

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 374815

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 30-015-55770
4. Property Code 336528	5. Property Name Mission State	6. Well No. 004H

7. Surface Location

UL - Lot P	Section 2	Township 16S	Range 28E	Lot Idn	Feet From 200	N/S Line S	Feet From 660	E/W Line E	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot A	Section 2	Township 16S	Range 28E	Lot Idn 1	Feet From 1	N/S Line N	Feet From 660	E/W Line E	County Eddy
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9. Pool Information

ROUND TANK;SAN ANDRES	52770
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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 3534
16. Multiple N	17. Proposed Depth 9494	18. Formation San Andres	19. Contractor	20. Spud Date 3/1/2025
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	2950	200	0
Prod	8.75	5.5	17	9494	1875	0

Casing/Cement Program: Additional Comments

Mack Energy Corporation proposed to drill 17 1/2" hole to 250', run 13 13/8" csg/cmt. Drill 12 1/4" hole to 1,200', run 9 5/8" csg/cmt. Drill 8 3/4" hole to 9,494', run 7" csg 0-2,950', run 5 1/2" csg 2,950-9,494' 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: Printed Name: Electronically filed by Jerry Sherrell Title: Regulatory Supervisor Email Address: jerrys@mec.com Date: 10/28/2024	OIL CONSERVATION DIVISION Approved By: Ward Rikala Title: Petroleum Specialist Supervisor Approved Date: 11/21/2024 Expiration Date: 11/21/2026 Conditions of Approval Attached
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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 30-015-55770	Pool Code 52770	Pool Name Round Tank; San Andres
Property Code 336528	Property Name MISSION STATE	Well Number 4H
OGRID No. 13837	Operator Name MACK ENERGY CORPORATION	Ground Level Elevation 3534.2
Surface Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal		Mineral Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal

Surface Location

UL P	Section 2	Township 16 S	Range 28 E	Lot	Ft. from N/S 200 SOUTH	Ft. from E/W 660 EAST	Latitude 32.9461085°N	Longitude 104.1403058°W	County EDDY
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Bottom Hole Location

UL	Section 2	Township 16 S	Range 28 E	Lot 1	Ft. from N/S 1 NORTH	Ft. from E/W 660 EAST	Latitude 32.9653068°N	Longitude 104.1404415°W	County EDDY
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Dedicated Acres 215	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.			Well setbacks are under Common Ownership: ☐ Yes ☐ No	

Kick Off Point (KOP)

UL P	Section 2	Township 16 S	Range 28 E	Lot	Ft. from N/S 200 SOUTH	Ft. from E/W 660 EAST	Latitude 32.9461085°N	Longitude 104.1403058°W	County EDDY
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First Take Point (FTP)

UL P	Section 2	Township 16 S	Range 28 E	Lot	Ft. from N/S 100 SOUTH	Ft. from E/W 660 EAST	Latitude 32.9458334°N	Longitude 104.1403039°W	County EDDY
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Last Take Point (LTP)

UL	Section 2	Township 16 S	Range 28 E	Lot 1	Ft. from N/S 100 NORTH	Ft. from E/W 660 EAST	Latitude 32.9650347°N	Longitude 104.1404395°W	County EDDY
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Unitized Area or Area of Uniform Interest	Spacing Unit Type ☐ Horizontal ☐ Vertical	Ground Floor Elevation:
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OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my 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.

Deana Weaver

10/11/2024

Signature

Date

Deana Weaver

Printed Name

dweaver@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

Certificate Number

Date of Survey

PLS 12797

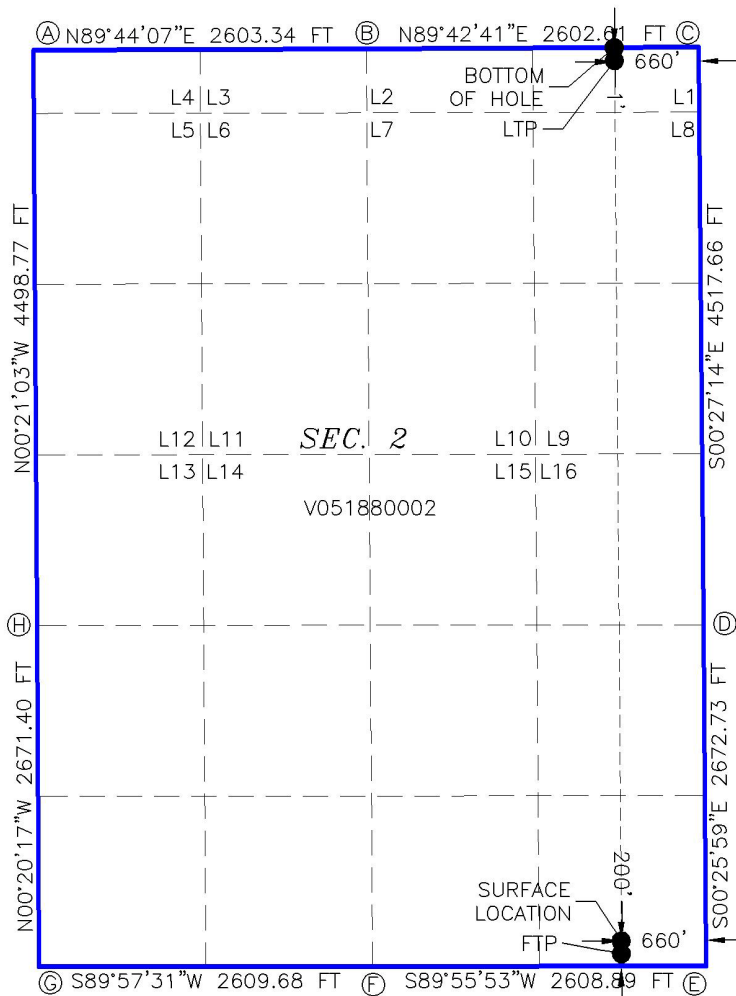
SEPTEMBER 12, 2024

SURVEY NO. 10259

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.

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 4H
EL. = 3534.2

GEODETIC COORDINATES
NAD 83 NMSP EAST
SURFACE LOCATION
200' FSL, 660' FEL
N.=707983.65
E.=600551.22
LAT.=32.9461085°N
LONG.=104.1403058°W

KICK OFF POINT
200' FSL, 660' FEL
N.=707983.65
E.=600551.22
LAT.=32.9461085°N
LONG.=104.1403058°W

FIRST TAKE POINT
100' FSL, 660' FEL
N.=707883.59
E.=600551.98
LAT.=32.9458334°N
LONG.=104.1403039°W

LAST TAKE POINT
100' FNL, 660' FEL
N.=714869.42
E.=600497.58
LAT.=32.9650347°N
LONG.=104.1404395°W

BOTTOM OF HOLE
1' FNL, 660' FEL
N.=714968.39
E.=600496.80
LAT.=32.9653068°N
LONG.=104.1404415°W

CORNER COORDINATES TABLE
NAD 83 NMSP EAST

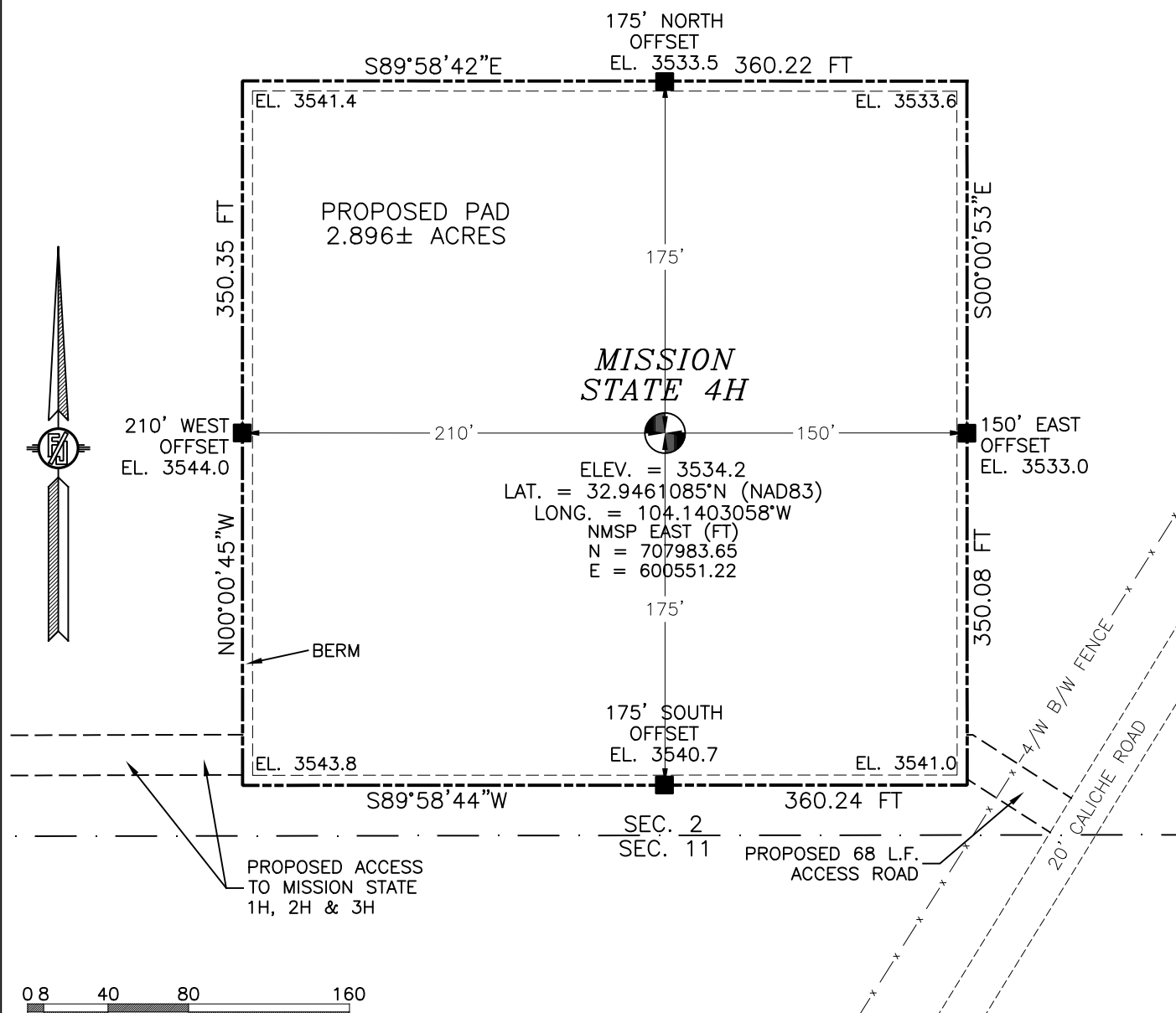
A	N.=714947.59	E.=595952.08
B	N.=714959.61	E.=598554.71
C	N.=714972.72	E.=601156.62
D	N.=710456.37	E.=601192.39
E	N.=707784.41	E.=601212.58
F	N.=707781.29	E.=598604.37
G	N.=707779.41	E.=595995.36
H	N.=710450.07	E.=595979.61

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. 1.15 MILES TO A ROAD SURVEY ON RIGHT (WEST), FOLLOW ROAD SURVEY WEST APPROX. 68' TO THE SOUTHEAST PAD CORNER FOR THIS LOCATION.

I, FILMON F. JARAMILLO, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I HAVE 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 F. JARAMILLO, P.S. 7981

MADRON SURVEYING, INC.

301 SOUTH CANAL
(575) 234-3327

MACK ENERGY CORPORATION
MISSION STATE 4H

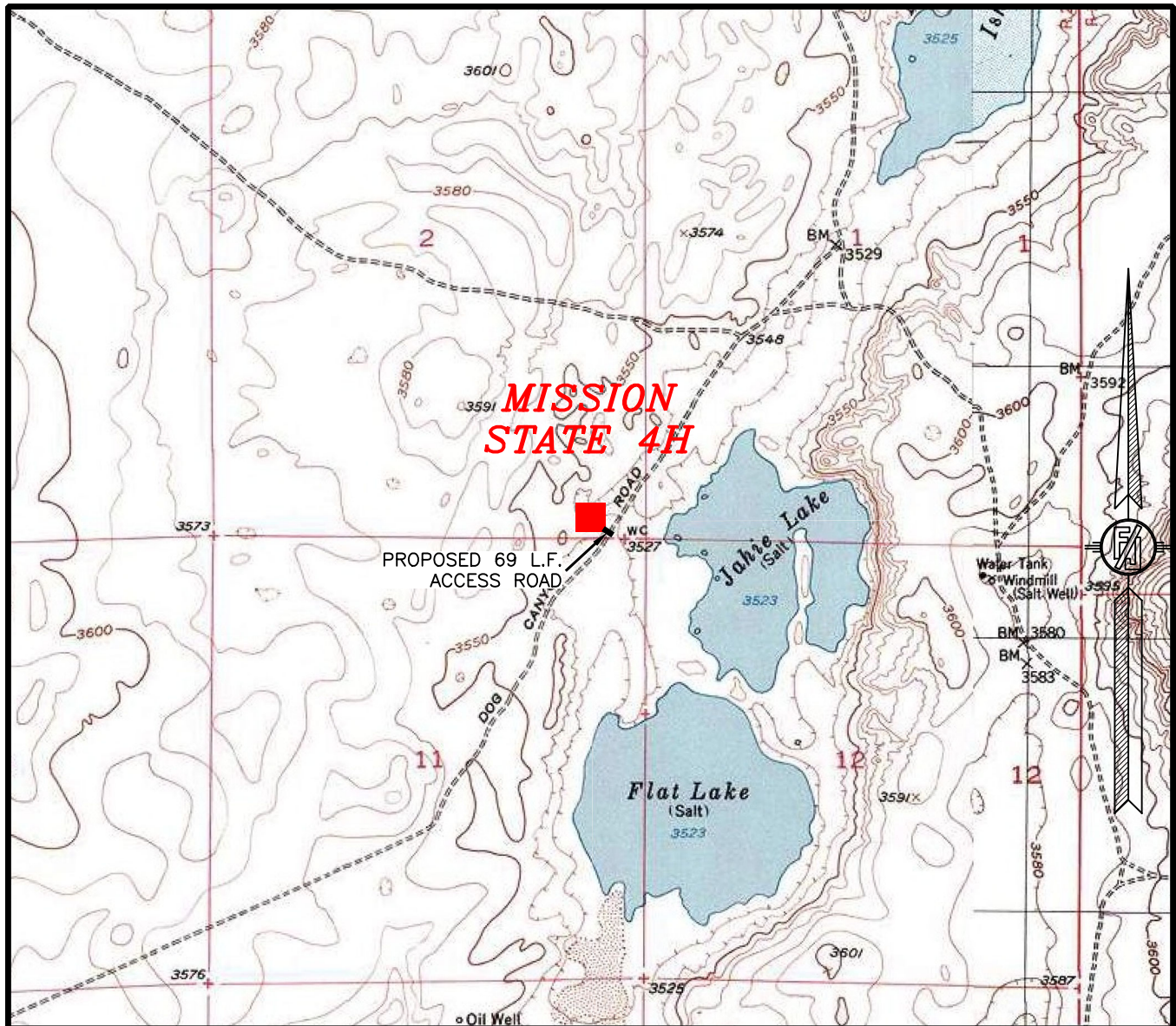
LOCATED 200 FT. FROM THE SOUTH LINE
AND 660 FT. FROM THE EAST LINE OF
SECTION 2, TOWNSHIP 16 SOUTH,
RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

SEPTEMBER 12, 2024

SURVEY NO. 10259

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

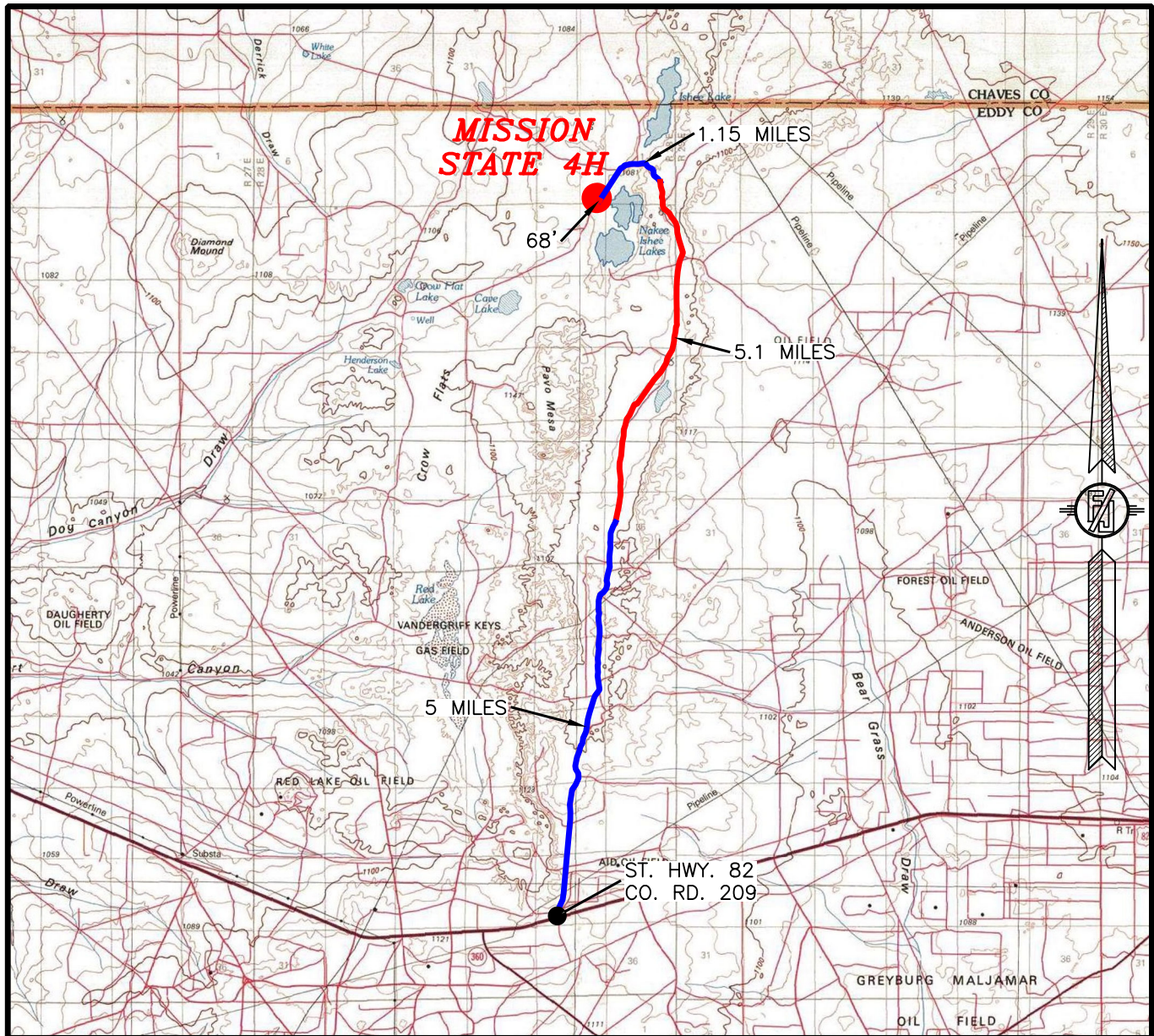
MACK ENERGY CORPORATION
MISSION STATE 4H
 LOCATED 200 FT. FROM THE SOUTH LINE
 AND 660 FT. FROM THE EAST LINE OF
 SECTION 2, TOWNSHIP 16 SOUTH,
 RANGE 28 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO

SEPTEMBER 12, 2024

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

SURVEY NO. 10259
 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. 68' TO THE SOUTHEAST PAD CORNER FOR THIS LOCATION.

MACK ENERGY CORPORATION
MISSION STATE 4H
LOCATED 200 FT. FROM THE SOUTH LINE
AND 660 FT. FROM THE EAST LINE OF
SECTION 2, TOWNSHIP 16 SOUTH,
RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

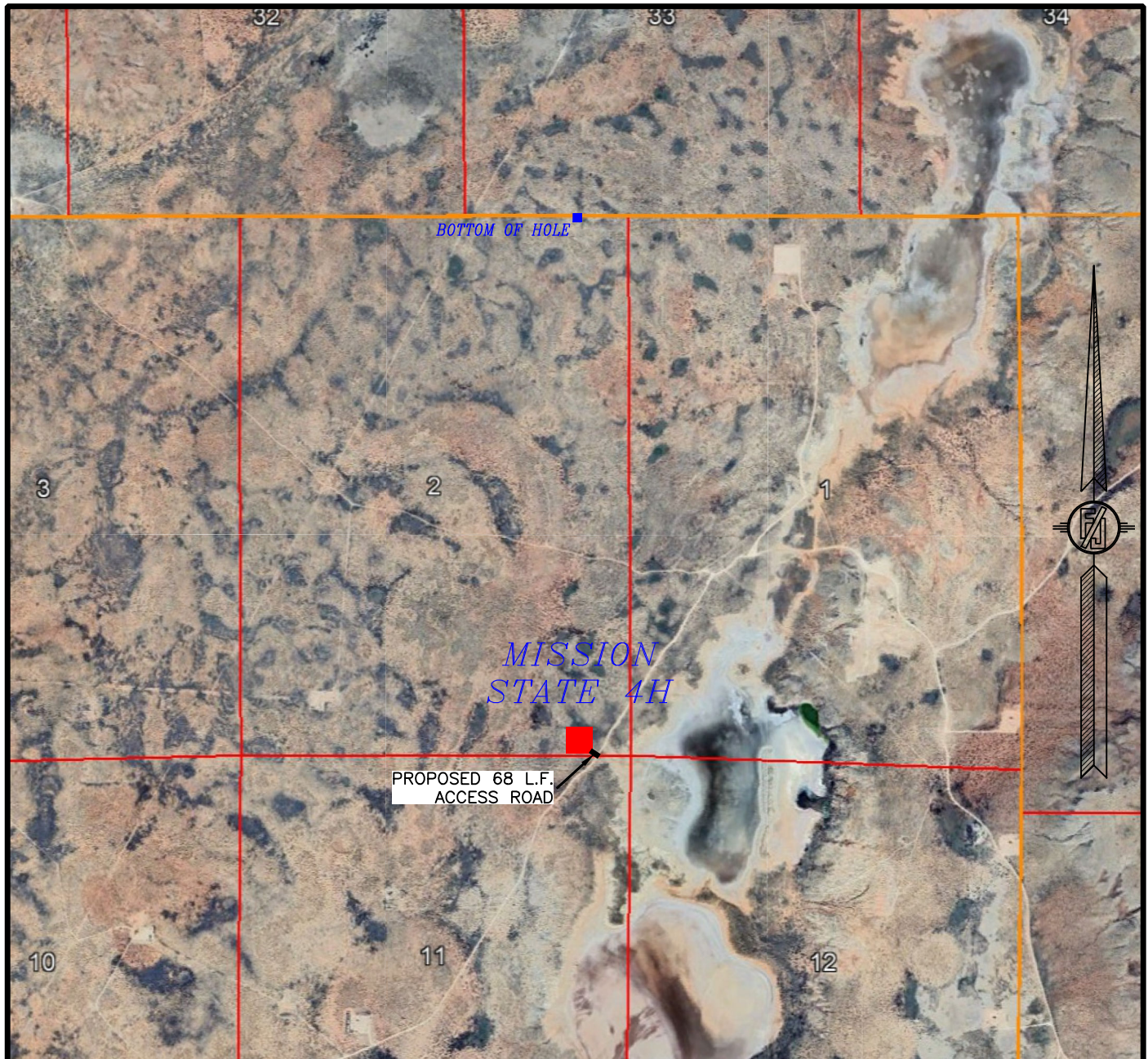
SEPTEMBER 12, 2024

MADRON SURVEYING, INC. 301 SOUTH CANAL

(575) 234-3327

SURVEY NO. 10259
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 4H
LOCATED 200 FT. FROM THE SOUTH LINE
AND 660 FT. FROM THE EAST LINE OF
SECTION 2, TOWNSHIP 16 SOUTH,
RANGE 28 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

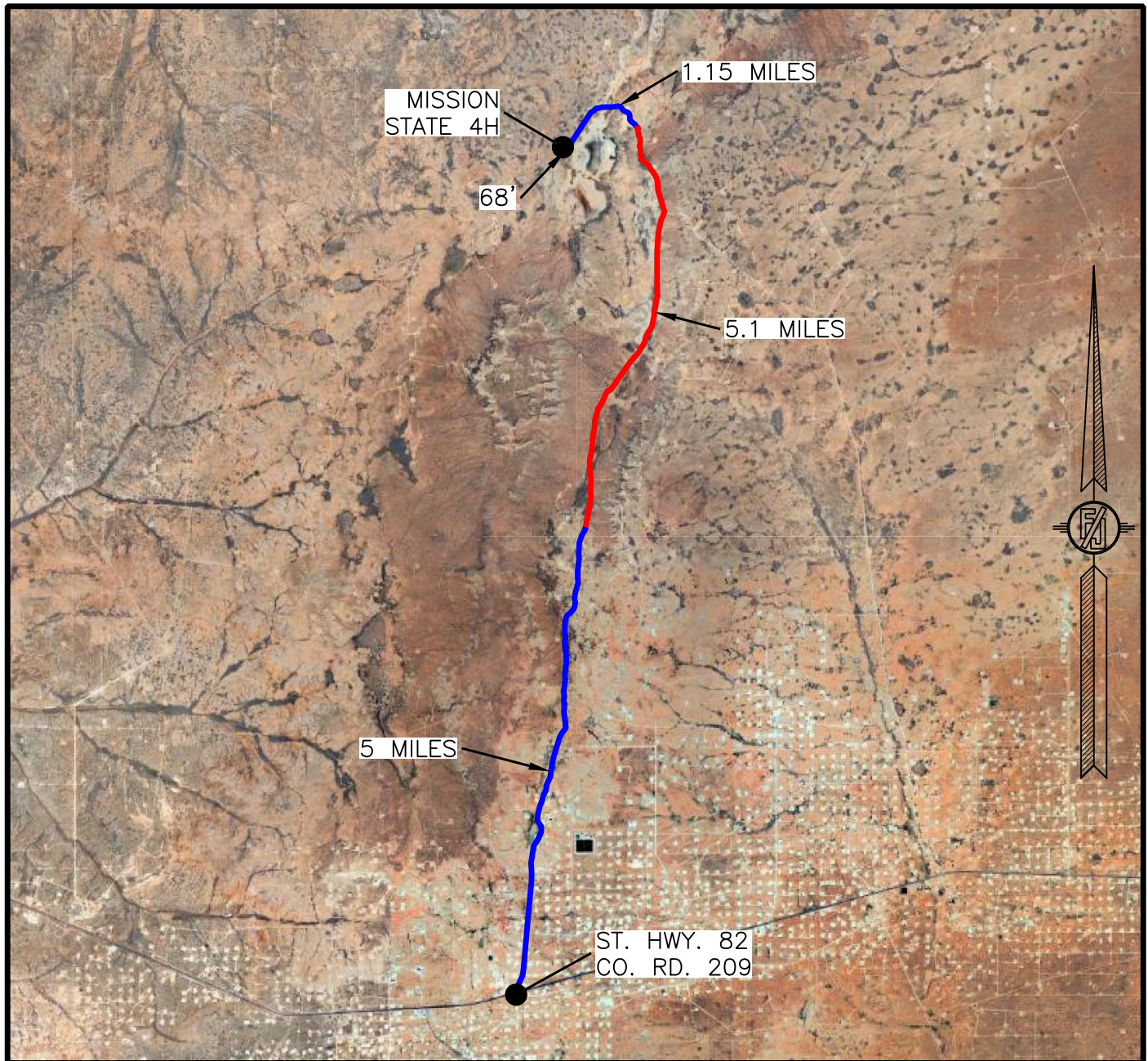
SEPTEMBER 12, 2024

SURVEY NO. 10259

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 4H
 LOCATED 200 FT. FROM THE SOUTH LINE
 AND 660 FT. FROM THE EAST 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. 10259

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

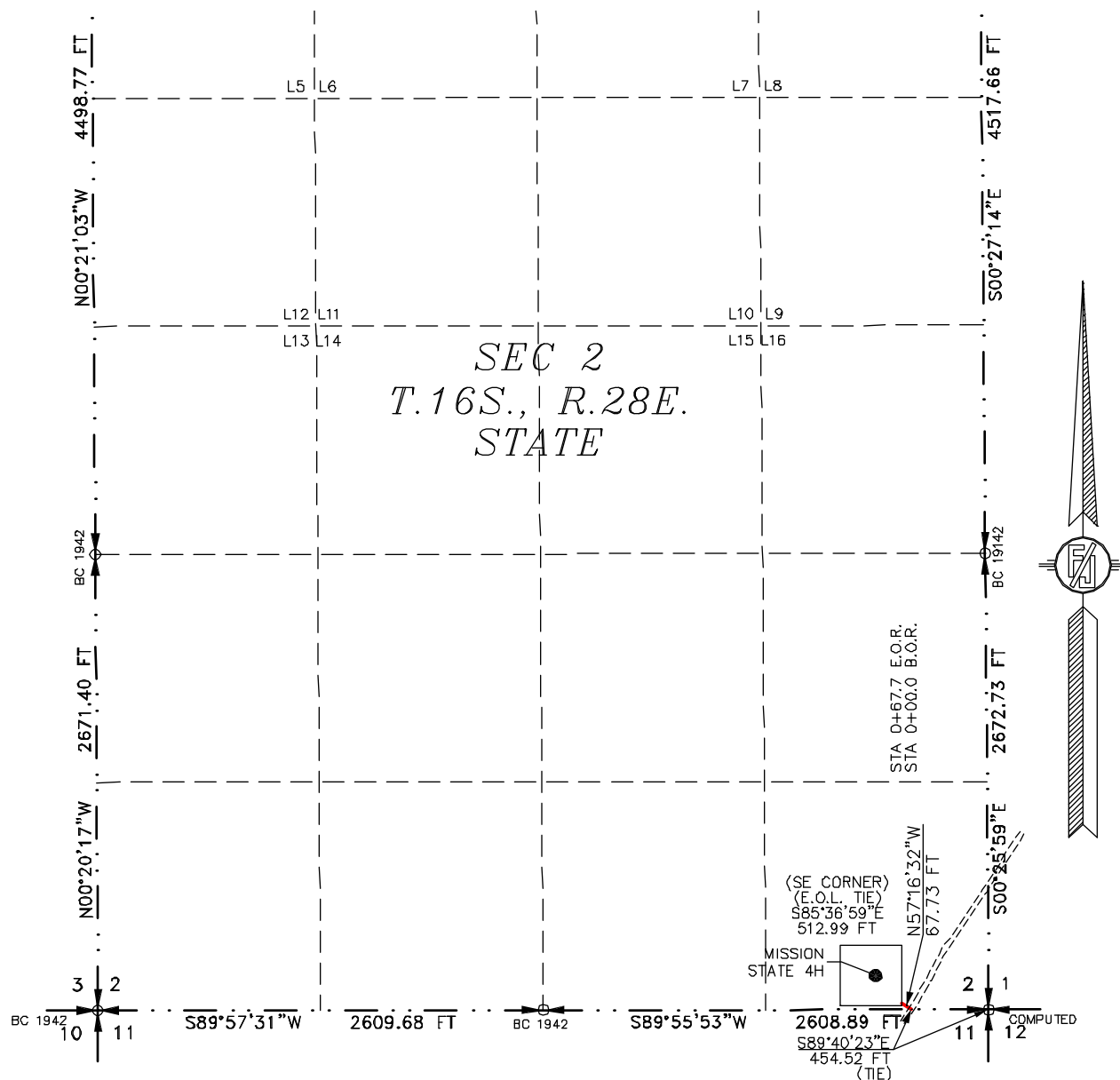
CARLSBAD, NEW MEXICO

ACCESS ROAD PLAT

ACCESS ROAD FOR MISSION STATE 4H

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

**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) 234-3327

SURVEYOR CERTIFICATE

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

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 12TH DAY OF OCTOBER 2024.

FILIMON F. JARAMILLO, PLS
12797
NEW MEXICO PROFESSIONAL SURVEYOR

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

SURVEY NO. 10259

ACCESS ROAD PLAT
ACCESS ROAD FOR MISSION STATE 4H

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 THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHEAST CORNER OF SAID SECTION 2, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M. BEARS S85°36'59"E, A DISTANCE OF 512.99 FEET;

SAID STRIP OF LAND BEING 67.73 FEET OR 4.10 RODS IN LENGTH, CONTAINING 0.047 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SE/4 SE/4 67.73 L.F. 4.10 RODS 0.047 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.

SHEET: 2-2

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

SURVEYOR CERTIFICATE

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

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 12TH DAY OF OCTOBER 2024.

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

SURVEY NO. 10259

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

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/oed/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 374815

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: MACK ENERGY CORP [13837] P.O. Box 960 Artesia, NM 882110960	API Number: 30-015-55770
	Well: Mission State #004H

OCD Reviewer	Condition
ward.rikala	Notify the OCD 24 hours prior to casing & cement.
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.
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.

Mission State #4H, Plan 1										
Operator	Mack Energy Corp			Units	feet, °/100ft			07:29 Friday, October 11, 2024 Page 1 of 5		
Field	Round Tank			County	Eddy			Vertical Section Azimuth 359.56		
Well Name	Mission State #4H			State	New Mexico			Survey Calculation Method Minimum Curvature		
Plan	1			Country	USA			Database Access		
Location	SL: 200 FSL & 660 FEL Sec 2-T16S-R28E BHL: 1 FNL & 660 FEL Sec 2-T16S-R28E				Map Zone	UTM		Lat Long Ref		
Site					Surface X	1904175.5		Surface Long		
Slot Name					Surface Y	11959992.7		Surface Lat		
Well Number	4H				Surface Z	3551.7		Global Z Ref KB		
Project					Ground Level	3534.2		Local North Ref Grid		
DIRECTIONAL WELL PLAN										
MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
ft	deg	deg	ft	ft	ft	°/100ft	ft	ft	ft	ft
*** TIE (at MD = 1938.00)										
1938.00	0.00	0.0	1938.00	0.00	0.00		0.00	1904175.50	11959992.70	1613.70
1950.00	0.00	0.0	1950.00	0.00	0.00	0.00	0.00	1904175.50	11959992.70	1601.70
2000.00	0.00	0.0	2000.00	0.00	0.00	0.00	0.00	1904175.50	11959992.70	1551.70
*** KOP 8 DEGREE (at MD = 2038.00)										
2038.00	0.00	0.0	2038.00	0.00	0.00	0.00	0.00	1904175.50	11959992.70	1513.70
2050.00	0.96	359.6	2050.00	0.10	0.00	8.00	0.10	1904175.50	11959992.80	1501.70
2100.00	4.96	359.6	2099.92	2.68	-0.02	8.00	2.68	1904175.48	11959995.38	1451.78
2150.00	8.96	359.6	2149.54	8.74	-0.07	8.00	8.74	1904175.43	11960001.44	1402.16
2200.00	12.96	359.6	2198.62	18.24	-0.14	8.00	18.24	1904175.36	11960010.94	1353.08
2250.00	16.96	359.6	2246.92	31.15	-0.24	8.00	31.15	1904175.26	11960023.85	1304.78
2300.00	20.96	359.6	2294.20	47.39	-0.36	8.00	47.39	1904175.14	11960040.09	1257.50
2350.00	24.96	359.6	2340.22	66.89	-0.51	8.00	66.89	1904174.99	11960059.59	1211.48
2400.00	28.96	359.6	2384.78	89.55	-0.69	8.00	89.55	1904174.81	11960082.25	1166.92
2450.00	32.96	359.6	2427.65	115.27	-0.89	8.00	115.27	1904174.61	11960107.97	1124.05
2500.00	36.96	359.6	2468.62	143.91	-1.11	8.00	143.92	1904174.39	11960136.61	1083.08
2550.00	40.96	359.6	2507.49	175.34	-1.35	8.00	175.35	1904174.15	11960168.04	1044.21
2600.00	44.96	359.6	2544.07	209.41	-1.61	8.00	209.42	1904173.89	11960202.11	1007.63
2650.00	48.96	359.6	2578.19	245.95	-1.89	8.00	245.95	1904173.61	11960238.65	973.51
2700.00	52.96	359.6	2609.68	284.77	-2.19	8.00	284.78	1904173.31	11960277.47	942.02
*** 55 DEGREE TANGENT (at MD = 2725.50)										
2725.50	55.00	359.6	2624.67	305.39	-2.35	8.00	305.40	1904173.15	11960298.09	927.03
2750.00	55.00	359.6	2638.73	325.46	-2.50	0.00	325.47	1904173.00	11960318.16	912.97
2800.00	55.00	359.6	2667.41	366.42	-2.81	0.00	366.43	1904172.69	11960359.12	884.29
2850.00	55.00	359.6	2696.08	407.38	-3.13	0.00	407.39	1904172.37	11960400.08	855.62
2900.00	55.00	359.6	2724.76	448.33	-3.44	0.00	448.35	1904172.06	11960441.03	826.94
*** 10 DEGREE BUILD (at MD = 2925.50)										
2925.50	55.00	359.6	2739.39	469.22	-3.60	0.00	469.23	1904171.90	11960461.92	812.31
2950.00	57.45	359.6	2753.01	489.58	-3.76	10.00	489.60	1904171.74	11960482.28	798.69
3000.00	62.45	359.6	2778.04	532.85	-4.09	10.00	532.86	1904171.41	11960525.55	773.66
3050.00	67.45	359.6	2799.20	578.13	-4.44	10.00	578.15	1904171.06	11960570.83	752.50
3100.00	72.45	359.6	2816.34	625.08	-4.80	10.00	625.10	1904170.70	11960617.78	735.36
3150.00	77.45	359.6	2829.32	673.35	-5.17	10.00	673.37	1904170.33	11960666.05	722.38
3200.00	82.45	359.6	2838.04	722.57	-5.55	10.00	722.59	1904169.95	11960715.27	713.66
3250.00	87.45	359.6	2842.44	772.35	-5.93	10.00	772.38	1904169.57	11960765.05	709.26
*** LANDING POINT (at MD = 3285.50)										
3285.50	91.00	359.6	2842.92	807.84	-6.20	10.00	807.87	1904169.30	11960800.54	708.78
3300.00	91.00	359.6	2842.67	822.34	-6.32	0.00	822.37	1904169.18	11960815.04	709.03
3350.00	91.00	359.6	2841.80	872.33	-6.70	0.00	872.36	1904168.80	11960865.03	709.91

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Mission State #4H, Plan 1

Operator	Mack Energy Corp	Units	feet, °/100ft	07:29 Friday, October 11, 2024 Page 2 of 5						
Field	Round Tank	County	Eddy	Vertical Section Azimuth	359.56					
Well Name	Mission State #4H	State	New Mexico	Survey Calculation Method	Minimum Curvature					
Plan	1	Country	USA	Database	Access					
Location	SL: 200 FSL & 660 FEL Sec 2-T16S-R28E BHL: 1 FNL & 660 FEL Sec 2-T16S-R28E			Map Zone	UTM		Lat Long Ref			
Site				Surface X	1904175.5		Surface Long			
Slot Name				Surface Y	11959992.7		Surface Lat			
Well Number	4H	API		Surface Z	3551.7		Global Z Ref KB			
Project				Ground Level	3534.2		Local North Ref Grid			
DIRECTIONAL WELL PLAN										
MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
ft	deg	deg	ft	ft	ft	°/100ft	ft	ft	ft	ft
3400.00	91.00	359.6	2840.92	922.32	-7.08	0.00	922.35	1904168.42	11960915.02	710.78
3450.00	91.00	359.6	2840.05	972.31	-7.47	0.00	972.34	1904168.03	11960965.01	711.65
3500.00	91.00	359.6	2839.18	1022.31	-7.85	0.00	1022.34	1904167.65	11961015.01	712.52
3550.00	91.00	359.6	2838.30	1072.30	-8.23	0.00	1072.33	1904167.27	11961065.00	713.40
3600.00	91.00	359.6	2837.43	1122.29	-8.62	0.00	1122.32	1904166.88	11961114.99	714.27
3650.00	91.00	359.6	2836.56	1172.28	-9.00	0.00	1172.31	1904166.50	11961164.98	715.14
3700.00	91.00	359.6	2835.69	1222.27	-9.39	0.00	1222.31	1904166.11	11961214.97	716.01
3750.00	91.00	359.6	2834.81	1272.26	-9.77	0.00	1272.30	1904165.73	11961264.96	716.89
3800.00	91.00	359.6	2833.94	1322.25	-10.15	0.00	1322.29	1904165.35	11961314.95	717.76
3850.00	91.00	359.6	2833.07	1372.24	-10.54	0.00	1372.28	1904164.96	11961364.94	718.63
3900.00	91.00	359.6	2832.20	1422.23	-10.92	0.00	1422.27	1904164.58	11961414.93	719.50
3950.00	91.00	359.6	2831.32	1472.22	-11.31	0.00	1472.27	1904164.19	11961464.92	720.38
4000.00	91.00	359.6	2830.45	1522.21	-11.69	0.00	1522.26	1904163.81	11961514.91	721.25
4050.00	91.00	359.6	2829.58	1572.21	-12.07	0.00	1572.25	1904163.43	11961564.91	722.12
4100.00	91.00	359.6	2828.71	1622.20	-12.46	0.00	1622.24	1904163.04	11961614.90	722.99
4150.00	91.00	359.6	2827.83	1672.19	-12.84	0.00	1672.24	1904162.66	11961664.89	723.87
4200.00	91.00	359.6	2826.96	1722.18	-13.23	0.00	1722.23	1904162.27	11961714.88	724.74
4250.00	91.00	359.6	2826.09	1772.17	-13.61	0.00	1772.22	1904161.89	11961764.87	725.61
4300.00	91.00	359.6	2825.22	1822.16	-13.99	0.00	1822.21	1904161.51	11961814.86	726.48
4350.00	91.00	359.6	2824.34	1872.15	-14.38	0.00	1872.21	1904161.12	11961864.85	727.36
4400.00	91.00	359.6	2823.47	1922.14	-14.76	0.00	1922.20	1904160.74	11961914.84	728.23
4450.00	91.00	359.6	2822.60	1972.13	-15.15	0.00	1972.19	1904160.35	11961964.83	729.10
4500.00	91.00	359.6	2821.72	2022.12	-15.53	0.00	2022.18	1904159.97	11962014.82	729.98
4550.00	91.00	359.6	2820.85	2072.11	-15.91	0.00	2072.18	1904159.59	11962064.81	730.85
4600.00	91.00	359.6	2819.98	2122.11	-16.30	0.00	2122.17	1904159.20	11962114.81	731.72
4650.00	91.00	359.6	2819.11	2172.10	-16.68	0.00	2172.16	1904158.82	11962164.80	732.59
4700.00	91.00	359.6	2818.23	2222.09	-17.06	0.00	2222.15	1904158.44	11962214.79	733.47
4750.00	91.00	359.6	2817.36	2272.08	-17.45	0.00	2272.15	1904158.05	11962264.78	734.34
4800.00	91.00	359.6	2816.49	2322.07	-17.83	0.00	2322.14	1904157.67	11962314.77	735.21
4850.00	91.00	359.6	2815.62	2372.06	-18.22	0.00	2372.13	1904157.28	11962364.76	736.08
4900.00	91.00	359.6	2814.74	2422.05	-18.60	0.00	2422.12	1904156.90	11962414.75	736.96
4950.00	91.00	359.6	2813.87	2472.04	-18.98	0.00	2472.11	1904156.52	11962464.74	737.83
5000.00	91.00	359.6	2813.00	2522.03	-19.37	0.00	2522.11	1904156.13	11962514.73	738.70
5050.00	91.00	359.6	2812.13	2572.02	-19.75	0.00	2572.10	1904155.75	11962564.72	739.57
5100.00	91.00	359.6	2811.25	2622.01	-20.14	0.00	2622.09	1904155.36	11962614.71	740.45
5150.00	91.00	359.6	2810.38	2672.01	-20.52	0.00	2672.08	1904154.98	11962664.71	741.32
5200.00	91.00	359.6	2809.51	2722.00	-20.90	0.00	2722.08	1904154.60	11962714.70	742.19

Mission State #4H, Plan 1

Operator	Mack Energy Corp	Units	feet, °/100ft	07:29 Friday, October 11, 2024 Page 3 of 5						
Field	Round Tank	County	Eddy	Vertical Section Azimuth	359.56					
Well Name	Mission State #4H	State	New Mexico	Survey Calculation Method	Minimum Curvature					
Plan	1	Country	USA	Database	Access					
Location	SL: 200 FSL & 660 FEL Sec 2-T16S-R28E BHL: 1 FNL & 660 FEL Sec 2-T16S-R28E			Map Zone	UTM		Lat Long Ref			
Site				Surface X	1904175.5		Surface Long			
Slot Name				Surface Y	11959992.7		Surface Lat			
Well Number	4H	API		Surface Z	3551.7		Global Z Ref	KB		
Project				Ground Level	3534.2		Local North Ref	Grid		
DIRECTIONAL WELL PLAN										
MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
ft	deg	deg	ft	ft	ft	°/100ft	ft	ft	ft	ft
5250.00	91.00	359.6	2808.64	2771.99	-21.29	0.00	2772.07	1904154.21	11962764.69	743.06
5300.00	91.00	359.6	2807.76	2821.98	-21.67	0.00	2822.06	1904153.83	11962814.68	743.94
5350.00	91.00	359.6	2806.89	2871.97	-22.06	0.00	2872.05	1904153.44	11962864.67	744.81
5400.00	91.00	359.6	2806.02	2921.96	-22.44	0.00	2922.05	1904153.06	11962914.66	745.68
5450.00	91.00	359.6	2805.15	2971.95	-22.82	0.00	2972.04	1904152.68	11962964.65	746.56
5500.00	91.00	359.6	2804.27	3021.94	-23.21	0.00	3022.03	1904152.29	11963014.64	747.43
5550.00	91.00	359.6	2803.40	3071.93	-23.59	0.00	3072.02	1904151.91	11963064.63	748.30
5600.00	91.00	359.6	2802.53	3121.92	-23.98	0.00	3122.02	1904151.52	11963114.62	749.17
5650.00	91.00	359.6	2801.65	3171.91	-24.36	0.00	3172.01	1904151.14	11963164.61	750.05
5700.00	91.00	359.6	2800.78	3221.91	-24.74	0.00	3222.00	1904150.76	11963214.61	750.92
5750.00	91.00	359.6	2799.91	3271.90	-25.13	0.00	3271.99	1904150.37	11963264.60	751.79
5800.00	91.00	359.6	2799.04	3321.89	-25.51	0.00	3321.99	1904149.99	11963314.59	752.66
5850.00	91.00	359.6	2798.16	3371.88	-25.89	0.00	3371.98	1904149.61	11963364.58	753.54
5900.00	91.00	359.6	2797.29	3421.87	-26.28	0.00	3421.97	1904149.22	11963414.57	754.41
5950.00	91.00	359.6	2796.42	3471.86	-26.66	0.00	3471.96	1904148.84	11963464.56	755.28
6000.00	91.00	359.6	2795.55	3521.85	-27.05	0.00	3521.95	1904148.45	11963514.55	756.15
6050.00	91.00	359.6	2794.67	3571.84	-27.43	0.00	3571.95	1904148.07	11963564.54	757.03
6100.00	91.00	359.6	2793.80	3621.83	-27.81	0.00	3621.94	1904147.69	11963614.53	757.90
6150.00	91.00	359.6	2792.93	3671.82	-28.20	0.00	3671.93	1904147.30	11963664.52	758.77
6200.00	91.00	359.6	2792.06	3721.81	-28.58	0.00	3721.92	1904146.92	11963714.51	759.64
6250.00	91.00	359.6	2791.18	3771.81	-28.97	0.00	3771.92	1904146.53	11963764.51	760.52
6300.00	91.00	359.6	2790.31	3821.80	-29.35	0.00	3821.91	1904146.15	11963814.50	761.39
6350.00	91.00	359.6	2789.44	3871.79	-29.73	0.00	3871.90	1904145.77	11963864.49	762.26
6400.00	91.00	359.6	2788.57	3921.78	-30.12	0.00	3921.89	1904145.38	11963914.48	763.13
6450.00	91.00	359.6	2787.69	3971.77	-30.50	0.00	3971.89	1904145.00	11963964.47	764.01
6500.00	91.00	359.6	2786.82	4021.76	-30.89	0.00	4021.88	1904144.61	11964014.46	764.88
6550.00	91.00	359.6	2785.95	4071.75	-31.27	0.00	4071.87	1904144.23	11964064.45	765.75
6600.00	91.00	359.6	2785.07	4121.74	-31.65	0.00	4121.86	1904143.85	11964114.44	766.63
6650.00	91.00	359.6	2784.20	4171.73	-32.04	0.00	4171.86	1904143.46	11964164.43	767.50
6700.00	91.00	359.6	2783.33	4221.72	-32.42	0.00	4221.85	1904143.08	11964214.42	768.37
6750.00	91.00	359.6	2782.46	4271.71	-32.81	0.00	4271.84	1904142.69	11964264.41	769.24
6800.00	91.00	359.6	2781.58	4321.71	-33.19	0.00	4321.83	1904142.31	11964314.41	770.12
6850.00	91.00	359.6	2780.71	4371.70	-33.57	0.00	4371.83	1904141.93	11964364.40	770.99
6900.00	91.00	359.6	2779.84	4421.69	-33.96	0.00	4421.82	1904141.54	11964414.39	771.86
6950.00	91.00	359.6	2778.97	4471.68	-34.34	0.00	4471.81	1904141.16	11964464.38	772.73
7000.00	91.00	359.6	2778.09	4521.67	-34.72	0.00	4521.80	1904140.78	11964514.37	773.61
7050.00	91.00	359.6	2777.22	4571.66	-35.11	0.00	4571.80	1904140.39	11964564.36	774.48

Mission State #4H, Plan 1										
Operator	Mack Energy Corp			Units	feet, °/100ft		07:29 Friday, October 11, 2024 Page 4 of 5			
Field	Round Tank			County	Eddy		Vertical Section Azimuth 359.56			
Well Name	Mission State #4H			State	New Mexico		Survey Calculation Method Minimum Curvature			
Plan	1			Country	USA		Database Access			
Location	SL: 200 FSL & 660 FEL Sec 2-T16S-R28E BHL: 1 FNL & 660 FEL Sec 2-T16S-R28E					Map Zone	UTM		Lat Long Ref	
Site						Surface X	1904175.5		Surface Long	
Slot Name	UWI					Surface Y	11959992.7		Surface Lat	
Well Number	4H					Surface Z	3551.7		Global Z Ref KB	
Project	MD/TVD Ref KB					Ground Level	3534.2		Local North Ref Grid	
DIRECTIONAL WELL PLAN										
MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
ft	deg	deg	ft	ft	ft	°/100ft	ft	ft	ft	ft
7100.00	91.00	359.6	2776.35	4621.65	-35.49	0.00	4621.79	1904140.01	11964614.35	775.35
7150.00	91.00	359.6	2775.48	4671.64	-35.88	0.00	4671.78	1904139.62	11964664.34	776.22
7200.00	91.00	359.6	2774.60	4721.63	-36.26	0.00	4721.77	1904139.24	11964714.33	777.10
7250.00	91.00	359.6	2773.73	4771.62	-36.64	0.00	4771.76	1904138.86	11964764.32	777.97
7300.00	91.00	359.6	2772.86	4821.61	-37.03	0.00	4821.76	1904138.47	11964814.31	778.84
7350.00	91.00	359.6	2771.99	4871.61	-37.41	0.00	4871.75	1904138.09	11964864.31	779.71
7400.00	91.00	359.6	2771.11	4921.60	-37.80	0.00	4921.74	1904137.70	11964914.30	780.59
7450.00	91.00	359.6	2770.24	4971.59	-38.18	0.00	4971.73	1904137.32	11964964.29	781.46
7500.00	91.00	359.6	2769.37	5021.58	-38.56	0.00	5021.73	1904136.94	11965014.28	782.33
7550.00	91.00	359.6	2768.49	5071.57	-38.95	0.00	5071.72	1904136.55	11965064.27	783.21
7600.00	91.00	359.6	2767.62	5121.56	-39.33	0.00	5121.71	1904136.17	11965114.26	784.08
7650.00	91.00	359.6	2766.75	5171.55	-39.72	0.00	5171.70	1904135.78	11965164.25	784.95
7700.00	91.00	359.6	2765.88	5221.54	-40.10	0.00	5221.70	1904135.40	11965214.24	785.82
7750.00	91.00	359.6	2765.00	5271.53	-40.48	0.00	5271.69	1904135.02	11965264.23	786.70
7800.00	91.00	359.6	2764.13	5321.52	-40.87	0.00	5321.68	1904134.63	11965314.22	787.57
7850.00	91.00	359.6	2763.26	5371.51	-41.25	0.00	5371.67	1904134.25	11965364.21	788.44
7900.00	91.00	359.6	2762.39	5421.51	-41.64	0.00	5421.67	1904133.87	11965414.21	789.31
7950.00	91.00	359.6	2761.51	5471.50	-42.02	0.00	5471.66	1904133.48	11965464.20	790.19
8000.00	91.00	359.6	2760.64	5521.49	-42.40	0.00	5521.65	1904133.10	11965514.19	791.06
8050.00	91.00	359.6	2759.77	5571.48	-42.79	0.00	5571.64	1904132.71	11965564.18	791.93
8100.00	91.00	359.6	2758.90	5621.47	-43.17	0.00	5621.64	1904132.33	11965614.17	792.80
8150.00	91.00	359.6	2758.02	5671.46	-43.55	0.00	5671.63	1904131.95	11965664.16	793.68
8200.00	91.00	359.6	2757.15	5721.45	-43.94	0.00	5721.62	1904131.56	11965714.15	794.55
8250.00	91.00	359.6	2756.28	5771.44	-44.32	0.00	5771.61	1904131.18	11965764.14	795.42
8300.00	91.00	359.6	2755.41	5821.43	-44.71	0.00	5821.60	1904130.79	11965814.13	796.29
8350.00	91.00	359.6	2754.53	5871.42	-45.09	0.00	5871.60	1904130.41	11965864.12	797.17
8400.00	91.00	359.6	2753.66	5921.41	-45.47	0.00	5921.59	1904130.03	11965914.11	798.04
8450.00	91.00	359.6	2752.79	5971.41	-45.86	0.00	5971.58	1904129.64	11965964.11	798.91
8500.00	91.00	359.6	2751.92	6021.40	-46.24	0.00	6021.57	1904129.26	11966014.10	799.78
8550.00	91.00	359.6	2751.04	6071.39	-46.63	0.00	6071.57	1904128.87	11966064.09	800.66
8600.00	91.00	359.6	2750.17	6121.38	-47.01	0.00	6121.56	1904128.49	11966114.08	801.53
8650.00	91.00	359.6	2749.30	6171.37	-47.39	0.00	6171.55	1904128.11	11966164.07	802.40
8700.00	91.00	359.6	2748.42	6221.36	-47.78	0.00	6221.54	1904127.72	11966214.06	803.28
8750.00	91.00	359.6	2747.55	6271.35	-48.16	0.00	6271.54	1904127.34	11966264.05	804.15
8800.00	91.00	359.6	2746.68	6321.34	-48.55	0.00	6321.53	1904126.95	11966314.04	805.02
8850.00	91.00	359.6	2745.81	6371.33	-48.93	0.00	6371.52	1904126.57	11966364.03	805.89
8900.00	91.00	359.6	2744.93	6421.32	-49.31	0.00	6421.51	1904126.19	11966414.02	806.77

Mission State #4H, Plan 1										
Operator Mack Energy Corp			Units feet, °/100ft			07:29 Friday, October 11, 2024 Page 5 of 5				
Field Round Tank			County Eddy			Vertical Section Azimuth 359.56				
Well Name Mission State #4H			State New Mexico			Survey Calculation Method Minimum Curvature				
Plan 1			Country USA			Database Access				
Location SL: 200 FSL & 660 FEL Sec 2-T16S-R28E BHL: 1 FNL & 660 FEL Sec 2-T16S-R28E						Map Zone UTM		Lat Long Ref		
Site			Surface X 1904175.5			Surface Long				
Slot Name			Surface Y 11959992.7			Surface Lat				
Well Number 4H			Surface Z 3551.7			Global Z Ref KB				
Project			Ground Level 3534.2			Local North Ref Grid				
MD/TVD Ref KB										
DIRECTIONAL WELL PLAN										
MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
ft	deg	deg	ft	ft	ft	°/100ft	ft	ft	ft	ft
8950.00	91.00	359.6	2744.06	6471.31	-49.70	0.00	6471.51	1904125.80	11966464.01	807.64
9000.00	91.00	359.6	2743.19	6521.31	-50.08	0.00	6521.50	1904125.42	11966514.01	808.51
9050.00	91.00	359.6	2742.32	6571.30	-50.46	0.00	6571.49	1904125.04	11966564.00	809.38
9100.00	91.00	359.6	2741.44	6621.29	-50.85	0.00	6621.48	1904124.65	11966613.99	810.26
9150.00	91.00	359.6	2740.57	6671.28	-51.23	0.00	6671.48	1904124.27	11966663.98	811.13
9200.00	91.00	359.6	2739.70	6721.27	-51.62	0.00	6721.47	1904123.88	11966713.97	812.00
9250.00	91.00	359.6	2738.83	6771.26	-52.00	0.00	6771.46	1904123.50	11966763.96	812.87
9300.00	91.00	359.6	2737.95	6821.25	-52.38	0.00	6821.45	1904123.12	11966813.95	813.75
9350.00	91.00	359.6	2737.08	6871.24	-52.77	0.00	6871.44	1904122.73	11966863.94	814.62
9400.00	91.00	359.6	2736.21	6921.23	-53.15	0.00	6921.44	1904122.35	11966913.93	815.49
9450.00	91.00	359.6	2735.34	6971.22	-53.54	0.00	6971.43	1904121.96	11966963.92	816.36
*** TD (at MD = 9493.50)										
9493.50	91.00	359.6	2734.58	7014.72	-53.87	0.00	7014.92	1904121.63	11967007.42	817.12

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State of New Mexico
Energy, Minerals and Natural Resources DepartmentSubmit Electronically
Via E-permittingOil 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 / 11 / 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 4H		P Sec 2 T16S R28E	200 FSL660 FEL	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 4H		3/1/2025	3/20/2025	3/31/2025	3/31/2025	4/1/2025

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>Deana Weaver</i>
Printed Name:	Deana Weaver
Title:	Regulatory Technician II
E-mail Address:	dweaver@mec.com
Date:	10/11/2024
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.

Month	Gas (MCF)
1	10550
2	8917
3	7769
4	6913
5	6247
6	5712
7	5273
8	4904
9	4589
10	4317
11	4080
12	3871
13	3685
14	3518
15	3368
16	3231
17	3107
18	2993
19	2889
20	2792
21	2702
22	2619
23	2542
24	2469
25	2402
26	2338
27	2278
28	2221
29	2168
30	2118
31	2070
32	2024
33	1981
34	1940
35	1900
36	1863
37	1827
38	1793
39	1760
40	1729
41	1698
42	1669
43	1641

44	1615
45	1589
46	1564
47	1540
48	1516
49	1494
50	1472
51	1451
52	1431
53	1411
54	1392
55	1374
56	1356
57	1339
58	1322
59	1305
60	1289
61	1274
62	1259
63	1244
64	1230
65	1216
66	1202
67	1189
68	1176
69	1164
70	1151
71	1140
72	1128
73	1116
74	1105
75	1094
76	1084
77	1073
78	1063
79	1053
80	1043
81	1034
82	1024
83	1015
84	1006
85	998
86	989
87	980

88	972
89	964
90	956
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