

District I

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

District II

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

District III

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

District IV

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

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

Form C-101
August 1, 2011

Permit 294696

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 30-005-64361
4. Property Code 326307	5. Property Name WHITE STATE	6. Well No. 005

7. Surface Location

UL - Lot P	Section 35	Township 15S	Range 27E	Lot Idn	Feet From 740	N/S Line S	Feet From 330	E/W Line E	County Chaves
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8. Proposed Bottom Hole Location

UL - Lot P	Section 35	Township 15S	Range 27E	Lot Idn P	Feet From 740	N/S Line S	Feet From 330	E/W Line E	County Chaves
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9. Pool Information

WC 16S28E3;SAN ANDRES	98356
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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 3586
16. Multiple N	17. Proposed Depth 2700	18. Formation San Andres	19. Contractor	20. Spud Date 6/1/2021
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

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

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	12.25	9.625	36	500	450	0
Prod	8.75	5.5	17	2700	630	0

Casing/Cement Program: Additional Comments

Drill 12.25" hole @ 500'. RIH w/ 9.625" J-55, 36# @ 500'. Lead cmt w/ 250sx (if needed) RFC+12%PF53+2%PF1+5ppsPF42+.125ppsPF29. Tail cmt w/ 200sx Class C +1% PF1 Drill 8.75" hole @ 2,700'. RIH w/ 5.5" L-80, 17# @ 2700'. Lead cmt w/ 210sx Class C 4% PF20+4pps PF45+125pps PF29. Tail cmt w/ 420sx PVL + 1.3(BWOW) PF44+5%PF174+.5%PF606+.1%PF153+.4ppsPF44

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	Approved By: Kurt Simmons		
Title: Production Clerk	Title: Petroleum Specialist - A		
Email Address: jerrys@mec.com	Approved Date: 4/21/2021	Expiration Date: 4/21/2023	
Date: 4/8/2021	Phone: 575-748-1288	Conditions of Approval Attached	

OIL CONSERVATION DIVISION

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 9835698292	³ Pool Name Diamond Mound, San Andres WC16S28E3; San Andres
⁴ Property Code 326307	⁵ Property Name WHITE STATE	⁶ Well Number 5
⁷ OGRID No. 13837	⁸ Operator Name MACK ENERGY CORPORATION	⁹ Elevation 3586.0

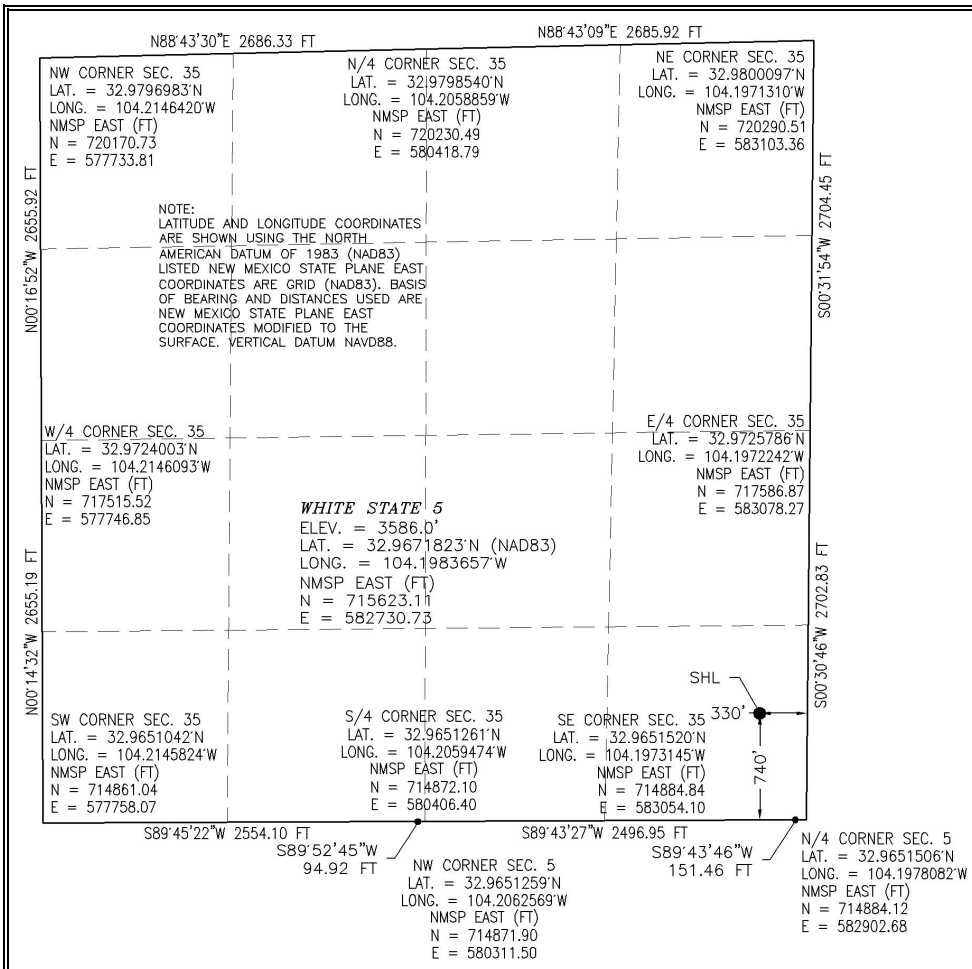
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	35	15 S	27 E		740	SOUTH	330	EAST	CHAVES

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

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



¹⁷ OPERATOR CERTIFICATION

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

Deana Weaver 4/8/2021

Signature Date

Deana Weaver

Printed Name

dweaver@mec.com

E-mail Address

¹⁸ SURVEYOR CERTIFICATION

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

MARCH 17, 2021

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number: ELMON F. JARAMILLO, PLS 12797
SURV. NO. 8829

Intent ☒ ☒ As Drilled ☐

API #		
Operator Name: MACK ENERGY CORPORATION	Property Name: WHITE STATE	Well Number 5

Kick Off Point (KOP)

UL P	Section 35	Township 15S	Range 27E	Lot	Feet 740	From N/S SOUTH	Feet 330	From E/W EAST	County CHAVES
Latitude 32.9671823					Longitude 104.1983657				NAD 83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

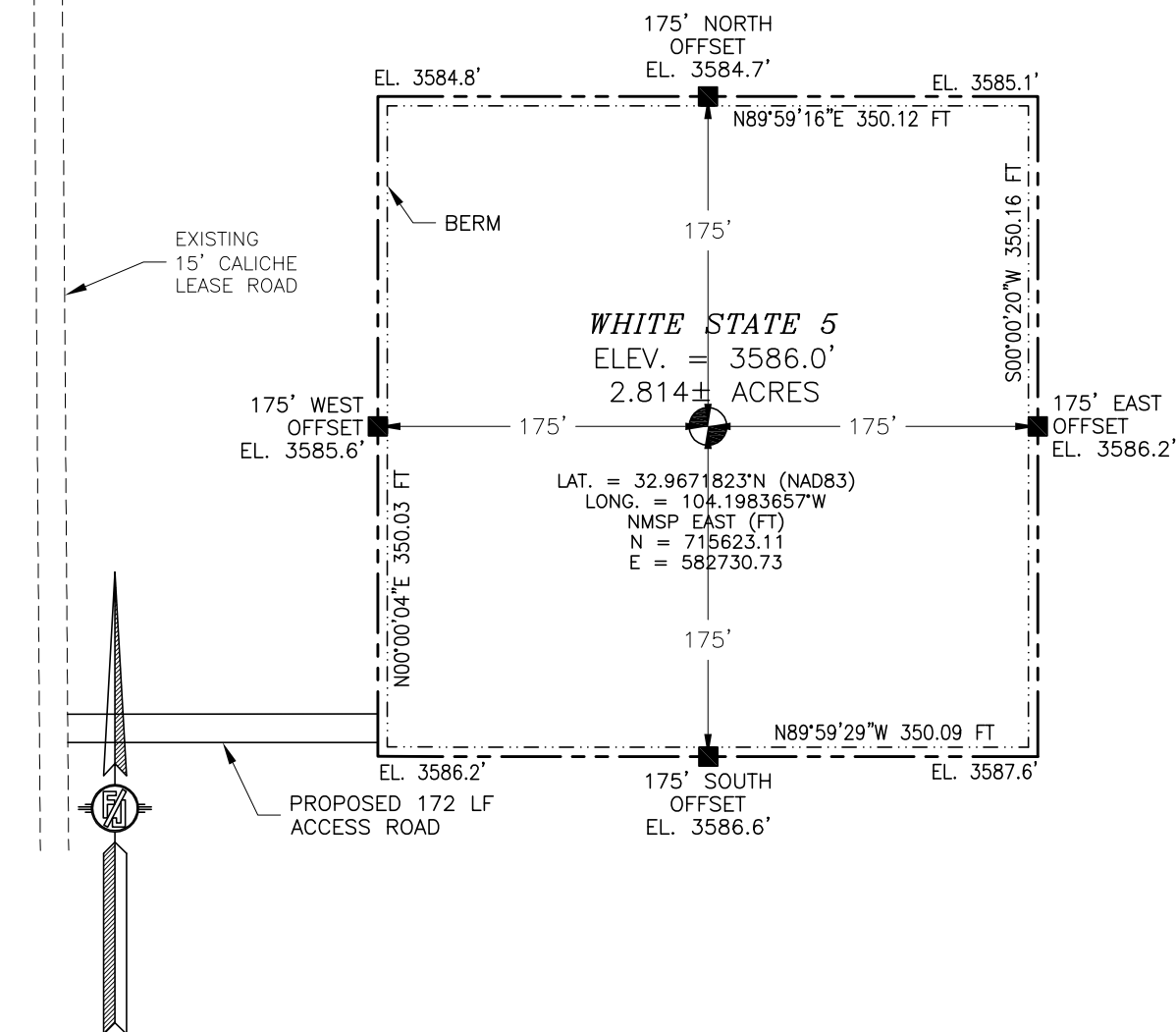
If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

SECTION 35, TOWNSHIP 15 SOUTH, RANGE 27 EAST, N.M.P.M.
CHAVES 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



SEC. 35
SEC. 36

010 50 100 200
SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF STATE HIGHWAY 2 & CR. 31 (BUFFALO VALLEY) GO EAST-SOUTHEAST ON CR. 31 FOR APPROX. 5.0 MILES TO RAT CAMP ROAD, GO EAST ON RAT CAMP ROAD FOR APPROX. 3.7 MILES, GO EAST ON 20' CALICHE LEASE ROAD FOR APPROX. 1.9 MILES, GO SOUTH ON 15' CALICHE LEASE ROAD FOR APPROX. 0.5 OF A MILE TO BEGIN SURVEY, FOLLOW ROAD SURVEY EAST APPROX. 172' TO THE SOUTHWEST PAD CORNER FOR THIS LOCATION.

I, FILIMON F. JARAMILLO, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I HAVE PERSONALLY AND RESPONSIBLY FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT I HAVE MET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

FILIMON F. JARAMILLO, 12/27/94

MADISON SURVEYING, INC.

301 SOUTH CANAL
(575) 234-3341

MACK ENERGY CORPORATION

WHITE STATE 5

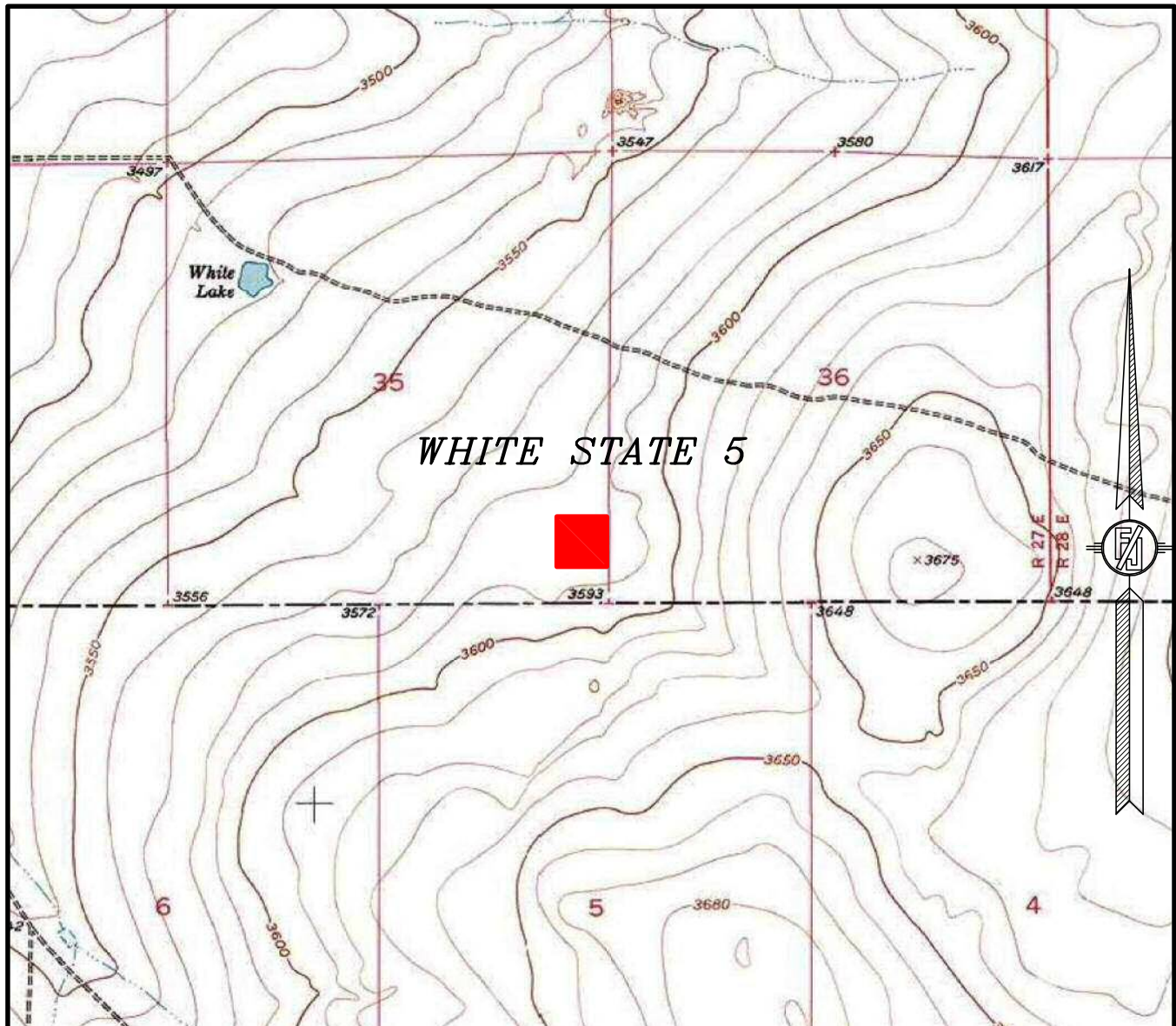
LOCATED 740 FT. FROM THE SOUTH LINE
AND 330 FT. FROM THE EAST LINE OF
SECTION 35, TOWNSHIP 15 SOUTH,
RANGE 27 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO

MARCH 17, 2021

SURVEY NO. 8829

CARLSBAD, NEW MEXICO

SECTION 35, TOWNSHIP 15 SOUTH, RANGE 27 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
LOCATION VERIFICATION MAP



USGS QUAD MAP:
DIAMOND MOUND

NOT TO SCALE

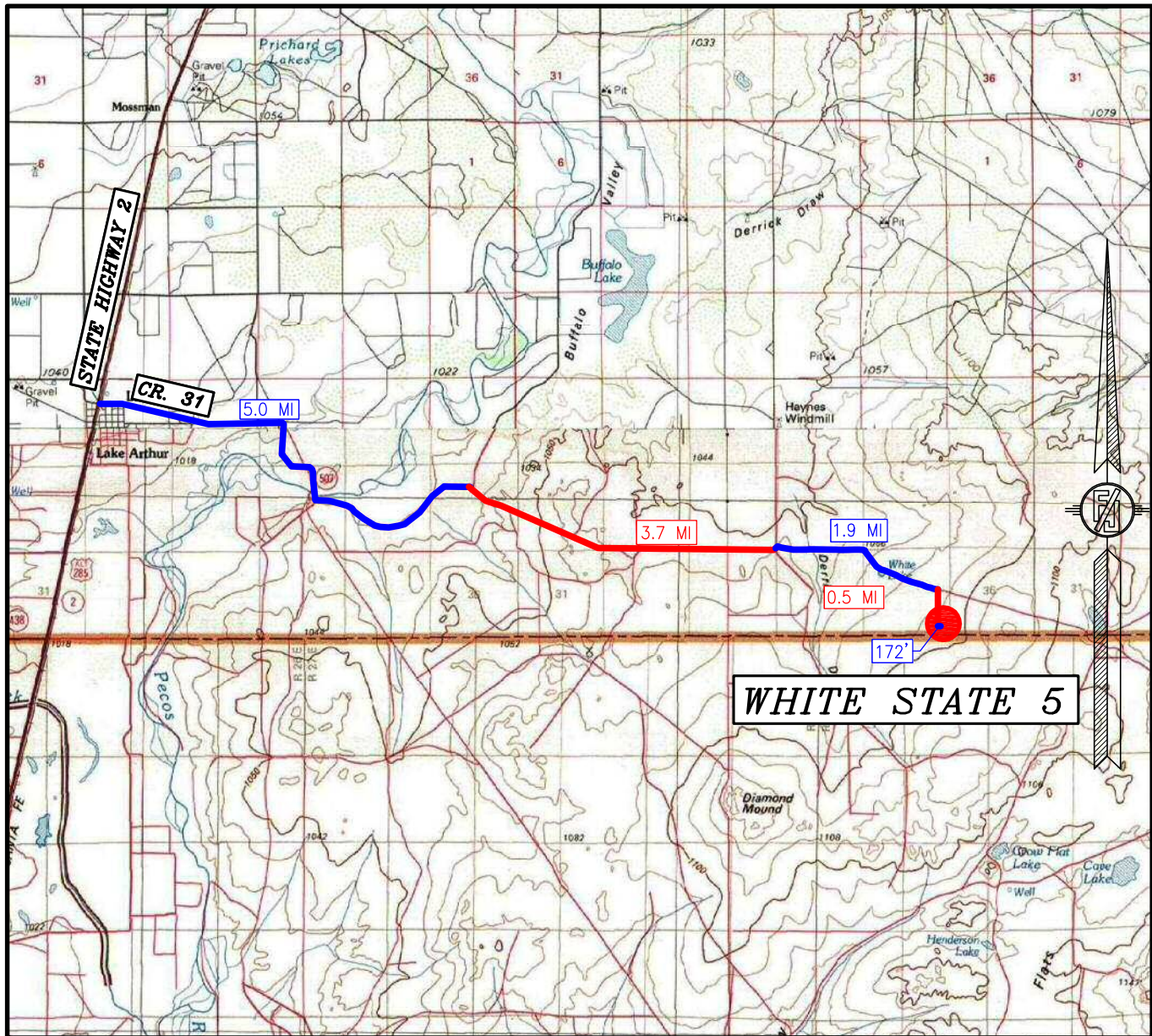
MACK ENERGY CORPORATION
WHITE STATE 5
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AND 330 FT. FROM THE EAST LINE OF
SECTION 35, TOWNSHIP 15 SOUTH,
RANGE 27 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO

MARCH 17, 2021

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

SURVEY NO. 8829
CARLSBAD, NEW MEXICO

SECTION 35, TOWNSHIP 15 SOUTH, RANGE 27 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

MACK ENERGY CORPORATION
WHITE STATE 5

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AND 330 FT. FROM THE EAST LINE OF
SECTION 35, TOWNSHIP 15 SOUTH,
RANGE 27 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO

MARCH 17, 2021

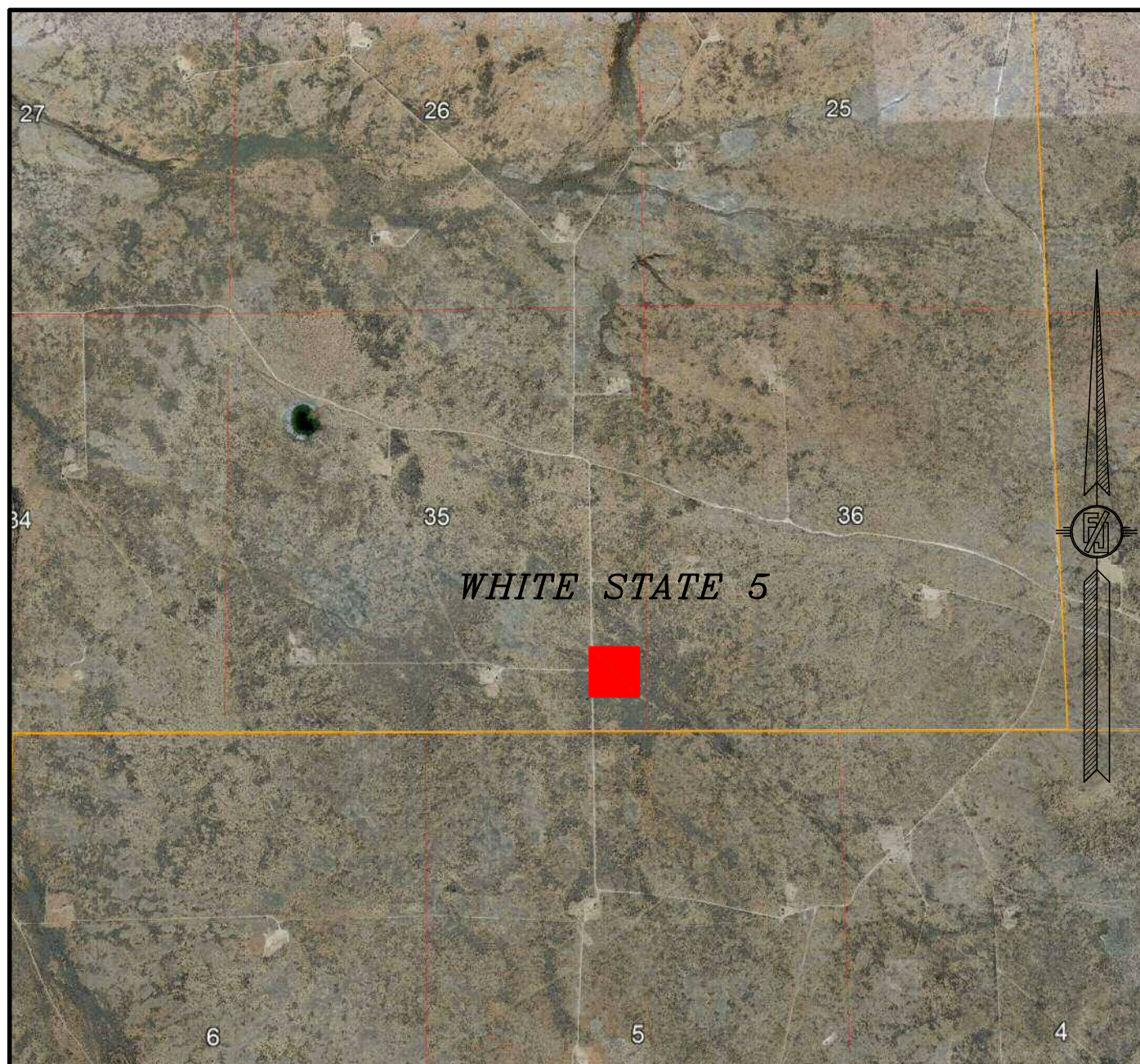
SURVEY NO. 8829

MADRON SURVEYING, INC. 301 SOUTH CANAL

(575) 234-3341

CARLSBAD, NEW MEXICO

SECTION 35, TOWNSHIP 15 SOUTH, RANGE 27 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
DECEMBER 2019

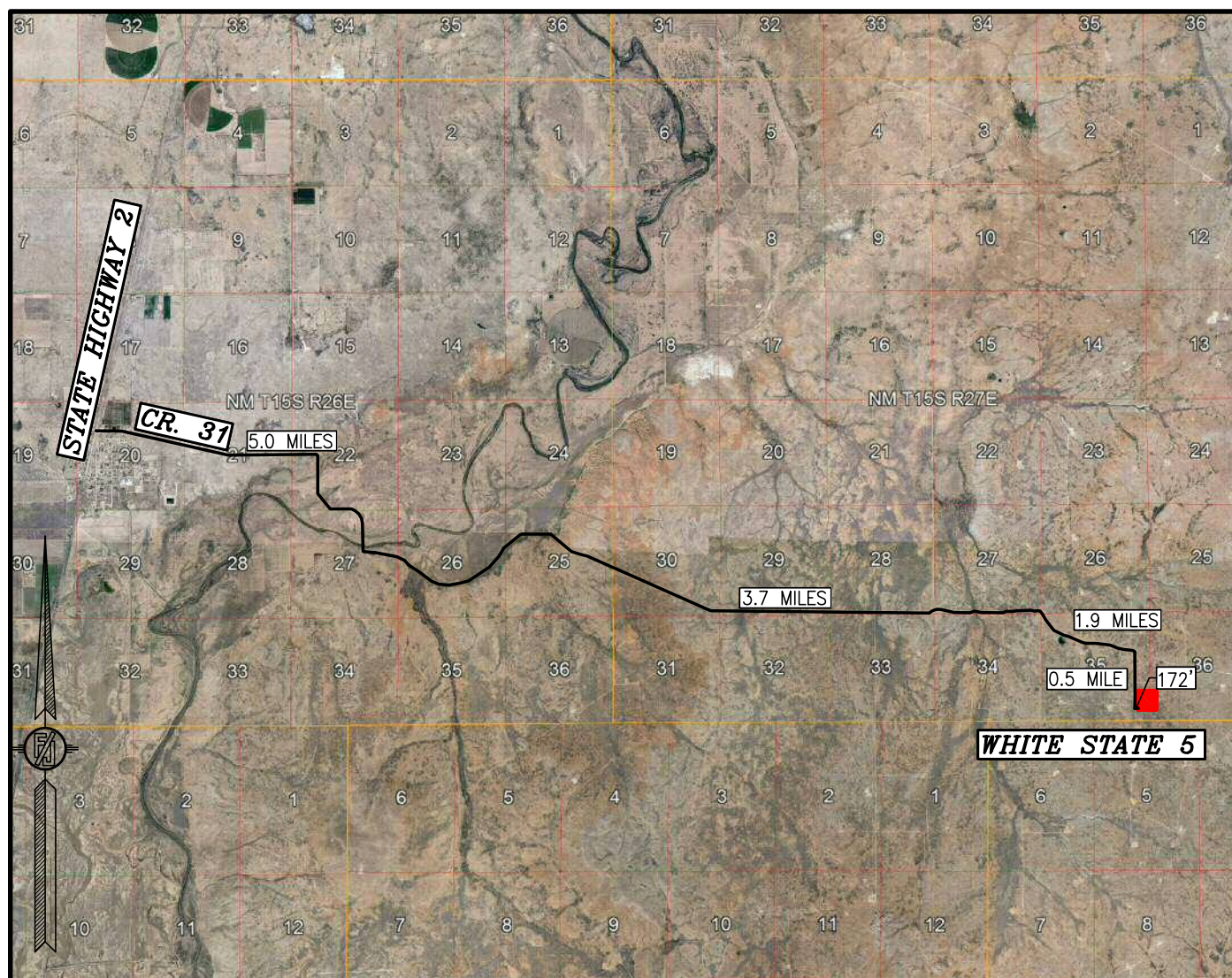
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RANGE 27 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO

MARCH 17, 2021

SURVEY NO. 8829

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

SECTION 35, TOWNSHIP 15 SOUTH, RANGE 27 EAST, N.M.P.M.
CHAVES COUNTY, STATE OF NEW MEXICO
ACCESS AERIAL ROUTE MAP



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
DECEMBER 2019

MACK ENERGY CORPORATION
WHITE STATE 5
LOCATED 740 FT. FROM THE SOUTH LINE
AND 330 FT. FROM THE EAST LINE OF
SECTION 35, TOWNSHIP 15 SOUTH,
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MARCH 17, 2021

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GAS CAPTURE PLAN

Date: 4/21/2021

☒ Original

Operator & OGRID No.: [13837] MACK ENERGY CORP

☐ Amended - Reason for
Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
WHITE STATE #005	30-005-64361	P-35-15S-27E	0740S 0330E	50	None	

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to DCP OPERATING COMPANY, LP and will be connected to DCP OPERATING COMPANY, LP Low Pressure gathering system located in Chaves County, New Mexico. It will require 0' of pipeline to connect the facility to Low Pressure gathering system. MACK ENERGY CORP provides (periodically) to DCP OPERATING COMPANY, LP a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, MACK ENERGY CORP and DCP OPERATING COMPANY, LP have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at DCP OPERATING COMPANY, LP Processing Plant located in Sec. 06, Twn. 19S, Rng. 37E, Lea County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on DCP OPERATING COMPANY, LP system at that time. Based on current information, it is MACK ENERGY CORP's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
 - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
 - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
 - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

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Santa Fe, NM 87505

Form APD Conditions

Permit 294696

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: MACK ENERGY CORP [13837] P.O. Box 960 Artesia, NM 882110960	API Number: 30-005-64361
	Well: WHITE STATE #005

OCD Reviewer	Condition
ksimmons	Notify OCD 24 hours prior to casing & cement
ksimmons	Will require a File As Drilled C-102 and a Directional Survey with the C-104
ksimmons	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud
kpickford	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
kpickford	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