Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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 375856

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

1. Operator Name and Address	2. OGRID Number
MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	13837
	3. API Number 30-015-55771

4. Property Code	5. Property Name	6. Well No.
336528	Mission State	001H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
M	2	16S	28E		200	S	990	W	Eddy

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
D	2	16S	28E	4	1	N	990	E	Eddy

9. Pool Information

ROUND TANK;SAN ANDRES	52770

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		State	3579
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	9334	San Andres		4/1/2025
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	17.5	13.375	48	250	300	0
Int1	12.25	9.625	36	1200	660	0
Prod	8.75	7	26	2850	200	0
Prod	8.75	5.5	17	9334	1875	0

Casing/Cement Program: Additional Comments

Mack Energy Corporation proposed to drill 17 1/2" hole to 250', run 13 3/8 csg/cmt. Drill 12 1/4" hole to 1,200', run 9 5/8" csg/cmt. Drill 8 3/4" hole to 9,334', run 7" csg 0-2,850', run 5 1/2" csg 2,850'-9,334' and cmt. Put well on production.

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 ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.** Signature:		**OIL CONSERVATION DIVISION**	
Printed Name:	Electronically filed by Jerry Sherrell	Approved By:	Ward Rikala
Title:	Regulatory Supervisor	Title:	Petroleum Specialist Supervisor
Email Address:	jerrys@mec.com	Approved Date:	11/21/2024 Expiration Date: 11/21/2026
Date:	10/29/2024 Phone: 575-748-1288	Conditions of Approval Attached	

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024 Submittal Type: ☐ Initial Submittal ☐ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name	
Property Code	Property Name MISSION STATE		Well Number 1H
OGRID No. 13837	Operator Name MACK ENERGY CORPORATION		Ground Level Elevation 3578.5
Surface Owner: ☐State ☐Fee ☐Tribal ☐Federal		Mineral Owner: ☐State ☐Fee ☐Tribal ☐Federal	

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	2	16 S	28 E		200 SOUTH	990 WEST	32.9461162°N	104.1519341°W	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
	2	16 S	28 E	4	1 NORTH	990 WEST	32.9652768°N	104.1520327°W	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
220				
Order Numbers.			Well setbacks are under Common Ownership: ☐Yes ☐No	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	2	16 S	28 E		200 SOUTH	990 WEST	32.9461162°N	104.1519341°W	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	2	16 S	28 E		100 SOUTH	990 WEST	32.9458412°N	104.1519332°W	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
	2	16 S	28 E	4	100 NORTH	990 WEST	32.9650047°N	104.1520313°W	EDDY

Unitized Area or Area of Uniform Interest	Spacing Unit Type ☐Horizontal ☐Vertical	Ground Floor Elevation:

OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best ofmy knowledge and belief, and, if the well is a vertical or directional well, 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 a working interest run leased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order here to fore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Delilah Flores 10/28/2024

Signature Date

Delilah Flores

Printed Name

delilah@mec.com

Email Address

SURVEYOR CERTIFICATIONS

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.

Signature and Seal of Professional Surveyor

FILIMON F. JARAMILLO

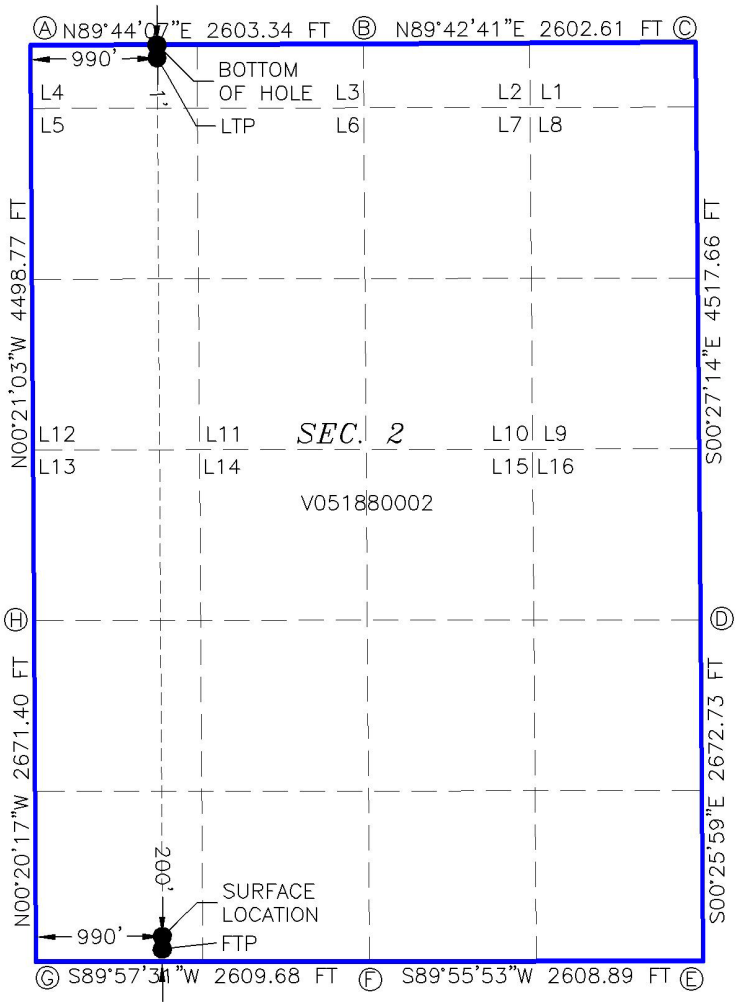
CertificateNumber	Dateof Survey
PLS 12797	SEPTEMBER 12, 2024 SURVEY NO. 10256

Note: 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.

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



MISSION STATE 1H
EL. = 3578.5

GEODETIC COORDINATES
NAD 83 NMSP EAST
SURFACE LOCATION
200' FSL, 990' FWL
N.=707980.14
E.=596984.08
LAT.=32.9461162°N
LONG.=104.1519341°W

KICK OFF POINT
200' FSL, 990' FWL
N.=707980.14
E.=596984.08
LAT.=32.9461162°N
LONG.=104.1519341°W

FIRST TAKE POINT
100' FSL, 990' FWL
N.=707880.10
E.=596984.53
LAT.=32.9458412°N
LONG.=104.1519332°W

LAST TAKE POINT
100' FNL, 990' FWL
N.=714852.18
E.=596942.42
LAT.=32.9650047°N
LONG.=104.1520313°W

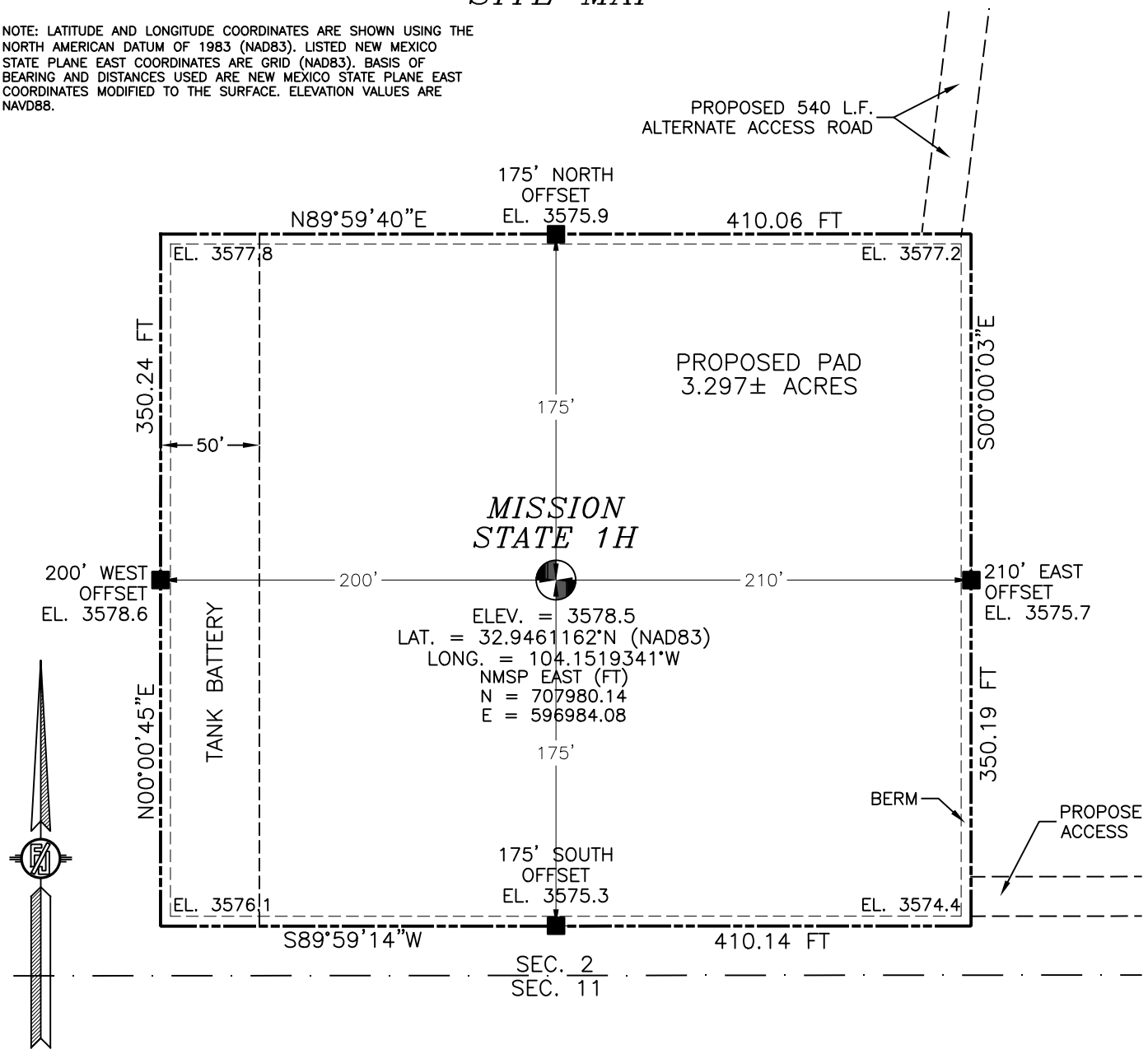
BOTTOM OF HOLE
1' FNL, 990' FWL
N.=714951.16
E.=596941.81
LAT.=32.9652768°N
LONG.=104.1520327°W

CORNER COORDINATES TABLE
NAD 83 NMSP EAST
A – N.=714947.59 E.=595952.08
B – N.=714959.61 E.=598554.71
C – N.=714972.72 E.=601156.62
D – N.=710456.37 E.=601192.39
E – N.=707784.41 E.=601212.58
F – N.=707781.29 E.=598604.37
G – N.=707779.41 E.=595995.36
H – N.=710450.07 E.=595979.61

LEGEND
SECTION LINE
QUARTER LINE
LEASE LINE
WELL PATH

SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 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.



0 8 40 80 160

SCALE 1" = 80'

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. 82 (LOVINGTON HWY.) & CO. RD. 209 (TURKEY TRACT RD.), GO NORTH ON CO. RD. 209 APPROX. 5 MILES TO END COUNTY MAINTENANCE, CONTINUE NORTH & NORTHEAST ON TURKEY TRACT RD. (CALICHE) APPROX. 5.1 MILES, CONTINUE NORTHWEST AT INTERSECTION AND GO NORTHWEST, WEST AND SOUTHWEST APPROX. 1.5 MILES TO A ROAD SURVEY ON RIGHT (WEST), FOLLOW ROAD SURVEY WEST APPROX. 0.68 MILES TO THE SOUTHEAST PAD CORNER FOR THIS LOCATION.

I, FILIMON F. JARAMILLO, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THIS SURVEY WAS MADE TO MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

FILIMON F. JARAMILLO PLS 17078

MACK ENERGY CORPORATION

MISSION STATE 1H

LOCATED 200 FT. FROM THE SOUTH LINE AND 990 FT. FROM THE WEST LINE OF SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO

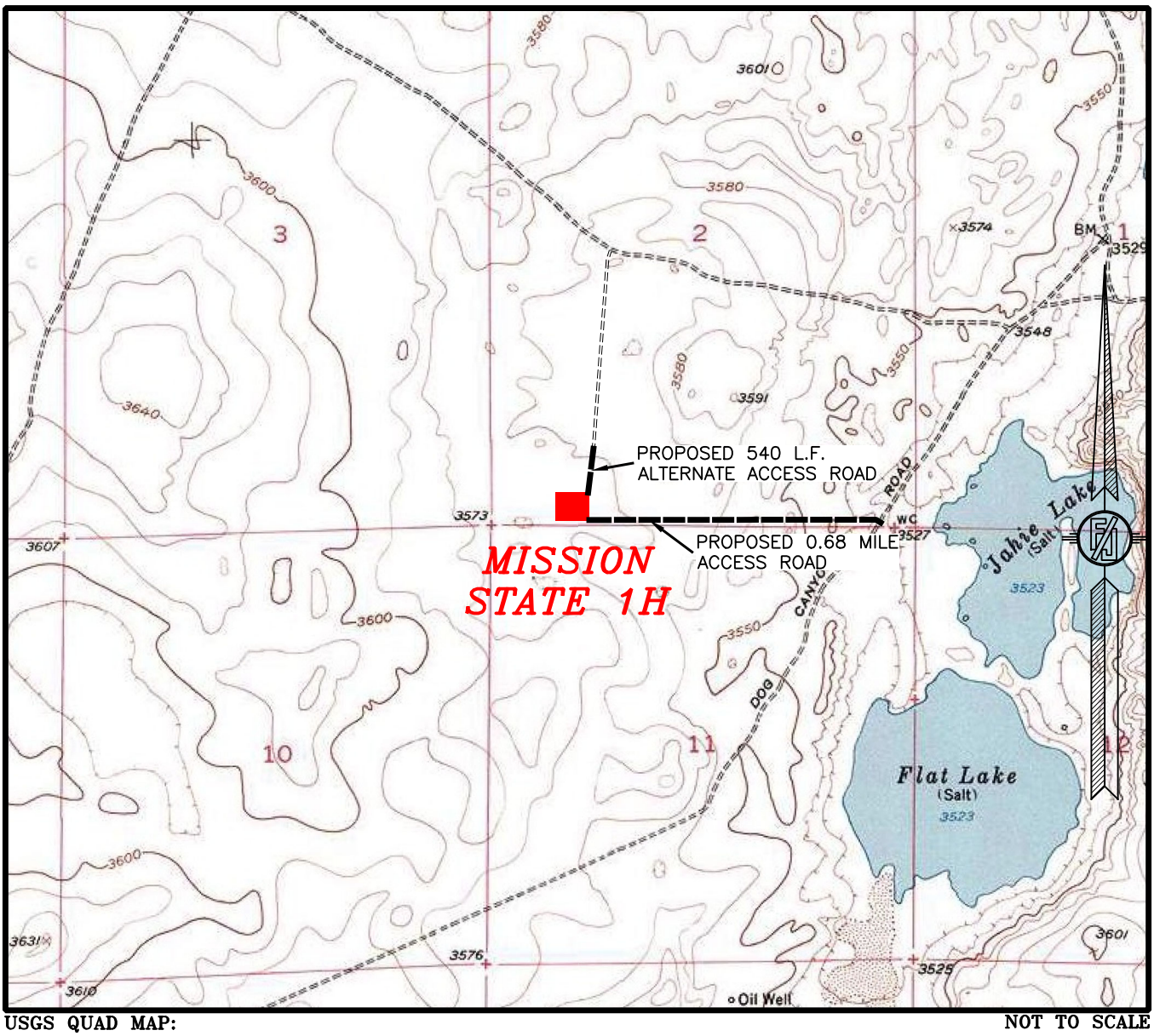
SEPTEMBER 12, 2024

SURVEY NO. 10256

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

SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

LOCATION VERIFICATION MAP



USGS QUAD MAP:
DIAMOND MOUND

NOT TO SCALE

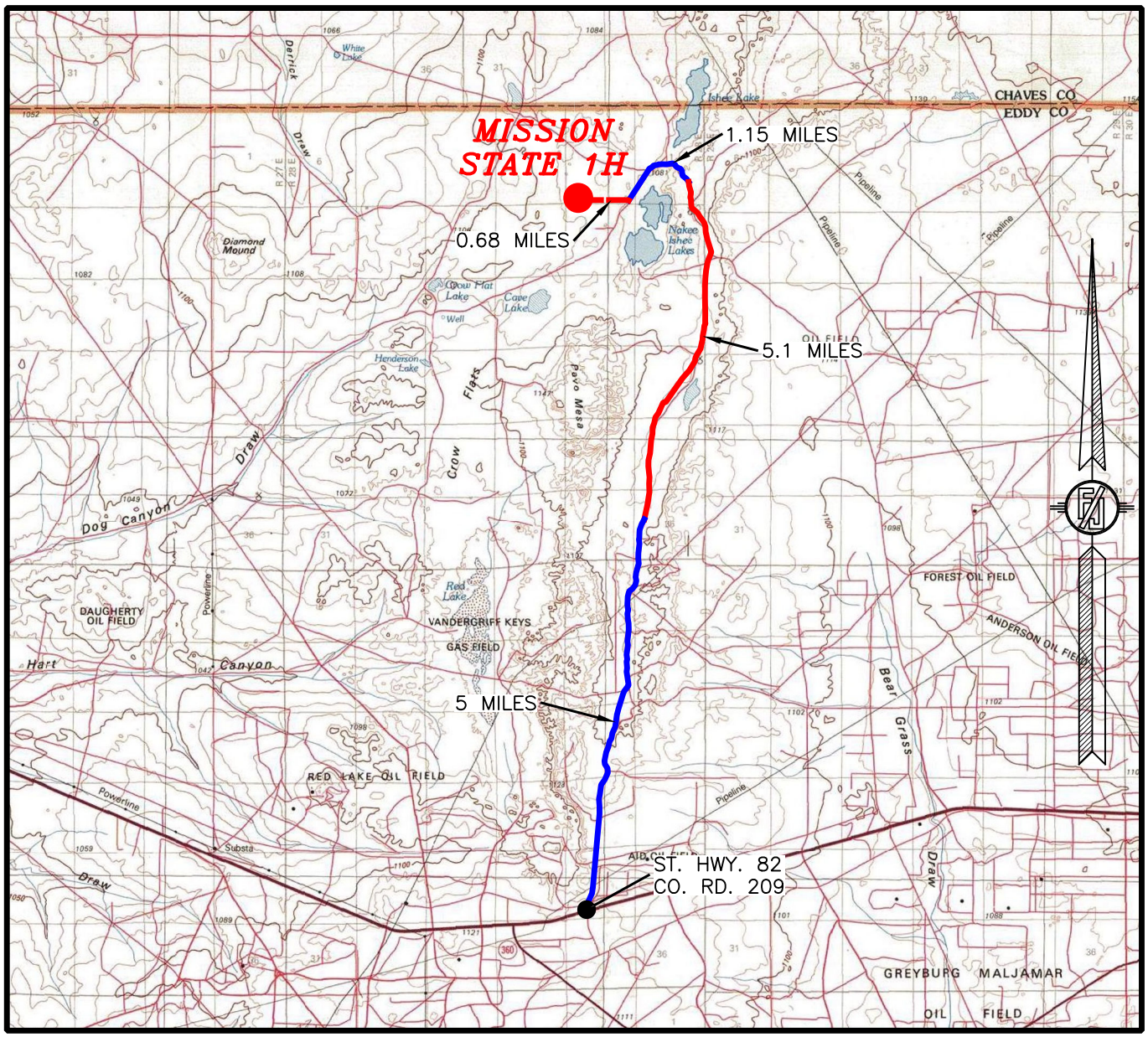
MACK ENERGY CORPORATION
MISSION STATE 1H
LOCATED 200 FT. FROM THE SOUTH LINE
AND 990 FT. FROM THE WEST LINE OF
SECTION 2, TOWNSHIP 16 SOUTH,
RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

SEPTEMBER 12, 2024

SURVEY NO. 10256

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

SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 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 ST. HWY. 82 (LOVINGTON HWY.) & CO. RD. 209 (TURKEY TRACT RD.), GO NORTH ON CO. RD. 209 APPROX. 5 MILES TO END COUNTY MAINTENANCE, CONTINUE NORTH & NORTHEAST ON TURKEY TRACT RD. (CALICHE) APPROX. 5.1 MILES, CONTINUE NORTHWEST AT INTERSECTION AND GO NORTHWEST, WEST AND SOUTHWEST APPROX. 1.15 MILES TO A ROAD SURVEY ON RIGHT (WEST), FOLLOW ROAD SURVEY WEST APPROX. 0.68 MILES TO THE SOUTHEAST PAD CORNER FOR THIS LOCATION.

MACK ENERGY CORPORATION
MISSION STATE 1H
LOCATED 200 FT. FROM THE SOUTH LINE AND 990 FT. FROM THE WEST LINE OF SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO

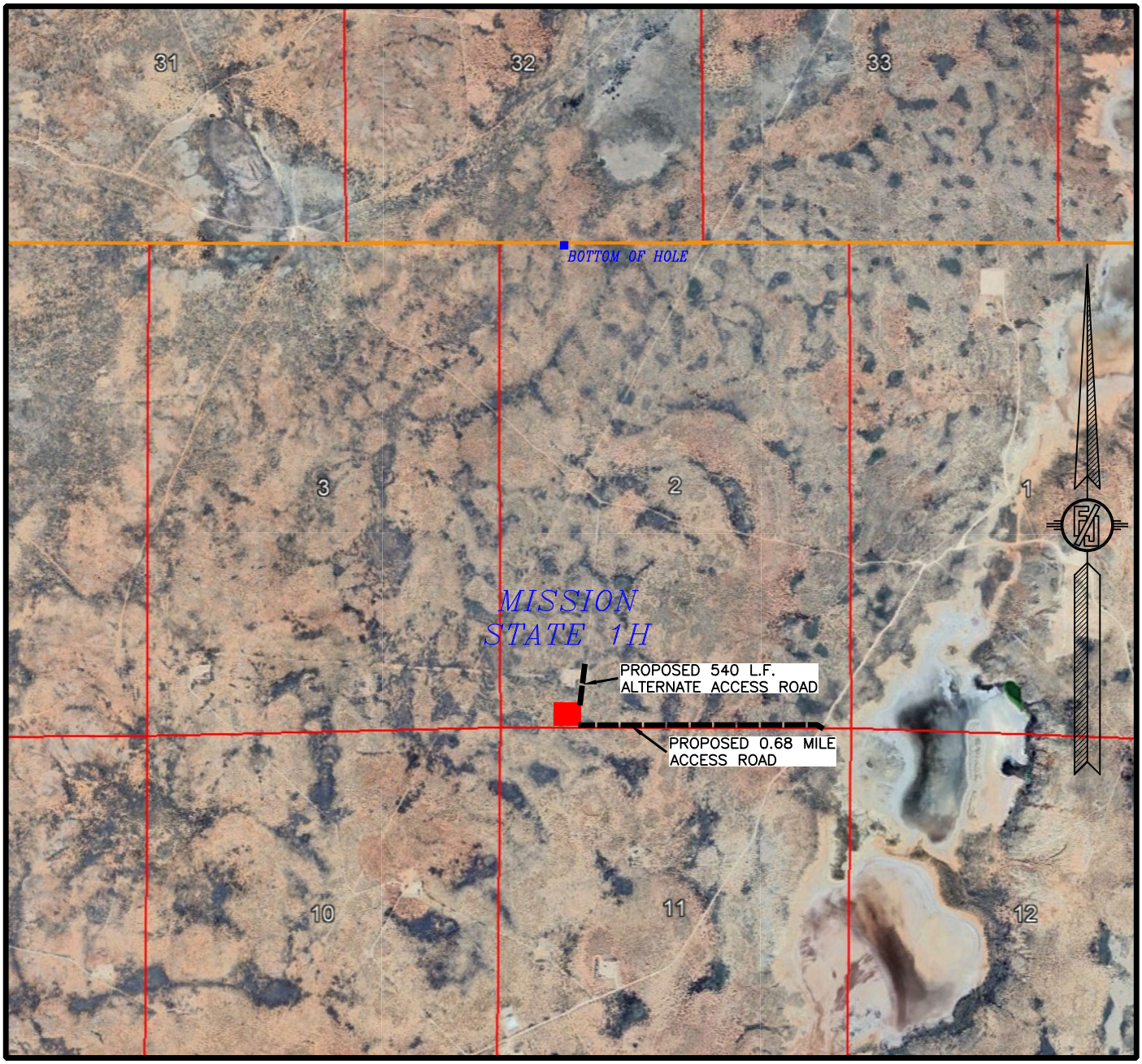
SEPTEMBER 12, 2024

SURVEY NO. 10256

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

SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
APRIL, 2023

MACK ENERGY CORPORATION

MISSION STATE 1H

LOCATED 200 FT. FROM THE SOUTH LINE
AND 990 FT. FROM THE WEST LINE OF
SECTION 2, TOWNSHIP 16 SOUTH,
RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

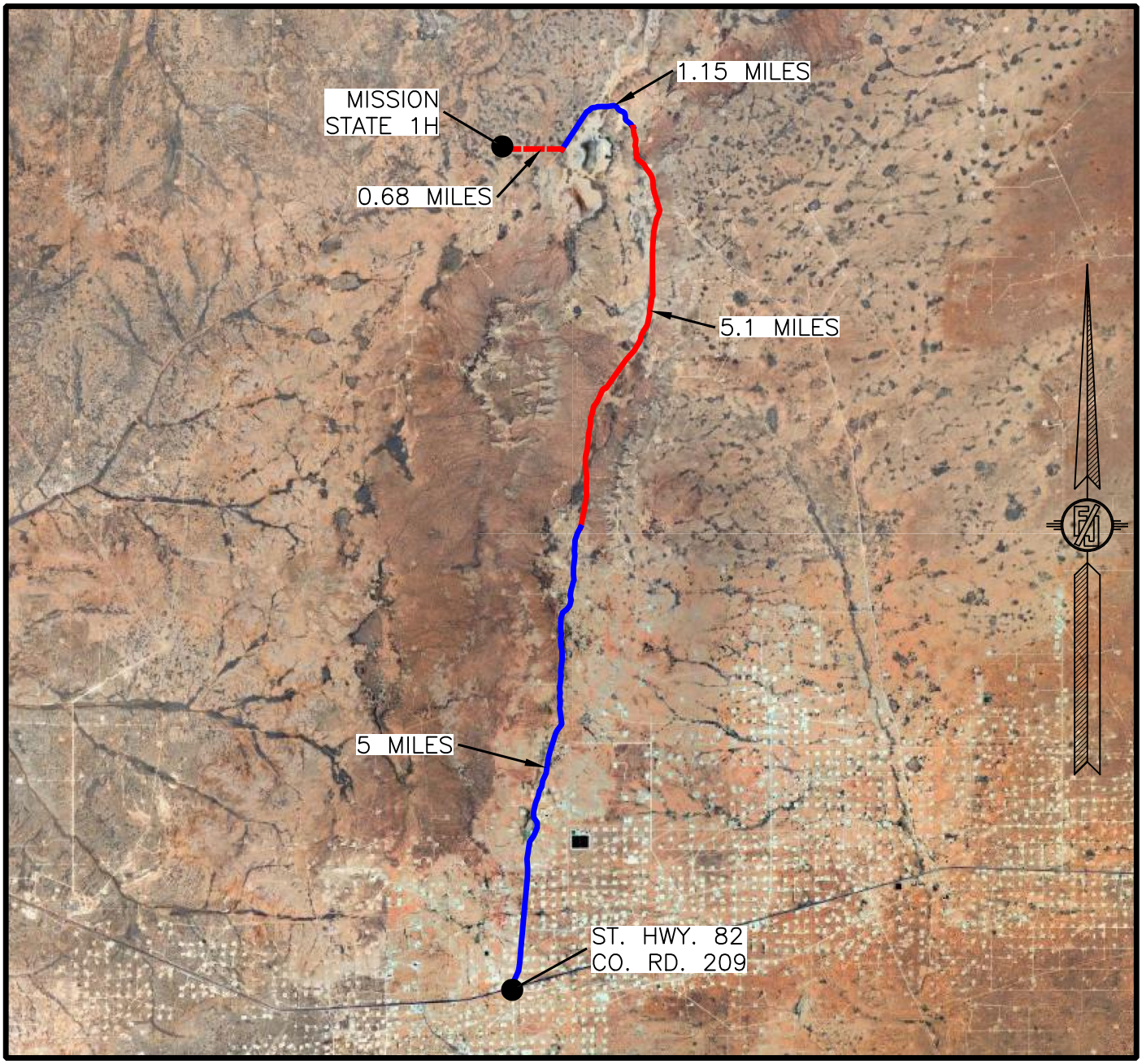
SEPTEMBER 12, 2024

SURVEY NO. 10256

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

SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

AERIAL ACCESS ROUTE MAP



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
APRIL, 2023

MACK ENERGY CORPORATION

MISSION STATE 1H

LOCATED 200 FT. FROM THE SOUTH LINE
AND 990 FT. FROM THE WEST LINE OF
SECTION 2, TOWNSHIP 16 SOUTH,
RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

SEPTEMBER 12, 2024

SURVEY NO. 10256

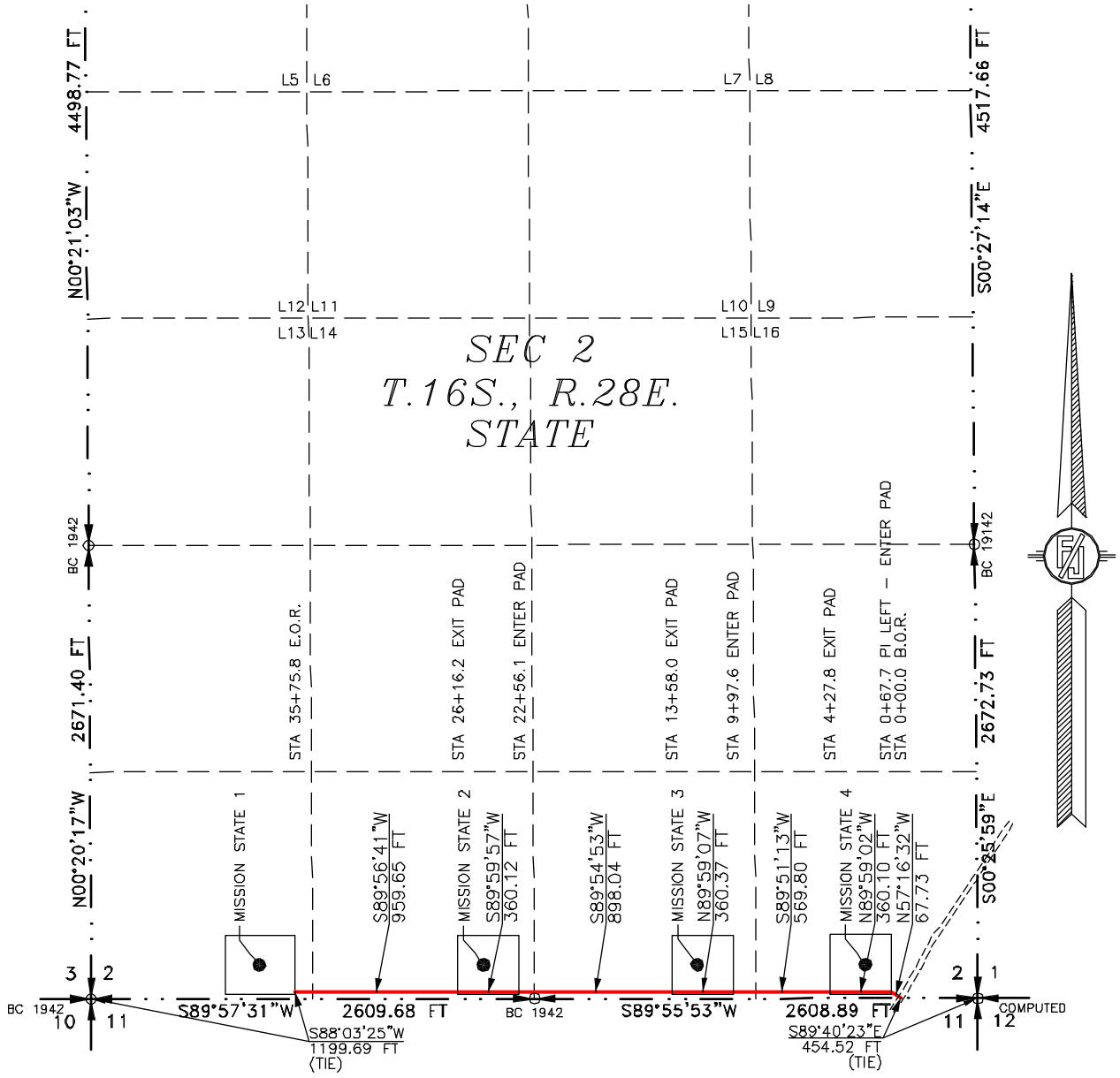
MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3327 CARLSBAD, NEW MEXICO

ACCESS ROAD PLAT

ACCESS ROAD FOR MISSION STATE 1

MACK ENERGY CORPORATION

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
SEPTEMBER 12, 2024



SEE NEXT SHEET (2–2) FOR DESCRIPTION

1000 0 1000
Scale: 1" = 1000'

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 8 DAY OF OCTOBER 2024.

FILIMON F. JARAMILLO PLS 12797
301 SOUTH CANAL
(575) 234-3327

FILIMON F. JARAMILLO NEW MEXICO 12797 REGISTERED PROFESSIONAL SURVEYOR

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

SHEET: 1–2

SURVEY NO. 10256

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

ACCESS ROAD PLAT

ACCESS ROAD FOR MISSION STATE 1

MACK ENERGY CORPORATION

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
SEPTEMBER 12, 2024

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING STATE OF NEW MEXICO LAND IN SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 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 2, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M., WHENCE THE SOUTHEAST CORNER OF SAID SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M. BEARS S89°40'23"E, A DISTANCE OF 454.52 FEET;
THENCE N57°16'32"W A DISTANCE OF 67.73 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N89°59'02"W A DISTANCE OF 360.10 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S89°51'13"W A DISTANCE OF 569.80 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N89°59'07"W A DISTANCE OF 360.37 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S89°54'53"W A DISTANCE OF 898.04 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S89°59'57"W A DISTANCE OF 360.12 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S89°56'41"W A DISTANCE OF 959.65 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHWEST CORNER OF SAID SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M. BEARS S88°03'25"W, A DISTANCE OF 1199.69 FEET;

SAID STRIP OF LAND BEING 3575.81 FEET OR 216.72 RODS IN LENGTH, CONTAINING 2.463 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SE/4 SE/4	860.98 L.F.	52.18 RODS	0.593 ACRES
SW/4 SE/4	1304.43 L.F.	79.06 RODS	0.898 ACRES
SE/4 SW/4	1304.82 L.F.	79.08 RODS	0.899 ACRES
SW/4 SW/4	105.58 L.F.	6.40 RODS	0.073 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 8 DAY OF OCTOBER 2024.

FILIMON F. JARAMILLO PLS 12797

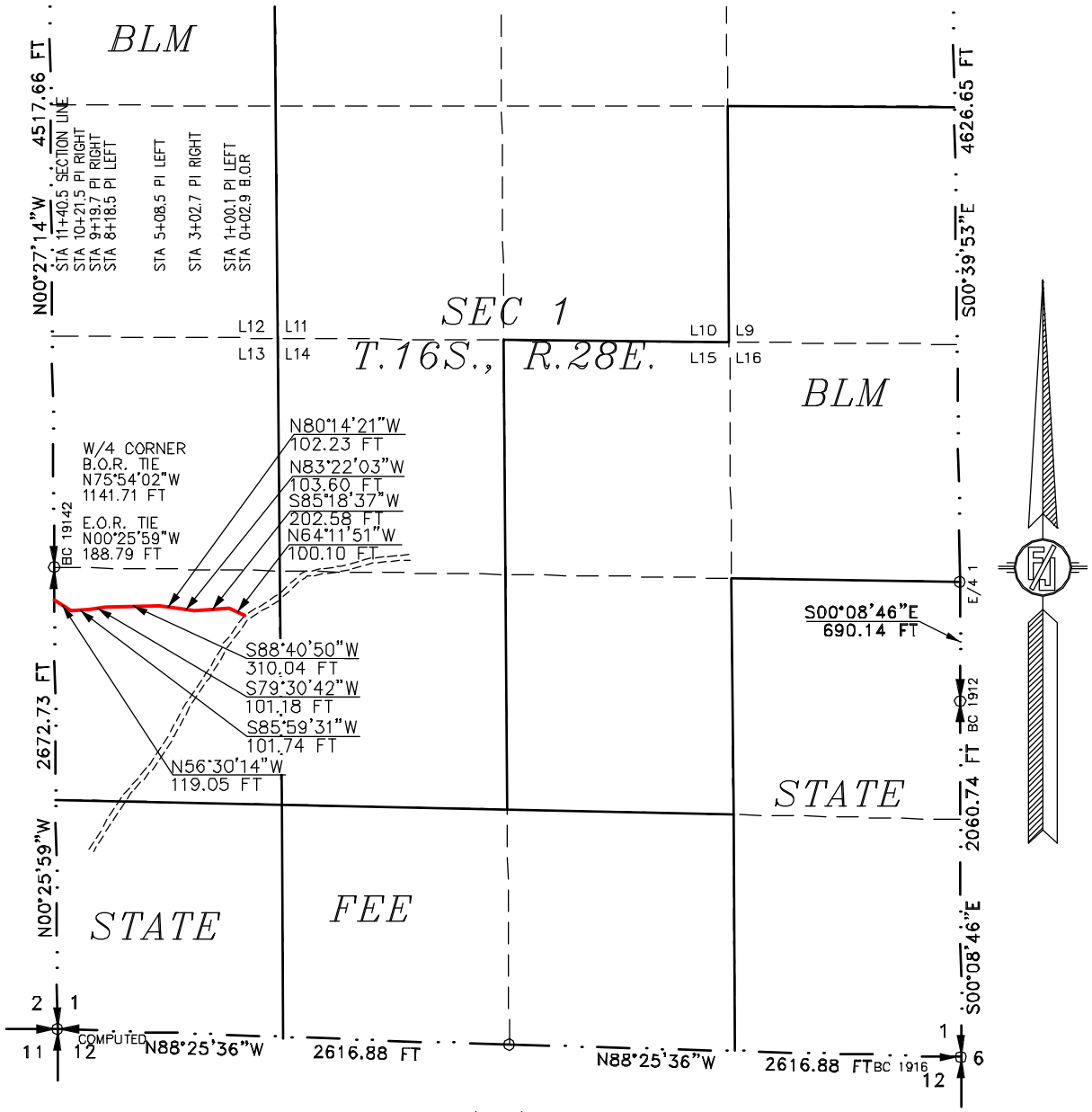
MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3327

ACCESS ROAD PLAT

EXISTING ROAD FOR ALTERNATE ACCESS TO MISSION STATE 1H

MACK ENERGY CORPORATION

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 1, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
SEPTEMBER 12, 2024



SEE NEXT SHEET (2-4) FOR DESCRIPTION

1000 0 1000
Scale: 1" = 1000'

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 18 DAY OF OCTOBER 2024.

FILIMON F. JARAMILLO NEW MEXICO 12797 REGISTERED PROFESSIONAL SURVEYOR

FILIMON F. JARAMILLO PLS 12797
301 SOUTH CANAL
(575) 234-3327

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

SHEET: 1-4

SURVEY NO. 10256

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

ACCESS ROAD PLAT

EXISTING ROAD FOR ALTERNATE ACCESS TO MISSION STATE 1H

MACK ENERGY CORPORATION

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 1, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
SEPTEMBER 12, 2024

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 1, TOWNSHIP 16 SOUTH, RANGE 28 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 1, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M., WHENCE THE WEST QUARTER CORNER OF SAID SECTION 1, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M. BEARS N75°54'02"W, A DISTANCE OF 1141.71 FEET;
THENCE N64°11'51"W A DISTANCE OF 100.10 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S85°18'37"W A DISTANCE OF 202.58 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N83°22'03"W A DISTANCE OF 103.60 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N80°14'21"W A DISTANCE OF 102.23 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S88°40'50"W A DISTANCE OF 310.04 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S79°30'42"W A DISTANCE OF 101.18 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S85°59'31"W A DISTANCE OF 101.74 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N56°30'14"W A DISTANCE OF 119.05 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE WEST QUARTER CORNER OF SAID SECTION 1, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M. BEARS N00°25'59"W, A DISTANCE OF 188.79 FEET;

SAID STRIP OF LAND BEING 1140.51 FEET OR 69.12 RODS IN LENGTH, CONTAINING 0.785 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NW/4 SW/4	1140.51 L.F.	69.12 RODS	0.765 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 16 DAY OF OCTOBER 2024.

FILIMON F. JARAMILLO PLS 12797

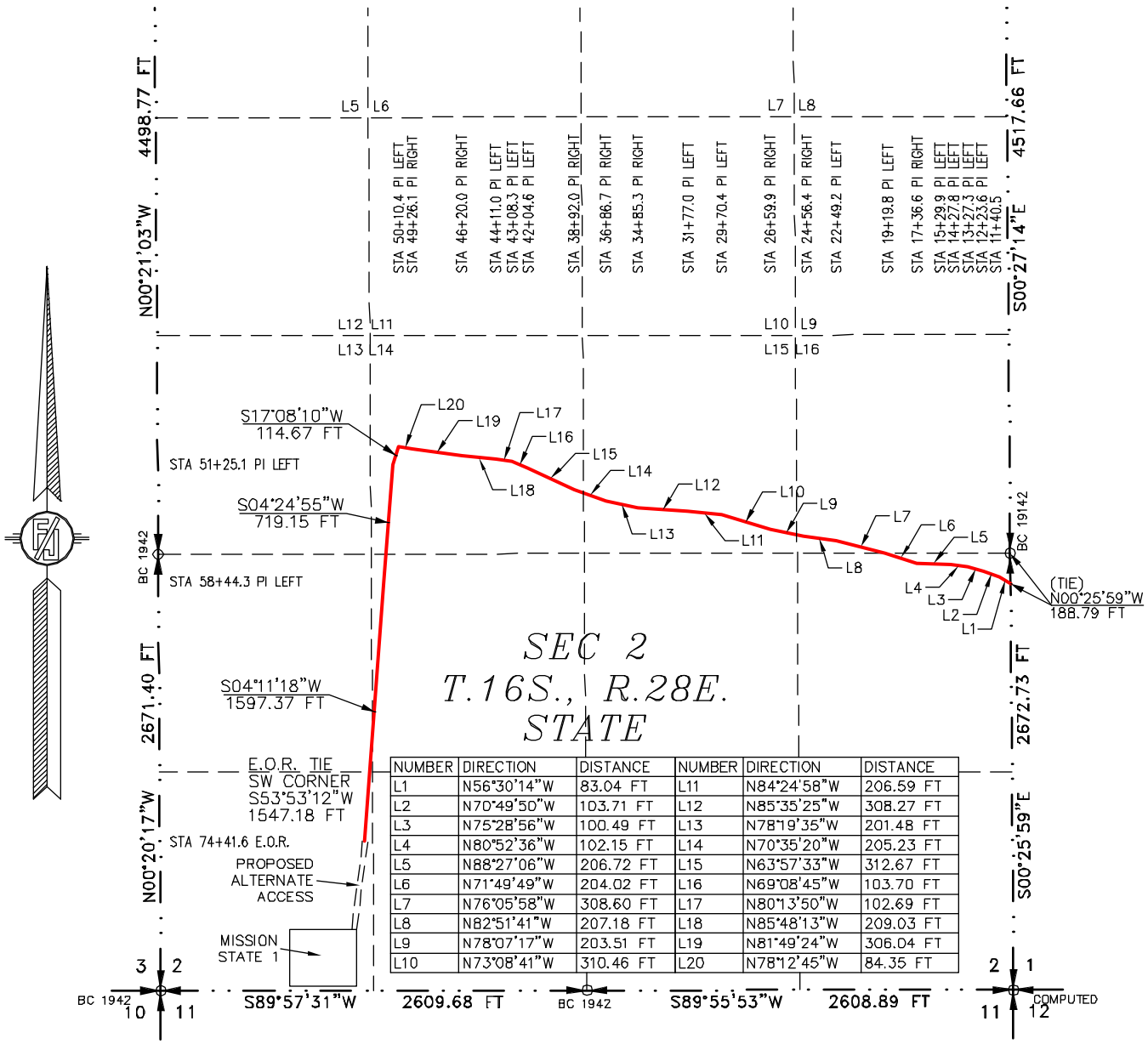
MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3327

ACCESS ROAD PLAT

EXISTING ROAD FOR ALTERNATE ACCESS TO MISSION STATE 1H

MACK ENERGY CORPORATION

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
SEPTEMBER 12, 2024



NUMBER	DIRECTION	DISTANCE	NUMBER	DIRECTION	DISTANCE
L1	N56°30'14"W	83.04 FT	L11	N84°24'58"W	206.59 FT
L2	N70°49'50"W	103.71 FT	L12	N85°35'25"W	308.27 FT
L3	N75°28'56"W	100.49 FT	L13	N78°19'35"W	201.48 FT
L4	N80°52'36"W	102.15 FT	L14	N70°35'20"W	205.23 FT
L5	N88°27'06"W	206.72 FT	L15	N63°57'33"W	312.67 FT
L6	N71°49'49"W	204.02 FT	L16	N69°08'45"W	103.70 FT
L7	N76°05'58"W	308.60 FT	L17	N80°13'50"W	102.69 FT
L8	N82°51'41"W	207.18 FT	L18	N85°48'13"W	209.03 FT
L9	N78°07'17"W	203.51 FT	L19	N81°49'24"W	306.04 FT
L10	N73°08'41"W	310.46 FT	L20	N78°12'45"W	84.35 FT

SEE NEXT SHEET (4-4) FOR DESCRIPTION

1000 0 1000
Scale: 1" = 1000'

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 8 DAY OF OCTOBER 2024.

FILIMON F. JARAMILLO PLS 12797

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

SHEET: 3-4

SURVEY NO. 10256

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

ACCESS ROAD PLAT

EXISTING ROAD FOR ALTERNATE ACCESS TO MISSION STATE 1H

MACK ENERGY CORPORATION

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
SEPTEMBER 12, 2024

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING STATE OF NEW MEXICO LAND IN SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 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 2, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M., WHENCE THE EAST QUARTER CORNER OF SAID SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M. BEARS N00°25'59"W, A DISTANCE OF 188.79 FEET;
THENCE N56°30'14"W A DISTANCE OF 83.04 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N70°49'50"W A DISTANCE OF 103.71 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N75°28'56"W A DISTANCE OF 100.49 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N80°52'36"W A DISTANCE OF 102.15 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N88°27'06"W A DISTANCE OF 206.72 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N71°49'49"W A DISTANCE OF 204.02 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N76°05'58"W A DISTANCE OF 308.60 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N82°51'41"W A DISTANCE OF 207.18 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N78°07'17"W A DISTANCE OF 203.51 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N73°08'41"W A DISTANCE OF 310.46 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N84°24'58"W A DISTANCE OF 206.59 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N85°35'25"W A DISTANCE OF 308.27 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N78°19'35"W A DISTANCE OF 201.48 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N70°35'20"W A DISTANCE OF 205.23 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N63°57'33"W A DISTANCE OF 312.67 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N69°08'45"W A DISTANCE OF 103.70 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N80°13'50"W A DISTANCE OF 102.69 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N85°48'13"W A DISTANCE OF 209.03 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N81°49'24"W A DISTANCE OF 306.04 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N78°12'45"W A DISTANCE OF 84.35 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S17°08'10"W A DISTANCE OF 114.67 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S04°24'55"W A DISTANCE OF 719.15 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S04°11'18"W A DISTANCE OF 1597.37 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHWEST CORNER OF SAID SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M. BEARS S53°53'12"W, A DISTANCE OF 1547.18 FEET;

SAID STRIP OF LAND BEING 6301.11 FEET OR 381.89 RODS IN LENGTH, CONTAINING 4.340 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NE/4 SE/4	791.79 L.F.	47.99 RODS	0.545 ACRES
LOT 16	560.05 L.F.	33.94 RODS	0.386 ACRES
LOT 15	1336.06 L.F.	80.97 RODS	0.920 ACRES
LOT 14	1847.29 L.F.	111.96 RODS	1.272 ACRES
NE/4 SW/4	1148.91 L.F.	69.63 RODS	0.791 ACRES
NW/4 SW/4	190.68 L.F.	11.56 RODS	0.131 ACRES
SW/4 SW/4	426.33 L.F.	25.84 RODS	0.294 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 8 DAY OF OCTOBER 2024.

FILIMON F. JARAMILLO PLS 12797

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

SHEET: 4-4

SURVEY NO. 10256

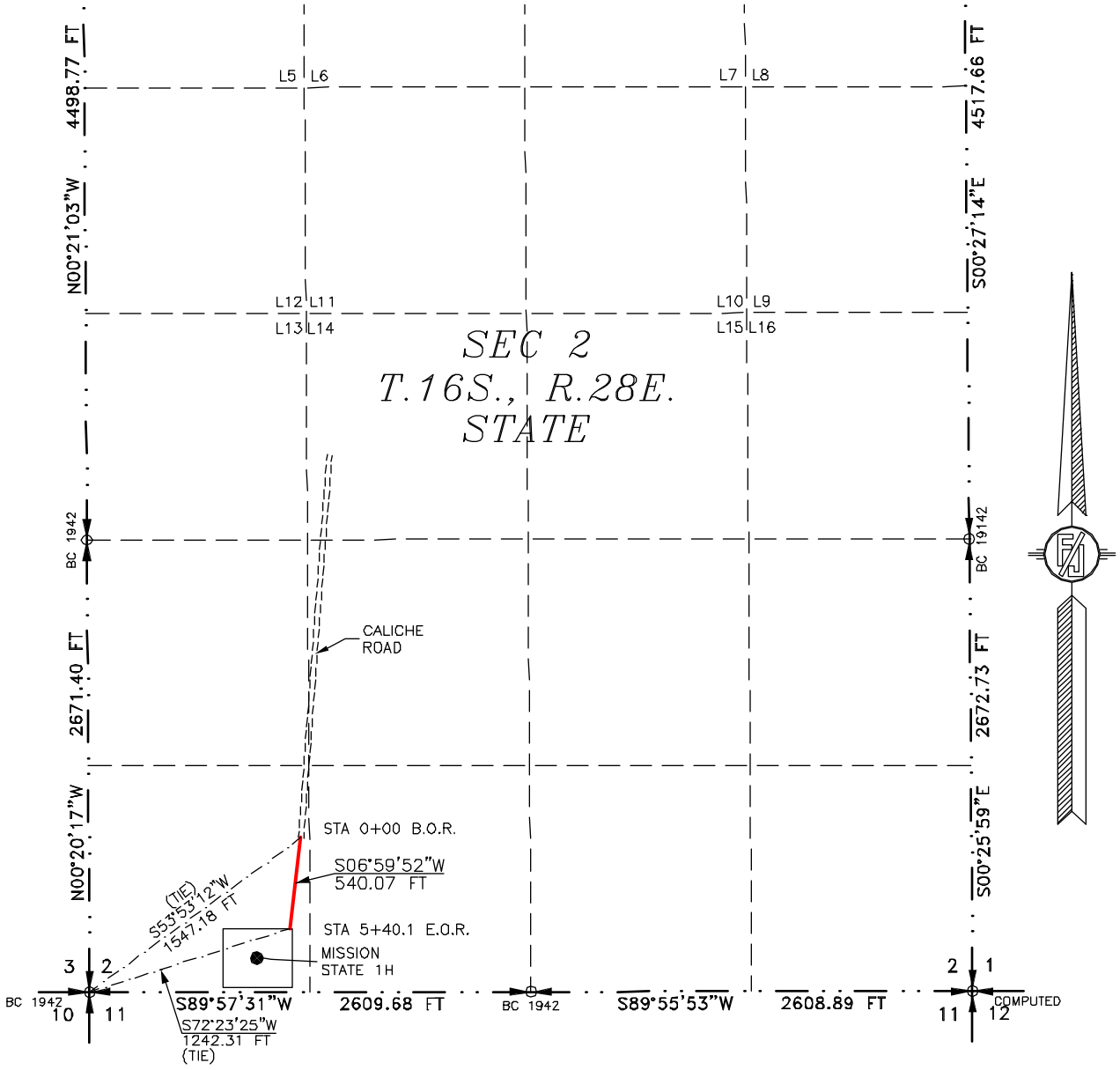
MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

ACCESS ROAD PLAT

ALTERNATE ACCESS ROAD FOR MISSION STATE 1H

MACK ENERGY CORPORATION

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
SEPTEMBER 12, 2024



SEE NEXT SHEET (2-2) FOR DESCRIPTION

1000 0 1000
Scale: 1" = 1000'

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 29TH DAY OF OCTOBER 2024.

FILIMON F. JARAMILLO PLS 12797
301 SOUTH CANAL
(575) 234-3327

FILIMON F. JARAMILLO NEW MEXICO 12797 REGISTERED PROFESSIONAL SURVEYOR

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

SHEET: 1-2

SURVEY NO. 10256

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

ACCESS ROAD PLAT

ALTERNATE ACCESS ROAD FOR MISSION STATE 1H

MACK ENERGY CORPORATION

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
SEPTEMBER 12, 2024

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING STATE OF NEW MEXICO LAND IN SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 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 SW/4 SW/4 OF SAID SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M., WHENCE THE SOUTHWEST CORNER OF SAID SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M. BEARS S53°53'12"W, A DISTANCE OF 1547.18 FEET;
THENCE S06°59'52"W A DISTANCE OF 540.07 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHWEST CORNER OF SAID SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M. BEARS S72°23'25"W, A DISTANCE OF 1242.31 FEET;

SAID STRIP OF LAND BEING 540.07 FEET OR 32.73 RODS IN LENGTH, CONTAINING 0.372 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SW/4 SW/4	540.07 L.F.	32.73 RODS	0.372 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 18 DAY OF OCTOBER 2024.

FILIMON F. JARAMILLO PLS 12797

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

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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 375856

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
MACK ENERGY CORP [13837] P.O. Box 960 Artesia, NM 882110960	30-015-55771
	Well: Mission State #001H

OCD Reviewer	Condition
ward.rikala	Notify the OCD 24 hours prior to casing & cement.
ward.rikala	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.
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing.
ward.rikala	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.
ward.rikala	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.
ward.rikala	A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.

Mission State #1H, Plan 1

Operator	Mack Energy Corp	**Units**	feet, °/100ft	07:27 Friday, October 11, 2024	Page 1 of 5
Field	Round Tank	**County**	Eddy	**Vertical Section Azimuth**	359.66
Well Name	Mission State #1H	**State**	New Mexico	**Survey Calculation Method**	Minimum Curvature
Plan	1	**Country**	USA	**Database**	Access

Location	SL: 200 FSL & 990 FWL Sec 2-T16S-R28E BHL: 1 FNL & 990 FWL Sec 2-T16S-R28E	**Map Zone**	UTM	**Lat Long Ref**	
Site		**Surface X**	1900621.5	**Surface Long**	
Slot Name		**UWI**		**Surface Y**	11960005.6	**Surface Lat**	
Well Number	1H	**API**		**Surface Z**	3596	**Global Z Ref**	KB
Project		**MD/TVD Ref**	KB	**Ground Level**	3578.5	**Local North Ref**	Grid

DIRECTIONAL WELL PLAN

MD* ft	INC* deg	AZI* deg	TVD* ft	N* ft	E* ft	DLS* °/100ft	V. S.* ft	MapE* ft	MapN* ft	SysTVD* ft
*** TIE (at MD = 1825.00)										
1825.00	0.00	0.0	1825.00	0.00	0.00		0.00	1900621.50	11960005.60	1771.00
1850.00	0.00	0.0	1850.00	0.00	0.00	0.00	0.00	1900621.50	11960005.60	1746.00
1900.00	0.00	0.0	1900.00	0.00	0.00	0.00	0.00	1900621.50	11960005.60	1696.00
*** KOP 8 DEGREE (at MD = 1925.00)										
1925.00	0.00	0.0	1925.00	0.00	0.00	0.00	0.00	1900621.50	11960005.60	1671.00
1950.00	2.00	359.7	1949.99	0.44	0.00	8.00	0.44	1900621.50	11960006.04	1646.01
2000.00	6.00	359.7	1999.86	3.92	-0.02	8.00	3.92	1900621.48	11960009.52	1596.14
2050.00	10.00	359.7	2049.37	10.88	-0.06	8.00	10.88	1900621.44	11960016.48	1546.63
2100.00	14.00	359.7	2098.26	21.27	-0.13	8.00	21.27	1900621.37	11960026.87	1497.74
2150.00	18.00	359.7	2146.32	35.05	-0.21	8.00	35.05	1900621.29	11960040.65	1449.68
2200.00	22.00	359.7	2193.29	52.15	-0.31	8.00	52.15	1900621.19	11960057.75	1402.71
2250.00	26.00	359.7	2238.96	72.48	-0.43	8.00	72.48	1900621.07	11960078.08	1357.04
2300.00	30.00	359.7	2283.10	95.95	-0.57	8.00	95.95	1900620.93	11960101.55	1312.90
2350.00	34.00	359.7	2325.49	122.44	-0.73	8.00	122.44	1900620.77	11960128.04	1270.51
2400.00	38.00	359.7	2365.94	151.82	-0.90	8.00	151.83	1900620.60	11960157.42	1230.06
2450.00	42.00	359.7	2404.23	183.96	-1.09	8.00	183.96	1900620.41	11960189.56	1191.77
2500.00	46.00	359.7	2440.19	218.68	-1.30	8.00	218.68	1900620.20	11960224.28	1155.81
2550.00	50.00	359.7	2473.64	255.83	-1.52	8.00	255.83	1900619.98	11960261.43	1122.36
2600.00	54.00	359.7	2504.42	295.22	-1.75	8.00	295.23	1900619.75	11960300.82	1091.58
*** 55 DEGREE TANGENT (at MD = 2612.50)										
2612.50	55.00	359.7	2511.67	305.40	-1.81	8.00	305.40	1900619.69	11960311.00	1084.33
2650.00	55.00	359.7	2533.18	336.12	-1.99	0.00	336.12	1900619.51	11960341.72	1062.82
2700.00	55.00	359.7	2561.86	377.07	-2.24	0.00	377.08	1900619.26	11960382.67	1034.14
2750.00	55.00	359.7	2590.54	418.03	-2.48	0.00	418.04	1900619.02	11960423.63	1005.46
2800.00	55.00	359.7	2619.22	458.99	-2.72	0.00	458.99	1900618.78	11960464.59	976.78
*** 10 DEGREE BUILD (at MD = 2812.50)										
2812.50	55.00	359.7	2626.39	469.23	-2.78	0.00	469.23	1900618.72	11960474.83	969.61
2850.00	58.75	359.7	2646.88	500.62	-2.97	10.00	500.63	1900618.53	11960506.22	949.12
2900.00	63.75	359.7	2670.92	544.45	-3.23	10.00	544.46	1900618.27	11960550.05	925.08
2950.00	68.75	359.7	2691.05	590.20	-3.50	10.00	590.21	1900618.00	11960595.80	904.95
3000.00	73.75	359.7	2707.12	637.53	-3.78	10.00	637.54	1900617.72	11960643.13	888.88
3050.00	78.75	359.7	2719.00	686.08	-4.07	10.00	686.09	1900617.43	11960691.68	877.00
3100.00	83.75	359.7	2726.60	735.48	-4.36	10.00	735.49	1900617.14	11960741.08	869.40
3150.00	88.75	359.7	2729.87	785.36	-4.66	10.00	785.37	1900616.84	11960790.96	866.13
*** LANDING POINT (at MD = 3175.50)										
3175.50	91.30	359.7	2729.86	810.85	-4.81	10.00	810.87	1900616.69	11960816.45	866.14
3200.00	91.30	359.7	2729.30	835.35	-4.96	0.00	835.36	1900616.54	11960840.95	866.70
3250.00	91.30	359.7	2728.17	885.33	-5.25	0.00	885.35	1900616.25	11960890.93	867.83

Mission State #1H, Plan 1

Operator	Mack Energy Corp	**Units**	feet, °/100ft	07:27 Friday, October 11, 2024	Page 2 of 5
Field	Round Tank	**County**	Eddy	**Vertical Section Azimuth**	359.66
Well Name	Mission State #1H	**State**	New Mexico	**Survey Calculation Method**	Minimum Curvature
Plan	1	**Country**	USA	**Database**	Access

Location	SL: 200 FSL & 990 FWL Sec 2-T16S-R28E BHL: 1 FNL & 990 FWL Sec 2-T16S-R28E	**Map Zone**	UTM	**Lat Long Ref**	
Site		**Surface X**	1900621.5	**Surface Long**	
Slot Name	**UWI**	**Surface Y**	11960005.6	**Surface Lat**	
Well Number	1H **API**	**Surface Z**	3596	**Global Z Ref**	KB
Project	**MD/TVD Ref** KB	**Ground Level**	3578.5	**Local North Ref**	Grid

DIRECTIONAL WELL PLAN

MD* ft	INC* deg	AZI* deg	TVD* ft	N* ft	E* ft	DLS* °/100ft	V. S.* ft	MapE* ft	MapN* ft	SysTVD* ft
3300.00	91.30	359.7	2727.04	935.32	-5.55	0.00	935.34	1900615.95	11960940.92	868.96
3350.00	91.30	359.7	2725.90	985.31	-5.85	0.00	985.32	1900615.65	11960990.91	870.10
3400.00	91.30	359.7	2724.77	1035.29	-6.14	0.00	1035.31	1900615.36	11961040.89	871.23
3450.00	91.30	359.7	2723.63	1085.28	-6.44	0.00	1085.30	1900615.06	11961090.88	872.37
3500.00	91.30	359.7	2722.50	1135.26	-6.74	0.00	1135.28	1900614.76	11961140.86	873.50
3550.00	91.30	359.7	2721.36	1185.25	-7.03	0.00	1185.27	1900614.47	11961190.85	874.64
3600.00	91.30	359.7	2720.23	1235.24	-7.33	0.00	1235.26	1900614.17	11961240.84	875.77
3650.00	91.30	359.7	2719.10	1285.22	-7.63	0.00	1285.25	1900613.87	11961290.82	876.90
3700.00	91.30	359.7	2717.96	1335.21	-7.92	0.00	1335.23	1900613.58	11961340.81	878.04
3750.00	91.30	359.7	2716.83	1385.20	-8.22	0.00	1385.22	1900613.28	11961390.80	879.17
3800.00	91.30	359.7	2715.69	1435.18	-8.52	0.00	1435.21	1900612.98	11961440.78	880.31
3850.00	91.30	359.7	2714.56	1485.17	-8.81	0.00	1485.19	1900612.69	11961490.77	881.44
3900.00	91.30	359.7	2713.42	1535.15	-9.11	0.00	1535.18	1900612.39	11961540.75	882.58
3950.00	91.30	359.7	2712.29	1585.14	-9.41	0.00	1585.17	1900612.09	11961590.74	883.71
4000.00	91.30	359.7	2711.15	1635.13	-9.70	0.00	1635.16	1900611.80	11961640.73	884.85
4050.00	91.30	359.7	2710.02	1685.11	-10.00	0.00	1685.14	1900611.50	11961690.71	885.98
4100.00	91.30	359.7	2708.89	1735.10	-10.30	0.00	1735.13	1900611.20	11961740.70	887.11
4150.00	91.30	359.7	2707.75	1785.09	-10.59	0.00	1785.12	1900610.91	11961790.69	888.25
4200.00	91.30	359.7	2706.62	1835.07	-10.89	0.00	1835.10	1900610.61	11961840.67	889.38
4250.00	91.30	359.7	2705.48	1885.06	-11.19	0.00	1885.09	1900610.31	11961890.66	890.52
4300.00	91.30	359.7	2704.35	1935.04	-11.48	0.00	1935.08	1900610.02	11961940.64	891.65
4350.00	91.30	359.7	2703.21	1985.03	-11.78	0.00	1985.07	1900609.72	11961990.63	892.79
4400.00	91.30	359.7	2702.08	2035.02	-12.08	0.00	2035.05	1900609.42	11962040.62	893.92
4450.00	91.30	359.7	2700.95	2085.00	-12.37	0.00	2085.04	1900609.13	11962090.60	895.05
4500.00	91.30	359.7	2699.81	2134.99	-12.67	0.00	2135.03	1900608.83	11962140.59	896.19
4550.00	91.30	359.7	2698.68	2184.98	-12.97	0.00	2185.01	1900608.53	11962190.58	897.32
4600.00	91.30	359.7	2697.54	2234.96	-13.26	0.00	2235.00	1900608.24	11962240.56	898.46
4650.00	91.30	359.7	2696.41	2284.95	-13.56	0.00	2284.99	1900607.94	11962290.55	899.59
4700.00	91.30	359.7	2695.27	2334.93	-13.86	0.00	2334.98	1900607.64	11962340.53	900.73
4750.00	91.30	359.7	2694.14	2384.92	-14.15	0.00	2384.96	1900607.35	11962390.52	901.86
4800.00	91.30	359.7	2693.00	2434.91	-14.45	0.00	2434.95	1900607.05	11962440.51	903.00
4850.00	91.30	359.7	2691.87	2484.89	-14.75	0.00	2484.94	1900606.75	11962490.49	904.13
4900.00	91.30	359.7	2690.74	2534.88	-15.04	0.00	2534.92	1900606.46	11962540.48	905.26
4950.00	91.30	359.7	2689.60	2584.87	-15.34	0.00	2584.91	1900606.16	11962590.47	906.40
5000.00	91.30	359.7	2688.47	2634.85	-15.64	0.00	2634.90	1900605.86	11962640.45	907.53
5050.00	91.30	359.7	2687.33	2684.84	-15.93	0.00	2684.89	1900605.57	11962690.44	908.67
5100.00	91.30	359.7	2686.20	2734.82	-16.23	0.00	2734.87	1900605.27	11962740.42	909.80

Mission State #1H, Plan 1

Operator	Mack Energy Corp	**Units**	feet, °/100ft	07:27 Friday, October 11, 2024	Page 3 of 5
Field	Round Tank	**County**	Eddy	**Vertical Section Azimuth**	359.66
Well Name	Mission State #1H	**State**	New Mexico	**Survey Calculation Method**	Minimum Curvature
Plan	1	**Country**	USA	**Database**	Access

Location	SL: 200 FSL & 990 FWL Sec 2-T16S-R28E BHL: 1 FNL & 990 FWL Sec 2-T16S-R28E	**Map Zone**	UTM	**Lat Long Ref**	
Site		**Surface X**	1900621.5	**Surface Long**	
Slot Name	**UWI**	**Surface Y**	11960005.6	**Surface Lat**	
Well Number	1H **API**	**Surface Z**	3596	**Global Z Ref**	KB
Project	**MD/TVD Ref** KB	**Ground Level**	3578.5	**Local North Ref**	Grid

DIRECTIONAL WELL PLAN

MD* ft	INC* deg	AZI* deg	TVD* ft	N* ft	E* ft	DLS* °/100ft	V. S.* ft	MapE* ft	MapN* ft	SysTVD* ft
5150.00	91.30	359.7	2685.06	2784.81	-16.53	0.00	2784.86	1900604.97	11962790.41	910.94
5200.00	91.30	359.7	2683.93	2834.80	-16.82	0.00	2834.85	1900604.68	11962840.40	912.07
5250.00	91.30	359.7	2682.80	2884.78	-17.12	0.00	2884.83	1900604.38	11962890.38	913.20
5300.00	91.30	359.7	2681.66	2934.77	-17.42	0.00	2934.82	1900604.08	11962940.37	914.34
5350.00	91.30	359.7	2680.53	2984.76	-17.71	0.00	2984.81	1900603.79	11962990.36	915.47
5400.00	91.30	359.7	2679.39	3034.74	-18.01	0.00	3034.80	1900603.49	11963040.34	916.61
5450.00	91.30	359.7	2678.26	3084.73	-18.31	0.00	3084.78	1900603.19	11963090.33	917.74
5500.00	91.30	359.7	2677.12	3134.71	-18.60	0.00	3134.77	1900602.90	11963140.31	918.88
5550.00	91.30	359.7	2675.99	3184.70	-18.90	0.00	3184.76	1900602.60	11963190.30	920.01
5600.00	91.30	359.7	2674.86	3234.69	-19.20	0.00	3234.74	1900602.30	11963240.29	921.14
5650.00	91.30	359.7	2673.72	3284.67	-19.49	0.00	3284.73	1900602.01	11963290.27	922.28
5700.00	91.30	359.7	2672.59	3334.66	-19.79	0.00	3334.72	1900601.71	11963340.26	923.41
5750.00	91.30	359.7	2671.45	3384.65	-20.09	0.00	3384.71	1900601.41	11963390.25	924.55
5800.00	91.30	359.7	2670.32	3434.63	-20.38	0.00	3434.69	1900601.12	11963440.23	925.68
5850.00	91.30	359.7	2669.18	3484.62	-20.68	0.00	3484.68	1900600.82	11963490.22	926.82
5900.00	91.30	359.7	2668.05	3534.60	-20.98	0.00	3534.67	1900600.53	11963540.20	927.95
5950.00	91.30	359.7	2666.91	3584.59	-21.27	0.00	3584.65	1900600.23	11963590.19	929.09
6000.00	91.30	359.7	2665.78	3634.58	-21.57	0.00	3634.64	1900599.93	11963640.18	930.22
6050.00	91.30	359.7	2664.65	3684.56	-21.86	0.00	3684.63	1900599.64	11963690.16	931.35
6100.00	91.30	359.7	2663.51	3734.55	-22.16	0.00	3734.62	1900599.34	11963740.15	932.49
6150.00	91.30	359.7	2662.38	3784.54	-22.46	0.00	3784.60	1900599.04	11963790.14	933.62
6200.00	91.30	359.7	2661.24	3834.52	-22.75	0.00	3834.59	1900598.75	11963840.12	934.76
6250.00	91.30	359.7	2660.11	3884.51	-23.05	0.00	3884.58	1900598.45	11963890.11	935.89
6300.00	91.30	359.7	2658.97	3934.49	-23.35	0.00	3934.56	1900598.15	11963940.09	937.03
6350.00	91.30	359.7	2657.84	3984.48	-23.64	0.00	3984.55	1900597.86	11963990.08	938.16
6400.00	91.30	359.7	2656.71	4034.47	-23.94	0.00	4034.54	1900597.56	11964040.07	939.29
6450.00	91.30	359.7	2655.57	4084.45	-24.24	0.00	4084.52	1900597.26	11964090.05	940.43
6500.00	91.30	359.7	2654.44	4134.44	-24.53	0.00	4134.51	1900596.97	11964140.04	941.56
6550.00	91.30	359.7	2653.30	4184.43	-24.83	0.00	4184.50	1900596.67	11964190.03	942.70
6600.00	91.30	359.7	2652.17	4234.41	-25.13	0.00	4234.49	1900596.37	11964240.01	943.83
6650.00	91.30	359.7	2651.03	4284.40	-25.42	0.00	4284.47	1900596.08	11964290.00	944.97
6700.00	91.30	359.7	2649.90	4334.38	-25.72	0.00	4334.46	1900595.78	11964339.98	946.10
6750.00	91.30	359.7	2648.76	4384.37	-26.02	0.00	4384.45	1900595.48	11964389.97	947.24
6800.00	91.30	359.7	2647.63	4434.36	-26.31	0.00	4434.43	1900595.19	11964439.96	948.37
6850.00	91.30	359.7	2646.50	4484.34	-26.61	0.00	4484.42	1900594.89	11964489.94	949.50
6900.00	91.30	359.7	2645.36	4534.33	-26.91	0.00	4534.41	1900594.59	11964539.93	950.64
6950.00	91.30	359.7	2644.23	4584.32	-27.20	0.00	4584.40	1900594.30	11964589.92	951.77

Mission State #1H, Plan 1

Operator	Mack Energy Corp	**Units**	feet, °/100ft	07:27 Friday, October 11, 2024	Page 4 of 5
Field	Round Tank	**County**	Eddy	**Vertical Section Azimuth**	359.66
Well Name	Mission State #1H	**State**	New Mexico	**Survey Calculation Method**	Minimum Curvature
Plan	1	**Country**	USA	**Database**	Access

Location	SL: 200 FSL & 990 FWL Sec 2-T16S-R28E BHL: 1 FNL & 990 FWL Sec 2-T16S-R28E	**Map Zone**	UTM	**Lat Long Ref**	
Site		**Surface X**	1900621.5	**Surface Long**	
Slot Name		**UWI**		**Surface Y** 11960005.6	**Surface Lat**
Well Number	1H	**API**		**Surface Z** 3596	**Global Z Ref** KB
Project		**MD/TVD Ref** KB		**Ground Level** 3578.5	**Local North Ref** Grid

DIRECTIONAL WELL PLAN

MD* ft	INC* deg	AZI* deg	TVD* ft	N* ft	E* ft	DLS* °/100ft	V. S.* ft	MapE* ft	MapN* ft	SysTVD* ft
7000.00	91.30	359.7	2643.09	4634.30	-27.50	0.00	4634.38	1900594.00	11964639.90	952.91
7050.00	91.30	359.7	2641.96	4684.29	-27.80	0.00	4684.37	1900593.70	11964689.89	954.04
7100.00	91.30	359.7	2640.82	4734.27	-28.09	0.00	4734.36	1900593.41	11964739.87	955.18
7150.00	91.30	359.7	2639.69	4784.26	-28.39	0.00	4784.34	1900593.11	11964789.86	956.31
7200.00	91.30	359.7	2638.56	4834.25	-28.69	0.00	4834.33	1900592.81	11964839.85	957.44
7250.00	91.30	359.7	2637.42	4884.23	-28.98	0.00	4884.32	1900592.52	11964889.83	958.58
7300.00	91.30	359.7	2636.29	4934.22	-29.28	0.00	4934.31	1900592.22	11964939.82	959.71
7350.00	91.30	359.7	2635.15	4984.21	-29.58	0.00	4984.29	1900591.92	11964989.81	960.85
7400.00	91.30	359.7	2634.02	5034.19	-29.87	0.00	5034.28	1900591.63	11965039.79	961.98
7450.00	91.30	359.7	2632.88	5084.18	-30.17	0.00	5084.27	1900591.33	11965089.78	963.12
7500.00	91.30	359.7	2631.75	5134.16	-30.47	0.00	5134.25	1900591.03	11965139.76	964.25
7550.00	91.30	359.7	2630.61	5184.15	-30.76	0.00	5184.24	1900590.74	11965189.75	965.39
7600.00	91.30	359.7	2629.48	5234.14	-31.06	0.00	5234.23	1900590.44	11965239.74	966.52
7650.00	91.30	359.7	2628.35	5284.12	-31.36	0.00	5284.22	1900590.14	11965289.72	967.65
7700.00	91.30	359.7	2627.21	5334.11	-31.65	0.00	5334.20	1900589.85	11965339.71	968.79
7750.00	91.30	359.7	2626.08	5384.10	-31.95	0.00	5384.19	1900589.55	11965389.70	969.92
7800.00	91.30	359.7	2624.94	5434.08	-32.25	0.00	5434.18	1900589.25	11965439.68	971.06
7850.00	91.30	359.7	2623.81	5484.07	-32.54	0.00	5484.16	1900588.96	11965489.67	972.19
7900.00	91.30	359.7	2622.67	5534.05	-32.84	0.00	5534.15	1900588.66	11965539.65	973.33
7950.00	91.30	359.7	2621.54	5584.04	-33.14	0.00	5584.14	1900588.36	11965589.64	974.46
8000.00	91.30	359.7	2620.41	5634.03	-33.43	0.00	5634.13	1900588.07	11965639.63	975.59
8050.00	91.30	359.7	2619.27	5684.01	-33.73	0.00	5684.11	1900587.77	11965689.61	976.73
8100.00	91.30	359.7	2618.14	5734.00	-34.03	0.00	5734.10	1900587.47	11965739.60	977.86
8150.00	91.30	359.7	2617.00	5783.99	-34.32	0.00	5784.09	1900587.18	11965789.59	979.00
8200.00	91.30	359.7	2615.87	5833.97	-34.62	0.00	5834.07	1900586.88	11965839.57	980.13
8250.00	91.30	359.7	2614.73	5883.96	-34.92	0.00	5884.06	1900586.58	11965889.56	981.27
8300.00	91.30	359.7	2613.60	5933.94	-35.21	0.00	5934.05	1900586.29	11965939.54	982.40
8350.00	91.30	359.7	2612.46	5983.93	-35.51	0.00	5984.04	1900585.99	11965989.53	983.54
8400.00	91.30	359.7	2611.33	6033.92	-35.81	0.00	6034.02	1900585.69	11966039.52	984.67
8450.00	91.30	359.7	2610.20	6083.90	-36.10	0.00	6084.01	1900585.40	11966089.50	985.80
8500.00	91.30	359.7	2609.06	6133.89	-36.40	0.00	6134.00	1900585.10	11966139.49	986.94
8550.00	91.30	359.7	2607.93	6183.88	-36.70	0.00	6183.98	1900584.80	11966189.48	988.07
8600.00	91.30	359.7	2606.79	6233.86	-36.99	0.00	6233.97	1900584.51	11966239.46	989.21
8650.00	91.30	359.7	2605.66	6283.85	-37.29	0.00	6283.96	1900584.21	11966289.45	990.34
8700.00	91.30	359.7	2604.52	6333.83	-37.59	0.00	6333.95	1900583.91	11966339.43	991.48
8750.00	91.30	359.7	2603.39	6383.82	-37.88	0.00	6383.93	1900583.62	11966389.42	992.61
8800.00	91.30	359.7	2602.26	6433.81	-38.18	0.00	6433.92	1900583.32	11966439.41	993.74

Mission State #1H, Plan 1

Operator	Mack Energy Corp	**Units**	feet, °/100ft	07:27 Friday, October 11, 2024	Page 5 of 5
Field	Round Tank	**County**	Eddy	**Vertical Section Azimuth**	359.66
Well Name	Mission State #1H	**State**	New Mexico	**Survey Calculation Method**	Minimum Curvature
Plan	1	**Country**	USA	**Database**	Access

Location	SL: 200 FSL & 990 FWL Sec 2-T16S-R28E BHL: 1 FNL & 990 FWL Sec 2-T16S-R28E	**Map Zone**	UTM	**Lat Long Ref**	
Site		**Surface X**	1900621.5	**Surface Long**	
Slot Name	**UWI**	**Surface Y**	11960005.6	**Surface Lat**	
Well Number	1H **API**	**Surface Z**	3596	**Global Z Ref**	KB
Project	**MD/TVD Ref** KB	**Ground Level**	3578.5	**Local North Ref**	Grid

DIRECTIONAL WELL PLAN

MD* ft	INC* deg	AZI* deg	TVD* ft	N* ft	E* ft	DLS* °/100ft	V. S.* ft	MapE* ft	MapN* ft	SysTVD* ft
8850.00	91.30	359.7	2601.12	6483.79	-38.48	0.00	6483.91	1900583.02	11966489.39	994.88
8900.00	91.30	359.7	2599.99	6533.78	-38.77	0.00	6533.89	1900582.73	11966539.38	996.01
8950.00	91.30	359.7	2598.85	6583.77	-39.07	0.00	6583.88	1900582.43	11966589.37	997.15
9000.00	91.30	359.7	2597.72	6633.75	-39.37	0.00	6633.87	1900582.13	11966639.35	998.28
9050.00	91.30	359.7	2596.58	6683.74	-39.66	0.00	6683.86	1900581.84	11966689.34	999.42
9100.00	91.30	359.7	2595.45	6733.72	-39.96	0.00	6733.84	1900581.54	11966739.32	1000.55
9150.00	91.30	359.7	2594.32	6783.71	-40.26	0.00	6783.83	1900581.24	11966789.31	1001.69
9200.00	91.30	359.7	2593.18	6833.70	-40.55	0.00	6833.82	1900580.95	11966839.30	1002.82
9250.00	91.30	359.7	2592.05	6883.68	-40.85	0.00	6883.80	1900580.65	11966889.28	1003.95
9300.00	91.30	359.7	2590.91	6933.67	-41.15	0.00	6933.79	1900580.35	11966939.27	1005.09
*** TD (at MD = 9333.50)										
9333.50	91.30	359.7	2590.15	6967.16	-41.34	0.00	6967.28	1900580.16	11966972.76	1005.85

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:** 10 / 08 / 2024

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
Mission State 1H		M Sec 2 T16S R28E	200 FSL 990 FWL	100	100	1,000

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
Mission State 1H						

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:	
Printed Name:	Delilah Flores
Title:	Regulatory Technician I
E-mail Address:	delilah@mec.com
Date:	10/28/2024
Phone:	575-748-1288

OIL CONSERVATION DIVISION

(Only applicable when submitted as a standalone form)

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.