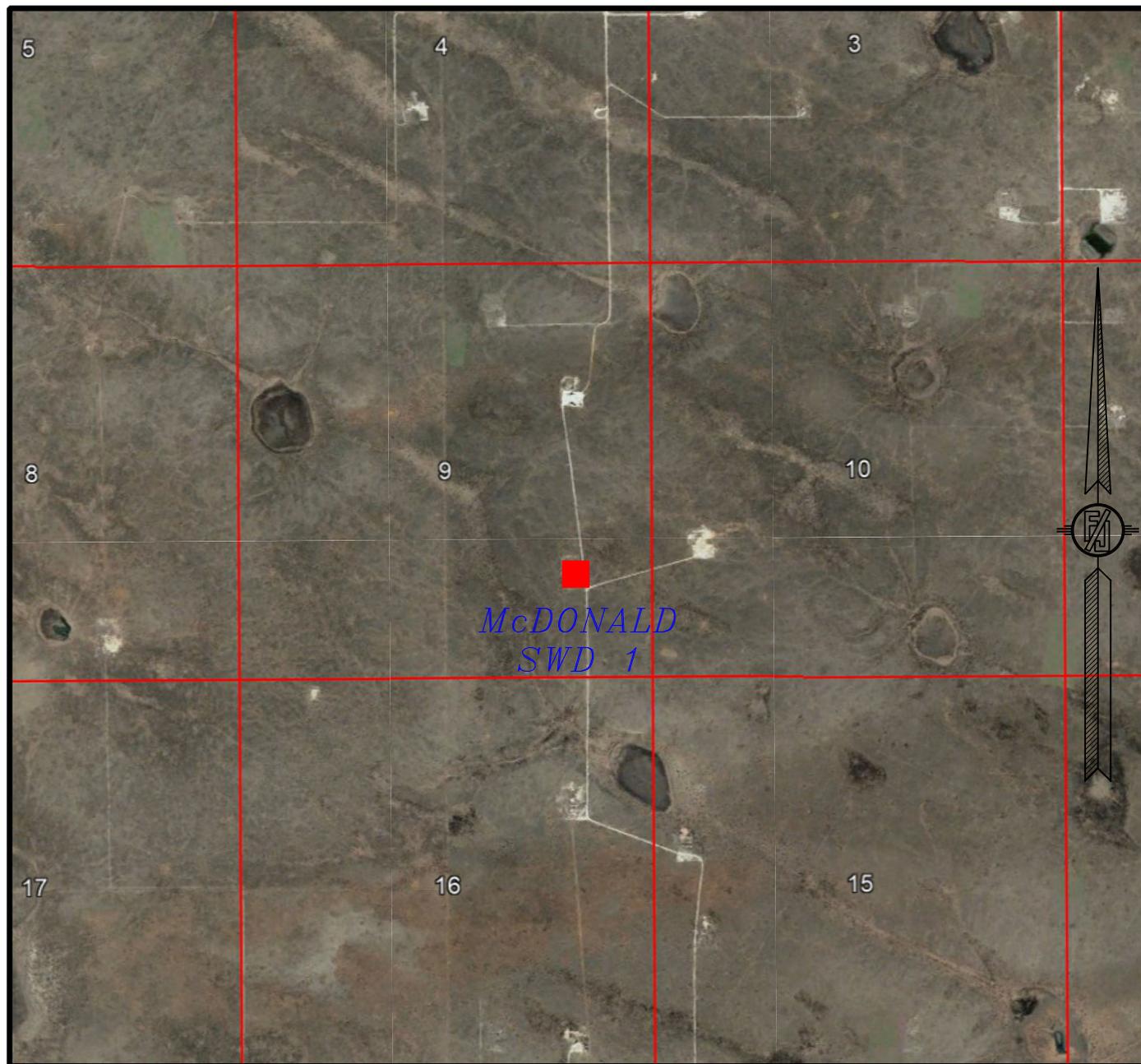
MACK ENERGY CORPORATION
McDONALD SWD 1
 LOCATED 1334 FT. FROM THE SOUTH LINE
 AND 987 FT. FROM THE EAST LINE OF
 SECTION 9, TOWNSHIP 15 SOUTH,
 RANGE 32 EAST, N.M.P.M.
 LEA COUNTY, STATE OF NEW MEXICO

FEBRUARY 12, 2023

SURVEY NO. 9656

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO
(575) 234-3327

SECTION 9, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
JAN. 2018

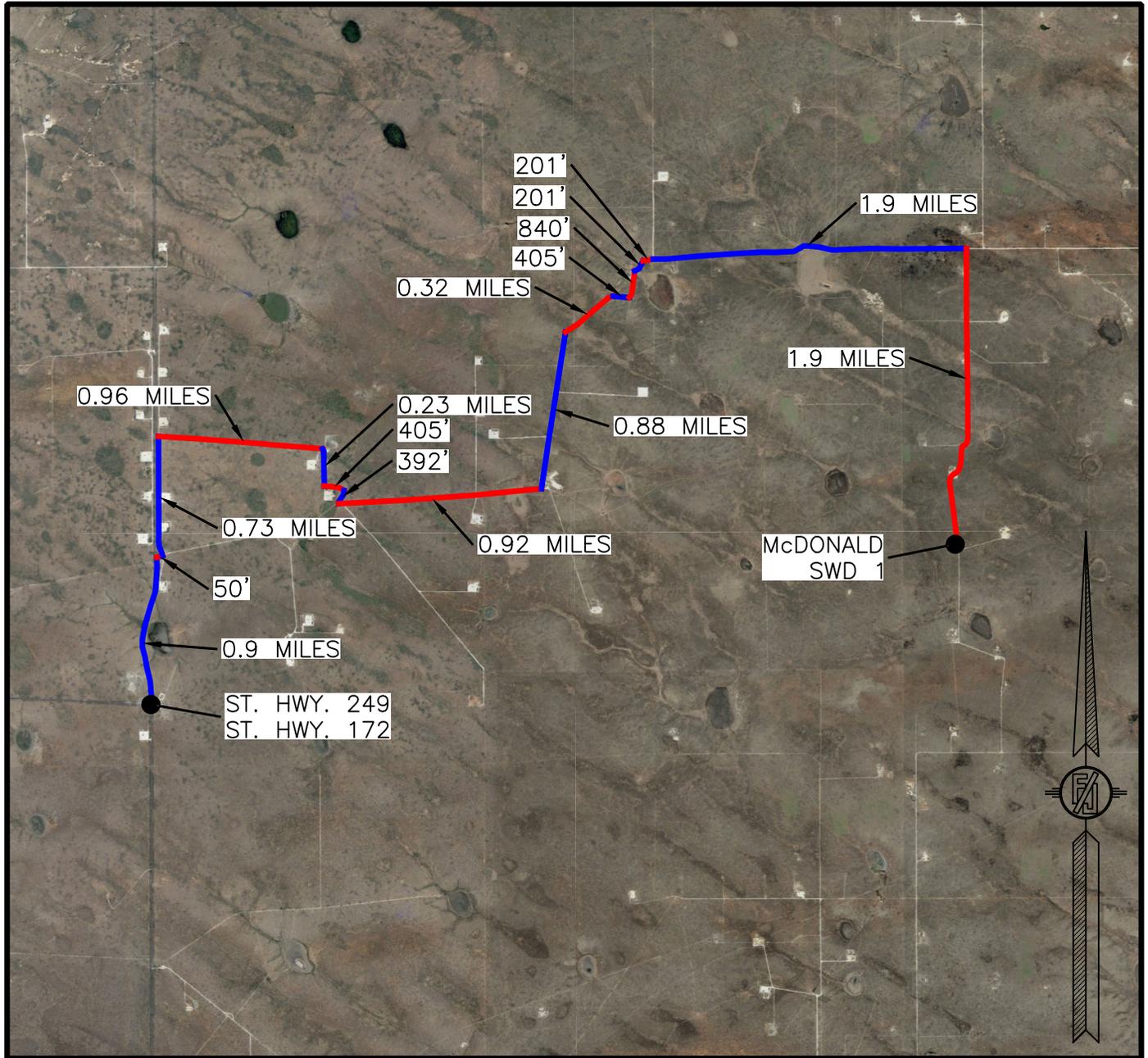
MACK ENERGY CORPORATION
McDONALD SWD 1
LOCATED 1334 FT. FROM THE SOUTH LINE
AND 987 FT. FROM THE EAST LINE OF
SECTION 9, TOWNSHIP 15 SOUTH,
RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

FEBRUARY 12, 2023

SURVEY NO. 9656

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO
(575) 234-3327

SECTION 9, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
AERIAL ACCESS ROUTE MAP



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
JAN. 2018

MACK ENERGY CORPORATION
McDONALD SWD 1
LOCATED 1334 FT. FROM THE SOUTH LINE
AND 987 FT. FROM THE EAST LINE OF
SECTION 9, TOWNSHIP 15 SOUTH,
RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

FEBRUARY 12, 2023

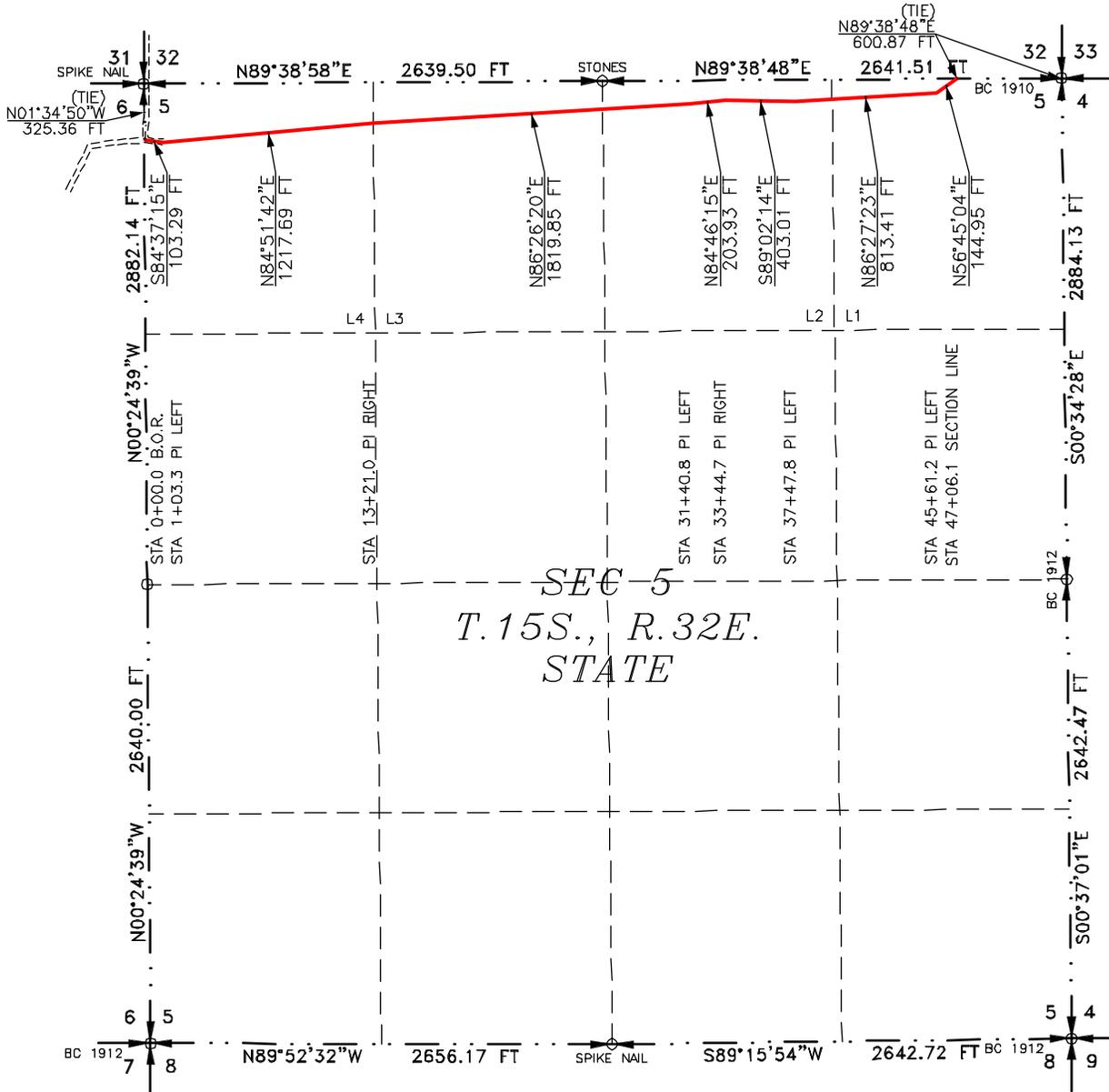
SURVEY NO. 9656

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO
(575) 234-3327

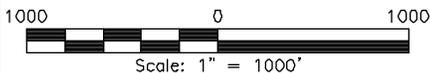
ACCESS ROAD PLAT

EXISTING CALICHE ROAD FOR ACCESS TO McDONALD SWD 1

MACK ENERGY CORPORATION
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 5, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
FEBRUARY 12, 2023



SEE NEXT SHEET (2-10) FOR DESCRIPTION



GENERAL NOTES

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING AND DISTANCE IS NMSF EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 12th DAY OF FEBRUARY 2023.



MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3327

SHEET: 1-10

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO (575) 234-3327 SURVEY NO. 9656

ACCESS ROAD PLAT

EXISTING CALICHE ROAD FOR ACCESS TO McDONALD SWD 1

MACK ENERGY CORPORATION
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 5, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
FEBRUARY 12, 2023

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING STATE OF NEW MEXICO LAND IN SECTION 5, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M., LEA COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN LOT 4 OF SAID SECTION 5, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M., WHENCE THE NORTHWEST CORNER OF SAID SECTION 5, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M. BEARS N01°34'50"W, A DISTANCE OF 325.36 FEET;
THENCE S84°37'15"E A DISTANCE OF 103.29 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N84°51'42"E A DISTANCE OF 1217.69 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N86°26'20"E A DISTANCE OF 1819.85 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N84°46'15"E A DISTANCE OF 203.93 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S89°02'14"E A DISTANCE OF 403.01 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N86°27'23"E A DISTANCE OF 813.41 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N56°45'04"E A DISTANCE OF 144.95 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE NORTHEAST CORNER OF SAID SECTION 5, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M. BEARS N89°38'48"E, A DISTANCE OF 600.87 FEET;

SAID STRIP OF LAND BEING 4706.13 FEET OR 285.22 RODS IN LENGTH, CONTAINING 3.241 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

| | | | |
|-------|--------------|------------|-------------|
| LOT 4 | 1318.12 L.F. | 79.89 RODS | 0.908 ACRES |
| LOT 3 | 1321.88 L.F. | 80.11 RODS | 0.910 ACRES |
| LOT 2 | 1322.53 L.F. | 80.15 RODS | 0.911 ACRES |
| LOT 1 | 743.60 L.F. | 45.07 RODS | 0.512 ACRES |

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 12th DAY OF FEBRUARY 2023



MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3327

GENERAL NOTES

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING AND DISTANCE IS NMSF EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

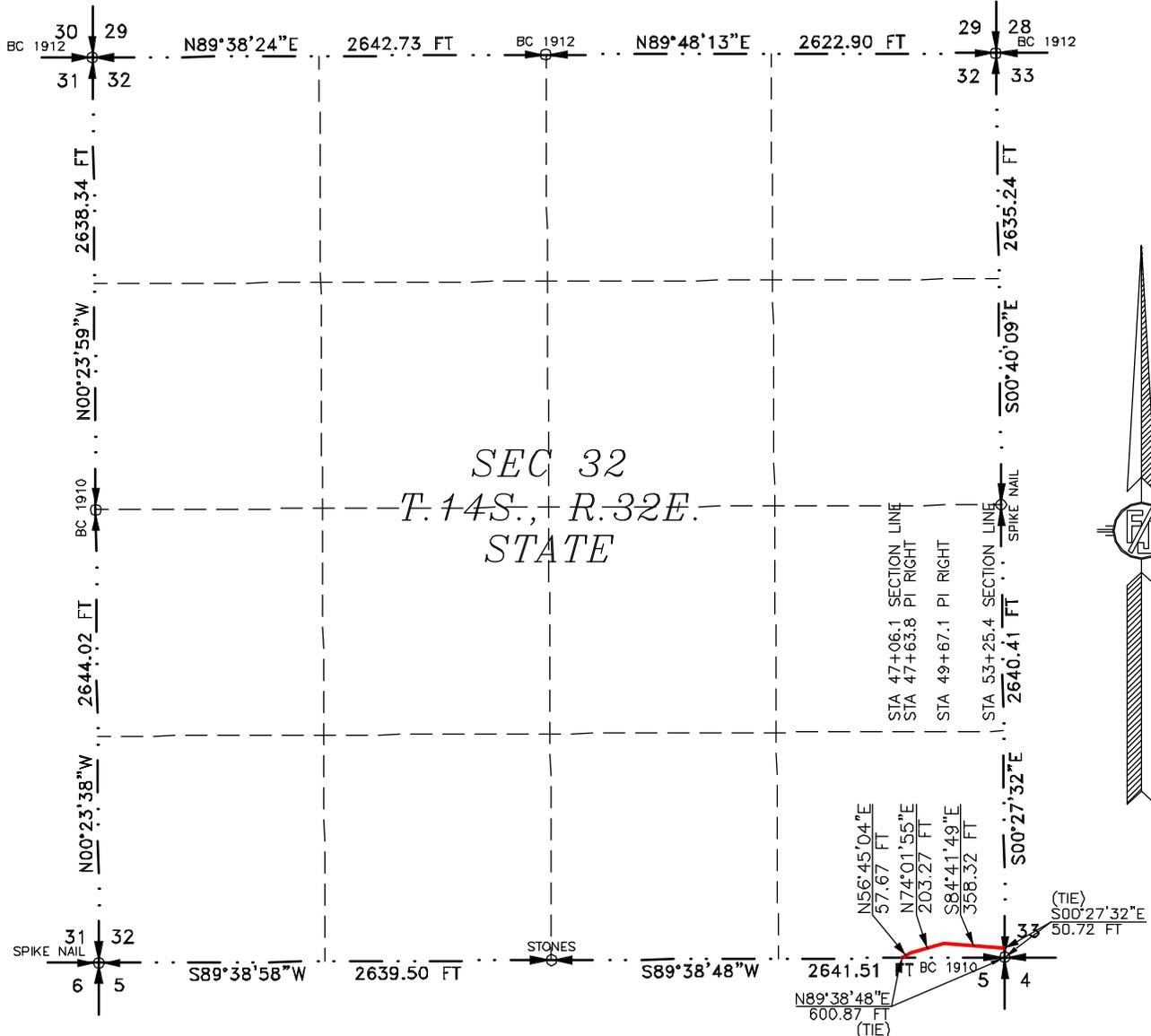
SHEET: 2-10

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO
SURVEY NO. 9656

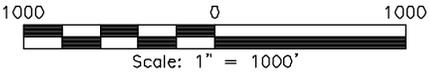
ACCESS ROAD PLAT

EXISTING CALICHE ROAD FOR ACCESS TO McDONALD SWD 1

MACK ENERGY CORPORATION
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 32, TOWNSHIP 14 SOUTH, RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
FEBRUARY 12, 2023



SEE NEXT SHEET (4-10) FOR DESCRIPTION



GENERAL NOTES

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING AND DISTANCE IS NMSD EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 12th DAY OF FEBRUARY 2023

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3327

SHEET: 3-10

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO (575) 234-3327

SURVEY NO. 9656

ACCESS ROAD PLAT

EXISTING CALICHE ROAD FOR ACCESS TO McDONALD SWD 1

**MACK ENERGY CORPORATION
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 32, TOWNSHIP 14 SOUTH, RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
FEBRUARY 12, 2023**

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING STATE OF NEW MEXICO LAND IN SECTION 32, TOWNSHIP 14 SOUTH, RANGE 32 EAST, N.M.P.M., LEA COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE SE/4 SE/4 OF SAID SECTION 32, TOWNSHIP 14 SOUTH, RANGE 32 EAST, N.M.P.M., WHENCE THE SOUTHEAST CORNER OF SAID SECTION 32, TOWNSHIP 14 SOUTH, RANGE 32 EAST, N.M.P.M. BEARS N89°38'48"E, A DISTANCE OF 600.87 FEET;
THENCE N56°45'04"E A DISTANCE OF 57.67 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N74°01'55"E A DISTANCE OF 203.27 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S84°41'49"E A DISTANCE OF 358.32 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHEAST CORNER OF SAID SECTION 32, TOWNSHIP 14 SOUTH, RANGE 32 EAST, N.M.P.M. BEARS S00°27'32"E, A DISTANCE OF 50.72 FEET;

SAID STRIP OF LAND BEING 619.26 FEET OR 37.53 RODS IN LENGTH, CONTAINING 0.426 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SE/4 SE/4 619.26 L.F. 37.53 RODS 0.426 ACRES

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 12th DAY OF FEBRUARY 2023

FILIMON F. JARAMILLO
12797
MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3327

FILIMON F. JARAMILLO PLS
SURVEY NO. 9656
MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO (575) 234-3327

GENERAL NOTES

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

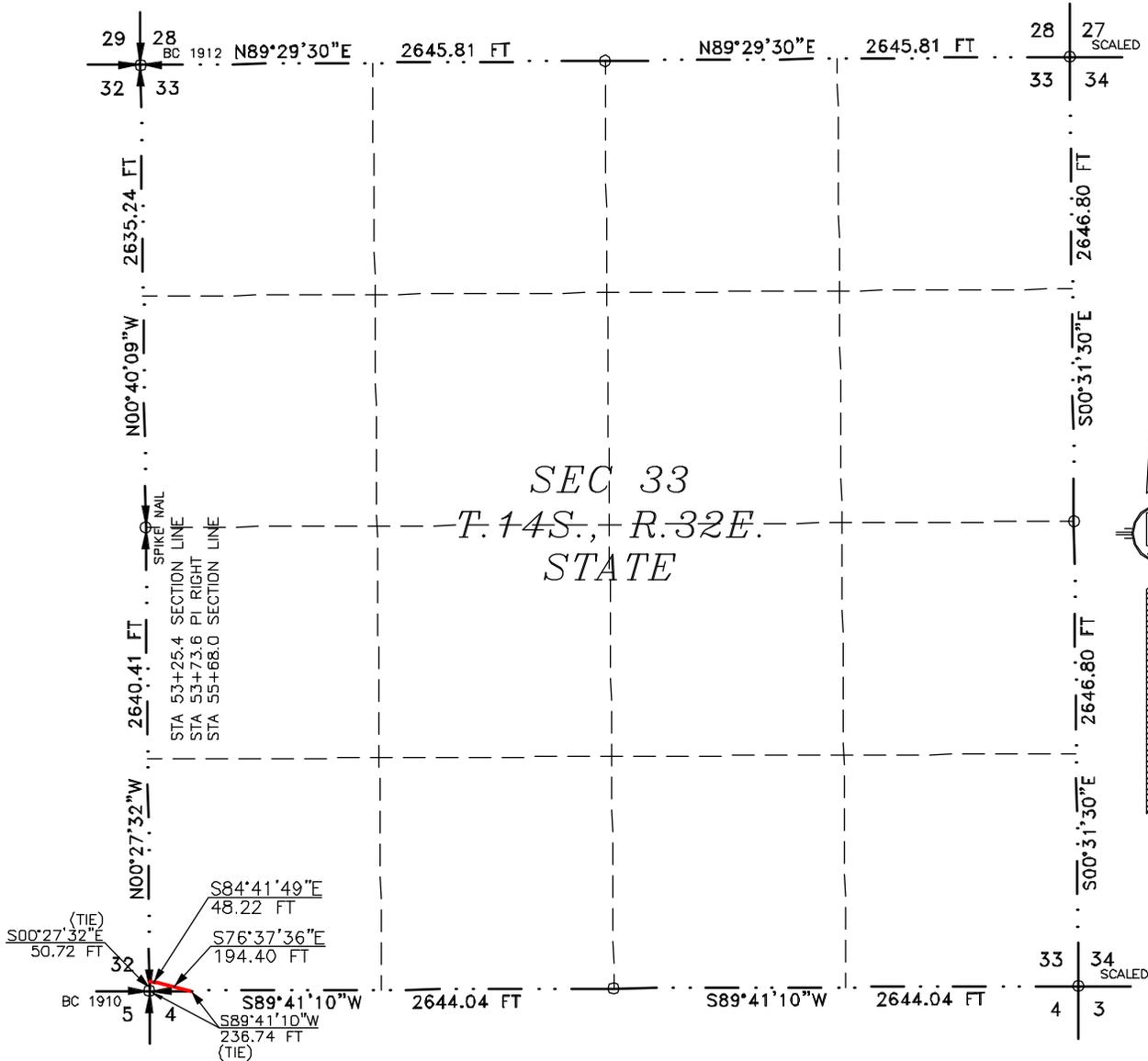
SHEET: 4-10

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO (575) 234-3327

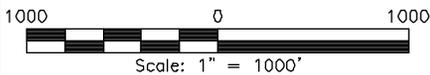
ACCESS ROAD PLAT

EXISTING CALICHE ROAD FOR ACCESS TO McDONALD SWD 1

MACK ENERGY CORPORATION
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 33, TOWNSHIP 14 SOUTH, RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
FEBRUARY 12, 2023



SEE NEXT SHEET (6-10) FOR DESCRIPTION



GENERAL NOTES

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING AND DISTANCE IS NMSF EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 12th DAY OF FEBRUARY 2023



MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3327

SHEET: 5-10

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO 88220 (575) 234-3327

SURVEY NO. 9656

ACCESS ROAD PLAT

EXISTING CALICHE ROAD FOR ACCESS TO McDONALD SWD 1

**MACK ENERGY CORPORATION
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 33, TOWNSHIP 14 SOUTH, RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
FEBRUARY 12, 2023**

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING STATE OF NEW MEXICO LAND IN SECTION 33, TOWNSHIP 14 SOUTH, RANGE 32 EAST, N.M.P.M., LEA COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE SW/4 SW/4 OF SAID SECTION 33, TOWNSHIP 14 SOUTH, RANGE 32 EAST, N.M.P.M., WHENCE THE SOUTHWEST CORNER OF SAID SECTION 33, TOWNSHIP 14 SOUTH, RANGE 32 EAST, N.M.P.M. BEARS S00°27'32"E, A DISTANCE OF 50.72 FEET;
THENCE S84°41'49"E A DISTANCE OF 48.22 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S76°37'36"E A DISTANCE OF 194.40 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHWEST CORNER OF SAID SECTION 33, TOWNSHIP 14 SOUTH, RANGE 32 EAST, N.M.P.M. BEARS S89°41'10"W, A DISTANCE OF 236.74 FEET;

SAID STRIP OF LAND BEING 242.62 FEET OR 14.70 RODS IN LENGTH, CONTAINING 0.167 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SW/4 SW/4 242.62 L.F. 14.70 RODS 0.167 ACRES

GENERAL NOTES

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 12th DAY OF FEBRUARY 2023



MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3327

SURVEY NO. 9656

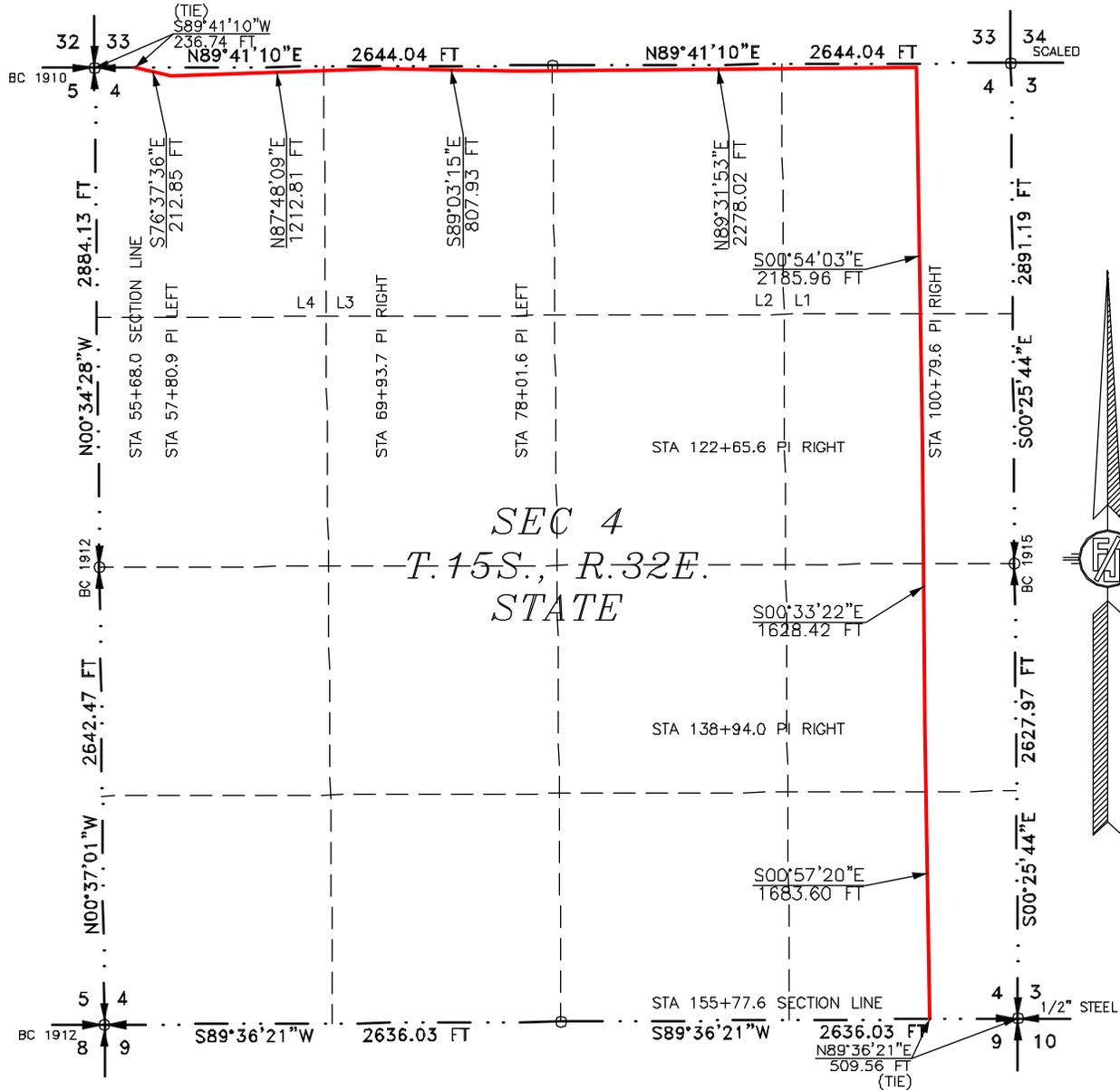
SHEET: 6-10

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO (575) 234-3327

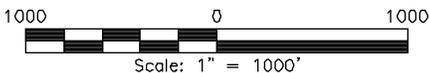
ACCESS ROAD PLAT

EXISTING CALICHE ROAD FOR ACCESS TO McDONALD SWD 1

MACK ENERGY CORPORATION CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING SECTION 4, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M. LEA COUNTY, STATE OF NEW MEXICO FEBRUARY 12, 2023



SEE NEXT SHEET (8-10) FOR DESCRIPTION



GENERAL NOTES

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING AND DISTANCE IS NMSF EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 12th DAY OF FEBRUARY 2023



MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3327

SHEET: 7-10

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO (575) 234-3327

SURVEY NO. 9656

ACCESS ROAD PLAT

EXISTING CALICHE ROAD FOR ACCESS TO McDONALD SWD 1

**MACK ENERGY CORPORATION
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 4, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
FEBRUARY 12, 2023**

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING STATE OF NEW MEXICO LAND IN SECTION 4, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M., LEA COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN LOT 4 RR/4 OF SAID SECTION 4, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M., WHENCE THE NORTHWEST CORNER OF SAID SECTION 4, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M. BEARS S89°41'10"W, A DISTANCE OF 236.74 FEET;
THENCE S76°37'36"E A DISTANCE OF 212.85 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N87°48'09"E A DISTANCE OF 1212.81 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S89°03'15"E A DISTANCE OF 807.93 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N89°31'53"E A DISTANCE OF 2278.02 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S00°54'03"E A DISTANCE OF 2185.96 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S00°33'22"E A DISTANCE OF 1628.42 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S00°57'20"E A DISTANCE OF 1683.60 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHEAST CORNER OF SAID SECTION 4, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M. BEARS N89°36'21"E, A DISTANCE OF 509.56 FEET;

SAID STRIP OF LAND BEING 10009.59 FEET OR 606.94 RODS IN LENGTH, CONTAINING 6.894 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

| | | | |
|-----------|--------------|-------------|-------------|
| LOT 4 | 1091.89 L.F. | 66.18 RODS | 0.752 ACRES |
| LOT 3 | 1322.40 L.F. | 80.15 RODS | 0.911 ACRES |
| LOT 2 | 1321.99 L.F. | 80.12 RODS | 0.910 ACRES |
| LOT 1 | 2198.52 L.F. | 133.24 RODS | 1.514 ACRES |
| SE/4 NE/4 | 1445.29 L.F. | 87.59 RODS | 0.995 ACRES |
| NE/4 SE/4 | 1314.74 L.F. | 79.68 RODS | 0.905 ACRES |
| SE/4 SE/4 | 1314.76 L.F. | 79.68 RODS | 0.905 ACRES |

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 26th DAY OF FEBRUARY 2023

FILIMON F. JARAMILLO
12797
MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3327

FILIMON F. JARAMILLO PLS
SURVEY NO. 9656
MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO (575) 234-3327

GENERAL NOTES

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING AND DISTANCE IS NMSF EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

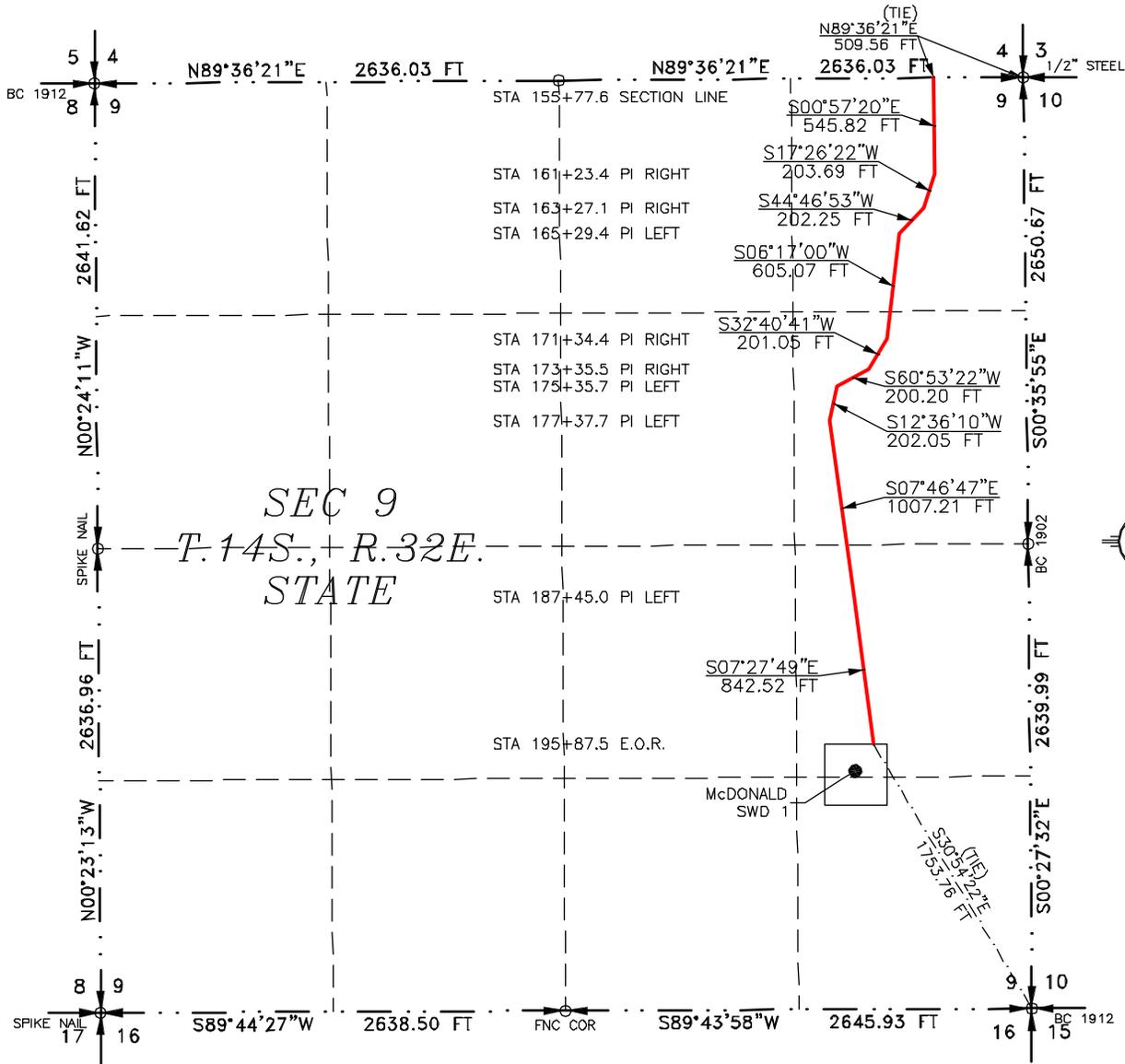
SHEET: 8-10

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO (575) 234-3327

ACCESS ROAD PLAT

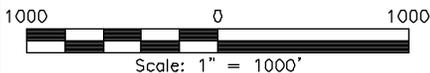
EXISTING CALICHE ROAD FOR ACCESS TO McDONALD SWD 1

MACK ENERGY CORPORATION
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 9, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
FEBRUARY 12, 2023



SEC 9
T. 14 S., R. 32 E.
STATE

SEE NEXT SHEET (10-10) FOR DESCRIPTION



GENERAL NOTES

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING AND DISTANCE IS NMSF EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 14th DAY OF FEBRUARY 2023

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3327

SHEET: 9-10

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO 88220 (575) 234-3327 SURVEY NO. 9656

ACCESS ROAD PLAT

EXISTING CALICHE ROAD FOR ACCESS TO McDONALD SWD 1

**MACK ENERGY CORPORATION
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 9, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
FEBRUARY 12, 2023**

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING STATE OF NEW MEXICO LAND IN SECTION 9, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M., LEA COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE NE/4 NE/4 OF SAID SECTION 9, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M., WHENCE THE NORTHEAST CORNER OF SAID SECTION 9, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M. BEARS N89°36'21"E, A DISTANCE OF 509.56 FEET;
THENCE S00°57'20"E A DISTANCE OF 545.82 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S17°26'22"W A DISTANCE OF 203.69 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S44°46'53"W A DISTANCE OF 202.25 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S06°17'00"W A DISTANCE OF 605.07 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S32°40'41"W A DISTANCE OF 201.05 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S60°53'22"W A DISTANCE OF 200.20 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S12°36'10"W A DISTANCE OF 202.05 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S07°46'47"E A DISTANCE OF 1007.21 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S07°27'49"E A DISTANCE OF 842.52 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHEAST CORNER OF SAID SECTION 9, TOWNSHIP 15 SOUTH, RANGE 32 EAST, N.M.P.M. BEARS S30°54'22"E, A DISTANCE OF 1753.76 FEET;

SAID STRIP OF LAND BEING 4009.86 FEET OR 243.02 RODS IN LENGTH, CONTAINING 2.762 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

| | | | |
|-----------|--------------|------------|-------------|
| NE/4 NE/4 | 1397.18 L.F. | 84.68 RODS | 0.962 ACRES |
| SE/4 NE/4 | 1472.96 L.F. | 89.27 RODS | 1.014 ACRES |
| NE/4 SE/4 | 1139.72 L.F. | 69.07 RODS | 0.785 ACRES |

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 12th DAY OF FEBRUARY 2023



MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3327

GENERAL NOTES

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING AND DISTANCE IS NMSF EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SHEET: 10-10

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO 88220 (575) 234-3327 **SURVEY NO. 9656**

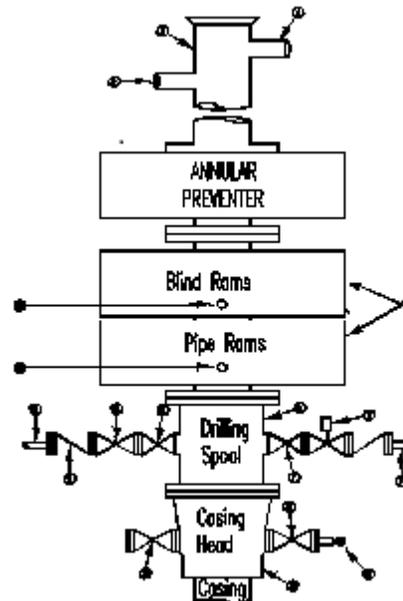
McDonald SWD #1
1340 FSL 990 FEL
Sec. 9 T15S R32E
Formation Tops

| | |
|--------------|---------|
| Quaternary | Surface |
| Rustler | 1445' |
| Top Salt | 1573' |
| Base Salt | 2360' |
| Yates | 2483' |
| Seven Rivers | 2750' |
| Queen | 3298' |
| Grayburg | 3715' |
| San Andres | 4048' |
| Glorieta | 5650' |

Mack Energy Corporation
Minimum Blowout Preventer Requirements
3000 psi Working Pressure
13 3/8 inch- 3 MWP
11 Inch - 3 MWP
EXHIBIT #10

Stack Requirements

| NO. | Items | Min. I.D. | Min. Nominal |
|-----|--|-----------|--------------|
| 1 | Flowline | | 2" |
| 2 | Fill up line | | 2" |
| 3 | Drilling nipple | | |
| 4 | Annular preventer | | |
| 5 | Two single or one dual hydraulically operated rams | | |
| 6a | Drilling spool with 2" min. kill line and 3" min choke line outlets | | 2" Choke |
| 6b | 2" min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above) | | |
| 7 | Valve Gate Plug | 3 1/8 | |
| 8 | Gate valve-power operated | 3 1/8 | |
| 9 | Line to choke manifold | | 3" |
| 10 | Valve Gate Plug | 2 1/16 | |
| 11 | Check valve | 2 1/16 | |
| 12 | Casing head | | |
| 13 | Valve Gate Plug | 1 13/16 | |
| 14 | Pressure gauge with needle valve | | |
| 15 | Kill line to rig mud pump manifold | | 2" |



OPTIONAL

| | | | |
|----|---------------|---------|--|
| 16 | Flanged Valve | 1 13/16 | |
|----|---------------|---------|--|

CONTRACTOR'S OPTION TO FURNISH: 10. ME

1. All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 2000 psi minimum.
2. Automatic accumulator (80 gallons, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
3. BOP controls, to be located near drillers' position.
4. Kelly equipped with Kelly cock.
5. Inside blowout preventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
6. Kelly saver-sub equipped with rubber casing protector at all times.
7. Plug type blowout preventer tester.
8. Extra set pipe rams to fit drill pipe in use on location at all times.
9. Type RX ring gaskets in place of Type R.

MEC TO FURNISH:

1. Bradenhead or casing head and side valves.
2. Wear bushing. If required.

GENERAL NOTES:

1. Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
2. All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through choke valves must be full opening and suitable for high pressure mud service.
3. Controls to be of standard design and each marked, showing opening and closing position
4. Chokes will be positioned so as not to hamper or delay changing of choke beans.

5. Replaceable parts for adjustable choke, or bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
6. All valves to be equipped with hand-wheels or handles ready for immediate use.
7. Choke lines must be suitably anchored.
8. Handwheels and extensions to be connected and ready for use.
9. Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
10. All seamless steel control piping (2000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
11. Casinghead connections shall not be used except in case of emergency.
12. Does not use kill line for routine fill up operations.

Mack Energy Corporation

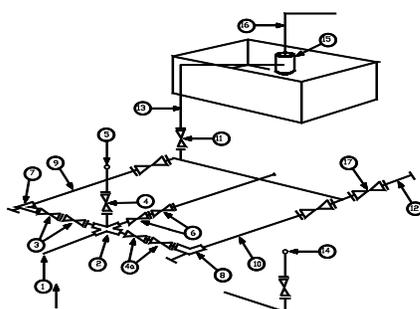
Exhibit #11

MINIMUM CHOKE MANIFOLD

3,000, 5,000, and 10,000 PSI Working Pressure

3M will be used

3 MWP - 5 MWP - 10 MWP



Mud Pit

Reserve Pit

* Location of separator optional

Below Substructure

Minimum requirements

| No. | | 3,000 MWP | | | 5,000 MWP | | | 10,000 MWP | | |
|-----|--|-----------|---------|--------|-----------|---------|--------|------------|---------|--------|
| | | I.D. | Nominal | Rating | I.D. | Nominal | Rating | I.D. | Nominal | Rating |
| 1 | Line from drilling Spool | | 3" | 3,000 | | 3" | 5,000 | | 3" | 10,000 |
| 2 | Cross 3" x 3" x 3" x 2" | | | 3,000 | | | 5,000 | | | |
| 2 | Cross 3" x 3" x 3" x 2" | | | | | | | | | 10,000 |
| 3 | Valve Gate Plug | 3 1/8" | | 3,000 | 3 1/8" | | 5,000 | 3 1/8" | | 10,000 |
| 4 | Valve Gate Plug | 1 13/16" | | 3,000 | 1 13/16" | | 5,000 | 1 13/16" | | 10,000 |
| 4a | Valves (1) | 2 1/16" | | 3,000 | 2 1/16" | | 5,000 | 2 1/16" | | 10,000 |
| 5 | Pressure Gauge | | | 3,000 | | | 5,000 | | | 10,000 |
| 6 | Valve Gate Plug | 3 1/8" | | 3,000 | 3 1/8" | | 5,000 | 3 1/8" | | 10,000 |
| 7 | Adjustable Choke (3) | 2" | | 3,000 | 2" | | 5,000 | 2" | | 10,000 |
| 8 | Adjustable Choke | 1" | | 3,000 | 1" | | 5,000 | 2" | | 10,000 |
| 9 | Line | | 3" | 3,000 | | 3" | 5,000 | | 3" | 10,000 |
| 10 | Line | | 2" | 3,000 | | 2" | 5,000 | | 2" | 10,000 |
| 11 | Valve Gate Plug | 3 1/8" | | 3,000 | 3 1/8" | | 5,000 | 3 1/8" | | 10,000 |
| 12 | Line | | 3" | 1,000 | | 3" | 1,000 | | 3" | 2,000 |
| 13 | Line | | 3" | 1,000 | | 3" | 1,000 | | 3" | 2,000 |
| 14 | Remote reading compound Standpipe pressure gauge | | | 3,000 | | | 5,000 | | | 10,000 |
| 15 | Gas Separator | | 2' x5' | | | 2' x5' | | | 2' x5' | |
| 16 | Line | | 4" | 1,000 | | 4" | 1,000 | | 4" | 2,000 |
| 17 | Valve Gate Plug | 3 1/8" | | 3,000 | 3 1/8" | | 5,000 | 3 1/8" | | 10,000 |

- (1) Only one required in Class 3M
- (2) Gate valves only shall be used for Class 10 M
- (3) Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTION

1. All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
2. All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
3. All lines shall be securely anchored.
4. Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
5. alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
6. Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90 degree bends using bull plugged tees

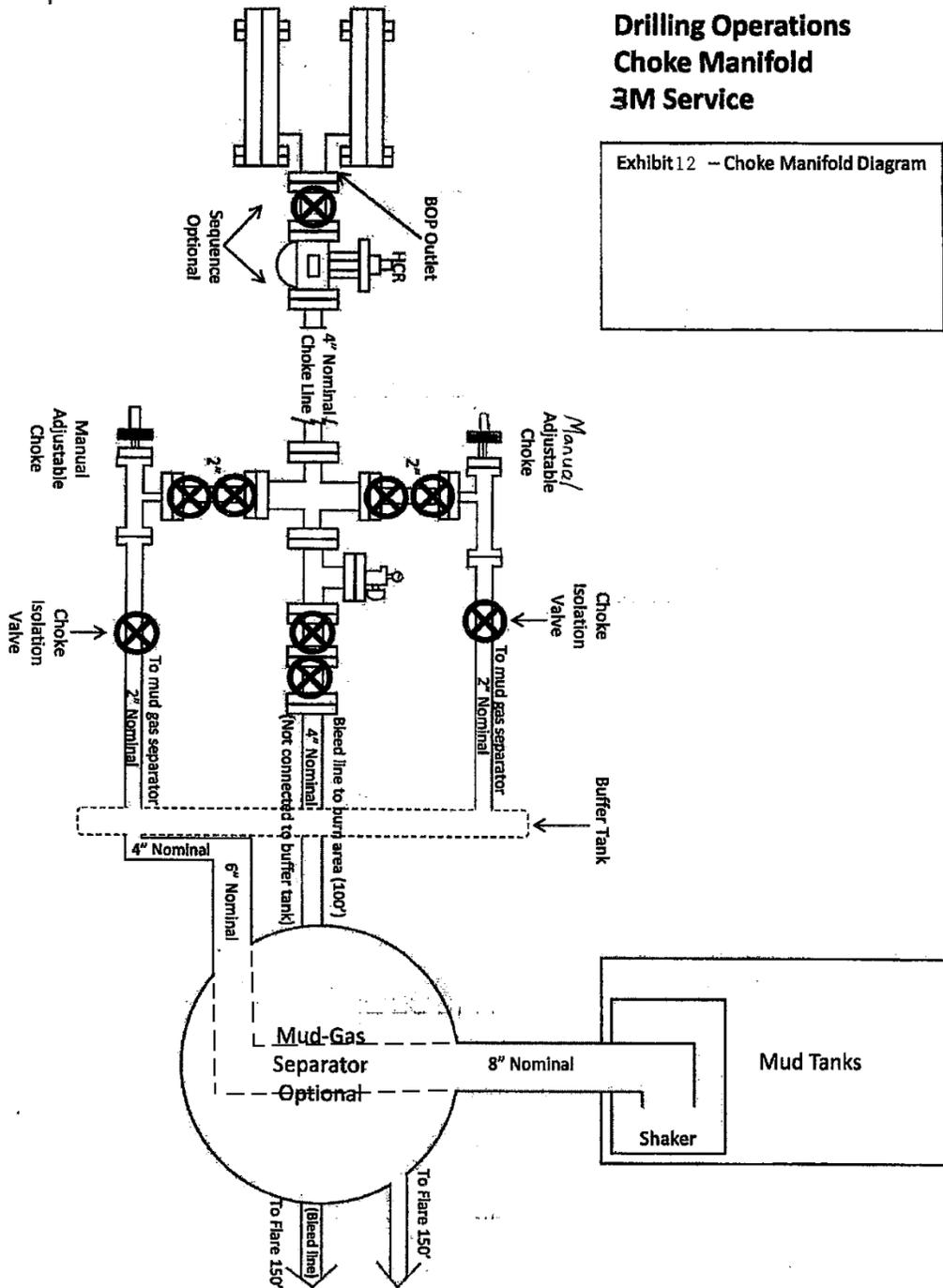
Mack Energy Corporation

MANIFOLD SCHEMATIC

Exhibit #12

Drilling Operations Choke Manifold 3M Service

Exhibit12 – Choke Manifold Diagram



District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720

District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720

District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
 1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS
 Action 210277

CONDITIONS

| | |
|--|---|
| Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960 | OGRID: 13837 |
| | Action Number: 210277 |
| | Action Type: [C-101] Drilling Non-Federal/Indian (APD) |

CONDITIONS

| Created By | Condition | Condition Date |
|------------|--|----------------|
| pkautz | MUST COMPLY WITH ALL COA'S IN SWD-2531 | 6/28/2024 |