

Form 3160-3  
(June 2015)FORM APPROVED  
OMB No. 1004-0137  
Expires: January 31, 2018

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**APPLICATION FOR PERMIT TO DRILL OR REENTER**

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER 1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other 1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		5. Lease Serial No. <b>NMNM141396</b> 6. If Indian, Allottee or Tribe Name  7. If Unit or CA Agreement, Name and No.  8. Lease Name and Well No. <b>JOCKEY FEDERAL COM</b> <b>1H</b> 9. API Well No. <span style="border: 2px solid red; padding: 2px;"><b>30-015-53973</b></span>
2. Name of Operator <b>MR NM OPERATING LLC</b> 3a. Address <b>5950 BERKSHIRE LANE, SUITE 1000, DALLAS, TX 7522</b> 3b. Phone No. (include area code) <b>(469) 906-2004</b>		10. Field and Pool, or Exploratory <b>WC 015 G-5 1627S35M; ABO</b> 11. Sec., T. R. M. or Blk. and Survey or Area <b>SEC 2/T17S/R27E/NMP</b>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface <b>SESE / 985 FSL / 385 FEL / LAT 32.8585682 / LONG -104.2419152</b> At proposed prod. zone <b>SWSW / 388 FSL / 100 FWL / LAT 32.8576497 / LONG -104.2747363</b>		12. County or Parish <b>EDDY</b> 13. State <b>NM</b>
14. Distance in miles and direction from nearest town or post office* <b>9 miles</b>		15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>385 feet</b> 16. No of acres in lease  17. Spacing Unit dedicated to this well <b>640.0</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>30 feet</b> 19. Proposed Depth <b>6119 feet / 17102 feet</b> 20. BLM/BIA Bond No. in file <b>FED: NMB002039</b>		21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>3493 feet</b> 22. Approximate date work will start* <b>12/01/2022</b> 23. Estimated duration <b>30 days</b>
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

- |   |   |
|---|---|
| 1. Well plat certified by a registered surveyor.<br>2. A Drilling Plan.<br>3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).<br>5. Operator certification.<br>6. Such other site specific information and/or plans as may be requested by the BLM. |
|---|---|

25. Signature (Electronic Submission)	Name (Printed/Typed) <b>BRIAN WOOD / Ph: (469) 906-2004</b>	Date <b>08/31/2022</b>
Title <b>President</b>		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) <b>CODY LAYTON / Ph: (575) 234-5959</b>	Date <b>07/06/2023</b>
Title <b>Assistant Field Manager Lands &amp; Minerals</b>		
Office <b>Carlsbad Field Office</b>		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
 Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

\*(Instructions on page 2)



District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
District II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

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

FORM C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30-015- 53973</b>	<sup>2</sup> Pool Code <b>97450</b>	<sup>3</sup> Pool Name <b>WC 015 G-5 1627S35M; ABO</b>
<sup>4</sup> Property Code <b>334518</b>	<sup>5</sup> Property Name <b>JOCKEY FEDERAL COM</b>	
<sup>7</sup> OGRID No. <b>330506</b>	<sup>8</sup> Operator Name <b>MR NM OPERATING LLC.</b>	<sup>6</sup> Well Number <b>1H</b>
		<sup>9</sup> Elevation <b>3493'</b>

<sup>10</sup>Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>P</b>	<b>2</b>	<b>17-S</b>	<b>27-E</b>	<b>-</b>	<b>985'</b>	<b>SOUTH</b>	<b>385'</b>	<b>EAST</b>	<b>EDDY</b>

<sup>11</sup>Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>M</b>	<b>3</b>	<b>17-S</b>	<b>30-E</b>	<b>-</b>	<b>388'</b>	<b>SOUTH</b>	<b>100'</b>	<b>WEST</b>	<b>EDDY</b>

<sup>12</sup> Dedicated Acres <b>640.00</b>	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

<sup>16</sup> LOWER MOST PERF./ BOTTOM HOLE LOCATION NEW MEXICO EAST NAD 1927 X=518152 Y=675688 LAT.: N 32.8575367 LONG.: W 104.2742215 NAD 1983 X=559331 Y=675751 LAT.: N 32.8576497 LONG.: W 104.2747363		SURFACE LOCATION NEW MEXICO EAST NAD 1927 X=528230 Y=676029 LAT.: N 32.8584549 LONG.: W 104.2414014 NAD 1983 X=569409 Y=676093 LAT.: N 32.8585682 LONG.: W 104.2419152		<sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature <u>Cory Walk</u> Date <u>08/30/2022</u> Printed Name <u>Cory Walk</u> E-mail Address <u>cory@permitswest.com</u>	
X=559394.70 Y=678113.83		X=564827.22 Y=677992.38		X=569887.11 Y=677869.75	
X=559204.00 Y=675369.36		X=561841.25 Y=675237.57		X=567110.40 Y=675106.55	
X=564480.13 Y=675105.73		X=569742.55 Y=675107.47		<sup>18</sup> SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true to the best of my belief. Date of Survey <u>05/19/2022</u> Signature and Seal of Professional Surveyor <u>RAMON A. DOMINGUEZ</u> Certificate Number <u>24508</u>	



U.S. Department of the Interior  
BUREAU OF LAND MANAGEMENT

# Drilling Plan Data Report

07/06/2023

APD ID: 10400087810

Submission Date: 08/31/2022

Highlighted data  
reflects the most  
recent changes

Operator Name: MR NM OPERATING LLC

Well Name: JOCKEY FEDERAL COM

Well Number: 1H

Well Type: OIL WELL

Well Work Type: Drill

[Show Final Text](#)

## Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
9119030	QUATERNARY	3493	0	0	ANHYDRITE, OTHER, SALT : Mixed Clastics	NONE	N
9119031	YATES	3249	244	244	ANHYDRITE, OTHER : Dolomitic Anhydrite	USEABLE WATER	N
9119032	SEVEN RIVERS	3109	384	384	ANHYDRITE, DOLOMITE	NONE	N
9119033	QUEEN	2684	809	809	SANDSTONE	NATURAL GAS, OIL	N
9119034	GRAYBURG	2204	1289	1289	ANHYDRITE, DOLOMITE, SANDSTONE, SHALE	NATURAL GAS, OIL	N
9119043	SAN ANDRES	1845	1648	1649	ANHYDRITE, DOLOMITE	NATURAL GAS, OIL	N
9119035	GLORIETA	434	3059	3112	OTHER : Sandy Dolomite	NATURAL GAS, OIL	N
9119036	PADDOCK	394	3099	3152	OTHER, SANDSTONE : Anhydritic Dolomite	NATURAL GAS, OIL	N
9119037	TUBB	-891	4384	4492	OTHER, SANDSTONE : Anhydritic Dolomite	NATURAL GAS, OIL	N
9119038	DRINKARD	-1076	4569	4684	OTHER, SANDSTONE : Anhydritic Dolomite	NATURAL GAS, OIL	N
9119039	ABO	-1616	5109	5251	ANHYDRITE, DOLOMITE	NATURAL GAS, OIL	Y

## Section 2 - Blowout Prevention

Pressure Rating (PSI): 3M

Rating Depth: 10000

**Equipment:** The minimum blowout prevention equipment (BOPE) shown in Exhibit #1 will consist of a 3,000- psi working pressure double ram BOP with blind ram and pipe ram inserts. A 3,000-psi annular preventer will be placed on top of the double ram BOP. Both units will be hydraulically operated. A Kelly cock will be kept in the drill string at all times A full opening drill pipe stabbing valve with proper drill pipe connections will always be on the rig floor. H2S monitoring and detection equipment will be utilized from surface casing point to TD.

**Requesting Variance?** YES

**Variance request:** MR NM requests a variance to use a flexible choke line from the BOP stack to the choke manifold. If flex hose is utilized the company man will have all proper certified paperwork for that hose available on location. Possible flex hose specifications shown in Exhibit 2.

Operator Name: MR NM OPERATING LLC

Well Name: JOCKEY FEDERAL COM

Well Number: 1H

**Testing Procedure:** All BOPE will be tested in accordance with Onshore Oil & Gas Order No. 2. Prior to drilling out of the surface casing, ram type BOPE and accessory equipment will be tested to 250/3,000 psig and the annular preventer to 250/1,500 psig. All installed casing strings will be tested to 1,500 psi for 30 minutes prior before drilling out. BOPE fuction tests will be performed daily for pipe rams and when drill pipe is out of the hole for blind rams. Function tests will be noted in the daily drillers log.

**Choke Diagram Attachment:**  
Choke\_Diagram\_3k\_20220831124241.pdf

**BOP Diagram Attachment:**  
BOP\_3k\_20220831124301.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	500	0	500	3493	2993	500	H-40	48	ST&C	1.125	1.25	DRY	1.8	DRY	1.8
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	1762	0	1666	3493	1827	1762	J-55	40	LT&C	1.125	1.25	DRY	1.8	DRY	1.8
3	PRODUCTION	8.75	5.5	NEW	API	N	0	17102	0	6118	3493	-2625	17102	P-110	20	BUTT	1.125	1.25	DRY	1.8	DRY	1.8

Casing Attachments

Casing ID: 1

String SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):  
Jockey\_1H\_Casing\_Design\_Assumptions\_20220831124413.pdf

Operator Name: MR NM OPERATING LLC

Well Name: JOCKEY FEDERAL COM

Well Number: 1H

Casing Attachments

Casing ID: 2StringINTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Jockey\_1H\_Casing\_Design\_Assumptions\_20220831124510.pdf

Casing ID: 3StringPRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Jockey\_1H\_Casing\_Design\_Assumptions\_20220831124614.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	0	0	0	0	0	0	None	None
SURFACE	Tail		0	500	518	1.34	14.8	694	100	Class C	2% Calcium
INTERMEDIATE	Lead		0	1409	349	2.17	12.5	757	100	35/65 Poz/C	5% Salt + 5% Strength Enhancer + 4% Bentonite
INTERMEDIATE	Tail		1409	1762	167	1.32	14.8	220	100	C Neat	Neat
PRODUCTION	Lead		1262	5650	520	2.81	11.5	1461	35	50/50 Poz/C	10% Bentonite + 5% Salt

**Operator Name:** MR NM OPERATING LLC**Well Name:** JOCKEY FEDERAL COM**Well Number:** 1H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Tail		5650	1710 2	2810	1.39	14	3906	35	50/50 Poz/C	2% Bentonite + 5% Salt

### Section 5 - Circulating Medium

**Mud System Type:** Closed**Will an air or gas system be Used?** NO**Description of the equipment for the circulating system in accordance with Onshore Order #2:****Diagram of the equipment for the circulating system in accordance with Onshore Order #2:**

**Describe what will be on location to control well or mitigate other conditions:** Sufficient mud materials will be on location to maintain mud properties and meet minimum loss control and weight increase requirements.

**Describe the mud monitoring system utilized:** An electronic pit volume totalizer (PVT) will be utilized on the rig pits to monitor pit volumes, flow rates, pump pressures, and stroke rates.

### Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	500	OTHER : Fresh Water	8.6	8.8							
500	1762	OTHER : Cut Brine	8.8	9.4							
1762	1710 2	OTHER : Cut Brine	8.8	9.4							

**Operator Name:** MR NM OPERATING LLC**Well Name:** JOCKEY FEDERAL COM**Well Number:** 1H

## Section 6 - Test, Logging, Coring

**List of production tests including testing procedures, equipment and safety measures:**

Open hole logs are not planned for this well. Directional surveys will be run with GR from below surface casing.

**List of open and cased hole logs run in the well:**

GAMMA RAY LOG,

**Coring operation description for the well:**

No cores, DSTs, or mud logs are planned at this time.

## Section 7 - Pressure

**Anticipated Bottom Hole Pressure:** 2750**Anticipated Surface Pressure:** 1384**Anticipated Bottom Hole Temperature(F):** 140**Anticipated abnormal pressures, temperatures, or potential geologic hazards?** NO**Describe:****Contingency Plans geohazards description:****Contingency Plans geohazards****Hydrogen Sulfide drilling operations plan required?** YES**Hydrogen sulfide drilling operations**

Jockey\_H2S\_Contingency\_Plan\_20220831125352.pdf

## Section 8 - Other Information

**Proposed horizontal/directional/multi-lateral plan submission:**

Jockey\_1H\_Horizontal\_Plan\_20220831125406.pdf

**Other proposed operations facets description:**

If water flow is encountered, DV tool will be placed above water flow depth. Second stage of cement will be pumped through DV tool if cement is not returned to surface on first stage.

MR NM Operating LLC requests the option to contract a surface rig to drill, set surface casing, and cement on the subject well. After WOC 8 hours or 500 psi compressive strength (whichever is greater), the surface rig will move off so the wellhead can be installed. A welder will cut the casing to the proper height and weld on the wellhead (both A and B sections). The weld will be tested to 1,000 psi. All valves will be closed, and a wellhead cap will be installed. If timing between rigs is such that MR NM Operating LLC would not be able to preset the surface, the primary rig will MIRU and drill the well in its entirety per the APD.

**Other proposed operations facets attachment:**

Jockey\_1H\_Drill\_Plan\_20220831125414.pdf

CoFlex\_Certs\_3k\_20220831125423.pdf

Jockey\_1H\_Anticollision\_Report\_20220831125432.pdf

Wellhead\_Diagram\_3\_String\_RDC\_20220831125447.pdf

**Operator Name:** MR NM OPERATING LLC

**Well Name:** JOCKEY FEDERAL COM

**Well Number:** 1H

**Other Variance attachment:**



# **MR NM OPERATING, LLC.**

**Eddy County, NM (NAD 83)**

**SEC 2, T-17-S, R-27-E**

**JOCKEY FEDERAL COM 1H**

**Original Hole**

**PRELIM #0 (08.05.22)**

## **Standard Planning Report**

**05 August, 2022**

Project: Eddy County, NM (NAD 83)  
Site: SEC 2, T-17-S, R-27-E  
Well: JOCKEY FEDERAL COM 1H  
Wellbore: Original Hole  
PRELIM #0 (08.05.22)

WELL DETAILS: JOCKEY FEDERAL COM 1H

18' KB @ 3511.00usft  
Ground Level: 3493.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	676093.00	569409.00	32° 51' 30.849 N	104° 14' 30.892 W

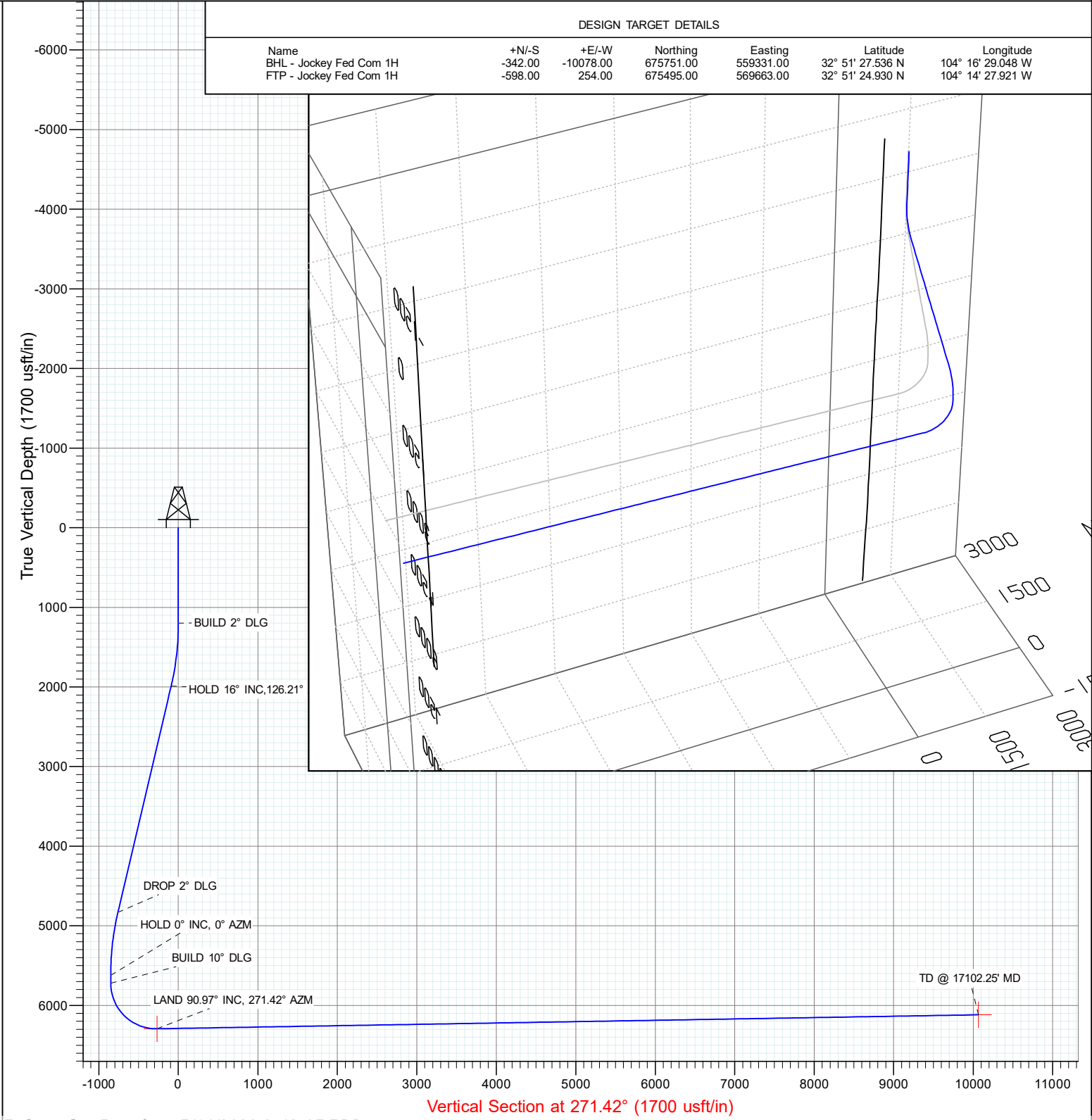
US State Plane 1983  
New Mexico Eastern Zone

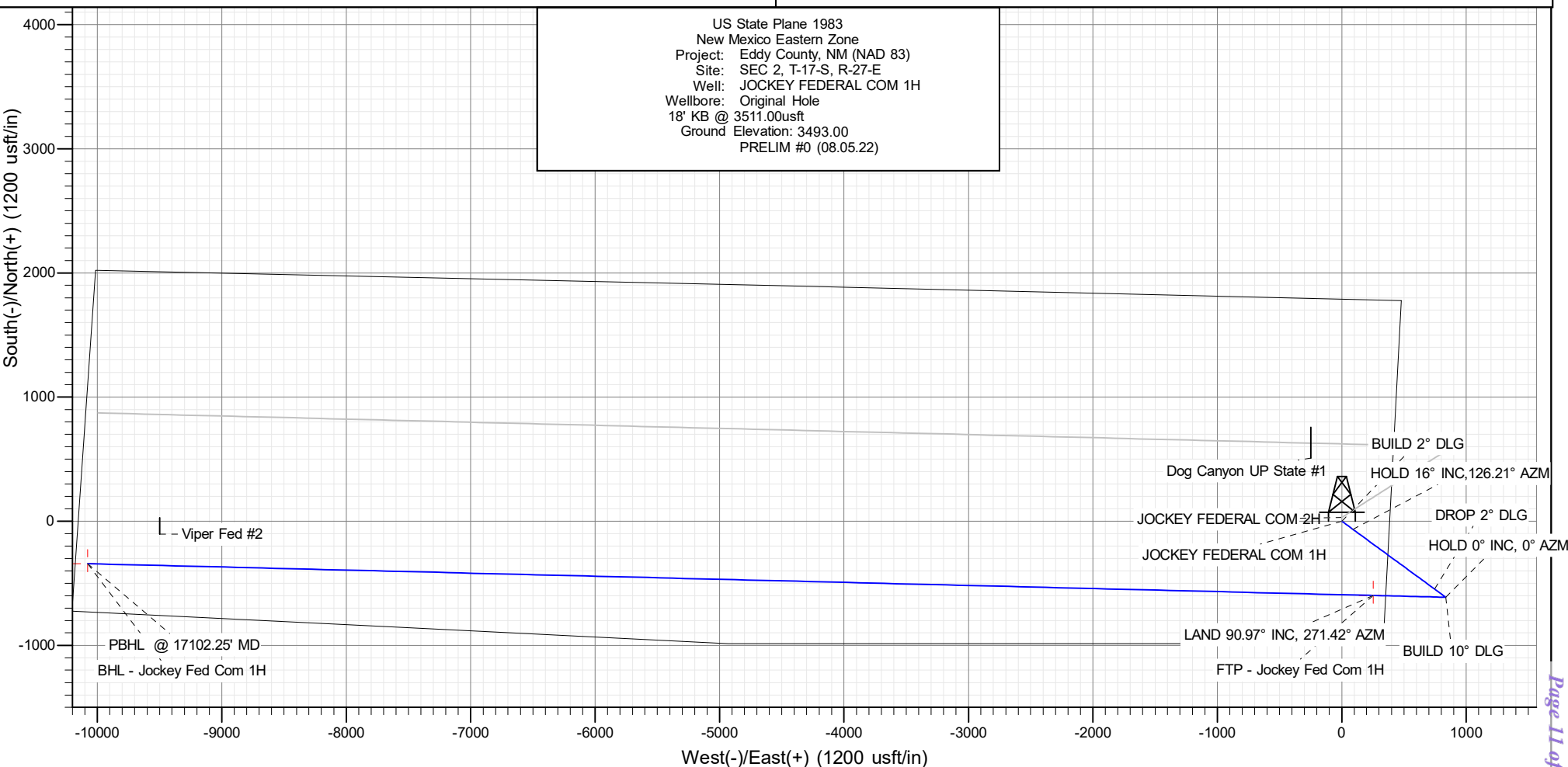
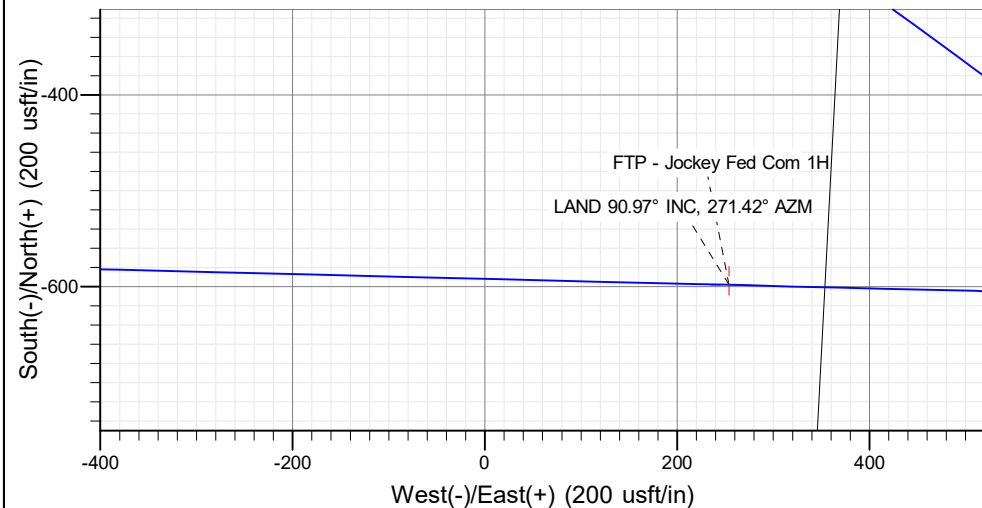
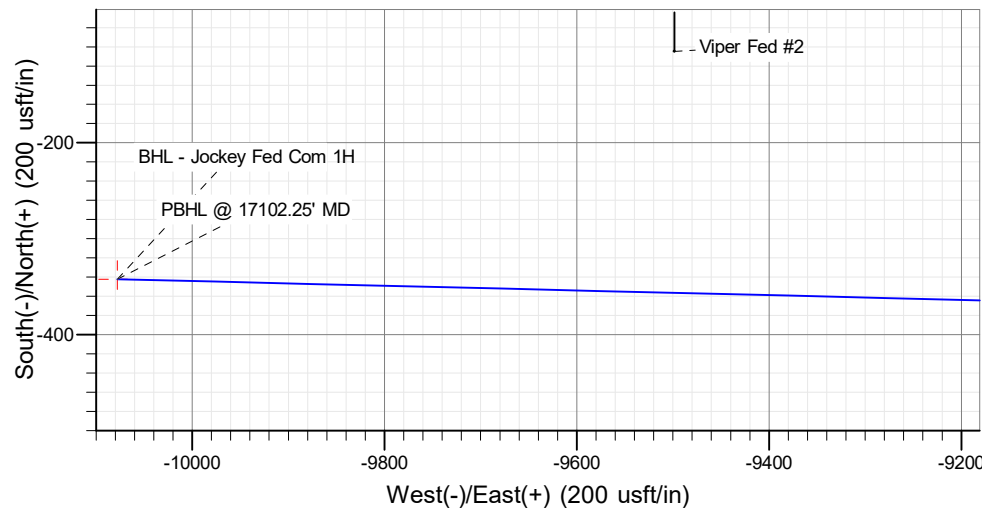
T  
↑  
G  
M  
↑  
↑

Total Azimuth to Grid North:  
True North: -0.05°  
Magnetic North: 6.86°

Magnetic Field  
Strength: 47665.9nT  
Dip Angle: 60.43°  
Date: 8/5/2022  
Model: HRGM

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1200.00	0.00	0.00	1200.00	0.00	0.00	0.00	0.00	0.00	BUILD 2° DLG
2000.00	16.00	126.21	1989.65	-65.56	89.54	2.00	126.21	-91.14	HOLD 16° INC, 126.21° AZM
4955.89	16.00	126.21	4831.02	-546.87	746.94	0.00	0.00	-760.26	DROP 2° DLG
5755.89	0.00	0.00	5620.67	-612.43	836.48	2.00	180.00	-851.40	HOLD 0° INC, 0° AZM
5855.90	0.00	0.00	5720.67	-612.43	836.48	0.00	0.00	-851.40	BUILD 10° DLG
6765.60	90.97	271.42	6293.55	-598.00	254.00	10.00	271.42	-268.74	LAND 90.97° INC, 271.42° AZM
17102.25	90.97	271.42	6118.56	-342.00	-10078.00	0.00	0.00	10066.43	TD @ 17102.25' MD





Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well JOCKEY FEDERAL COM 1H
Company:	MR NM OPERATING, LLC.	TVD Reference:	18' KB @ 3511.00usft
Project:	Eddy County, NM (NAD 83)	MD Reference:	18' KB @ 3511.00usft
Site:	SEC 2, T-17-S, R-27-E	North Reference:	Grid
Well:	JOCKEY FEDERAL COM 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	PRELIM #0 (08.05.22)		

Project	Eddy County, NM (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		SEC 2, T-17-S, R-27-E				
Site Position:		Northing:	678,447.00 usft	Latitude:	32° 51' 54.174 N	
From:	Map	Easting:	565,343.00 usft	Longitude:	104° 15' 18.541 W	
Position Uncertainty:		0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.04 °

Well	JOCKEY FEDERAL COM 1H					
Well Position	+N/-S	-2,354.00 usft	Northing:	676,093.00 usft	Latitude:	32° 51' 30.849 N
	+E/-W	4,066.00 usft	Easting:	569,409.00 usft	Longitude:	104° 14' 30.892 W
Position Uncertainty	0.00 usft		Wellhead Elevation:	Ground Level:		3,493.00 usft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HRGM	8/5/2022	6.91	60.43	47,665.92624942

Design	PRELIM #0 (08.05.22)			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	271.42

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,000.00	16.00	126.21	1,989.65	-65.56	89.54	2.00	2.00	0.00	126.21	
4,955.89	16.00	126.21	4,831.02	-546.87	746.94	0.00	0.00	0.00	0.00	
5,755.89	0.00	0.00	5,620.67	-612.43	836.48	2.00	-2.00	0.00	180.00	
5,855.90	0.00	0.00	5,720.67	-612.43	836.48	0.00	0.00	0.00	0.00	
6,765.60	90.97	271.42	6,293.55	-598.00	254.00	10.00	10.00	0.00	271.42	
17,102.25	90.97	271.42	6,118.56	-342.00	-10,078.00	0.00	0.00	0.00	0.00	

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well JOCKEY FEDERAL COM 1H
<b>Company:</b>	MR NM OPERATING, LLC.	<b>TVD Reference:</b>	18' KB @ 3511.00usft
<b>Project:</b>	Eddy County, NM (NAD 83)	<b>MD Reference:</b>	18' KB @ 3511.00usft
<b>Site:</b>	SEC 2, T-17-S, R-27-E	<b>North Reference:</b>	Grid
<b>Well:</b>	JOCKEY FEDERAL COM 1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	PRELIM #0 (08.05.22)		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>BUILD 2° DLG</b>									
1,300.00	2.00	126.21	1,299.98	-1.03	1.41	-1.43	2.00	2.00	0.00
1,400.00	4.00	126.21	1,399.84	-4.12	5.63	-5.73	2.00	2.00	0.00
1,500.00	6.00	126.21	1,499.45	-9.27	12.66	-12.89	2.00	2.00	0.00
1,600.00	8.00	126.21	1,598.70	-16.47	22.50	-22.90	2.00	2.00	0.00
1,700.00	10.00	126.21	1,697.47	-25.71	35.12	-35.74	2.00	2.00	0.00
1,800.00	12.00	126.21	1,795.62	-36.98	50.51	-51.41	2.00	2.00	0.00
1,900.00	14.00	126.21	1,893.06	-50.27	68.66	-69.89	2.00	2.00	0.00
2,000.00	16.00	126.21	1,989.64	-65.56	89.54	-91.14	2.00	2.00	0.00
<b>HOLD 16° INC,126.21° AZM</b>									
2,100.00	16.00	126.21	2,085.77	-81.84	111.78	-113.78	0.00	0.00	0.00
2,200.00	16.00	126.21	2,181.90	-98.13	134.02	-136.41	0.00	0.00	0.00
2,300.00	16.00	126.21	2,278.02	-114.41	156.26	-159.05	0.00	0.00	0.00
2,400.00	16.00	126.21	2,374.15	-130.69	178.50	-181.69	0.00	0.00	0.00
2,500.00	16.00	126.21	2,470.27	-146.97	200.74	-204.32	0.00	0.00	0.00
2,600.00	16.00	126.21	2,566.40	-163.26	222.98	-226.96	0.00	0.00	0.00
2,700.00	16.00	126.21	2,662.53	-179.54	245.22	-249.60	0.00	0.00	0.00
2,800.00	16.00	126.21	2,758.65	-195.82	267.46	-272.23	0.00	0.00	0.00
2,900.00	16.00	126.21	2,854.78	-212.11	289.70	-294.87	0.00	0.00	0.00
3,000.00	16.00	126.21	2,950.90	-228.39	311.94	-317.51	0.00	0.00	0.00
3,100.00	16.00	126.21	3,047.03	-244.67	334.18	-340.15	0.00	0.00	0.00
3,200.00	16.00	126.21	3,143.16	-260.96	356.42	-362.78	0.00	0.00	0.00
3,300.00	16.00	126.21	3,239.28	-277.24	378.66	-385.42	0.00	0.00	0.00
3,400.00	16.00	126.21	3,335.41	-293.52	400.90	-408.06	0.00	0.00	0.00
3,500.00	16.00	126.21	3,431.54	-309.81	423.14	-430.69	0.00	0.00	0.00
3,600.00	16.00	126.21	3,527.66	-326.09	445.39	-453.33	0.00	0.00	0.00
3,700.00	16.00	126.21	3,623.79	-342.37	467.63	-475.97	0.00	0.00	0.00
3,800.00	16.00	126.21	3,719.91	-358.66	489.87	-498.60	0.00	0.00	0.00
3,900.00	16.00	126.21	3,816.04	-374.94	512.11	-521.24	0.00	0.00	0.00
4,000.00	16.00	126.21	3,912.17	-391.22	534.35	-543.88	0.00	0.00	0.00
4,100.00	16.00	126.21	4,008.29	-407.51	556.59	-566.51	0.00	0.00	0.00
4,200.00	16.00	126.21	4,104.42	-423.79	578.83	-589.15	0.00	0.00	0.00
4,300.00	16.00	126.21	4,200.54	-440.07	601.07	-611.79	0.00	0.00	0.00
4,400.00	16.00	126.21	4,296.67	-456.35	623.31	-634.42	0.00	0.00	0.00
4,500.00	16.00	126.21	4,392.80	-472.64	645.55	-657.06	0.00	0.00	0.00
4,600.00	16.00	126.21	4,488.92	-488.92	667.79	-679.70	0.00	0.00	0.00
4,700.00	16.00	126.21	4,585.05	-505.20	690.03	-702.33	0.00	0.00	0.00
4,800.00	16.00	126.21	4,681.17	-521.49	712.27	-724.97	0.00	0.00	0.00
4,900.00	16.00	126.21	4,777.30	-537.77	734.51	-747.61	0.00	0.00	0.00
4,955.89	16.00	126.21	4,831.03	-546.87	746.94	-760.26	0.00	0.00	0.00

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well JOCKEY FEDERAL COM 1H
<b>Company:</b>	MR NM OPERATING, LLC.	<b>TVD Reference:</b>	18' KB @ 3511.00usft
<b>Project:</b>	Eddy County, NM (NAD 83)	<b>MD Reference:</b>	18' KB @ 3511.00usft
<b>Site:</b>	SEC 2, T-17-S, R-27-E	<b>North Reference:</b>	Grid
<b>Well:</b>	JOCKEY FEDERAL COM 1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	PRELIM #0 (08.05.22)		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
<b>DROP 2° DLG</b>									
5,000.00	15.12	126.21	4,873.52	-553.86	756.48	-769.98	2.00	-2.00	0.00
5,100.00	13.12	126.21	4,970.49	-568.27	776.16	-790.01	2.00	-2.00	0.00
5,200.00	11.12	126.21	5,068.26	-580.67	793.10	-807.25	2.00	-2.00	0.00
5,300.00	9.12	126.21	5,166.70	-591.05	807.27	-821.67	2.00	-2.00	0.00
5,400.00	7.12	126.21	5,265.69	-599.39	818.67	-833.27	2.00	-2.00	0.00
5,500.00	5.12	126.21	5,365.12	-605.68	827.26	-842.02	2.00	-2.00	0.00
5,600.00	3.12	126.21	5,464.86	-609.92	833.06	-847.92	2.00	-2.00	0.00
5,700.00	1.12	126.21	5,564.78	-612.11	836.04	-850.95	2.00	-2.00	0.00
5,755.89	0.00	0.00	5,620.67	-612.43	836.48	-851.40	2.00	-2.00	-225.82
<b>HOLD 0° INC, 0° AZM</b>									
5,800.00	0.00	0.00	5,664.78	-612.43	836.48	-851.40	0.00	0.00	0.00
5,855.90	0.00	0.00	5,720.68	-612.43	836.48	-851.40	0.00	0.00	0.00
<b>BUILD 10° DLG</b>									
5,900.00	4.41	271.42	5,764.74	-612.39	834.78	-849.70	10.00	10.00	0.00
6,000.00	14.41	271.42	5,863.26	-611.98	818.46	-833.37	10.00	10.00	0.00
6,100.00	24.41	271.42	5,957.46	-611.16	785.28	-800.18	10.00	10.00	0.00
6,200.00	34.41	271.42	6,044.46	-609.95	736.25	-751.14	10.00	10.00	0.00
6,300.00	44.41	271.42	6,121.63	-608.38	672.86	-687.73	10.00	10.00	0.00
6,400.00	54.41	271.42	6,186.61	-606.50	597.04	-611.89	10.00	10.00	0.00
6,500.00	64.41	271.42	6,237.43	-604.37	511.09	-525.91	10.00	10.00	0.00
6,600.00	74.41	271.42	6,272.55	-602.05	417.63	-432.42	10.00	10.00	0.00
6,700.00	84.41	271.42	6,290.91	-599.62	319.49	-334.25	10.00	10.00	0.00
6,765.60	90.97	271.42	6,293.55	-598.00	254.00	-268.74	10.00	10.00	0.00
<b>LAND 90.97° INC, 271.42° AZM</b>									
6,800.00	90.97	271.42	6,292.97	-597.15	219.61	-234.34	0.00	0.00	0.00
6,900.00	90.97	271.42	6,291.27	-594.67	119.66	-134.36	0.00	0.00	0.00
7,000.00	90.97	271.42	6,289.58	-592.19	19.70	-34.37	0.00	0.00	0.00
7,100.00	90.97	271.42	6,287.89	-589.72	-80.25	65.61	0.00	0.00	0.00
7,200.00	90.97	271.42	6,286.20	-587.24	-180.21	165.60	0.00	0.00	0.00
7,300.00	90.97	271.42	6,284.50	-584.76	-280.16	265.59	0.00	0.00	0.00
7,400.00	90.97	271.42	6,282.81	-582.29	-380.12	365.57	0.00	0.00	0.00
7,500.00	90.97	271.42	6,281.12	-579.81	-480.07	465.56	0.00	0.00	0.00
7,600.00	90.97	271.42	6,279.42	-577.33	-580.03	565.54	0.00	0.00	0.00
7,700.00	90.97	271.42	6,277.73	-574.86	-679.98	665.53	0.00	0.00	0.00
7,800.00	90.97	271.42	6,276.04	-572.38	-779.94	765.51	0.00	0.00	0.00
7,900.00	90.97	271.42	6,274.35	-569.90	-879.89	865.50	0.00	0.00	0.00
8,000.00	90.97	271.42	6,272.65	-567.43	-979.85	965.48	0.00	0.00	0.00
8,100.00	90.97	271.42	6,270.96	-564.95	-1,079.80	1,065.47	0.00	0.00	0.00
8,200.00	90.97	271.42	6,269.27	-562.47	-1,179.76	1,165.46	0.00	0.00	0.00
8,300.00	90.97	271.42	6,267.57	-560.00	-1,279.71	1,265.44	0.00	0.00	0.00
8,400.00	90.97	271.42	6,265.88	-557.52	-1,379.67	1,365.43	0.00	0.00	0.00
8,500.00	90.97	271.42	6,264.19	-555.04	-1,479.62	1,465.41	0.00	0.00	0.00
8,600.00	90.97	271.42	6,262.50	-552.57	-1,579.58	1,565.40	0.00	0.00	0.00
8,700.00	90.97	271.42	6,260.80	-550.09	-1,679.53	1,665.38	0.00	0.00	0.00
8,800.00	90.97	271.42	6,259.11	-547.61	-1,779.49	1,765.37	0.00	0.00	0.00
8,900.00	90.97	271.42	6,257.42	-545.14	-1,879.44	1,865.36	0.00	0.00	0.00
9,000.00	90.97	271.42	6,255.72	-542.66	-1,979.40	1,965.34	0.00	0.00	0.00
9,100.00	90.97	271.42	6,254.03	-540.18	-2,079.35	2,065.33	0.00	0.00	0.00
9,200.00	90.97	271.42	6,252.34	-537.71	-2,179.31	2,165.31	0.00	0.00	0.00
9,300.00	90.97	271.42	6,250.65	-535.23	-2,279.26	2,265.30	0.00	0.00	0.00
9,400.00	90.97	271.42	6,248.95	-532.75	-2,379.22	2,365.28	0.00	0.00	0.00
9,500.00	90.97	271.42	6,247.26	-530.28	-2,479.17	2,465.27	0.00	0.00	0.00

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well JOCKEY FEDERAL COM 1H
<b>Company:</b>	MR NM OPERATING, LLC.	<b>TVD Reference:</b>	18' KB @ 3511.00usft
<b>Project:</b>	Eddy County, NM (NAD 83)	<b>MD Reference:</b>	18' KB @ 3511.00usft
<b>Site:</b>	SEC 2, T-17-S, R-27-E	<b>North Reference:</b>	Grid
<b>Well:</b>	JOCKEY FEDERAL COM 1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	PRELIM #0 (08.05.22)		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
9,600.00	90.97	271.42	6,245.57	-527.80	-2,579.13	2,565.26	0.00	0.00	0.00	
9,700.00	90.97	271.42	6,243.87	-525.32	-2,679.08	2,665.24	0.00	0.00	0.00	
9,800.00	90.97	271.42	6,242.18	-522.85	-2,779.04	2,765.23	0.00	0.00	0.00	
9,900.00	90.97	271.42	6,240.49	-520.37	-2,878.99	2,865.21	0.00	0.00	0.00	
10,000.00	90.97	271.42	6,238.80	-517.89	-2,978.95	2,965.20	0.00	0.00	0.00	
10,100.00	90.97	271.42	6,237.10	-515.42	-3,078.90	3,065.18	0.00	0.00	0.00	
10,200.00	90.97	271.42	6,235.41	-512.94	-3,178.86	3,165.17	0.00	0.00	0.00	
10,300.00	90.97	271.42	6,233.72	-510.46	-3,278.81	3,265.16	0.00	0.00	0.00	
10,400.00	90.97	271.42	6,232.02	-507.99	-3,378.77	3,365.14	0.00	0.00	0.00	
10,500.00	90.97	271.42	6,230.33	-505.51	-3,478.72	3,465.13	0.00	0.00	0.00	
10,600.00	90.97	271.42	6,228.64	-503.03	-3,578.68	3,565.11	0.00	0.00	0.00	
10,700.00	90.97	271.42	6,226.95	-500.56	-3,678.63	3,665.10	0.00	0.00	0.00	
10,800.00	90.97	271.42	6,225.25	-498.08	-3,778.59	3,765.08	0.00	0.00	0.00	
10,900.00	90.97	271.42	6,223.56	-495.61	-3,878.54	3,865.07	0.00	0.00	0.00	
11,000.00	90.97	271.42	6,221.87	-493.13	-3,978.50	3,965.06	0.00	0.00	0.00	
11,100.00	90.97	271.42	6,220.17	-490.65	-4,078.45	4,065.04	0.00	0.00	0.00	
11,200.00	90.97	271.42	6,218.48	-488.18	-4,178.41	4,165.03	0.00	0.00	0.00	
11,300.00	90.97	271.42	6,216.79	-485.70	-4,278.36	4,265.01	0.00	0.00	0.00	
11,400.00	90.97	271.42	6,215.09	-483.22	-4,378.32	4,365.00	0.00	0.00	0.00	
11,500.00	90.97	271.42	6,213.40	-480.75	-4,478.27	4,464.98	0.00	0.00	0.00	
11,600.00	90.97	271.42	6,211.71	-478.27	-4,578.23	4,564.97	0.00	0.00	0.00	
11,700.00	90.97	271.42	6,210.02	-475.79	-4,678.18	4,664.95	0.00	0.00	0.00	
11,800.00	90.97	271.42	6,208.32	-473.32	-4,778.14	4,764.94	0.00	0.00	0.00	
11,900.00	90.97	271.42	6,206.63	-470.84	-4,878.09	4,864.93	0.00	0.00	0.00	
12,000.00	90.97	271.42	6,204.94	-468.36	-4,978.05	4,964.91	0.00	0.00	0.00	
12,100.00	90.97	271.42	6,203.24	-465.89	-5,078.00	5,064.90	0.00	0.00	0.00	
12,200.00	90.97	271.42	6,201.55	-463.41	-5,177.96	5,164.88	0.00	0.00	0.00	
12,300.00	90.97	271.42	6,199.86	-460.93	-5,277.91	5,264.87	0.00	0.00	0.00	
12,400.00	90.97	271.42	6,198.17	-458.46	-5,377.87	5,364.85	0.00	0.00	0.00	
12,500.00	90.97	271.42	6,196.47	-455.98	-5,477.82	5,464.84	0.00	0.00	0.00	
12,600.00	90.97	271.42	6,194.78	-453.50	-5,577.78	5,564.83	0.00	0.00	0.00	
12,700.00	90.97	271.42	6,193.09	-451.03	-5,677.73	5,664.81	0.00	0.00	0.00	
12,800.00	90.97	271.42	6,191.39	-448.55	-5,777.69	5,764.80	0.00	0.00	0.00	
12,900.00	90.97	271.42	6,189.70	-446.07	-5,877.64	5,864.78	0.00	0.00	0.00	
13,000.00	90.97	271.42	6,188.01	-443.60	-5,977.60	5,964.77	0.00	0.00	0.00	
13,100.00	90.97	271.42	6,186.32	-441.12	-6,077.55	6,064.75	0.00	0.00	0.00	
13,200.00	90.97	271.42	6,184.62	-438.64	-6,177.51	6,164.74	0.00	0.00	0.00	
13,300.00	90.97	271.42	6,182.93	-436.17	-6,277.46	6,264.73	0.00	0.00	0.00	
13,400.00	90.97	271.42	6,181.24	-433.69	-6,377.42	6,364.71	0.00	0.00	0.00	
13,500.00	90.97	271.42	6,179.54	-431.21	-6,477.37	6,464.70	0.00	0.00	0.00	
13,600.00	90.97	271.42	6,177.85	-428.74	-6,577.33	6,564.68	0.00	0.00	0.00	
13,700.00	90.97	271.42	6,176.16	-426.26	-6,677.28	6,664.67	0.00	0.00	0.00	
13,800.00	90.97	271.42	6,174.47	-423.78	-6,777.24	6,764.65	0.00	0.00	0.00	
13,900.00	90.97	271.42	6,172.77	-421.31	-6,877.19	6,864.64	0.00	0.00	0.00	
14,000.00	90.97	271.42	6,171.08	-418.83	-6,977.15	6,964.63	0.00	0.00	0.00	
14,100.00	90.97	271.42	6,169.39	-416.35	-7,077.10	7,064.61	0.00	0.00	0.00	
14,200.00	90.97	271.42	6,167.69	-413.88	-7,177.06	7,164.60	0.00	0.00	0.00	
14,300.00	90.97	271.42	6,166.00	-411.40	-7,277.01	7,264.58	0.00	0.00	0.00	
14,400.00	90.97	271.42	6,164.31	-408.92	-7,376.97	7,364.57	0.00	0.00	0.00	
14,500.00	90.97	271.42	6,162.62	-406.45	-7,476.92	7,464.55	0.00	0.00	0.00	
14,600.00	90.97	271.42	6,160.92	-403.97	-7,576.88	7,564.54	0.00	0.00	0.00	
14,700.00	90.97	271.42	6,159.23	-401.49	-7,676.83	7,664.52	0.00	0.00	0.00	
14,800.00	90.97	271.42	6,157.54	-399.02	-7,776.79	7,764.51	0.00	0.00	0.00	
14,900.00	90.97	271.42	6,155.84	-396.54	-7,876.74	7,864.50	0.00	0.00	0.00	

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well JOCKEY FEDERAL COM 1H
<b>Company:</b>	MR NM OPERATING, LLC.	<b>TVD Reference:</b>	18' KB @ 3511.00usft
<b>Project:</b>	Eddy County, NM (NAD 83)	<b>MD Reference:</b>	18' KB @ 3511.00usft
<b>Site:</b>	SEC 2, T-17-S, R-27-E	<b>North Reference:</b>	Grid
<b>Well:</b>	JOCKEY FEDERAL COM 1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	PRELIM #0 (08.05.22)		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
15,000.00	90.97	271.42	6,154.15	-394.06	-7,976.70	7,964.48	0.00	0.00	0.00	
15,100.00	90.97	271.42	6,152.46	-391.59	-8,076.65	8,064.47	0.00	0.00	0.00	
15,200.00	90.97	271.42	6,150.77	-389.11	-8,176.61	8,164.45	0.00	0.00	0.00	
15,300.00	90.97	271.42	6,149.07	-386.63	-8,276.56	8,264.44	0.00	0.00	0.00	
15,400.00	90.97	271.42	6,147.38	-384.16	-8,376.52	8,364.42	0.00	0.00	0.00	
15,500.00	90.97	271.42	6,145.69	-381.68	-8,476.47	8,464.41	0.00	0.00	0.00	
15,600.00	90.97	271.42	6,143.99	-379.20	-8,576.43	8,564.40	0.00	0.00	0.00	
15,700.00	90.97	271.42	6,142.30	-376.73	-8,676.38	8,664.38	0.00	0.00	0.00	
15,800.00	90.97	271.42	6,140.61	-374.25	-8,776.34	8,764.37	0.00	0.00	0.00	
15,900.00	90.97	271.42	6,138.91	-371.77	-8,876.29	8,864.35	0.00	0.00	0.00	
16,000.00	90.97	271.42	6,137.22	-369.30	-8,976.25	8,964.34	0.00	0.00	0.00	
16,100.00	90.97	271.42	6,135.53	-366.82	-9,076.20	9,064.32	0.00	0.00	0.00	
16,200.00	90.97	271.42	6,133.84	-364.35	-9,176.16	9,164.31	0.00	0.00	0.00	
16,300.00	90.97	271.42	6,132.14	-361.87	-9,276.11	9,264.30	0.00	0.00	0.00	
16,400.00	90.97	271.42	6,130.45	-359.39	-9,376.07	9,364.28	0.00	0.00	0.00	
16,500.00	90.97	271.42	6,128.76	-356.92	-9,476.02	9,464.27	0.00	0.00	0.00	
16,600.00	90.97	271.42	6,127.06	-354.44	-9,575.98	9,564.25	0.00	0.00	0.00	
16,700.00	90.97	271.42	6,125.37	-351.96	-9,675.93	9,664.24	0.00	0.00	0.00	
16,800.00	90.97	271.42	6,123.68	-349.49	-9,775.89	9,764.22	0.00	0.00	0.00	
16,900.00	90.97	271.42	6,121.99	-347.01	-9,875.84	9,864.21	0.00	0.00	0.00	
17,000.00	90.97	271.42	6,120.29	-344.53	-9,975.80	9,964.20	0.00	0.00	0.00	
17,100.00	90.97	271.42	6,118.60	-342.06	-10,075.75	10,064.18	0.00	0.00	0.00	
17,102.25	90.97	271.42	6,118.56	-342.00	-10,078.00	10,066.43	0.00	0.00	0.00	
TD @ 17102.25' MD										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
BHL - Jockey Fed Com - hit/miss target - Shape - Point	0.00	0.00	6,118.56	-342.00	-10,078.00	675,751.00	559,331.00	32° 51' 27.536 N	104° 16' 29.048 W	
FTP - Jockey Fed Com - plan misses target center by 0.05usft at 6765.60usft MD (6293.55 TVD, -598.00 N, 254.00 E) - Point	0.00	0.00	6,293.50	-598.00	254.00	675,495.00	569,663.00	32° 51' 24.930 N	104° 14' 27.921 W	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,200.00	1,200.00	0.00	0.00	BUILD 2° DLG	
2,000.00	1,989.64	-65.56	89.54	HOLD 16° INC, 126.21° AZM	
4,955.89	4,831.03	-546.87	746.94	DROP 2° DLG	
5,755.89	5,620.67	-612.43	836.48	HOLD 0° INC, 0° AZM	
5,855.90	5,720.68	-612.43	836.48	BUILD 10° DLG	
6,765.60	6,293.55	-598.00	254.00	LAND 90.97° INC, 271.42° AZM	
17,102.25	6,118.56	-342.00	-10,078.00	TD @ 17102.25' MD	



## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	<b>Mr. NM</b>
<b>LEASE NO.:</b>	<b>NMNM141396</b>
<b>LOCATION:</b>	Section 2, T.17 S., R.27 E., NMPM
<b>COUNTY:</b>	Eddy County, New Mexico

<b>WELL NAME &amp; NO.:</b>	Jockey Fed Com 1H
<b>SURFACE HOLE FOOTAGE:</b>	985'/S & 385'/E
<b>BOTTOM HOLE FOOTAGE:</b>	388'/S & 100'/W

COA

H2S	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input type="radio"/> Low	<input type="radio"/> Medium	<input checked="" type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input type="checkbox"/> Fluid Filled	<input type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit

### A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

### B. CASING

1. The **10-3/4** inch surface casing shall be set at approximately **500** feet (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8**

- hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:
- Cement to surface. If cement does not circulate see B.1.a, c-d above.
- Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**
- ❖ In High Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
3. The minimum required fill of cement behind the **5-1/2** inch production casing is: Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

### C. PRESSURE CONTROL

1. **Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).**
2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** psi.
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
  - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

**D. SPECIAL REQUIREMENT (S)****Communitization Agreement**

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

**GENERAL REQUIREMENTS**

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

☒ Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,  
(575) 361-2822

☒ Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)  
689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig

- Notify the BLM when moving in and removing the Spudder Rig.
  - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
  - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
  3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

**B. PRESSURE CONTROL**

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

- a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
  - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
  - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
  - d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE.

If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

#### C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

#### D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

**ZS012523**

MR NM Operating, LLC

## Hydrogen Sulfide Plan Summary

- A. All personnel shall receive proper H<sub>2</sub>S training in accordance with Onshore Order III.C.3.a
- B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible by location personnel.
- C. Required Emergency Equipment:
  - Well Control Equipment
    - Flare line 150' from wellhead to be ignited by flare gun or remote igniter
    - Choke manifold with a remotely operated choke
    - Mud/Gas Separator
  - Protective Equipment for Essential Personnel
    - Breathing Apparatus:
      - Rescue Packs (SCBA) – 1 unit shall be placed at each breathing area, 2 shall be stored in a safety trailer.
      - Work/Escapes Packs – 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity
      - Emergency Escape Packs – 4 packs shall be stored in the doghouse for emergency evacuation
    - Auxiliary Rescue Equipment
      - Stretcher
      - Two OSHA full body harnesses
      - 100' of 5/8" OSHA approved rope
      - 1 – 20# Class ABC fire extinguisher
  - H<sub>2</sub>S Detection and Monitoring Equipment
    - The stationary detector with three sensors will be placed in the upper dog house if equipped, set to visually alarm @ 10 ppm and audible @ 14 ppm. Calibrate a minimum of every 30 days or as needed. The sensors will be placed in the following places: Rig floor / Bell Nipple / End of flowline or where wellbore fluid is being discharged
  - Visual Warning Systems



- One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site
- A colored condition flag will be on display, reflecting the current condition at the site at the time
- Two wind socks will be placed in strategic locations, visible from all angles
- Mud Program
  - The mud program will be designed to minimize the volume of H<sub>2</sub>S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H<sub>2</sub>S bearing zones
- Metallurgy
  - All drill strings, casings, tubing, wellhead, blowout preventer, drilling spools, kill lines, choke manifolds, and valves shall be suitable for H<sub>2</sub>S service
- Communication
  - Communication will be via cell phones and land lines where available

## LEGEND

———— TOWNSHIP LINE  
 - - - - - SECTION LINE

## MR NM OPERATING LLC.

SECTION 2, TOWNSHIP 17-S, RANGE 27-E, N.M.P.M.  
 EDDY COUNTY, NEW MEXICO

DETAIL VIEW  
 SCALE: 1" = 100'

flare line (straight)  
 & flare >150'  
 from well head

warning signs  
 & windsock

highest ground  
 to northeast

PRIMARY safety briefing area  
 >150' from well head &  
 egress (exit) route

windsocks on  
 rig floor & at  
 mud tanks

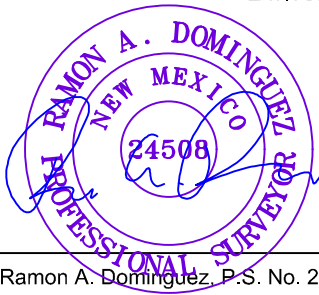
CENTER OF PAD  
 X=569359  
 Y=676118  
 LAT.: N 32.8586370  
 LONG.: W 104.2420780

prevailing winds  
 blow from south

LEASE NAME & WELL NO.: JOCKEY FEDERAL COM 1H

1H LATITUDE N 32.8585682 1H LONGITUDE W 104.2419152

CENTER OF PAD IS 1010' FSL & 436' FEL



Ramon A. Dominguez, P.S. No. 24508

MAY 23, 2022

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET.

THIS PROPOSED PAD SITE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MR NM OPERATING LLC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

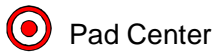
ORIGINAL DOCUMENT SIZE: 8.5" X 11"



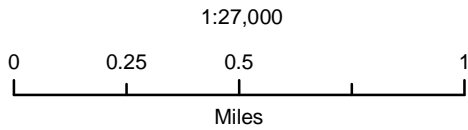
# MR NM Operating, LLC

Jockey Pad  
H2S Contingency Plan:  
Radius Map

Section 2, Township 17S, Range 27E  
Eddy County, New Mexico



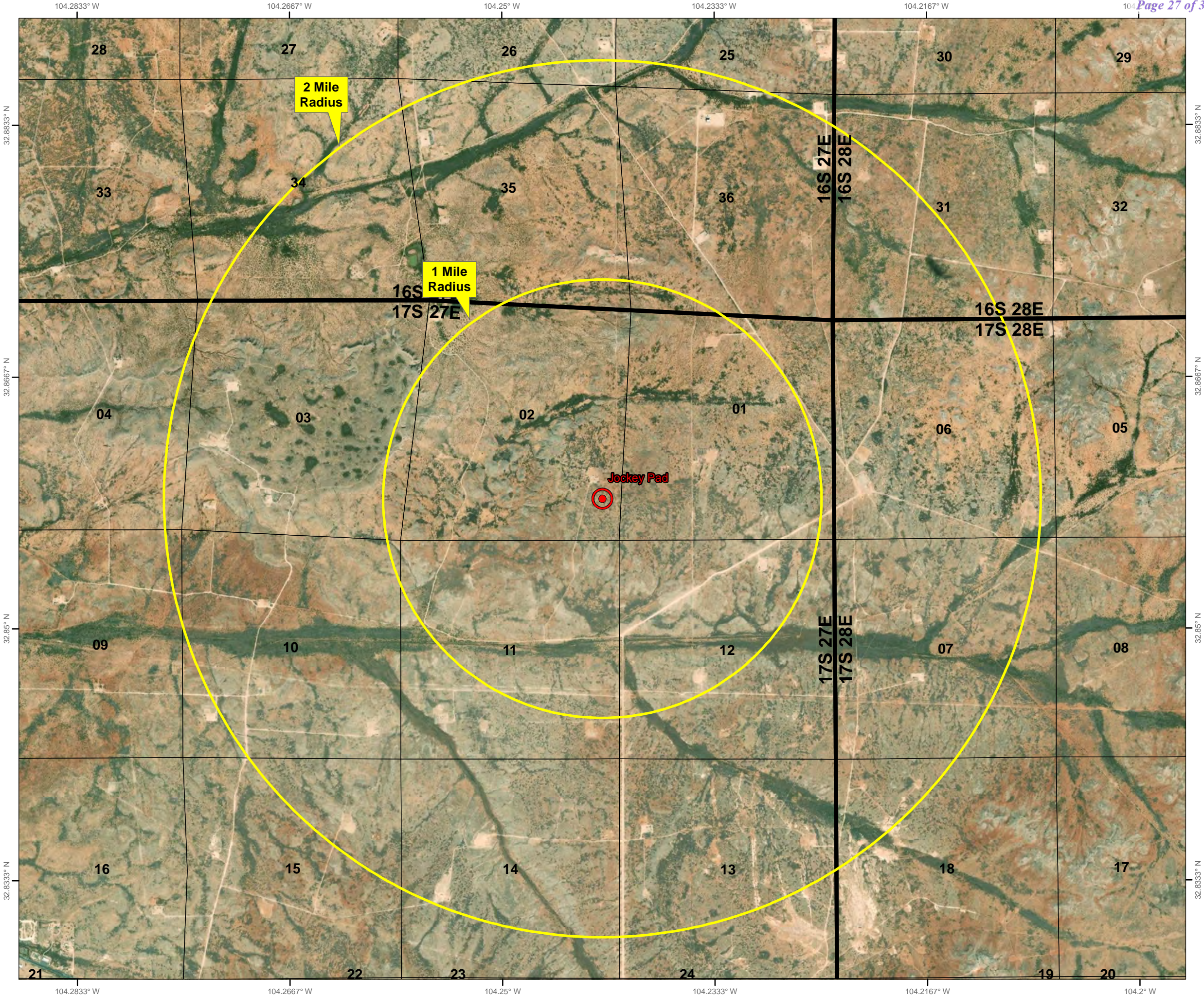
Pad Center



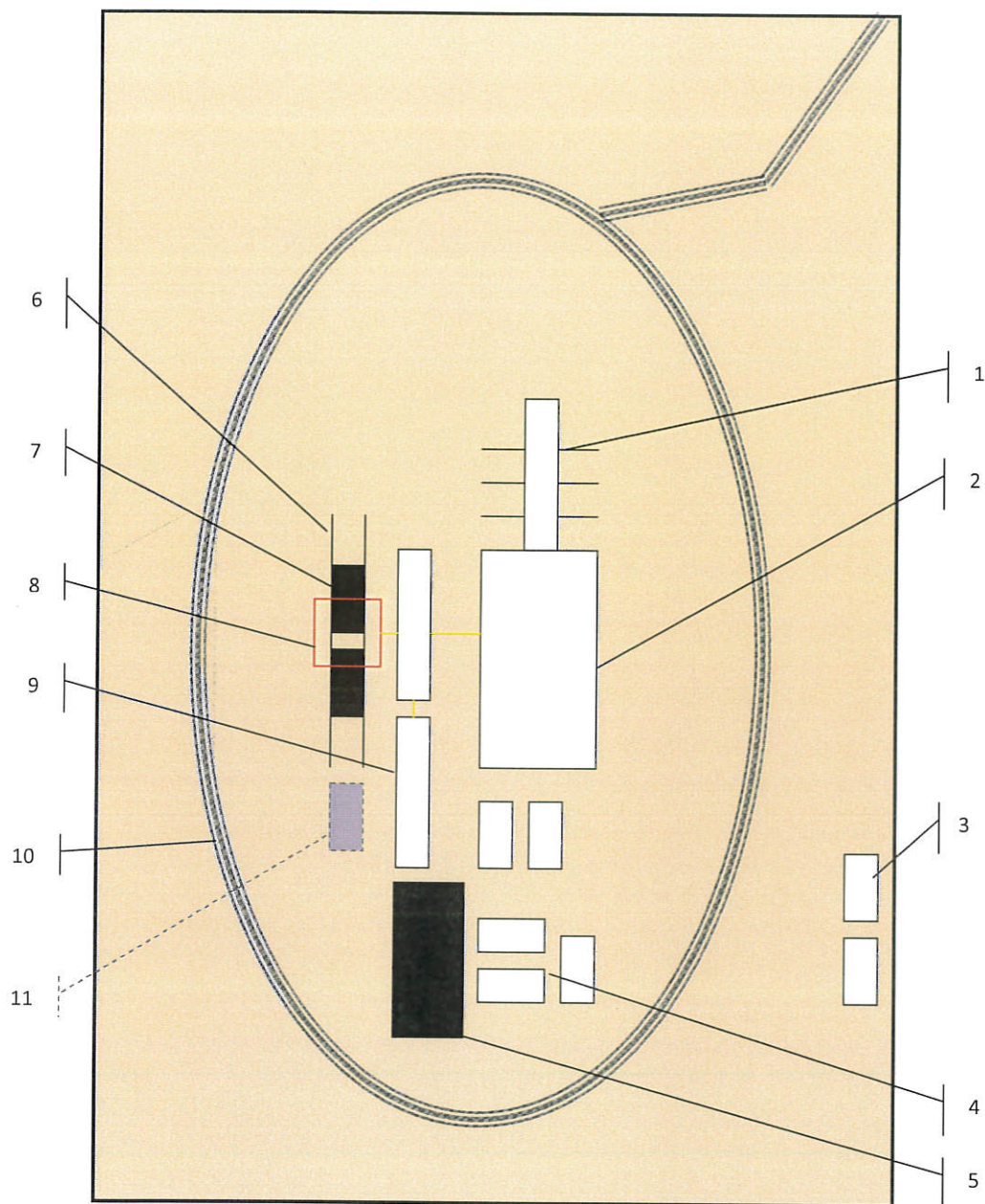
NAD 1983 New Mexico State Plane East  
FIPS 3001 Feet



Prepared by Permits West, Inc., August 23, 2022  
for MR NM Operating, LLC







Schematic Closed Loop Drilling Rig\*

1. Pipe Rack
2. Drill Rig
3. House Trailers/ Offices
4. Generator/Fuel/Storage
5. Overflow-Frac Tank
6. Skids
7. Roll Offs
8. Hopper or Centrifuge
9. Mud Tanks
10. Loop Drive
11. Generator (only for use with centrifuge)

\*Not drawn to scale: Closed loop system requires at least 30 feet beyond mud tanks. Ideally 60 feet would be available

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Above: Centrifugal Closed Loop System



Closed Loop Drilling System: Mud tanks to right (1)  
 Hopper in air to settle out solids (2)  
 Water return pipe (3)  
 Shaker between hopper and mud tanks (4)  
 Roll offs on skids (5)

#### Flow Chart for Drilling Fluids and Solids



Photos Courtesy of Gandy Corporation Oil  
 Field Service

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**District II**

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**District III**

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**District IV**

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

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

CONDITIONS

Action 239070

**CONDITIONS**

Operator: MR NM Operating LLC 5950 Berkshire Lane Dallas, TX 75225	OGRID: 330506
	Action Number: 239070
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

**CONDITIONS**

Created By	Condition	Condition Date
ward.rikala	Notify OCD 24 hours prior to casing & cement	7/14/2023
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	7/14/2023
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	7/14/2023
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	7/14/2023
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	7/14/2023