Form 3160-3 FORM APPROVED OMB No. 1004-0137 (June 2015) Expires: January 31, 2018 **UNITED STATES** 5. Lease Serial No. DEPARTMENT OF THE INTERIOR NMNM141396 BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. ✓ DRILL REENTER 1a. Type of work: 1b. Type of Well: ✓ Oil Well Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing ✓ Single Zone Multiple Zone JOCKEY FEDERAL COM 2H 9. API Well No. 30-015-53972 2. Name of Operator MR NM OPERATING LLC 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory 5950 BERKSHIRE LANE, SUITE 1000, DALLAS, TX 7522 (469) 906-2004 |Hart Canyon; Abo 97450 4. Location of Well (Report location clearly and in accordance with any State requirements.*) 11. Sec., T. R. M. or Blk. and Survey or Area SEC 2/T17S/R27E/NMP At surface SESE / 1015 FSL / 386 FEL / LAT 32.8586506 / LONG -104.2419152 At proposed prod. zone NWSW / 1604 FSL / 100 FWL / LAT 32.8609845 / LONG -104.2744595 14. Distance in miles and direction from nearest town or post office* 12. County or Parish 13 State **EDDY** NM 9 miles 15. Distance from proposed* 16. No of acres in lease 17. Spacing Unit dedicated to this well 386 feet location to nearest property or lease line, ft. 640.0 (Also to nearest drig. unit line, if any) 18. Distance from proposed location* 19. Proposed Depth 20. BLM/BIA Bond No. in file to nearest well, drilling, completed, 30 feet 6121 feet / 17069 feet FED: NMB002039 applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 3493 feet 12/01/2022 30 days 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. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above) 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. 6. Such other site specific information and/or plans as may be requested by the SUPO must be filed with the appropriate Forest Service Office). 25. Signature Name (Printed/Typed) Date (Electronic Submission) BRIAN WOOD / Ph: (469) 906-2004 08/31/2022 Title President Approved by (Signature) Date Name (Printed/Typed) (Electronic Submission) CODY LAYTON / Ph: (575) 234-5959 07/06/2023 Title Office Assistant Field Manager Lands & Minerals Carlsbad Field Office 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.



<u>District I</u> 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 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 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

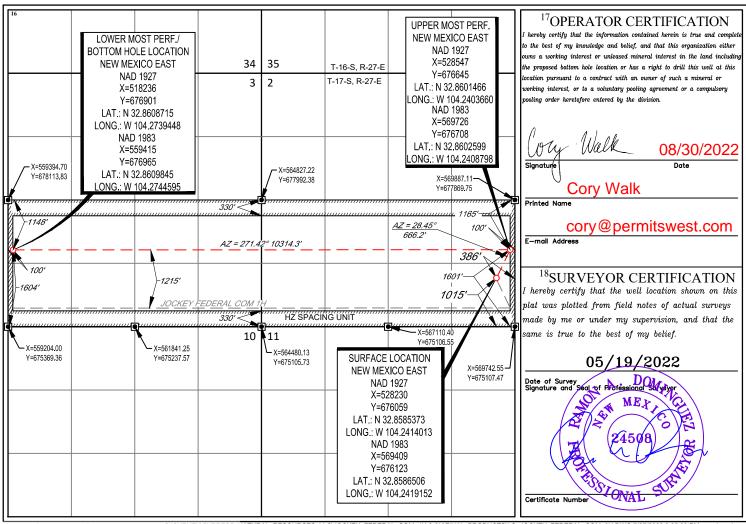
WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015- 53972	² Pool Code 98312	³ Pool Name Hart Canyon: Abo 97450	
⁴ Property Code	⁵ Pro	operty Name	⁶ Well Number
334518	JOCKEY	FEDERAL COM	2H
⁷ OGRID No.	⁸ Op	erator Name	⁹ Elevation
330506	MR NM O	PERATING LLC.	3493'
	10 Surf	ace Location	

Surface Location

UL or lot no.	Section 2	Township 17-S	27-E	Lot Idn —	Feet from the 1015'	SOUTH	Feet from the 386'	EAST	EDDY
	•		11]	Bottom Ho	le Location If I	Different From Su	rface		,
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	3	17-S	30-E	-	1604'	SOUTH	100'	WEST	EDDY
12Dedicated Acres	¹³ Joint or l	nfill 14Co	nsolidation Co	de ¹⁵ Ord	er No.			-	
640.00									

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.



Released to Imaging: 7/14/2023 3.55.09 PM NATURAL_RESOURCES_LLCIJOCKEY_FEDERAL_COM_1H & 2HIFINAL_PRODUCTSILO_JOCKEY_FEDERAL_COM_2H.DWG 7/27/2022 2:25:39 PM acardona-



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

Drilling Plan Data Report

07/06/2023

APD ID: 10400087817

Submission Date: 08/31/2022

Highlighted data reflects the most recent changes

Operator Name: MR NM OPERATING LLC

Well Number: 2H

Well Name: JOCKEY FEDERAL COM

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
9119945	QUATERNARY	3493	0	0	ANHYDRITE, OTHER, SALT : Mixed Clastics	NONE	N
9119946	YATES	3244	249	249	ANHYDRITE, OTHER : Dolomitic Anhydrite	USEABLE WATER	N
9119947	SEVEN RIVERS	3204	289	289	ANHYDRITE, DOLOMITE	NONE	N
9119948	QUEEN	2684	809	809	SANDSTONE	NATURAL GAS, OIL	N
9119949	GRAYBURG	2204	1289	1289	ANHYDRITE, DOLOMITE, SANDSTONE, SHALE	NATURAL GAS, OIL	N
9119955	SAN ANDRES	1844	1649	1747	ANHYDRITE, DOLOMITE	NATURAL GAS, OIL	N
9119950	GLORIETA	434	3059	3115	OTHER : Sandy Dolomite	NATURAL GAS, OIL	N
9119951	PADDOCK	394	3099	3160	OTHER, SANDSTONE : Anhydritic Dolomite	NATURAL GAS, OIL	N
9119952	TUBB	-891	4384	4495	OTHER, SANDSTONE : Anhydritic Dolomite	NATURAL GAS, OIL	N
9119953	DRINKARD	-1076	4569	4587	OTHER, SANDSTONE : Anhydritic Dolomite	NATURAL GAS, OIL	N
9119954	ABO	-1616	5109	5254	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.

Well Name: JOCKEY FEDERAL COM Well Number: 2H

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_20220831135813.pdf

BOP Diagram Attachment:

BOP_3k_20220831135822.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	1.12 5	1.25	DRY	1.8	DRY	1.8
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	1752	0	1747	3493	1746	1752	J-55	40	LT&C	1.12 5	1.25	DRY	1.8	DRY	1.8
3	PRODUCTI ON	8.75	5.5	NEW	API	N	0	17069	0	6121	3493	-2628	17069	P- 110	20	BUTT	1.12 5	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_2H_Casing_Design_Assumptions_20220831135901.pdf

Well Name: JOCKEY FEDERAL COM Well Number: 2H

Casing Attachments

Casing ID: 2

String

INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

 ${\sf Jockey_2H_Casing_Design_Assumptions_20220831135929.pdf}$

Casing ID: 3

String

PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Jockey_2H_Casing_Design_Assumptions_20220831140008.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Тор МD	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	1402	347	2.17	12.5	753	100	35/65 Poz/C	5% Salt + 5% Strength Enhancer + 4% Bentonite
INTERMEDIATE	Tail		1402	1752	166	1.32	14.8	219	100	C Neat	Neat
PRODUCTION	Lead		1252	5650	521	2.81	11.5	1464	35	50/50 Poz/C	10% Bentonite + 5% Salt

Well Name: JOCKEY FEDERAL COM Well Number: 2H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Tail		5650	1706 9	2801	1.39	14	3893	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)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	500	OTHER : Fresh Water	8.6	8.8							
500	1752	OTHER : Cut Brine	8.8	9.4							
1752	1706 9	OTHER : Cut Brine	8.8	9.4							

Well Name: JOCKEY FEDERAL COM Well Number: 2H

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 geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

Jockey_H2S_Contingency_Plan_20220831140428.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Jockey_2H_Horizontal_Plan_20220831140443.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_2H_Drill_Plan_20220831140919.pdf

CoFlex_Certs_3k_20220831140929.pdf

Jockey_2H_Anticollision_Report_20220831140937.pdf

Wellhead_Diagram_3_String_RDC_20220831140946.pdf

Well Name: JOCKEY FEDERAL COM Well Number: 2H

Other Variance attachment:

MR NM OPERATING, LLC.

Eddy County, NM (NAD 83) SEC 2, T-17-S, R-27-E JOCKEY FEDERAL COM 2H

Original Hole

PRELIM #0 (08.05.22)

Standard Planning Report

05 August, 2022

Page 10 of 30
Total Azimuth to Grid North
True North: -0.05° Received by OCD: 7/12/2023 1:05:19 PM WELL DETAILS: JOCKEY FEDERAL COM 2H Т М 18' KB @ 3511.00usft Project: Eddy County, NM (NAD 83) Site: SEC 2, T-17-S, R-27-E Well: JOCKEY FEDERAL COM 2H Magnetic North: 6.86 Ground Level: 3493.00 Magnetic Field Strength: 47666.0nT Dip Angle: 60.43° Date: 8/5/2022 Model: HRGM +N/-S +E/-W Northing Easting Latittude Longitude Wellbore: Original Hole 676123.00 569409.00 32° 51' 31.146 N 104° 14' 30.892 W 0.00 0.00 PRELIM #0 (08.05.22) US State Plane 1983 New Mexico Eastern Zone SECTION DETAILS Azi 0.00 TVD +N/-S +E/-W Dleg 0.00 TFace 0.00 VSect 0.00 MD Annotation 0.00 0.00 0.00 0.00 0.00 BUILD 2° DLG HOLD 16° INC, 57.32° AZM 1123.50 0.00 0.00 1123.50 0.00 0.00 0.00 0.00 0.00 1923.33 16.00 57.32 1912.98 59.89 93.37 2.00 57.32 -91.85 4954.10 16.00 57.32 4826.39 510.83 796.41 0.00 0.00 -783.41 DROP 2° DLG 5753.93 0.00 0.00 5615.87 570.72 889.78 2.00 180.00 -875.26 HOLD 0° INC, 0° AZM BUILD 10° DLG 5853.93 0.00 0.00 5715.87 570.72 889.78 0.00 0.00 -875.26 6763 23 90.93 271.43 6288 76 585 23 307.70 10.00 271 43 -293 00 LAND 90.93° INC, 271.43° AZM 271.43 10011.90 17069.49 90.93 6121.48 842.00 -9994.00 0.00 0.00 TD @ 17069.49' MD DESIGN TARGET DETAILS -6000 Name BHL - Jockey Fed Com 2H +N/-S 842.00 +E/-W Northing 676965.00 Easting 559415.00 Latitude 32° 51' 39.548 N Longitude 104° 16' 28.055 W -9994.00 FTP - Jockey Fed Com 2H 585.00 317.00 676708.00 569726.00 32° 51' 36.932 N 104° 14' 27.169 W -5000 -4000 -3000 nsft/in) -2000 Depth (1700 Op 1000 True Vertical 0 3000 1500 1000 BUILD 2° DLG HOLD 16° INC, 57.32° 2000 0 3000 4000 DROP 2° DLG HOLD 0° INC, 0° AZM 5000 BUILD 10° DLG TD @ 17069.49' MD LAND 90.93° INC, 271.43° AZM 6000

-1000

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2000

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Vertical Section at 271.43° (1700 usft/in)

6000

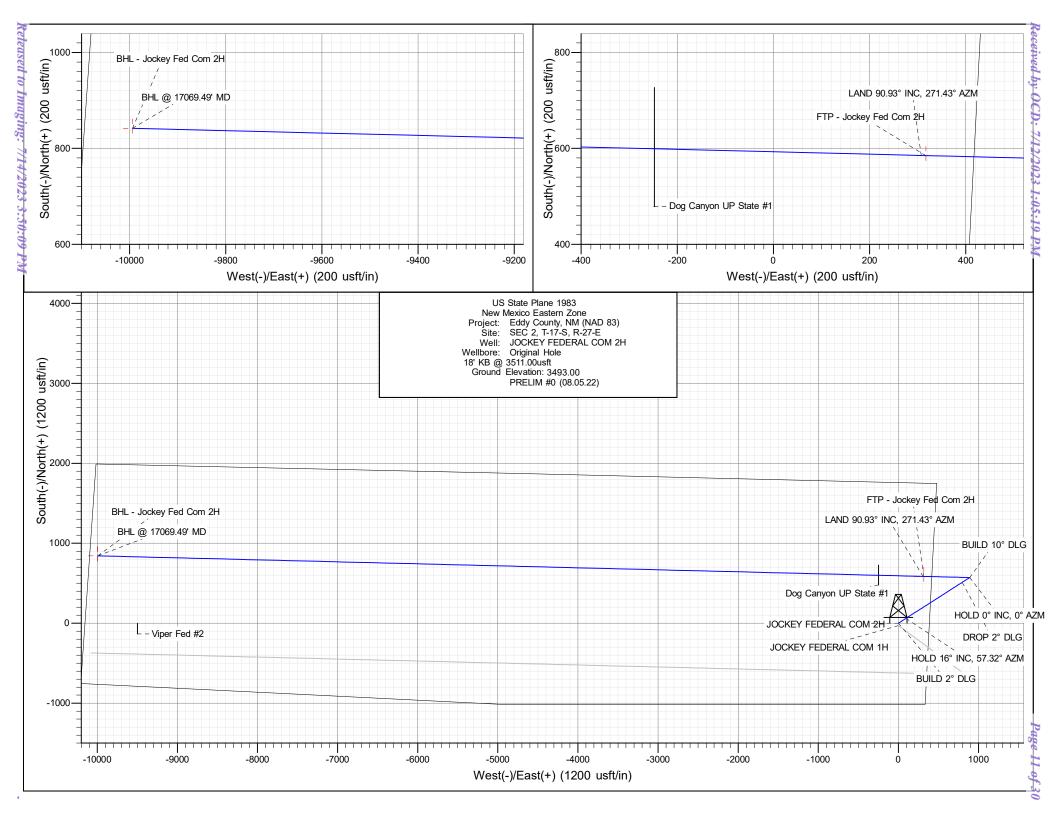
7000

8000

9000

10000

11000



USA EDM 5000 Multi Users DB Database: Company: MR NM OPERATING, LLC. Project: Eddy County, NM (NAD 83) Site: SEC 2, T-17-S, R-27-E Well:

JOCKEY FEDERAL COM 2H Original Hole

PRELIM #0 (08.05.22)

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: **Survey Calculation Method:**

Well JOCKEY FEDERAL COM 2H

18' KB @ 3511.00usft 18' KB @ 3511.00usft

Grid Minimum Curvature

Project Eddy County, NM (NAD 83)

Wellbore:

Design:

US State Plane 1983 Map System: North American Datum 1983 Geo Datum: New Mexico Eastern Zone Map Zone:

System Datum: Mean Sea Level

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

Northing: 678,447.00 usft Site Position: Latitude: 32° 51' 54.174 N From: Мар 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 2H **Well Position** +N/-S -2,324.00 usft Northing: 676,123.00 usft Latitude: 32° 51' 31.146 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) 47,665.95679800 **HRGM** 8/5/2022 6.91 60.43

Design PRELIM #0 (08.05.22) Audit Notes: Version: Phase: PLAN Tie On Depth: 0.00 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 0.00 0.00 0.00 271.43

lan 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	
1,123.50	0.00	0.00	1,123.50	0.00	0.00	0.00	0.00	0.00	0.00	
1,923.33	16.00	57.32	1,912.98	59.89	93.37	2.00	2.00	0.00	57.32	
4,954.10	16.00	57.32	4,826.39	510.83	796.41	0.00	0.00	0.00	0.00	
5,753.93	0.00	0.00	5,615.87	570.72	889.78	2.00	-2.00	0.00	180.00	
5,853.93	0.00	0.00	5,715.87	570.72	889.78	0.00	0.00	0.00	0.00	
6,763.23	90.93	271.43	6,288.76	585.23	307.70	10.00	10.00	0.00	271.43	
17,069.49	90.93	271.43	6,121.48	842.00	-9,994.00	0.00	0.00	0.00	0.00	

Database: USA EDM 5000 Multi Users DB Company: MR NM OPERATING, LLC.
Project: Eddy County, NM (NAD 83)
Site: SEC 2, T-17-S, R-27-E
Well: JOCKEY FEDERAL COM 2H

Wellbore: Original Hole

Design: PRELIM #0 (08.05.22)

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well JOCKEY FEDERAL COM 2H

18' KB @ 3511.00usft 18' KB @ 3511.00usft

Grid Minimum Curvature

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 1,100.00 1,123.50 BUILD 2° DL	0.00 0.00 0.00	0.00 0.00 0.00	1,000.00 1,100.00 1,123.50	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
1,200.00	1.53	57.32	1,199.99	0.55	0.86	-0.85	2.00	2.00	0.00
1,300.00	3.53	57.32	1,299.89	2.93	4.58	-4.50	2.00	2.00	0.00
1,400.00	5.53	57.32	1,399.57	7.20	11.22	-11.04	2.00	2.00	0.00
1,500.00	7.53	57.32	1,498.92	13.34	20.79	-20.46	2.00	2.00	0.00
1,600.00	9.53	57.32	1,597.81	21.35	33.28	-32.74	2.00	2.00	0.00
1,700.00	11.53	57.32	1,696.12	31.21	48.66	-47.87	2.00	2.00	0.00
1,800.00	13.53	57.32	1,793.73	42.92	66.92	-65.83	2.00	2.00	0.00
1,900.00	15.53	57.32	1,890.53	56.47	88.04	-86.60	2.00	2.00	0.00
1,923.33	16.00	57.32	1,912.98	59.89	93.37	-91.85	2.00	2.00	0.00
	IC, 57.32° AZM	57.00	4 000 00	74.00	444.40	100.04	2.22	0.00	0.00
2,000.00	16.00	57.32	1,986.68	71.30	111.16	-109.34	0.00	0.00	0.00
2,100.00	16.00	57.32	2,082.81	86.18	134.35	-132.16	0.00	0.00	0.00
2,200.00	16.00	57.32	2,178.94	101.06	157.55	-154.98	0.00	0.00	0.00
2,300.00	16.00	57.32	2,275.06	115.93	180.75	-177.80	0.00	0.00	0.00
2,400.00	16.00	57.32	2,371.19	130.81	203.94	-200.62	0.00	0.00	0.00
2,500.00	16.00	57.32	2,467.32	145.69	227.14	-223.43	0.00	0.00	0.00
2,600.00	16.00	57.32	2,563.45	160.57	250.34	-246.25	0.00	0.00	0.00
2,700.00	16.00	57.32	2,659.57	175.45	273.53	-269.07	0.00	0.00	0.00
2,800.00	16.00	57.32	2,755.70	190.33	296.73	-291.89	0.00	0.00	0.00
2,900.00	16.00	57.32	2,851.83	205.21	319.93	-314.71	0.00	0.00	0.00
3,000.00	16.00	57.32	2,947.96	220.09	343.12	-337.52	0.00	0.00	0.00
3,100.00	16.00	57.32	3,044.09	234.96	366.32	-360.34	0.00	0.00	0.00
3,200.00	16.00	57.32	3,140.21	249.84	389.52	-383.16	0.00	0.00	0.00
3,300.00	16.00	57.32	3,236.34	264.72	412.71	-405.98	0.00	0.00	0.00
3,400.00	16.00	57.32	3,332.47	279.60	435.91	-428.80	0.00	0.00	0.00
3,500.00	16.00	57.32	3,428.60	294.48	459.11	-451.61	0.00	0.00	0.00
3,600.00	16.00	57.32	3,524.72	309.36	482.30	-474.43	0.00	0.00	0.00
3,700.00	16.00	57.32	3,620.85	324.24	505.50	-497.25	0.00	0.00	0.00
3,800.00	16.00	57.32	3,716.98	339.11	528.70	-520.07	0.00	0.00	0.00
3,900.00	16.00	57.32	3,813.11	353.99	551.89	-542.89	0.00	0.00	0.00
4,000.00	16.00	57.32	3,909.24	368.87	575.09	-565.70	0.00	0.00	0.00
4,100.00	16.00	57.32	4,005.36	383.75	598.29	-588.52	0.00	0.00	0.00
4,200.00	16.00	57.32	4,101.49	398.63	621.48	-611.34	0.00	0.00	0.00
4,300.00	16.00	57.32	4,197.62	413.51	644.68	-634.16	0.00	0.00	0.00
4,400.00	16.00	57.32	4,293.75	428.39	667.87	-656.98	0.00	0.00	0.00
4,500.00	16.00	57.32	4,389.87	443.26	691.07	-679.79	0.00	0.00	0.00
4,600.00	16.00	57.32	4,486.00	458.14	714.27	-702.61	0.00	0.00	0.00
4,700.00	16.00	57.32	4,582.13	473.02	737.46	-725.43	0.00	0.00	0.00
4,800.00	16.00	57.32	4,678.26	487.90	760.66	-748.25	0.00	0.00	0.00
4,900.00	16.00	57.32	4,774.39	502.78	783.86	-771.07	0.00	0.00	0.00

Database: USA EDM 5000 Multi Users DB Company: MR NM OPERATING, LLC.
Project: Eddy County, NM (NAD 83)
Site: SEC 2, T-17-S, R-27-E
Well: JOCKEY FEDERAL COM 2H

Wellbore: Original Hole

Design: PRELIM #0 (08.05.22)

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well JOCKEY FEDERAL COM 2H 18' KB @ 3511.00usft 18' KB @ 3511.00usft Grid Minimum Curvature

ed 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)
4,954.10	16.00	57.32	4,826.39	510.83	796.41	-783.41	0.00	0.00	0.00
DROP 2° DI									
5,000.00	15.08	57.32	4,870.61	517.47	806.76	-793.59	2.00	-2.00	0.00
5,100.00	13.08	57.32	4,967.60	530.60	827.23	-813.73	2.00	-2.00	0.00
5,200.00	11.08	57.32	5.065.39	541.90	844.84	-831.06	2.00	-2.00	0.00
5,300.00	9.08	57.32	5,163.84	551.34	859.57	-845.55	2.00	-2.00	0.00
5,400.00	7.08	57.32	5,262.84	558.93	871.40	-857.18	2.00	-2.00	0.00
5,500.00	5.08	57.32	5,362.27	564.65	880.31	-865.95	2.00	-2.00	0.00
5,600.00	3.08	57.32	5,462.01	568.49	886.30	-871.84	2.00	-2.00	0.00
5,700.00	1.08	57.32	5,561.94	570.45	889.35	-874.84	2.00	-2.00	0.00
5,753.93	0.00	0.00	5,615.87	570.72	889.78	-875.26	2.00	-2.00	0.00
HOLD 0° IN	C, 0° AZM								
5,800.00	0.00	0.00	5,661.94	570.72	889.78	-875.26	0.00	0.00	0.00
5,853.93	0.00	0.00	5,715.87	570.72	889.78	-875.26	0.00	0.00	0.00
BUILD 10°	DLG								
5,900.00	4.61	271.43	5,761.89	570.77	887.93	-873.41	10.00	10.00	0.00
6.000.00	14.61	271.43	5,860.36	571.18	871.27	-856.74	10.00	10.00	0.00
6,100.00	24.61	271.43	5,954.45	572.02	837.76	-823.23	10.00	10.00	0.00
6,200.00	34.61	271.43	6,041.28	573.25	788.44	-023.23 -773.89	10.00	10.00	0.00
6,300.00	44.61	271.43	6.118.23	573.23 574.83	724.79	-710.22	10.00	10.00	0.00
6,400.00	54.61	271.43	6,182.95	576.73	648.75	-634.15	10.00	10.00	0.00
6,500.00	64.61	271.43	6,233.47	578.87	562.62	-548.00	10.00	10.00	0.00
6,600.00	74.61	271.43	6,268.28	581.21	469.04	-454.39	10.00	10.00	0.00
6,700.00	84.61	271.43	6,286.29	583.65	370.84	-356.16	10.00	10.00	0.00
6,763.23	90.93	271.43	6,288.76	585.23	307.71	-293.01	10.00	10.00	0.00
LAND 90.93	3° INC, 271.43° AZ	ZM							
6,800.00	90.93	271.43	6,288.16	586.14	270.95	-256.24	0.00	0.00	0.00
6,900.00	90.93	271.43	6,286.54	588.64	171.00	-156.25	0.00	0.00	0.00
7,000.00	90.93	271.43	6,284.91	591.13	71.04	-56.27	0.00	0.00	0.00
7,100.00	90.93	271.43	6,283.29	593.62	-28.91	43.72	0.00	0.00	0.00
7,200.00	90.93	271.43	6,281.67	596.11	-128.87	143.71	0.00	0.00	0.00
7,300.00	90.93	271.43	6,280.04	598.60	-228.83	243.69	0.00	0.00	0.00
7,400.00	90.93	271.43	6,278.42	601.09	-328.78	343.68	0.00	0.00	0.00
7,500.00	90.93	271.43	6,276.80	603.58	-428.74 529.60	443.67	0.00	0.00	0.00
7,600.00	90.93	271.43	6,275.17	606.08	-528.69	543.65	0.00	0.00	0.00
7,700.00 7,800.00	90.93	271.43	6,273.55	608.57	-628.65 728.61	643.64	0.00	0.00	0.00
,	90.93	271.43	6,271.93	611.06	-728.61	743.63	0.00	0.00	0.00
7,900.00	90.93	271.43	6,270.30	613.55	-828.56	843.61	0.00	0.00	0.00
8,000.00	90.93	271.43	6,268.68	616.04	-928.52	943.60	0.00	0.00	0.00
8,100.00	90.93	271.43	6,267.06	618.53	-1,028.47	1,043.59	0.00	0.00	0.00
8,200.00	90.93	271.43	6,265.44	621.02	-1,128.43	1,143.58	0.00	0.00	0.00
8,300.00	90.93	271.43	6,263.81	623.52	-1,228.38	1,243.56	0.00	0.00	0.00
8,400.00	90.93	271.43	6,262.19	626.01	-1,328.34	1,343.55	0.00	0.00	0.00
8,500.00	90.93	271.43	6,260.57	628.50	-1,428.30	1,443.54	0.00	0.00	0.00
8,600.00	90.93	271.43	6,258.94	630.99	-1,528.25	1,543.52	0.00	0.00	0.00
8,700.00	90.93	271.43	6,257.32	633.48	-1,628.21	1,643.51	0.00	0.00	0.00
8,800.00	90.93	271.43	6,255.70	635.97	-1,728.16	1,743.50	0.00	0.00	0.00
8,900.00	90.93	271.43	6,254.07	638.46	-1,828.12	1,843.48	0.00	0.00	0.00
9,000.00	90.93	271.43	6,252.45	640.96	-1,828.12 -1,928.07	1,843.48	0.00	0.00	0.00
9,000.00	90.93	271.43	6,252.45	643.45	-1,926.07 -2,028.03	2,043.46	0.00	0.00	0.00
9,100.00	90.93	271.43	6,249.20	645.94	-2,026.03 -2,127.99	2,043.46	0.00	0.00	0.00
9,200.00	90.93	271.43	6,249.20	648.43	-2,127.99 -2,227.94	2,143.44	0.00	0.00	0.00
,									
9,400.00	90.93	271.43	6,245.96	650.92	-2,327.90	2,343.42	0.00	0.00	0.00

Database: USA EDM 5000 Multi Users DB Company: MR NM OPERATING, LLC.
Project: Eddy County, NM (NAD 83)
Site: SEC 2, T-17-S, R-27-E
Well: JOCKEY FEDERAL COM 2H

Wellbore: Original Hole

Design: PRELIM #0 (08.05.22)

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well JOCKEY FEDERAL COM 2H 18' KB @ 3511.00usft 18' KB @ 3511.00usft Grid Minimum Curvature

lanned 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)
9,500.00	90.93	271.43	6,244.34	653.41	-2,427.85	2,443.40	0.00	0.00	0.00
9,600.00	90.93	271.43	6,242.71	655.90	-2,527.81	2,543.39	0.00	0.00	0.00
9,700.00	90.93	271.43	6,241.09	658.40	-2,627.77	2,643.38	0.00	0.00	0.00
9,800.00	90.93	271.43	6,239.47	660.89	-2,727.72	2,743.36	0.00	0.00	0.00
9,900.00	90.93	271.43	6,237.84	663.38	-2,827.68	2,843.35	0.00	0.00	0.00
10,000.00	90.93	271.43	6,236.22	665.87	-2,927.63	2,943.34	0.00	0.00	0.00
10,100.00	90.93	271.43	6,234.60	668.36	-3,027.59	3,043.32	0.00	0.00	0.00
10,200.00	90.93	271.43	6,232.97	670.85	-3,127.54	3,143.31	0.00	0.00	0.00
10,300.00	90.93	271.43	6,231.35	673.34	-3,227.50	3,243.30	0.00	0.00	0.00
10,400.00	90.93	271.43	6,229.73	675.84	-3,327.46	3,343.29	0.00	0.00	0.00
10,500.00	90.93	271.43	6,228.10	678.33	-3,427.41	3,443.27	0.00	0.00	0.00
10,600.00	90.93	271.43	6,226.48	680.82	-3,527.37	3,543.26	0.00	0.00	0.00
10,700.00	90.93	271.43	6,224.86	683.31	-3,627.32	3,643.25	0.00	0.00	0.00
10,800.00	90.93	271.43	6,223.24	685.80	-3,727.28	3,743.23	0.00	0.00	0.00
10,900.00	90.93	271.43	6,221.61	688.29	-3,827.23	3,843.22	0.00	0.00	0.00
11,000.00	90.93	271.43	6,219.99	690.78	-3,927.19	3,943.21	0.00	0.00	0.00
11,100.00	90.93	271.43	6,218.37	693.28	-4,027.15	4,043.19	0.00	0.00	0.00
11,200.00	90.93	271.43	6,216.74	695.77	-4,127.10	4,143.18	0.00	0.00	0.00
11,300.00	90.93	271.43	6,215.12	698.26	-4,227.06	4,243.17	0.00	0.00	0.00
11,400.00	90.93	271.43	6,213.50	700.75	-4,327.01	4,343.15	0.00	0.00	0.00
11,500.00	90.93	271.43	6,211.87	703.24	-4,426.97	4,443.14	0.00	0.00	0.00
11,600.00	90.93	271.43	6,210.25	705.73	-4,526.93	4,543.13	0.00	0.00	0.00
11,700.00	90.93	271.43	6,208.63	708.22	-4,626.88	4,643.11	0.00	0.00	0.00
11,800.00	90.93	271.43	6,207.00	710.72	-4,726.84	4,743.10	0.00	0.00	0.00
11,900.00	90.93	271.43	6,205.38	713.21	-4,826.79	4,843.09	0.00	0.00	0.00
12,000.00	90.93	271.43	6,203.76	715.70	-4,926.75	4,943.07	0.00	0.00	0.00
12,100.00	90.93	271.43	6,202.14	718.19	-5,026.70	5,043.06	0.00	0.00	0.00
12,200.00	90.93	271.43	6,200.51	720.68	-5,126.66	5,143.05	0.00	0.00	0.00
12,300.00	90.93	271.43	6,198.89	723.17	-5,226.62	5,243.04	0.00	0.00	0.00
12,400.00	90.93	271.43	6,197.27	725.66	-5,326.57	5,343.02	0.00	0.00	0.00
12,500.00	90.93	271.43	6,195.64	728.16	-5,426.53	5,443.01	0.00	0.00	0.00
12,600.00	90.93	271.43	6,194.02	730.65	-5,526.48	5,543.00	0.00	0.00	0.00
12,700.00	90.93	271.43	6,192.40	733.14	-5,626.44	5,642.98	0.00	0.00	0.00
12,800.00	90.93	271.43	6,190.77	735.63	-5,726.39	5,742.97	0.00	0.00	0.00
12,900.00	90.93	271.43	6,189.15	738.12	-5,826.35	5,842.96	0.00	0.00	0.00
13,000.00	90.93	271.43	6,187.53	740.61	-5,926.31	5,942.94	0.00	0.00	0.00
13,100.00	90.93	271.43	6,185.90	743.10	-6,026.26	6,042.93	0.00	0.00	0.00
13,200.00	90.93	271.43	6,184.28	745.59	-6,126.22	6,142.92	0.00	0.00	0.00
13,300.00	90.93	271.43	6,182.66	748.09	-6,226.17	6,242.90	0.00	0.00	0.00
13,400.00	90.93	271.43	6,181.04	750.58	-6,326.13	6,342.89	0.00	0.00	0.00
13,500.00	90.93	271.43	6,179.41	753.07	-6,426.09	6,442.88	0.00	0.00	0.00
13,600.00	90.93	271.43	6,177.79	755.56	-6,526.04	6,542.86	0.00	0.00	0.00
13,700.00	90.93	271.43	6,176.17	758.05	-6,626.00	6,642.85	0.00	0.00	0.00
13,800.00	90.93	271.43	6,174.54	760.54	-6,725.95	6,742.84	0.00	0.00	0.00
13,900.00	90.93	271.43	6,172.92	763.03	-6,825.91	6,842.82	0.00	0.00	0.00
14,000.00	90.93	271.43	6,171.30	765.53	-6,925.86	6,942.81	0.00	0.00	0.00
14,100.00	90.93	271.43	6,169.67	768.02	-7,025.82	7,042.80	0.00	0.00	0.00
14,200.00	90.93	271.43	6,168.05	770.51	-7,125.78	7,142.78	0.00	0.00	0.00
14,300.00	90.93	271.43	6,166.43	773.00	-7,225.73	7,242.77	0.00	0.00	0.00
14,400.00	90.93	271.43	6,164.80	775.49	-7,325.69	7,342.76	0.00	0.00	0.00
14,500.00	90.93	271.43	6,163.18	777.98	-7,425.64	7,442.75	0.00	0.00	0.00
14,600.00	90.93	271.43	6,161.56	780.47	-7,525.60	7,542.73	0.00	0.00	0.00
14,700.00	90.93	271.43	6,159.94	782.97	-7,625.55	7,642.72	0.00	0.00	0.00
14,800.00	90.93	271.43	6,158.31	785.46	-7,725.51	7,742.71	0.00	0.00	0.00

Database: USA EDM 5000 Multi Users DB Company: MR NM OPERATING, LLC.
Project: Eddy County, NM (NAD 83)
Site: SEC 2, T-17-S, R-27-E
Well: JOCKEY FEDERAL COM 2H

Wellbore: Original Hole

Design: PRELIM #0 (08.05.22)

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Well JOCKEY FEDERAL COM 2H 18' KB @ 3511.00usft 18' KB @ 3511.00usft Grid Minimum Curvature

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)
14,900.00 15,000.00	90.93 90.93	271.43 271.43	6,156.69 6,155.07	787.95 790.44	-7,825.47 -7,925.42	7,842.69 7,942.68	0.00 0.00	0.00 0.00	0.00 0.00
15,100.00	90.93	271.43	6,153.44	792.93	-8,025.38	8,042.67	0.00	0.00	0.00
15,200.00	90.93	271.43	6,151.82	795.42	-8,125.33	8,142.65	0.00	0.00	0.00
15,300.00	90.93	271.43	6,150.20	797.91	-8,225.29	8,242.64	0.00	0.00	0.00
15,400.00	90.93	271.43	6,148.57	800.41	-8,325.24	8,342.63	0.00	0.00	0.00
15,500.00	90.93	271.43	6,146.95	802.90	-8,425.20	8,442.61	0.00	0.00	0.00
15,600.00	90.93	271.43	6,145.33	805.39	-8,525.16	8,542.60	0.00	0.00	0.00
15,700.00	90.93	271.43	6,143.70	807.88	-8,625.11	8,642.59	0.00	0.00	0.00
15,800.00	90.93	271.43	6,142.08	810.37	-8,725.07	8,742.57	0.00	0.00	0.00
15,900.00	90.93	271.43	6,140.46	812.86	-8,825.02	8,842.56	0.00	0.00	0.00
16,000.00	90.93	271.43	6,138.83	815.35	-8,924.98	8,942.55	0.00	0.00	0.00
16,100.00	90.93	271.43	6,137.21	817.85	-9,024.94	9,042.53	0.00	0.00	0.00
16,200.00	90.93	271.43	6,135.59	820.34	-9,124.89	9,142.52	0.00	0.00	0.00
16,300.00	90.93	271.43	6,133.97	822.83	-9,224.85	9,242.51	0.00	0.00	0.00
16,400.00	90.93	271.43	6,132.34	825.32	-9,324.80	9,342.50	0.00	0.00	0.00
16,500.00	90.93	271.43	6,130.72	827.81	-9,424.76	9,442.48	0.00	0.00	0.00
16,600.00	90.93	271.43	6,129.10	830.30	-9,524.71	9,542.47	0.00	0.00	0.00
16,700.00	90.93	271.43	6,127.47	832.79	-9,624.67	9,642.46	0.00	0.00	0.00
16,800.00	90.93	271.43	6,125.85	835.29	-9,724.63	9,742.44	0.00	0.00	0.00
16,900.00	90.93	271.43	6,124.23	837.78	-9,824.58	9,842.43	0.00	0.00	0.00
17,000.00	90.93	271.43	6,122.60	840.27	-9,924.54	9,942.42	0.00	0.00	0.00
17,069.49	90.93	271.43	6,121.48	842.00	-9,994.00	10,011.90	0.00	0.00	0.00
TD @ 17069.	49' MD								

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
BHL - Jockey Fed Com ; - plan misses target - Point		0.00 Pusft at 1706	6,121.50 9.49usft MD	842.00 (6121.48 TVD	-9,994.00), 842.00 N, -9	676,965.00 9994.00 E)	559,415.00	32° 51' 39.548 N	104° 16' 28.055 W
FTP - Jockey Fed Com 2 - plan misses target - Point		0.00 ousft at 6753	6,289.00 .95usft MD (585.00 6288.83 TVD,	317.00 585.00 N, 31	676,708.00 6.99 E)	569,726.00	32° 51' 36.932 N	104° 14' 27.169 W

Plan Annotations					
Measured Vertical		Local Coordinates			
Depth (usft)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
1,123.50	1.123.50	0.00	0.00	BUILD 2° DLG	
1,923.33	1,123.30	59.89	93.37	HOLD 16° INC, 57.32° AZM	
4,954.10	4,826.39	510.83	796.41	DROP 2° DLG	
5,753.93	5,615.87	570.72	889.78	HOLD 0° INC, 0° AZM	
5,853.93	5,715.87	570.72	889.78	BUILD 10° DLG	
6,763.23	6,288.76	585.23	307.71	LAND 90.93° INC, 271.43° AZM	
17,069.49	6,121.48	842.00	-9,994.00	TD @ 17069.49' MD	

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: Mr. NM

LEASE NO.: | NMNM141396

LOCATION: | Section 2, T.17 S., R.27 E., NMPM

COUNTY: Eddy County, New Mexico

WELL NAME & NO.: Jockey Fed Com 2H
SURFACE HOLE FOOTAGE: 1015'/S & 386'/E
BOTTOM HOLE FOOTAGE 1604'/S & 100'/W

COA

H2S	C Yes	• No	
Potash	None	© Secretary	© R-111-P
Cave/Karst Potential	C Low	© Medium	• High
Cave/Karst Potential	Critical		
Variance	O None	• Flex Hose	Other
Wellhead	Conventional	Multibowl	© Both
Other	☐4 String Area	☐ Capitan Reef	□WIPP
Other	☐ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☑ COM	□ 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 $\underline{8}$

- 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 CountyCall the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
- 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 2nd 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 intergrity 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 intergrity 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 H2S training an 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/Escape 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
 - ➤ H2S 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 H2S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H2S bearing zones

Metallurgy

 All drill strings, casings, tubing, wellhead, blowout preventer, drilling spools, kill lines, choke manifolds, and valves shall be suitable for H2S service

Communication

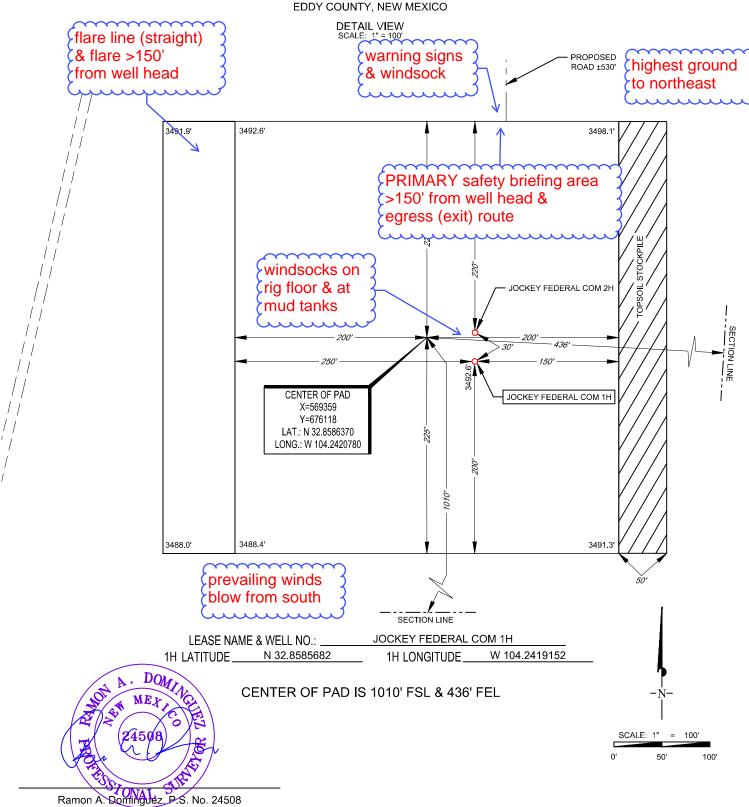
Communication will be via cell phones and land lines where available

LEGEND TOWNSHIP LINE

SECTION LINE

EXHIBIT 2B MR NM OPERATING LLC.

SECTION 2, TOWNSHIP 17-S, RANGE 27-E, N.M.P.M.



 $\frac{\text{MAY} 23,\,2022}{\text{ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET.$

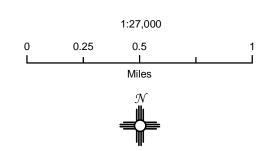
THIS PROPOSED PAD SITE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MR NM OPERATING LLC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS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

MR NM Operating, LLC

Jockey Pad H2S Contingency Plan: Radius Map

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



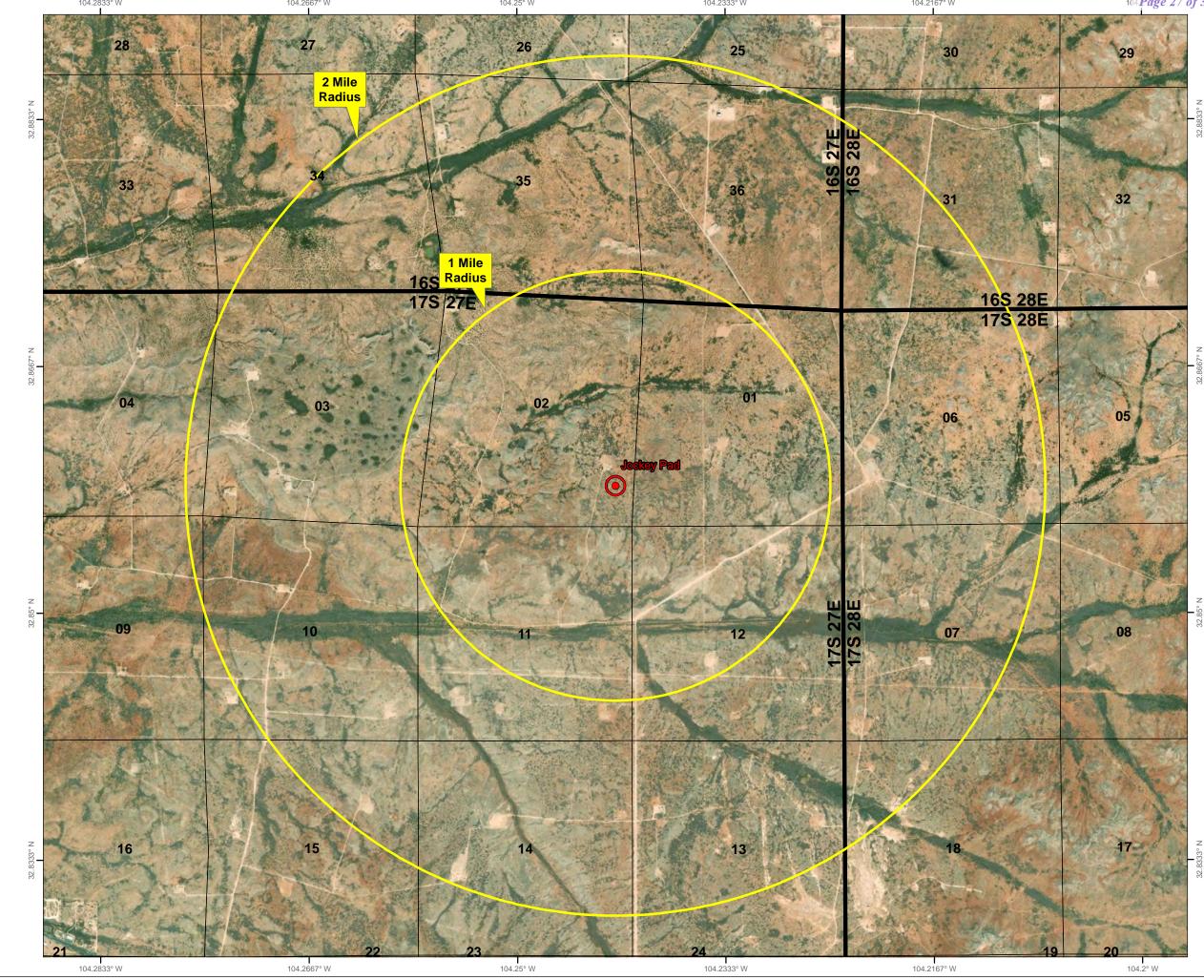


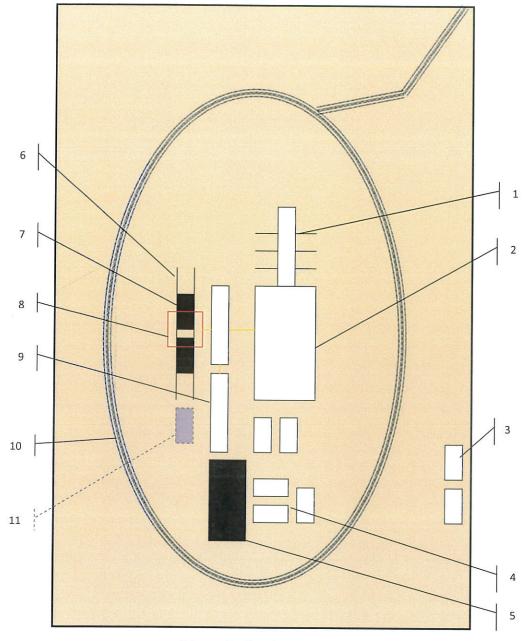
NAD 1983 New Mexico State Plane East FIPS 3001 Feet



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





Above: Centrifugal Closed Loop System



Closed Loop Drilling System: Mud tanks to right (1)

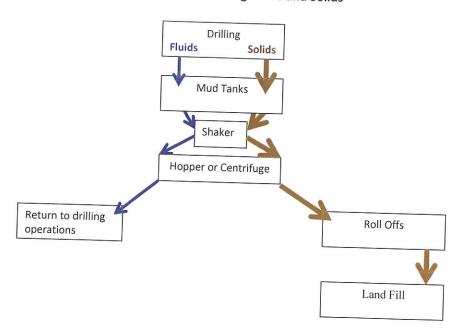
Hopper in air to settle out solids (2)

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



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

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 239075

CONDITIONS

Operator:	OGRID:
MR NM Operating LLC	330506
5950 Berkshire Lane	Action Number:
Dallas, TX 75225	239075
	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	7/13/2023
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	7/13/2023
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	7/13/2023
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	7/13/2023
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	7/13/2023