

**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**

Form C-101

August 1, 2011

Permit 321729

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

1. Operator Name and Address MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960		2. OGRID Number 13837
		3. API Number 30-015-49780
4. Property Code 333090	5. Property Name Anchorage State	6. Well No. 001

**7. Surface Location**

UL - Lot D	Section 32	Township 16S	Range 27E	Lot Idn	Feet From 180	N/S Line N	Feet From 330	E/W Line W	County Eddy
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**8. Proposed Bottom Hole Location**

UL - Lot D	Section 32	Township 16S	Range 27E	Lot Idn D	Feet From 330	N/S Line N	Feet From 330	E/W Line W	County Eddy
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**9. Pool Information**

WC 16S27E32;SAN ANDRES	98371
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**Additional Well Information**

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3436
16. Multiple N	17. Proposed Depth 2665	18. Formation San Andres	19. Contractor	20. Spud Date 12/1/2022
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
Surf	12.25	9.625	36	400	200	0
Prod	8.75	7	26	2665	385	0

**Casing/Cement Program: Additional Comments**

Mack Energy Corporation proposed to drill 12 1/4" hole to 400', run 9 5/8" csg/cmt. Drill 8 3/4" hole to 2665', run 7" csg/cmt, put well on production.
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**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 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.	<b>OIL CONSERVATION DIVISION</b>	
Signature:		
Printed Name: Electronically filed by Jerry Sherrell	Approved By: Katherine Pickford	
Title: Regulatory Supervisor	Title: Geoscientist	
Email Address: jerrys@mec.com	Approved Date: 7/28/2022	Expiration Date: 7/28/2024
Date: 7/25/2022	Phone: 575-748-1288	Conditions of Approval Attached

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Phone: (505) 476-3460 Fax: (505) 476-3462

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

<sup>1</sup> API Number <b>30-015-49780</b>	<sup>2</sup> Pool Code <del>52770</del> <b>98371</b>	<sup>3</sup> Pool Name <del>Round Tank, San Andres</del> <b>WC 16S27E32; SAN ANDRES</b>
<sup>4</sup> Property Code <b>333090</b>	<sup>5</sup> Property Name <b>ANCHORAGE STATE</b>	
<sup>7</sup> OGRID No. <b>13837</b>	<sup>8</sup> Operator Name <b>MACK ENERGY CORPORATION</b>	<sup>6</sup> Well Number <b>1</b>
		<sup>9</sup> Elevation <b>3436.2</b>

<sup>10</sup> Surface Location

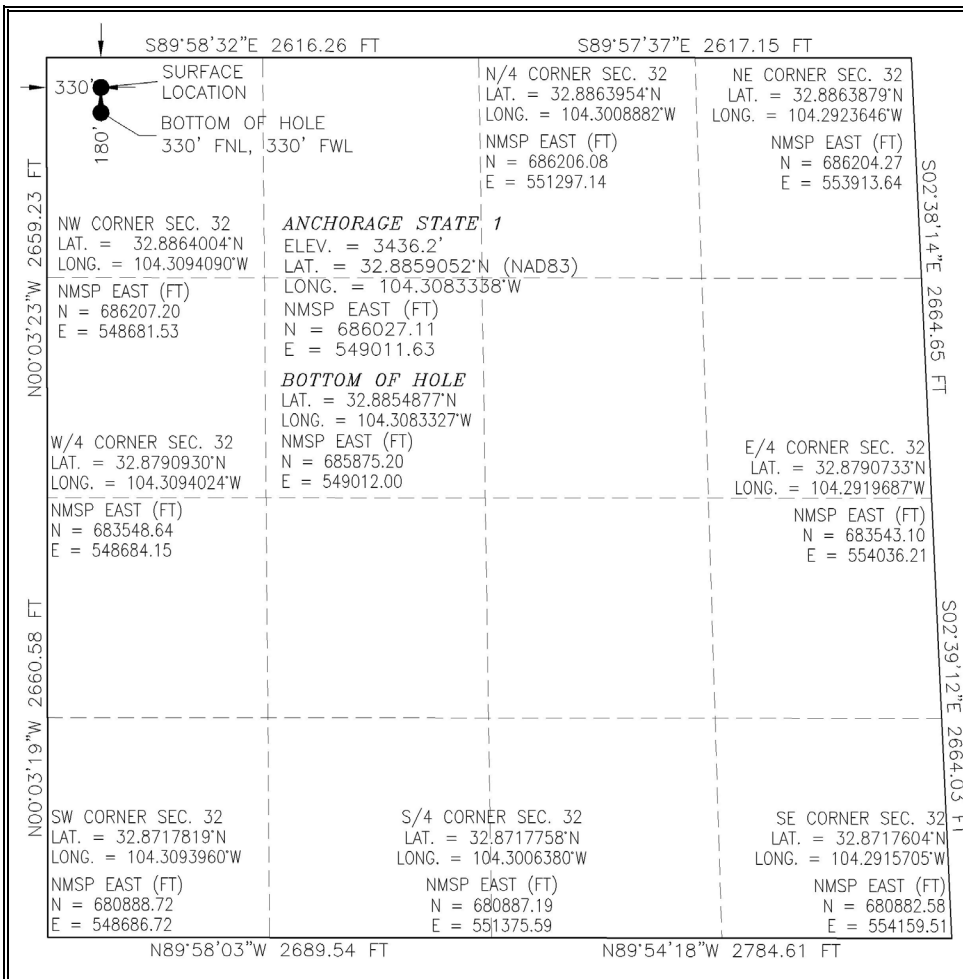
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>D</b>	<b>32</b>	<b>16 S</b>	<b>27 E</b>		<b>180</b>	<b>NORTH</b>	<b>330</b>	<b>WEST</b>	<b>EDDY</b>

<sup>11</sup> 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
<b>D</b>	<b>32</b>	<b>16 S</b>	<b>27 E</b>		<b>330</b>	<b>NORTH</b>	<b>330</b>	<b>WEST</b>	<b>EDDY</b>

<sup>12</sup> Dedicated Acres <b>40</b>	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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.

<sup>17</sup> 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.

*Delilah Flores* 7/25/2022

Signature Date

Delilah Flores

Printed Name

delilah@mec.com

E-mail Address

<sup>18</sup> 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.

JULY 5, 2022

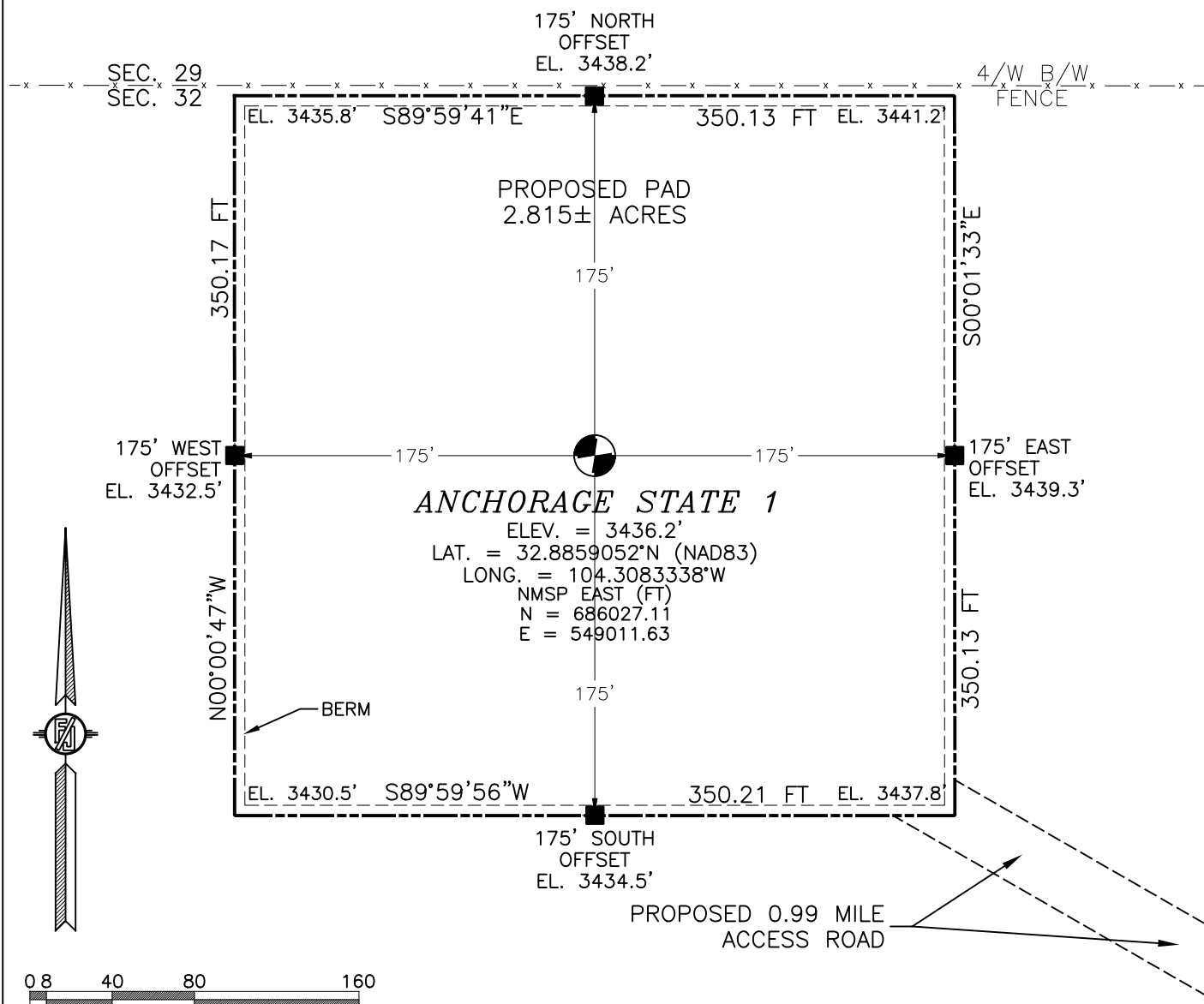
Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number: 12797  
 SURVEY NO. 9457

SECTION 32, TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
SITE MAP

NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE. ELEVATION VALUES ARE NAVD88.



**DIRECTIONS TO LOCATION**

FROM THE INTERSECTION OF STATE HIGHWAY 82 & CO. RD. 200 (KARR RANCH), GO NORTHWEST ON CO. RD. 200 APPROX. 1.8 MILES, TURN RIGHT (NORTHEAST) ON 20' CALICHE ROAD (DOG CANYON RD.) AND GO APPROX. 1.2 MILES, TURN LEFT (NORTHWEST) ON 15' CALICHE ROAD AND GO APPROX. 0.35 MILES, CONTINUE NORTHWEST ON 1/2 CALICHE ROAD APPROX. 450' TO BEGIN ROAD SURVEY FOLLOW ROAD SURVEY NORTHWEST APPROX. 772' TO ROAD TO CONTINUE NORTHWEST APPROX. 4446' TO THE SOUTHEAST PAD CORNER FOR THIS LOCATION.

I, FILMON E. JARAMILLO, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR, CERTIFY THAT I DIRECTED AND SUPERVISED THIS SURVEY, THAT THIS SURVEY WAS MADE IN ACCORDANCE WITH THE MINIMUM STANDARDS FOR SURVEYING PRACTICE IN THE STATE OF NEW MEXICO.

FILMON E. JARAMILLO, P.E.S. 7987

MADRON SURVEYING, INC.

301 SOUTH CANAL  
(575) 234-3341

MACK ENERGY CORPORATION  
ANCHORAGE STATE 1

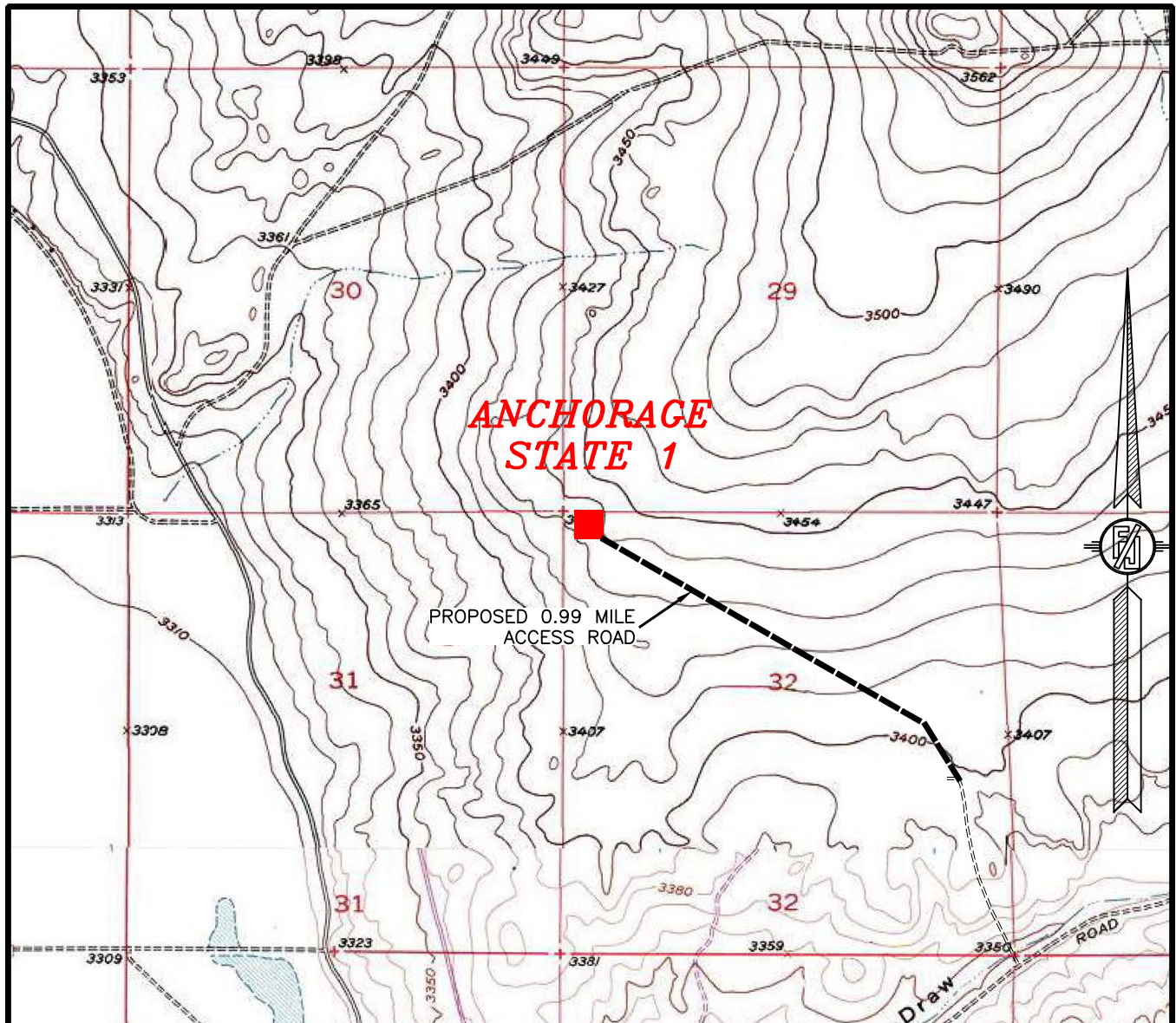
LOCATED 180 FT. FROM THE NORTH LINE  
AND 330 FT. FROM THE WEST LINE OF  
SECTION 32, TOWNSHIP 16 SOUTH,  
RANGE 27 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO

JULY 5, 2022

SURVEY NO. 9457

CARLSBAD, NEW MEXICO

SECTION 32, TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO  
 LOCATION VERIFICATION MAP



USGS QUAD MAP:  
 ARTESIA NE

NOT TO SCALE

**MACK ENERGY CORPORATION**  
**ANCHORAGE STATE 1**  
 LOCATED 180 FT. FROM THE NORTH LINE  
 AND 330 FT. FROM THE WEST LINE OF  
 SECTION 32, TOWNSHIP 16 SOUTH,  
 RANGE 27 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO

JULY 5, 2022

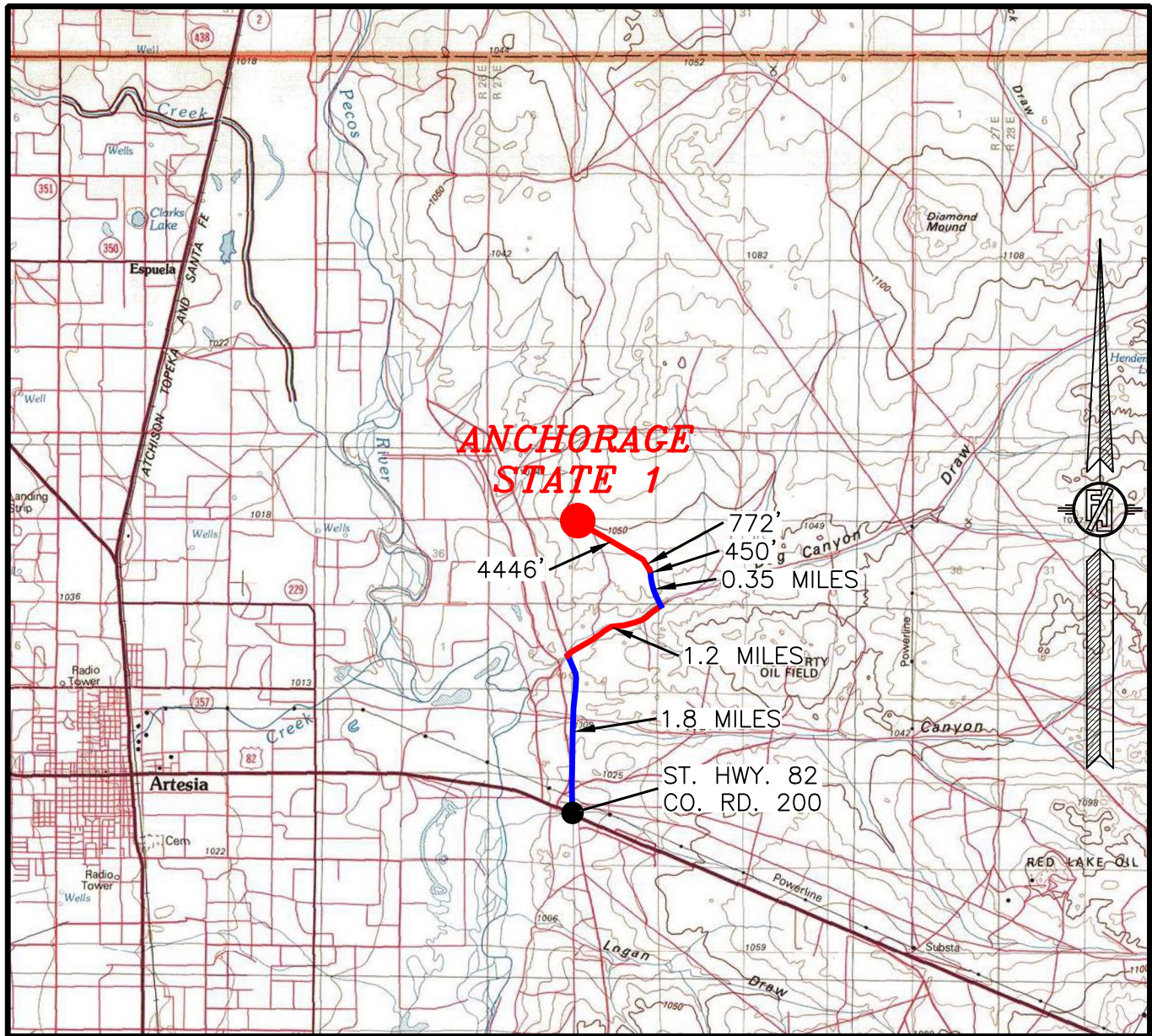
MADRON SURVEYING, INC.

301 SOUTH CANAL  
 (575) 234-3341

SURVEY NO. 9457  
 CARLSBAD, NEW MEXICO



SECTION 32, TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO  
 VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

**DIRECTIONS TO LOCATION**

FROM THE INTERSECTION OF STATE HIGHWAY 82 & CO. RD. 200 (KARR RANCH), GO NORTHWEST ON CO. RD. 200 APPROX. 1.8 MILES, TURN RIGHT (NORTHEAST) ON 20' CALICHE ROAD (DOG CANYON RD.) AND GO APPROX. 1.2 MILES, TURN LEFT (NORTHWEST) ON 15' CALICHE ROAD AND GO APPROX. 0.35 MILES, CONTINUE NORTHWEST ON 12' CALICHE ROAD APPROX. 450' TO BEGIN ROAD SURVEY, FOLLOW ROAD SURVEY NORTHWEST APPROX. 772' TO ROAD PI, CONTINUE NORTHWEST APPROX. 4446' TO THE SOUTHEAST PAD CORNER FOR THIS LOCATION.

**MACK ENERGY CORPORATION**  
**ANCHORAGE STATE 1**  
 LOCATED 180 FT. FROM THE NORTH LINE  
 AND 330 FT. FROM THE WEST LINE OF  
 SECTION 32, TOWNSHIP 16 SOUTH,  
 RANGE 27 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO

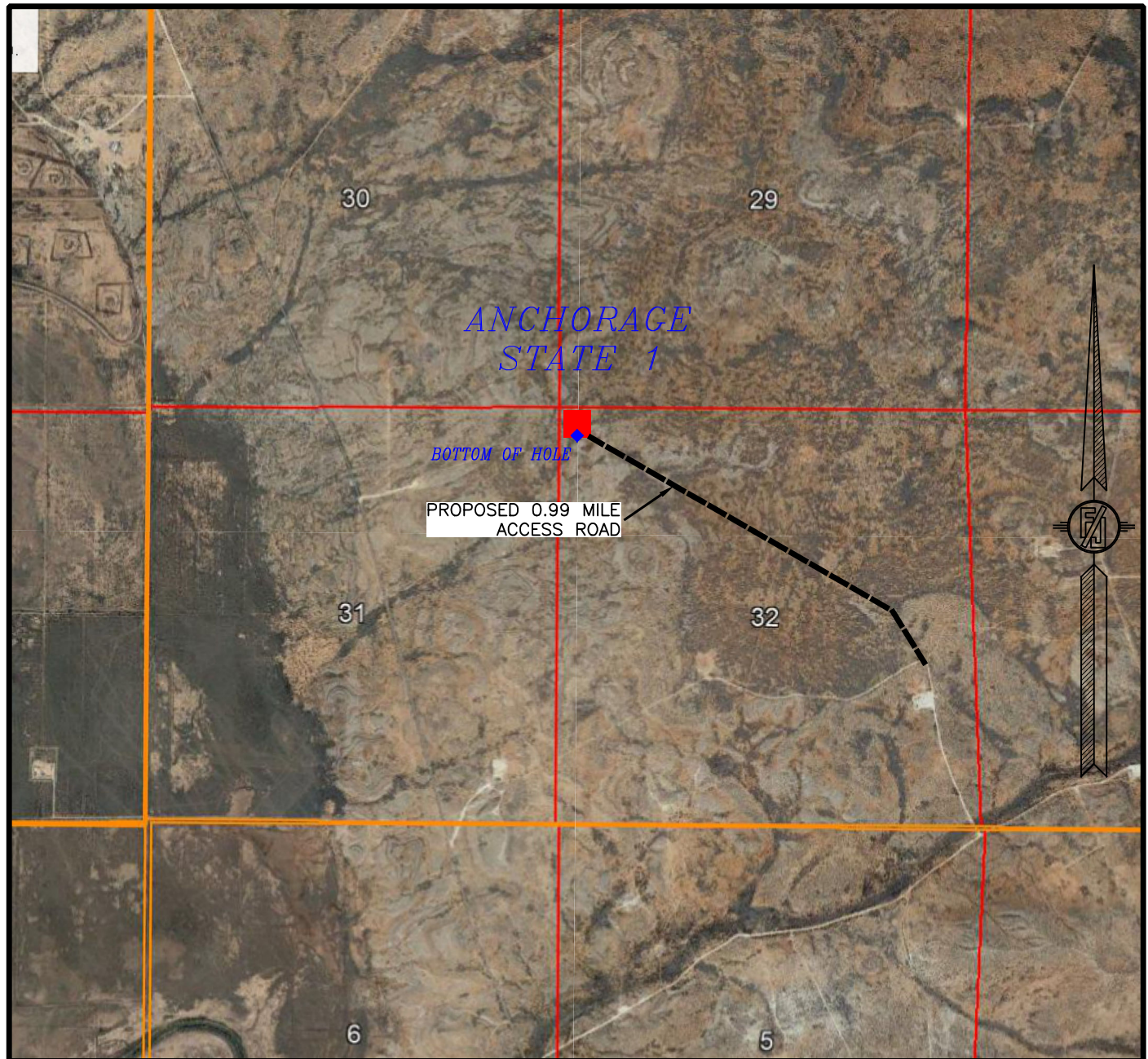
JULY 5, 2022

MADRON SURVEYING, INC. 301 SOUTH CANAL  
 (575) 234-3341

SURVEY NO. 9457  
 CARLSBAD, NEW MEXICO



SECTION 32, TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO  
 AERIAL PHOTO



NOT TO SCALE  
 AERIAL PHOTO:  
 GOOGLE EARTH  
 DEC. 2019

**MACK ENERGY CORPORATION**  
**ANCHORAGE STATE 1**  
 LOCATED 180 FT. FROM THE NORTH LINE  
 AND 330 FT. FROM THE WEST LINE OF  
 SECTION 32, TOWNSHIP 16 SOUTH,  
 RANGE 27 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO

JULY 5, 2022

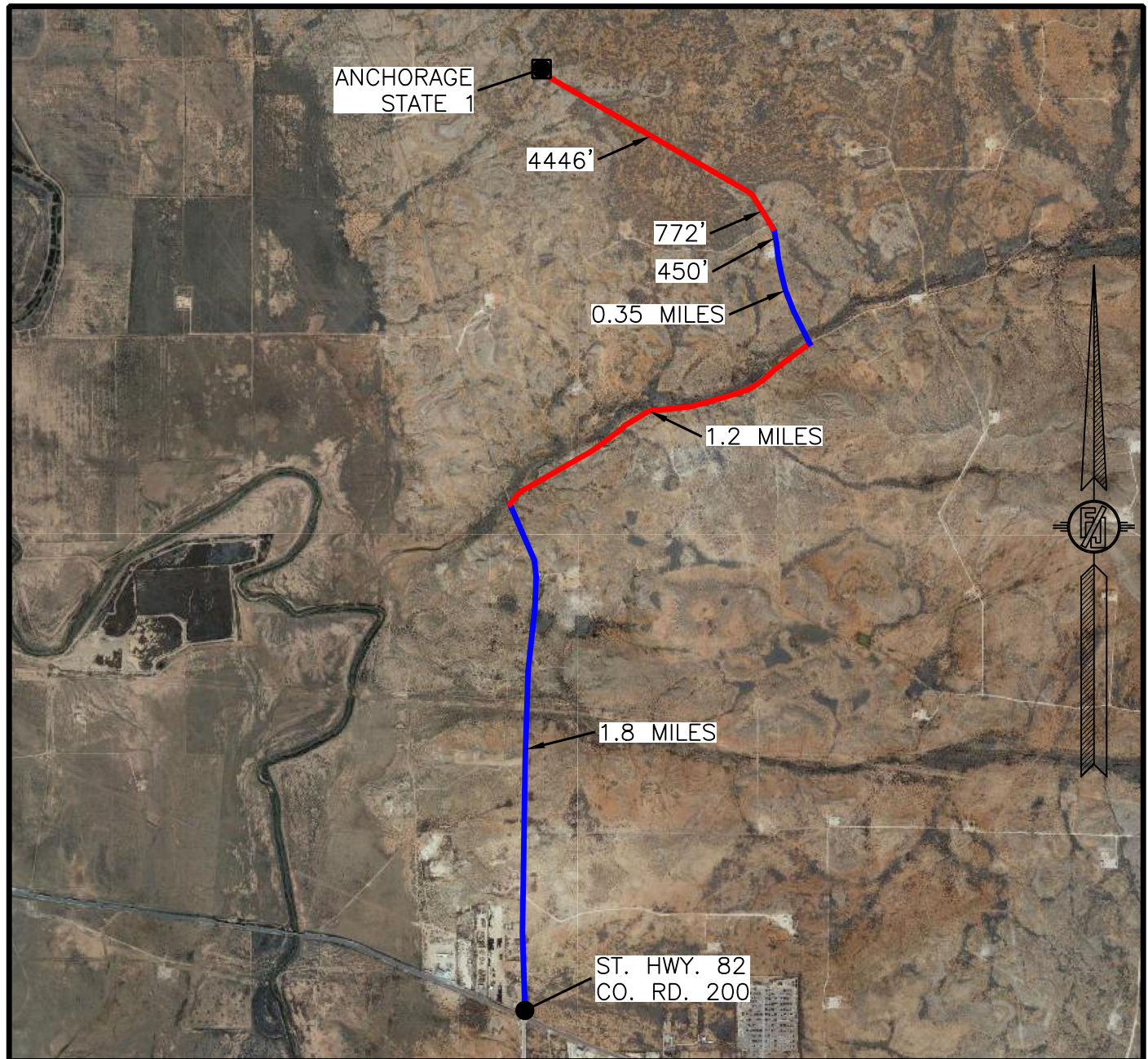
SURVEY NO. 9457

MADRON SURVEYING, INC. 301 SOUTH CANAL  
 (575) 234-3341

CARLSBAD, NEW MEXICO



SECTION 32, TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO  
 AERIAL ACCESS ROUTE MAP



NOT TO SCALE  
 AERIAL PHOTO:  
 GOOGLE EARTH  
 DEC. 2019

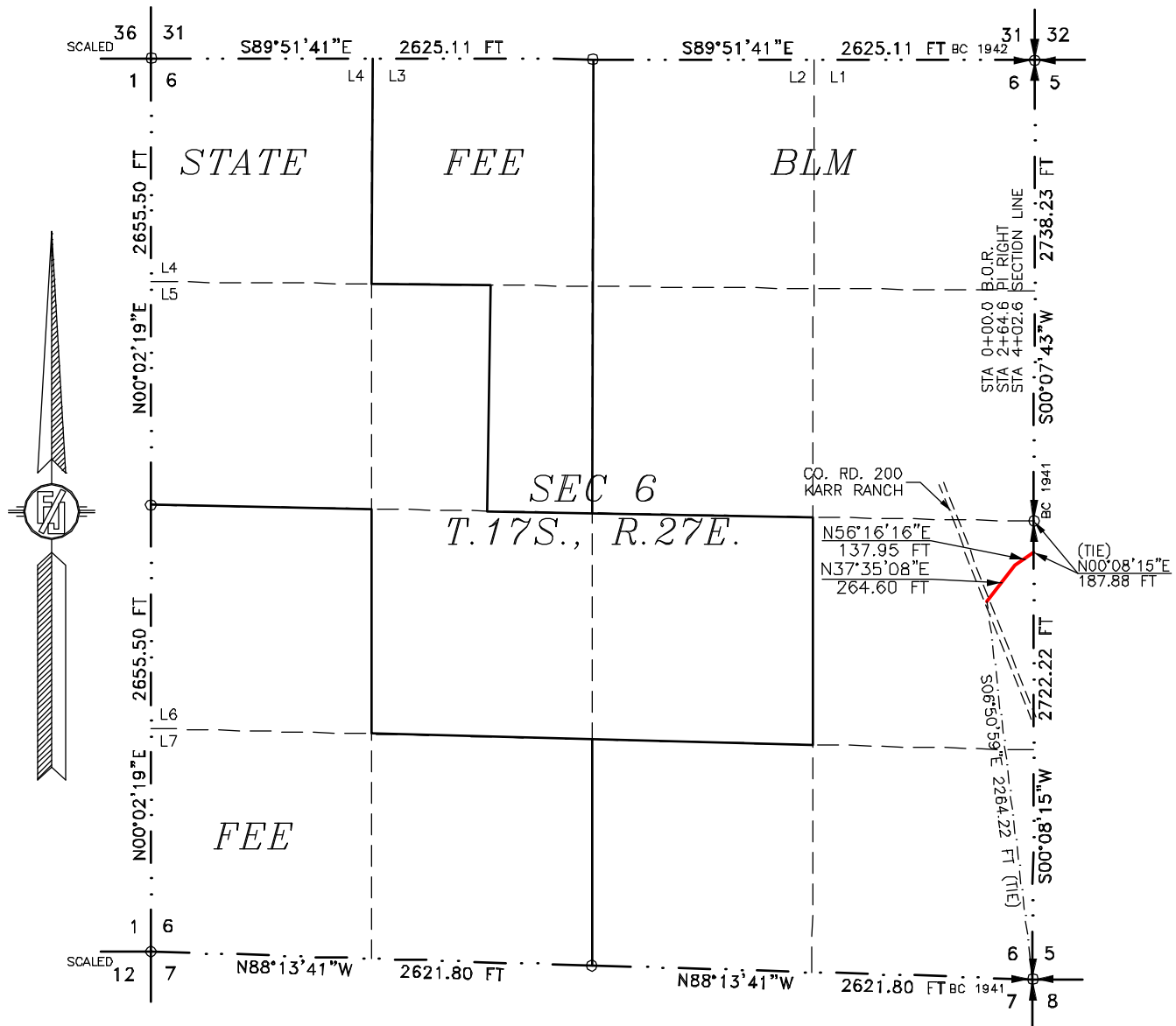
**MACK ENERGY CORPORATION**  
**ANCHORAGE STATE 1**  
 LOCATED 180 FT. FROM THE NORTH LINE  
 AND 330 FT. FROM THE WEST LINE OF  
 SECTION 32, TOWNSHIP 16 SOUTH,  
 RANGE 27 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO

JULY 5, 2022

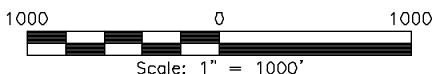
SURVEY NO. 9457

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO  
 (575) 234-3341

*MACK ENERGY CORPORATION  
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING  
SECTION 6, TOWNSHIP 17 SOUTH, RANGE 27 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
JULY 5, 2022*



SEE NEXT SHEET (2-6) FOR DESCRIPTION



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: 1-6*

MADRON SURVEYING, INC. 301 SOUTH GAVILAN  
(575) 234-1541 CARLSBAD, NEW MEXICO

# 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 11 DAY OF JULY 2022

MADRON SURVEYING, INC.  
301 SOUTH CANAL  
CARLSBAD, NEW MEXICO 88220  
Phone (575) 234-3341

SURVEY NO. 9457.



**ACCESS ROAD PLAT**

EXISTING CALICHE ROAD FOR ACCESS TO ANCHORAGE STATE 1

**MACK ENERGY CORPORATION**

**CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING  
SECTION 6, TOWNSHIP 17 SOUTH, RANGE 27 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
JULY 5, 2022**

**DESCRIPTION**

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 6, TOWNSHIP 17 SOUTH, RANGE 27 EAST, N.M.P.M., EDDY 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 SE/4 OF SAID SECTION 6, TOWNSHIP 17 SOUTH, RANGE 27 EAST, N.M.P.M., WHENCE THE SOUTHEAST CORNER OF SAID SECTION 6, TOWNSHIP 17 SOUTH, RANGE 27 EAST, N.M.P.M. BEARS S06°50'59"E, A DISTANCE OF 2264.22 FEET;

THENCE N37°35'08"E A DISTANCE OF 264.60 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;

THENCE N56°16'16"E A DISTANCE OF 137.95 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE EAST QUARTER CORNER OF SAID SECTION 6, TOWNSHIP 17 SOUTH, RANGE 27 EAST, N.M.P.M. BEARS N00°08'15"E, A DISTANCE OF 187.88 FEET;

SAID STRIP OF LAND BEING 402.55 FEET OR 24.40 RODS IN LENGTH, CONTAINING 0.277 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NE/4 SE/4    402.55 L.F.    24.40 RODS    0.277 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 5th DAY OF JULY 2022

FILIMON F. JARAMILLO, PLS. 12797  
NEW MEXICO PROFESSIONAL SURVEYOR

MADRON SURVEYING, INC.  
301 SOUTH CANAL  
CARLSBAD, NEW MEXICO 88220  
Phone (575) 234-3341

**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: 2-6

**MADRON SURVEYING, INC.** 301 SOUTH CANAL CARLSBAD, NEW MEXICO (575) 234-3341

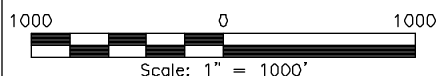
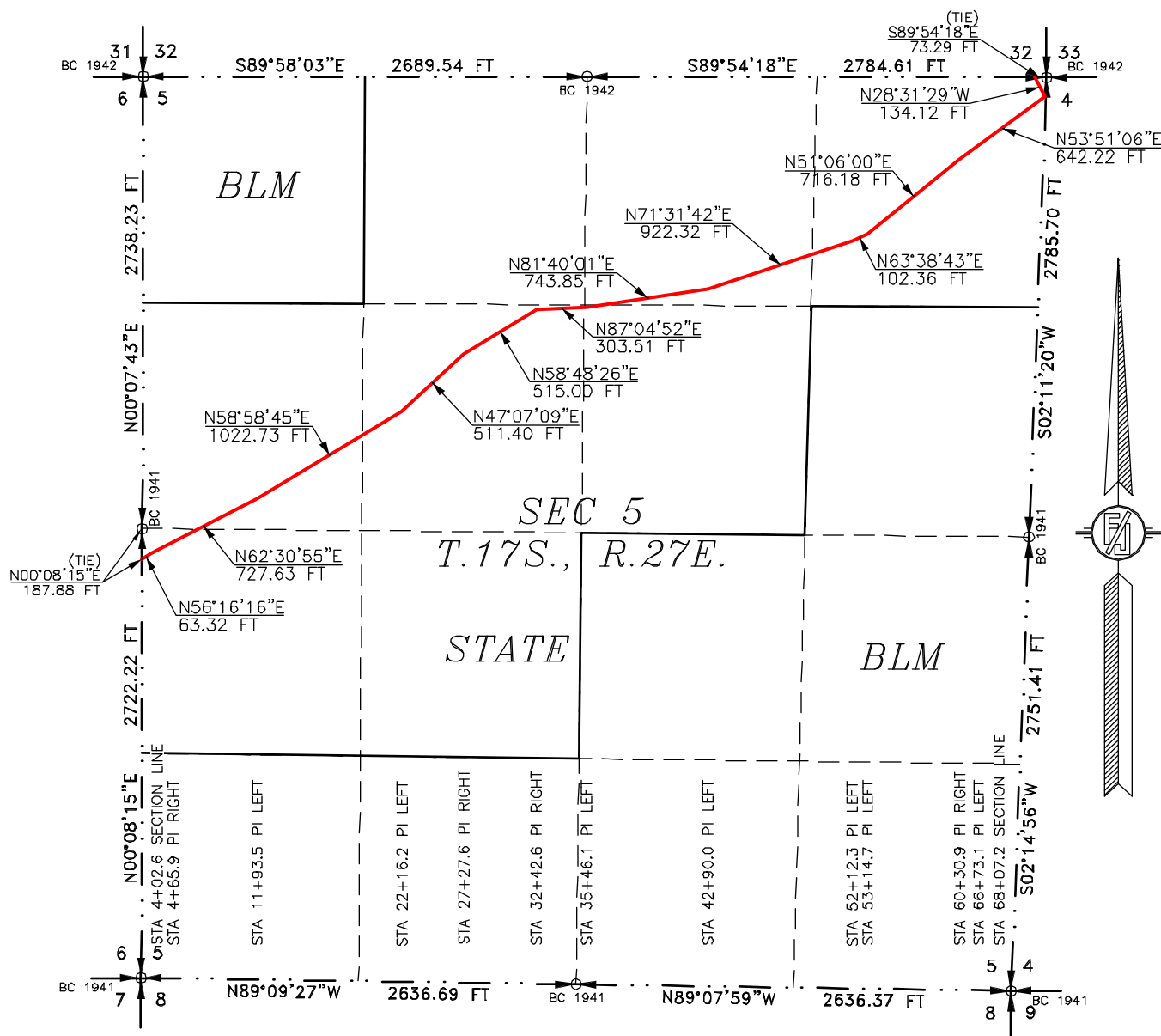
**SURVEY NO. 9457**

**ACCESS ROAD PLAT**

EXISTING CALICHE ROAD FOR ACCESS TO ANCHORAGE STATE 1

**MACK ENERGY CORPORATION**

**CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING  
SECTION 5, TOWNSHIP 17 SOUTH, RANGE 27 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
JULY 5, 2022**

**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: 3-6

MADRON SURVEYING, INC.

**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 5th DAY OF JULY 2022

FILMON F. JARAMILLO  
NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797  
301 SOUTH CANAL  
CARLSBAD, NEW MEXICO 88220  
(575) 234-3341

MADRON SURVEYING, INC.  
301 SOUTH CANAL  
CARLSBAD, NEW MEXICO 88220  
Phone (575) 234-3341

SURVEY NO. 9457

CARLSBAD, NEW MEXICO



**ACCESS ROAD PLAT**

EXISTING CALICHE ROAD FOR ACCESS TO ANCHORAGE STATE 1

**MACK ENERGY CORPORATION**

**CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING  
SECTION 5, TOWNSHIP 17 SOUTH, RANGE 27 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
JULY 5, 2022**

**DESCRIPTION**

A STRIP OF LAND 30 FEET WIDE CROSSING STATE OF NEW MEXICO LAND IN SECTION 5, TOWNSHIP 17 SOUTH, RANGE 27 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE NW/4 SW/4 OF SAID SECTION 5, TOWNSHIP 17 SOUTH, RANGE 27 EAST, N.M.P.M., WHENCE THE WEST QUARTER CORNER OF SAID SECTION 5, TOWNSHIP 17 SOUTH, RANGE 27 EAST, N.M.P.M. BEARS N00°08'15"E, A DISTANCE OF 187.88 FEET;  
THENCE N56°16'16"E A DISTANCE OF 63.32 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;  
THENCE N62°30'55"E A DISTANCE OF 727.63 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;  
THENCE N58°58'45"E A DISTANCE OF 1022.73 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;  
THENCE N47°07'09"E A DISTANCE OF 511.40 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;  
THENCE N58°48'26"E A DISTANCE OF 515.00 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;  
THENCE N87°04'52"E A DISTANCE OF 303.51 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;  
THENCE N81°40'01"E A DISTANCE OF 743.85 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;  
THENCE N71°31'42"E A DISTANCE OF 922.32 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;  
THENCE N63°38'43"E A DISTANCE OF 102.36 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;  
THENCE N51°06'00"E A DISTANCE OF 716.18 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;  
THENCE N53°51'06"E A DISTANCE OF 642.22 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;  
THENCE N28°31'29"W A DISTANCE OF 134.12 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE NORTHEAST CORNER OF SAID SECTION 5, TOWNSHIP 17 SOUTH, RANGE 27 EAST, N.M.P.M. BEARS S89°54'18"E, A DISTANCE OF 73.29 FEET;

SAID STRIP OF LAND BEING 6404.65 FEET OR 388.16 RODS IN LENGTH, CONTAINING 4.411 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NW/4 SW/4	387.17 L.F.	23.47 RODS	0.267 ACRES
SW/4 NW/4	1147.84 L.F.	69.57 RODS	0.791 ACRES
SE/4 NW/4	1594.94 L.F.	96.66 RODS	1.098 ACRES
SW/4 NE/4	110.01 L.F.	6.67 RODS	0.076 ACRES
NW/4 NE/4	1313.92 L.F.	79.63 RODS	0.905 ACRES
NE/4 NE/4	1850.77 L.F.	112.17 RODS	1.275 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 5<sup>TH</sup> DAY OF JULY 2022

FILIMON F. JARAMILLO  
12797  
MADRON SURVEYING, INC.  
301 SOUTH CANAL  
CARLSBAD, NEW MEXICO 88220  
Phone (575) 234-3341

**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: 4-6

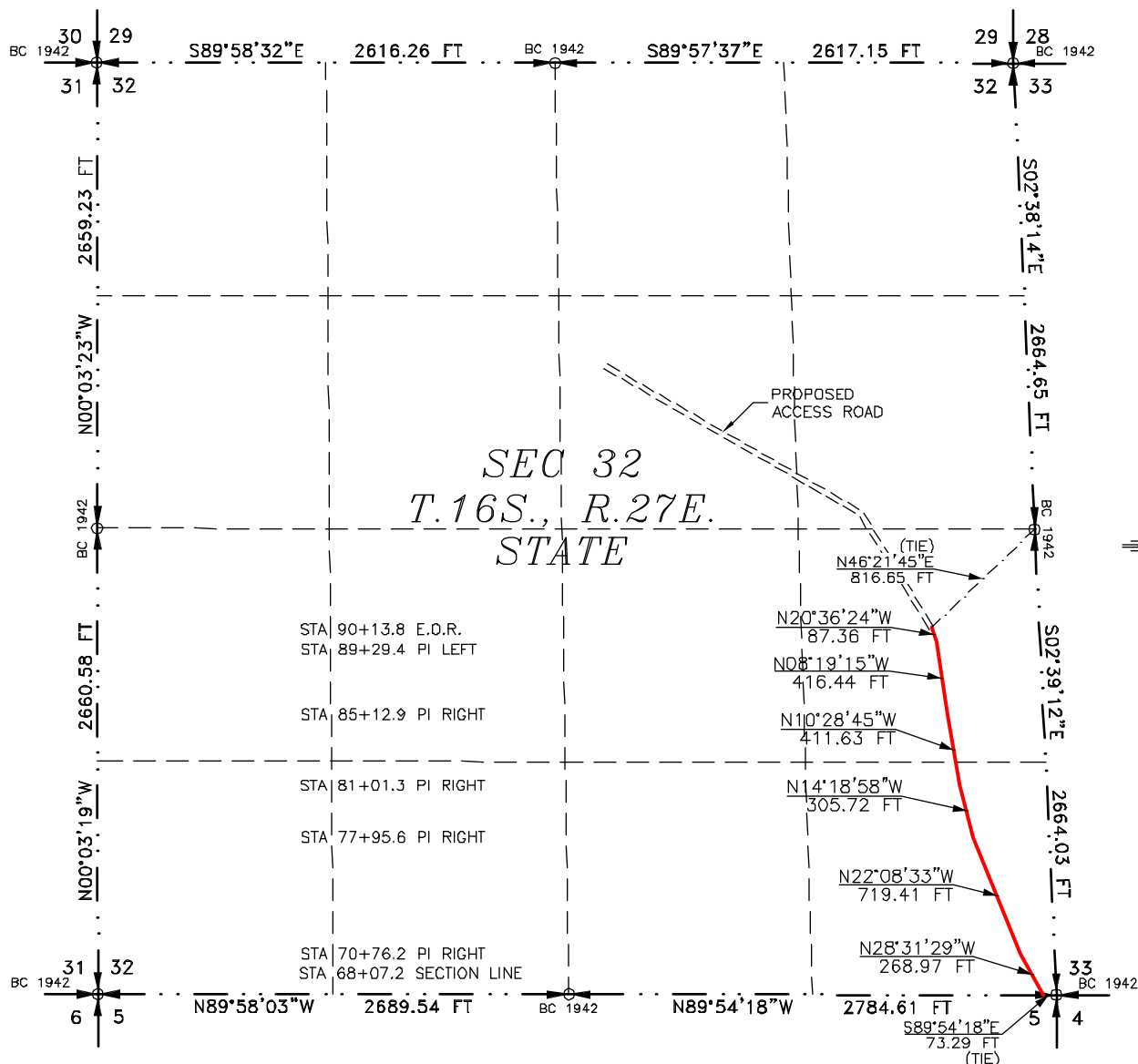
**MADRON SURVEYING, INC.** 301 SOUTH CANAL, CARLSBAD, NEW MEXICO 88220  
(575) 234-3341

SURVEY NO. 9457

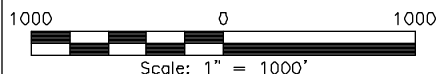
**ACCESS ROAD PLAT**

EXISTING CALICHE ROAD FOR ACCESS TO ANCHORAGE STATE 1

**MACK ENERGY CORPORATION**  
**CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING**  
**SECTION 32, TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M.**  
**EDDY COUNTY, STATE OF NEW MEXICO**  
**JULY 5, 2022**



SEE NEXT SHEET (6-6) FOR DESCRIPTION

**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: 5-6

**MADRON SURVEYING, INC.**  
 301 SOUTH CANAL  
 CARLSBAD, NEW MEXICO 88220  
 (575) 234-3341

**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 5th DAY OF JULY 2022

**FILMON F. JARAMILLO**  
 12797  
 PROFESSIONAL SURVEYOR

**MADRON SURVEYING, INC.**  
 301 SOUTH CANAL  
 CARLSBAD, NEW MEXICO 88220  
 Phone (575) 234-3341

SURVEY NO. 9457

**CARLSBAD, NEW MEXICO**



**ACCESS ROAD PLAT**

EXISTING CALICHE ROAD FOR ACCESS TO ANCHORAGE STATE 1

**MACK ENERGY CORPORATION**  
**CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING**  
**SECTION 32, TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M.**  
**EDDY COUNTY, STATE OF NEW MEXICO**  
**JULY 5, 2022**

**DESCRIPTION**

A STRIP OF LAND 30 FEET WIDE CROSSING STATE OF NEW MEXICO LAND IN SECTION 32, TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M., EDDY 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 16 SOUTH, RANGE 27 EAST, N.M.P.M., WHENCE THE SOUTHEAST CORNER OF SAID SECTION 32, TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M. BEARS S89°54'18"E, A DISTANCE OF 73.29 FEET;  
 THENCE N28°31'29"W A DISTANCE OF 268.97 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;  
 THENCE N22°08'33"W A DISTANCE OF 719.41 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;  
 THENCE N14°18'58"W A DISTANCE OF 305.72 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;  
 THENCE N10°28'45"W A DISTANCE OF 411.63 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;  
 THENCE N08°19'15"W A DISTANCE OF 416.44 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;  
 THENCE N20°36'24"W A DISTANCE OF 87.36 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE EAST QUARTER CORNER OF SAID SECTION 32, TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M. BEARS N46°21'45"E, A DISTANCE OF 816.65 FEET;

SAID STRIP OF LAND BEING 2209.53 FEET OR 133.91 RODS IN LENGTH, CONTAINING 1.522 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

**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 5th DAY OF JULY 2022

FILIMON F. JARAMILLO  
 301 SOUTH CANAL  
 CARLSBAD, NEW MEXICO 88220  
 (575) 234-3341  
 PROFESSIONAL SURVEYOR

MADRON SURVEYING, INC.  
 301 SOUTH CANAL  
 CARLSBAD, NEW MEXICO 88220  
 Phone (575) 234-3341

SURVEY NO. 9457

**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: 6-6

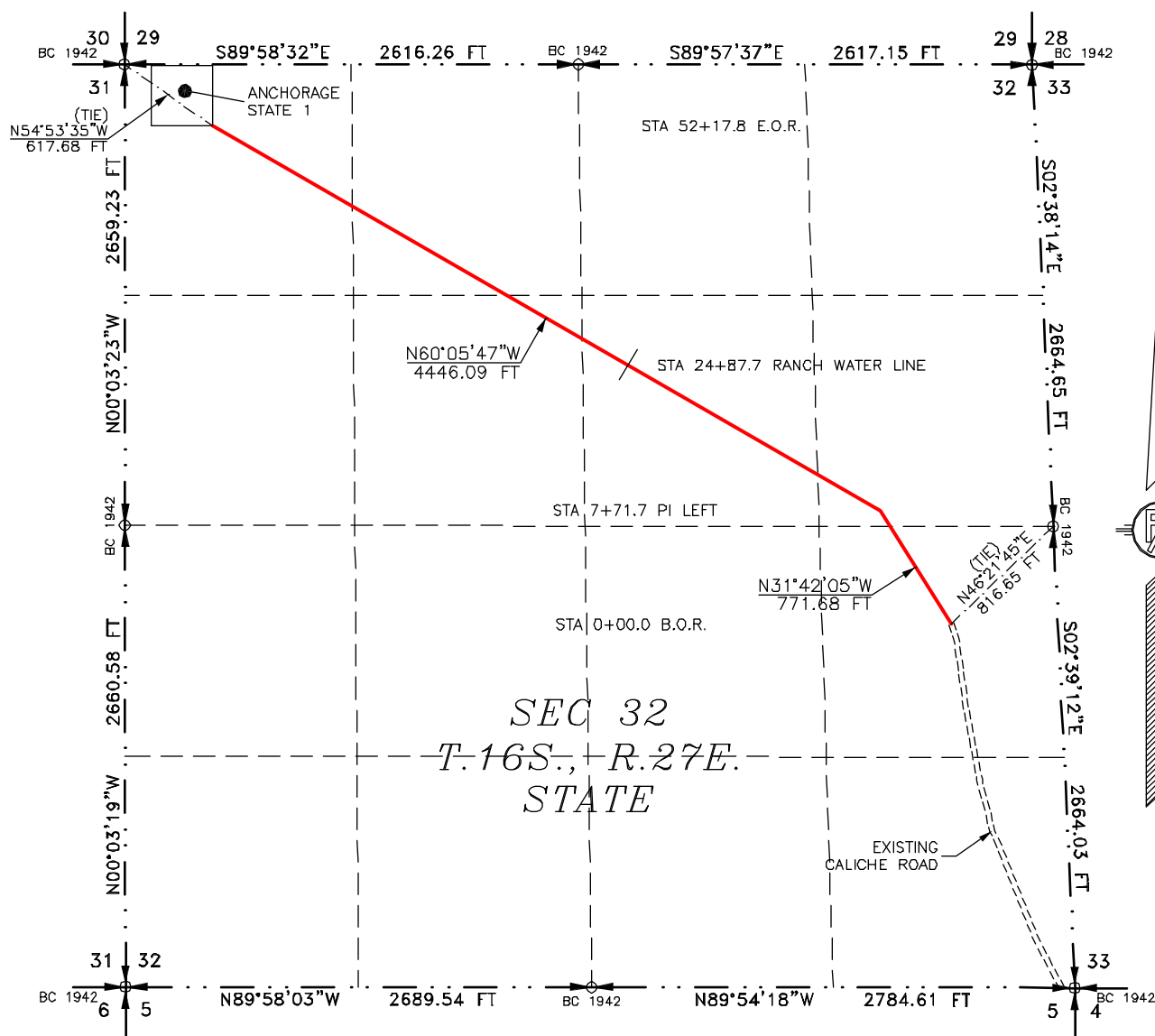
**MADRON SURVEYING, INC.** 301 SOUTH CANAL CARLSBAD, NEW MEXICO

**ACCESS ROAD PLAT**

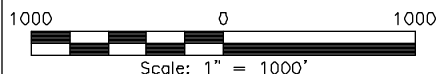
PROPOSED ACCESS ROAD FOR ANCHORAGE STATE 1

**MACK ENERGY CORPORATION**

**CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING  
SECTION 32, TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
JULY 5, 2022**



SEE NEXT SHEET (2-2) FOR DESCRIPTION

**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: 1-2

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO (575) 234-3341

**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 5th DAY OF JULY 2022

FILMON F. JARAMILLO, PLS. 12797  
MADRON SURVEYING, INC.  
301 SOUTH CANAL  
CARLSBAD, NEW MEXICO 88220  
Phone (575) 234-3341

SURVEY NO. 9457

CARLSBAD, NEW MEXICO



**ACCESS ROAD PLAT**

PROPOSED ACCESS ROAD FOR ANCHORAGE STATE 1

**MACK ENERGY CORPORATION**

**CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING  
SECTION 32, TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
JULY 5, 2022**

**DESCRIPTION**

A STRIP OF LAND 30 FEET WIDE CROSSING STATE OF NEW MEXICO LAND IN SECTION 32, TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M., EDDY 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 SE/4 OF SAID SECTION 32, TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M., WHENCE THE EAST QUARTER CORNER OF SAID SECTION 32, TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M. BEARS N46°21'45"E, A DISTANCE OF 816.65 FEET;  
THENCE N31°42'05"W A DISTANCE OF 771.68 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;  
THENCE N60°05'47"W A DISTANCE OF 4446.09 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE NORTHWEST CORNER OF SAID SECTION 32, TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M. BEARS N54°53'35"W, A DISTANCE OF 617.68 FEET;

SAID STRIP OF LAND BEING 5217.77 FEET OR 316.23 RODS IN LENGTH, CONTAINING 3.594 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NE/4 SE/4	663.54 L.F.	40.21 RODS	0.457 ACRES
SE/4 NW/4	526.51 L.F.	31.91 RODS	0.363 ACRES
SW/4 NE/4	1565.66 L.F.	94.89 RODS	1.078 ACRES
SE/4 NW/4	504.05 L.F.	30.55 RODS	0.347 ACRES
NE/4 NW/4	1024.45 L.F.	62.09 RODS	0.706 ACRES
NW/4 NW/4	933.56 L.F.	56.58 RODS	0.643 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 5th DAY OF JULY 2022

FILIMON F. JARAMILLO, PLS  
301 SOUTH CANAL  
(575) 234-3341  
CARLSBAD, NEW MEXICO

MADRON SURVEYING, INC.  
301 SOUTH CANAL  
CARLSBAD, NEW MEXICO 88220  
Phone (575) 234-3341

SURVEY NO. 9457

MADRON SURVEYING, INC.

**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: 2-2

**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**

Form APD Conditions

Permit 321729

**PERMIT CONDITIONS OF APPROVAL**

Operator Name and Address: MACK ENERGY CORP [13837] P.O. Box 960 Artesia, NM 882110960	API Number: 30-015-49780
	Well: Anchorage State #001

OCD Reviewer	Condition
kpickford	Notify OCD 24 hours prior to casing & cement
kpickford	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud
kpickford	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
kpickford	Cement is required to circulate on both surface and production strings of casing
kpickford	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system



# **Mack Energy**

**Eddy County, NM  
Sec 32-T16S-R27E  
Anchorage State #1**

**Wellbore #1**

**Plan: Plan #1**

## **Standard Planning Report**

**22 July, 2022**



**Microsoft**  
Planning Report



<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Site Sec 32-T16S-R27E
<b>Company:</b>	Mack Energy	<b>TVD Reference:</b>	3436.2+18 @ 3454.2usft
<b>Project:</b>	Eddy County, NM	<b>MD Reference:</b>	3436.2+18 @ 3454.2usft
<b>Site:</b>	Sec 32-T16S-R27E	<b>North Reference:</b>	Grid
<b>Well:</b>	Anchorage State #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1		

<b>Project</b>	Eddy County, NM		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	New Mexico Eastern Zone		

Site	Sec 32-T16S-R27E					
Site Position:		Northing:	686,027.11 usft	Latitude:	32° 53' 9.259 N	
From:	Map	Easting:	549,011.63 usft	Longitude:	104° 18' 30.002 W	
Position Uncertainty:		0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.01

Well	Anchorage State #1					
Well Position	+N/-S	0.0 usft	Northing:	686,027.11 usft	Latitude:	32° 53' 9.259 N
	+E/-W	0.0 usft	Easting:	549,011.63 usft	Longitude:	104° 18' 30.002 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,436.2 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	07/22/22	6.80	60.48	47,724.32804128

<b>Design</b>	Plan #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	179.86

<b>Plan Survey Tool Program</b>	<b>Date</b>	07/22/22		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.0	2,664.1	Plan #1 (Wellbore #1)	MWD
				MWD - Standard

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
915.5	13.50	179.86	911.7	-48.7	0.1	3.25	3.25	0.00	179.86	
1,148.6	13.50	179.86	1,138.3	-103.2	0.3	0.00	0.00	0.00	0.00	
1,564.1	0.00	0.00	1,550.0	-151.9	0.4	3.25	-3.25	0.00	180.00	
2,664.1	0.00	0.00	2,650.0	-151.9	0.4	0.00	0.00	0.00	0.00	BHL Anchorage State

**Microsoft**  
Planning Report



<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Site Sec 32-T16S-R27E
<b>Company:</b>	Mack Energy	<b>TVD Reference:</b>	3436.2+18 @ 3454.2usft
<b>Project:</b>	Eddy County, NM	<b>MD Reference:</b>	3436.2+18 @ 3454.2usft
<b>Site:</b>	Sec 32-T16S-R27E	<b>North Reference:</b>	Grid
<b>Well:</b>	Anchorage State #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>KOP BLD 3.25°/100'</b>									
600.0	3.25	179.86	599.9	-2.8	0.0	2.8	3.25	3.25	0.00
700.0	6.50	179.86	699.6	-11.3	0.0	11.3	3.25	3.25	0.00
800.0	9.75	179.86	798.6	-25.5	0.1	25.5	3.25	3.25	0.00
900.0	13.00	179.86	896.6	-45.2	0.1	45.2	3.25	3.25	0.00
915.5	13.50	179.86	911.7	-48.7	0.1	48.7	3.25	3.25	0.00
<b>EOB HLD 13.5° Inc.</b>									
1,000.0	13.50	179.86	993.8	-68.5	0.2	68.5	0.00	0.00	0.00
1,100.0	13.50	179.86	1,091.1	-91.8	0.2	91.8	0.00	0.00	0.00
1,148.6	13.50	179.86	1,138.3	-103.2	0.3	103.2	0.00	0.00	0.00
<b>DROP 3.25°/100'</b>									
1,200.0	11.83	179.86	1,188.5	-114.4	0.3	114.4	3.25	-3.25	0.00
1,300.0	8.58	179.86	1,286.9	-132.2	0.3	132.2	3.25	-3.25	0.00
1,400.0	5.33	179.86	1,386.1	-144.3	0.4	144.3	3.25	-3.25	0.00
1,500.0	2.08	179.86	1,485.9	-150.7	0.4	150.7	3.25	-3.25	0.00
1,564.1	0.00	0.00	1,550.0	-151.9	0.4	151.9	3.25	-3.25	0.00
<b>EOD HLD 0° Inc.</b>									
1,600.0	0.00	0.00	1,585.9	-151.9	0.4	151.9	0.00	0.00	0.00
1,700.0	0.00	0.00	1,685.9	-151.9	0.4	151.9	0.00	0.00	0.00
1,800.0	0.00	0.00	1,785.9	-151.9	0.4	151.9	0.00	0.00	0.00
1,900.0	0.00	0.00	1,885.9	-151.9	0.4	151.9	0.00	0.00	0.00
2,000.0	0.00	0.00	1,985.9	-151.9	0.4	151.9	0.00	0.00	0.00
2,100.0	0.00	0.00	2,085.9	-151.9	0.4	151.9	0.00	0.00	0.00
2,200.0	0.00	0.00	2,185.9	-151.9	0.4	151.9	0.00	0.00	0.00
2,300.0	0.00	0.00	2,285.9	-151.9	0.4	151.9	0.00	0.00	0.00
2,400.0	0.00	0.00	2,385.9	-151.9	0.4	151.9	0.00	0.00	0.00
2,500.0	0.00	0.00	2,485.9	-151.9	0.4	151.9	0.00	0.00	0.00
2,600.0	0.00	0.00	2,585.9	-151.9	0.4	151.9	0.00	0.00	0.00
2,664.1	0.00	0.00	2,650.0	-151.9	0.4	151.9	0.00	0.00	0.00
<b>TD at 2664.1</b>									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
BHL Anchorage State 1	0.00	0.01	2,650.0	-151.9	0.4	685,875.20	549,012.00	32° 53' 7.756 N	104° 18' 29.998 W
- plan hits target center									
- Point									

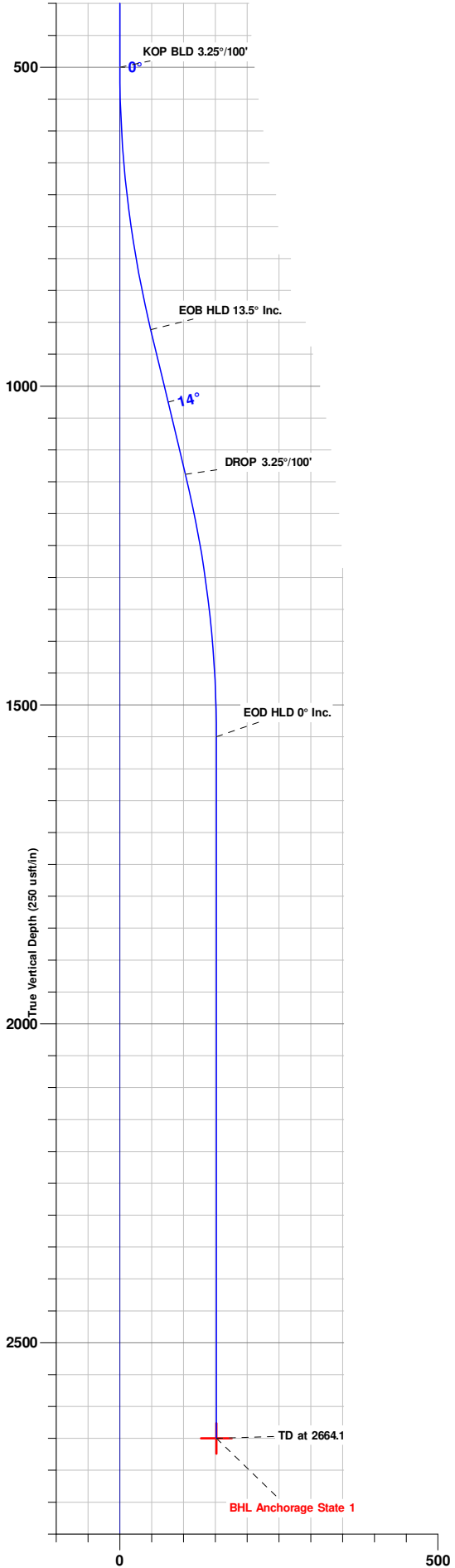


Microsoft  
Planning Report



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Site Sec 32-T16S-R27E
Company:	Mack Energy	TVD Reference:	3436.2+18 @ 3454.2usft
Project:	Eddy County, NM	MD Reference:	3436.2+18 @ 3454.2usft
Site:	Sec 32-T16S-R27E	North Reference:	Grid
Well:	Anchorage State #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
500.0	500.0	0.0	0.0	KOP BLD 3.25°/100'
915.5	911.7	-48.7	0.1	EOB HLD 13.5° Inc.
1,148.6	1,138.3	-103.2	0.3	DROP 3.25°/100'
1,564.1	1,550.0	-151.9	0.4	EOD HLD 0° Inc.
2,664.1	2,650.0	-151.9	0.4	TD at 2664.1



DESIGN TARGET DETAILS

Name	TVD	+N-S	+E-W	Northing	Eastings	Latitude	Longitude
BHL Anchorage State 1	2650.0	-151.9	0.4	686875.20	549012.00	32° 53' 7.756 N	104° 18' 29.998 W

- plan hits target center

Section Details

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0
915.5	13.50	179.86	911.7	-48.7	0.1	3.25	179.86	48.7
1148.6	13.50	179.86	1138.3	-103.2	0.3	0.00	0.00	103.2
1564.1	0.00	0.00	1550.0	-151.9	0.4	3.25	180.00	151.9
2664.1	0.00	0.00	2650.0	-151.9	0.4	0.00	0.00	151.9

T

G

M

Azimuths to Grid North

True North: -0.01°

Magnetic North: 6.78°

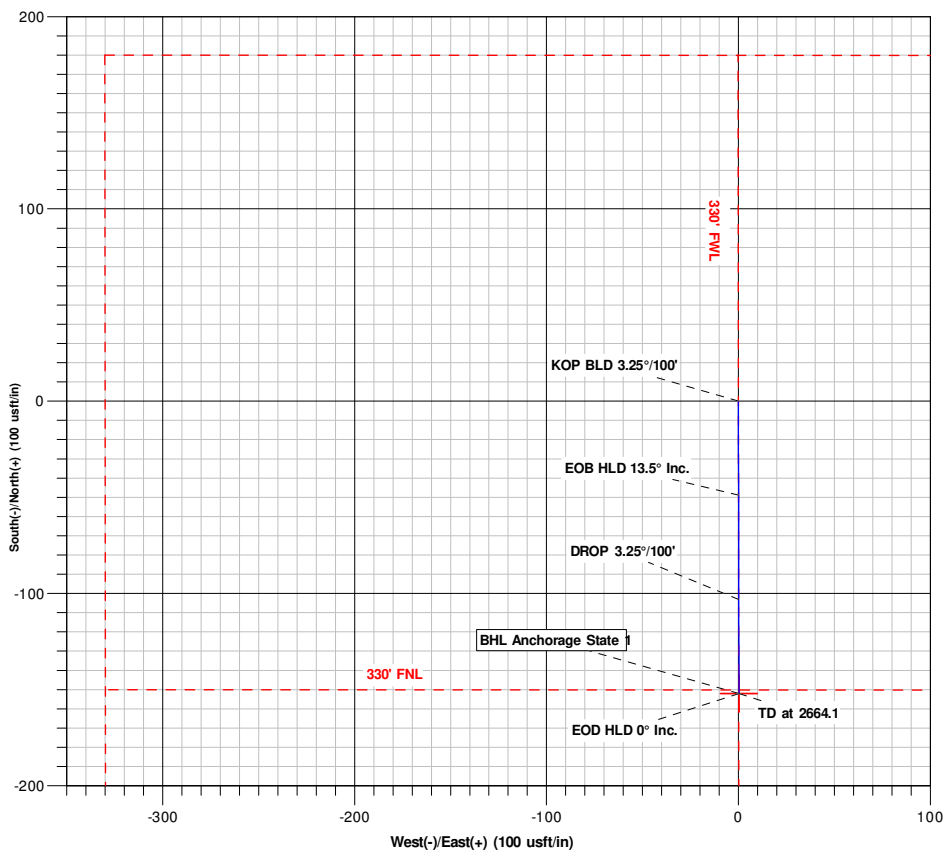
Magnetic Field

Strength: 47724.3nT

Dip Angle: 60.48°

Date: 07/22/2022

Model: IGRF2015



State of New Mexico  
Energy, Minerals and Natural Resources Department

Submit Electronically  
Via E-permitting

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

## NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

### Section 1 – Plan Description

Effective May 25, 2021

**I. Operator:** Mack Energy Corporation **OGRID:** 013837 **Date:** 07 / 25 / 2022

**II. Type:** ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: \_\_\_\_\_

**III. Well(s):** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Anchorage State 1		Sec. 32 T16S R27E	180 FNL 330 FWL	100	100	1000

**IV. Central Delivery Point Name:** DCP Midstream Linam Ranch Processing Plant/Durango Midstream [See 19.15.27.9(D)(1) NMAC]

**V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Anchorage State 1		12/1/2022	1/1/2023	2/1/2023	2/15/2023	2/15/2023

**VI. Separation Equipment:** ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

**VII. Operational Practices:** ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

**VIII. Best Management Practices:** ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.



## **Section 2 – Enhanced Plan**

### **EFFECTIVE APRIL 1, 2022**

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

#### **IX. Anticipated Natural Gas Production:**

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

#### **X. Natural Gas Gathering System (NGGS):**

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

**XI. Map.** ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

**XII. Line Capacity.** The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

**XIII. Line Pressure.** Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

**XIV. Confidentiality:** ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

### **Section 3 - Certifications**

**Effective May 25, 2021**

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

***If Operator checks this box, Operator will select one of the following:***

**Well Shut-In.** ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

**Venting and Flaring Plan.** ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

### **Section 4 - Notices**

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:	<i>Delilah Flores</i>
Printed Name:	Delilah Flores
Title:	Regulatory Technician I
E-mail Address:	delilah@mec.com
Date:	07/25/2022
Phone:	575-748-1288
<b>OIL CONSERVATION DIVISION</b> <b>(Only applicable when submitted as a standalone form)</b>	
Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	



## VI. Separation Equipment:

Mack Energy Corporation(MEC) production facilities include separation equipment designed to efficiently separate gas from liquid phases to optimize gas capture based on projected and estimated volumes from the targeted pool of our completion project. MEC will utilize flowback separation equipment and production separation equipment designed and built to industry specifications after the completion to optimize gas capture and send gas to sales or flare based on analytical composition. MEC operates facilities that are typically multi-well facilities. Production separation equipment is upgraded prior to new wells being completed, if determined to be undersized or inadequate. This equipment is already on-site and tied into our sales gas lines prior to the new drill operations.

## VII. Operational Practices:

1. Subsection (A) Venting and Flaring of Natural Gas. MEC understands the requirements of NMAC 19.15.27.8 which outlines that the venting and flaring of natural gas during drilling, completion or production operations that constitutes waste as defined in 19.15.2 are prohibited.
2. Subsection (B) Venting and Flaring during drilling operations. This gas capture plan isn't for a well being drilled.
3. Subsection (C) Venting and flaring during completion or recompletion. Flowlines will be routed for flowback fluids into a completion or storage tank and if feasible under well conditions, flare rather than vent and commence operation of a separator as soon as it is technically feasible for a separator to function.
  - At any point in the well life (completion, production, inactive) an audio, visual and olfactory inspection be performed at prescribed intervals (weekly or monthly) pursuant to Subsection D of 19.15.27.8 NMAC, to confirm that all production equipment is operating properly and there are no leaks or releases.
4. Subsection (D) Venting and flaring during production operations
  - At any point in the well life (completion, production, inactive) an audio, visual and olfactory inspection be performed at prescribed intervals (weekly or monthly) pursuant to Subsection D of 19.15.27.8 NMAC, to confirm that all production equipment is operating properly and there are no leaks or releases.
  - Monitor manual liquid unloading for wells on-site or in close proximity (<30 minutes' drive time), take reasonable actions to achieve a stabilized rate and pressure at the earliest practical time, and take reasonable actions to minimize venting to the maximum extent practicable.
  - MEC will not vent or flare except during the approved activities listed in NMAC 19.15.27.8 (D) 14.
5. Subsection (E) Performance standards
  - All tanks and separation equipment are designed for maximum throughput and pressure to minimize waste.
  - If a flare is utilized during production operations it will have a continuous pilot and is located more than 100 feet from any known well or storage tanks.
  - At any point in the well life (completion, production, inactive) an audio, visual and olfactory inspection be performed at prescribed intervals (weekly or monthly) pursuant to Subsection D of 19.15.27.8 NMAC, to confirm that all production equipment is operating properly and there are no leaks or releases.

6. Subsection (F) Measurement or estimation of vented and flared natural gas
  - Measurement equipment is installed to measure the volume of natural gas flared from process piping.
  - When measurement isn't practicable, estimation of vented and flared natural gas will be completed as noted in 19.15.27.8 (F) 5-6.

VIII. Best Management Practices:

1. MEC has adequate storage and takeaway capacity for wells it chooses to complete as the flowlines at the sites are already in place and tied into a gathering system.
2. MEC will flare rather than vent vessel blowdown gas when technically feasible during active and/or planned maintenance to equipment on-site.
3. MEC combusts natural gas that would otherwise be vented or flared, when technically feasible.
4. MEC will shut in wells in the event of a takeaway disruption, emergency situation, or other operations where venting or flaring may occur due to equipment failures.
5. MEC has a gas gathering system in place(CTB-887)a with multiple purchaser's to limit venting or flaring, due to purchaser shut downs.