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

5. Lease Serial No.: NMLC029339B

6. If Indian, Allotee or Tribe Name:

1a. Type of work: ☑ DRILL ☐ REENTER

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☑ Single Zone ☐ Multiple Zone

7. If Unit or CA Agreement, Name and No.:

8. Lease Name and Well No.: PICARD FEDERAL COM 005H

2. Name of Operator: MR NM OPERATING LLC

9. API Well No.: 30-015-54293

3a. Address: 5950 BERKSHIRE LANE, SUITE 1000, DALLAS, TX 7522

3b. Phone No. *(include area code)*: (469) 906-2004

10. Field and Pool, or Exploratory: CEDAR LAKE/GLORIETA -YESO

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface: LOT 4 / 1002 FNL / 40 FWL / LAT 32.8679957 / LONG -103.916639

At proposed prod. zone: LOT 4 / 1230 FNL / 100 FWL / LAT 32.8673776 / LONG -103.9336422

11. Sec., T. R. M. or Blk. and Survey or Area: SEC 6/T17S/R31E/NMP

14. Distance in miles and direction from nearest town or post office*: 5 miles

12. County or Parish: EDDY

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any): 40 feet

16. No of acres in lease:

17. Spacing Unit dedicated to this well: 319.56

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: 30 feet

19. Proposed Depth: 4800 feet / 10535 feet

20. BLM/BIA Bond No. in file: FED: NMB002039

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3776 feet

22. Approximate date work will start*: 07/01/2023

23. Estimated duration: 60 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.
2. A Drilling Plan.
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).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)	BRIAN WOOD / Ph: (469) 906-2004	02/28/2023

Title: President

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	CODY LAYTON / Ph: (575) 234-5959	09/28/2023

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.

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 09/28/2023

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

[1]API Number	[2]Pool Code	[3]Pool Name
30-015-54293	96831	CEDAR LAKE; GLORIETA-YESO

[4]Property Code	[5]Property Name	[6]Well Number
332307	PICARD FEDERAL COM	5H

[7]OGRID No.	[8]Operator Name	[9]Elevation
330506	MR NM OPERATING LLC.	3776'

[10]Surface Location

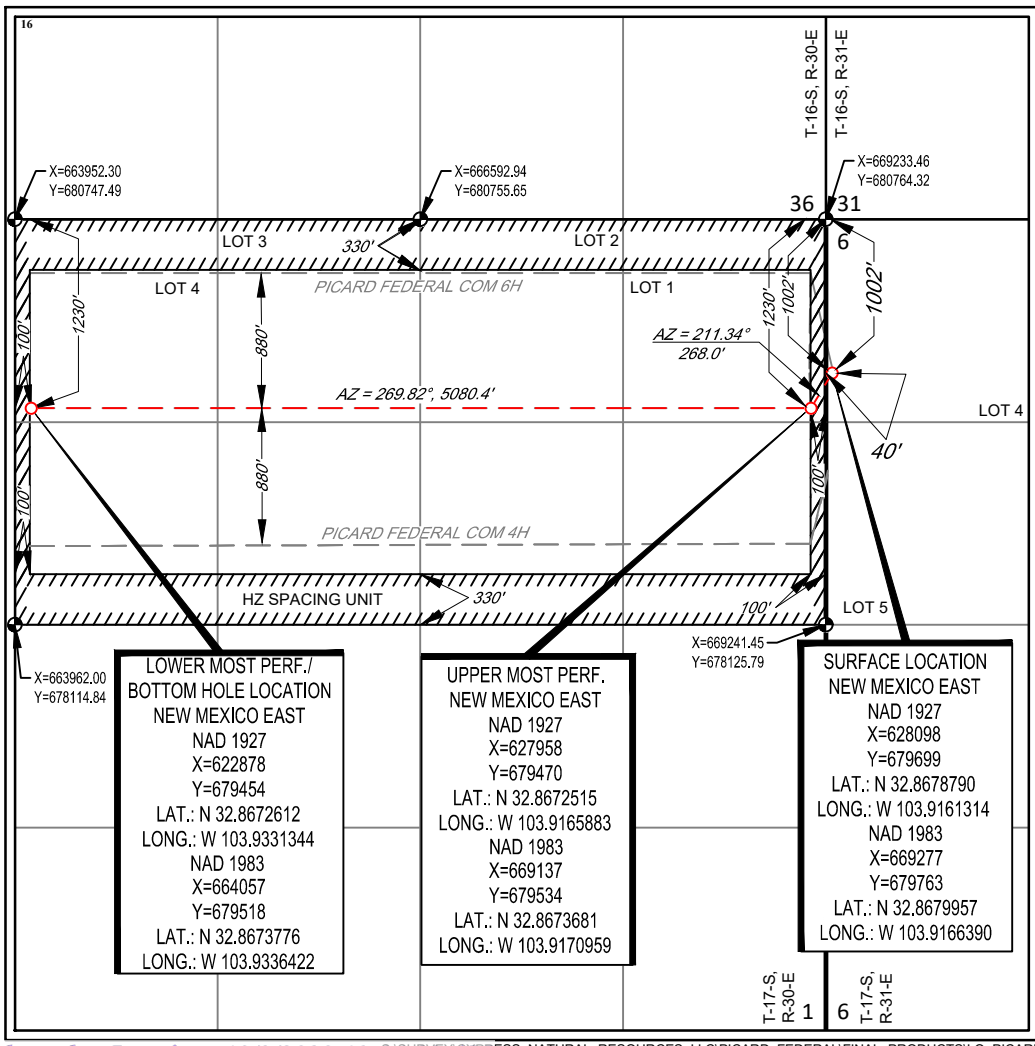
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	6	17-S	31-E	-	1002'	NORTH	40'	WEST	EDDY

[11]Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	1	17-S	30-E	-	1230'	NORTH	100'	WEST	EDDY

[12]Dedicated Acres	[13]Joint or Infill	[14]Consolidation Code	[15]Order No.
319.56			

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



[17]OPERATOR CERTIFICATION

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

Cory Walk — 2-17-2023
Signature — Date

Cory Walk
Printed Name

cory@permitswest.com
E-mail Address

[18]SURVEYOR CERTIFICATION

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

12/24/2022
Date of Survey
Signature and Seal of Professional Surveyor:

RAMON A. DOMINGUEZ, NEW MEXICO, 24508, PROFESSIONAL SURVEYOR

Certificate Number

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

Drilling Plan Data Report
09/28/2023

APD ID: 10400090928
Submission Date: 02/28/2023
Operator Name: MR NM OPERATING LLC
Well Name: PICARD FEDERAL COM
Well Number: 005H
Well Type: OIL WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
12218074	QUATERNARY	3776	0	0	OTHER : None	NONE	N
12218075	RUSTLER ANHYDRITE	3469	307	307	OTHER : Evaporite	OIL, USEABLE WATER	N
12218076	TOP SALT	3244	532	532	SALT	NONE	N
12218077	BASE OF SALT	2451	1325	1326	SALT	NONE	N
12218078	TANSILL	2410	1366	1377	ANHYDRITE, LIMESTONE, SHALE	NONE	N
12218079	YATES	2281	1495	1515	ANHYDRITE, LIMESTONE, SHALE	NONE	N
12218080	SEVEN RIVERS	2010	1766	1797	ANHYDRITE, LIMESTONE, SHALE, SILTSTONE	NONE	N
12218081	QUEEN	1413	2363	2419	ANHYDRITE, LIMESTONE, SHALE	NONE	N
12218082	GRAYBURG	996	2780	2852	ANHYDRITE, DOLOMITE	OIL	N
12218083	SAN ANDRES	688	3088	3177	DOLOMITE	OIL	N
12218084	GLORIETA	-741	4517	4704	DOLOMITE	OIL	N
12218085	YESO	-806	4582	4802	DOLOMITE	OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 3M
Rating Depth: 10000

Equipment: A 3M (minimum) BOP system will be used. The minimum blowout prevention equipment (BOPE) 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.
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.

Operator Name: MR NM OPERATING LLC

Well Name: PICARD FEDERAL COM **Well Number:** 005H

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 the greater of 1,500 psi or Casing string length (ft) x 0.22 psi/ft, but not to exceed 70% of casing burst pressure (minimum internal yield). BOPE function 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_20230227120330.pdf

BOP Diagram Attachment:

BOP_3k_20230227120341.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	12.25	9.625	NEW	API	N	0	500	0	500	3776	3276	500	J-55	40	ST&C	1.125	1.25	DRY	1.6	DRY	1.6
2	PRODUCTION	8.75	7.0	NEW	API	Y	0	5128	0	4755	3765	-979	5128	L-80	29	BUTT	1.125	1.25	DRY	1.6	DRY	1.6
3	PRODUCTION	8.75	5.5	NEW	API	Y	5128	10534	4755	4800	-979	-1024	5406	L-80	17	BUTT	1.125	1.25	DRY	1.6	DRY	1.6

Casing Attachments

Casing ID: 1 **String** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Design_Assumptions_20230227120406.pdf

Operator Name: MR NM OPERATING LLC

Well Name: PICARD FEDERAL COM **Well Number:** 005H

Casing Attachments

Casing ID: 2 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing_Design_Assumptions_20230227120458.pdf

Casing Design Assumptions and Worksheet(s):

Casing_Design_Assumptions_20230227120506.pdf

Casing ID: 3 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing_Design_Assumptions_20230227120539.pdf

Casing Design Assumptions and Worksheet(s):

Casing_Design_Assumptions_20230227120546.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	500	0	0	0	0	0	None	None
SURFACE	Tail		0	500	234	1.34	14.8	313	100	Class C	2% Calcium Chloride
PRODUCTION	Lead		0	4300	356	2.47	11.9	878	35	50/50 Poz/C	10% Gel + 5% Salt + .2%PF153 + 3#/sk OF42 + .125lb/sk PF29 + .4 lb/sk PF45
PRODUCTION	Tail		4300	10534	1359	1.48	13	2012	35	Class PVL	5% Expanding Cement + 1.3% Salt + .5% PF606 + .4% PF45 + .1% PF153

Operator Name: MR NM OPERATING LLC

Well Name: PICARD FEDERAL COM **Well Number:** 005H

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	8.4	8.8							
500	10534	OTHER : Cut Brine	8.8	9.4							

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.

Operator Name: MR NM OPERATING LLC

Well Name: PICARD FEDERAL COM **Well Number:** 005H

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 2444 **Anticipated Surface Pressure:** 1381

Anticipated Bottom Hole Temperature(F): 120

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

Picard_N2_H2S_Plan_20230227120802.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Picard_5H_Directional_Plan_20230227120910.pdf

Other proposed operations facets description:

String depths are estimates based on planned formation depths and directional plans. Actual depths will vary due to actual formation tops and well path.

All of the casing strings below the conductor will be pressure tested to the greater of 1,500 psi or Casing string length (ft) x 0.22 psi/ft, but not to exceed 70% of casing burst pressure (minimum internal yield). If a pressure drop of more than 10% is seen in 30 minutes corrective action will be taken.

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.

Other proposed operations facets attachment:

CoFlex_Certs_3k_20230227120953.pdf

Picard_5H_Anticollision_Report_20230227121005.pdf

Wellhead_Diagram_PrimaryDesign_20230227121017.pdf

Wellhead_Diagram_ContingencyDesign_20230227121017.pdf

Picard_5H_Drill_Plan_v2_20230608122137.pdf

Casing_Design_Plan_20230608122149.pdf

Other Variance attachment:

BOP_Variance_Request_20230228082134.pdf

Casing_Cementing_Variance_20230228082134.pdf

Cypress Natural Resources

Eddy County, NM (NAD 83)
SEC 6 - T17S - R31E
Picard Federal Com 5H

OH

Plan #0

Standard Planning Report

24 January, 2023

Project: Eddy County, NM (NAD 83)
Site: SEC 6 - T17S - R31E
Well: Picard Federal Com 5H
Wellbore: OH
Plan #0

WELL DETAILS: Picard Federal Com 5H

25' KB @ 3801.00usft
Ground Level: 3776.00

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude
0.00	0.00	679763.00	669277.00	32.867996	-103.916638

US State Plane 1983
New Mexico Eastern Zone

Total Azimuth to Grid North
True North: -0.23°
Magnetic North: 6.67°

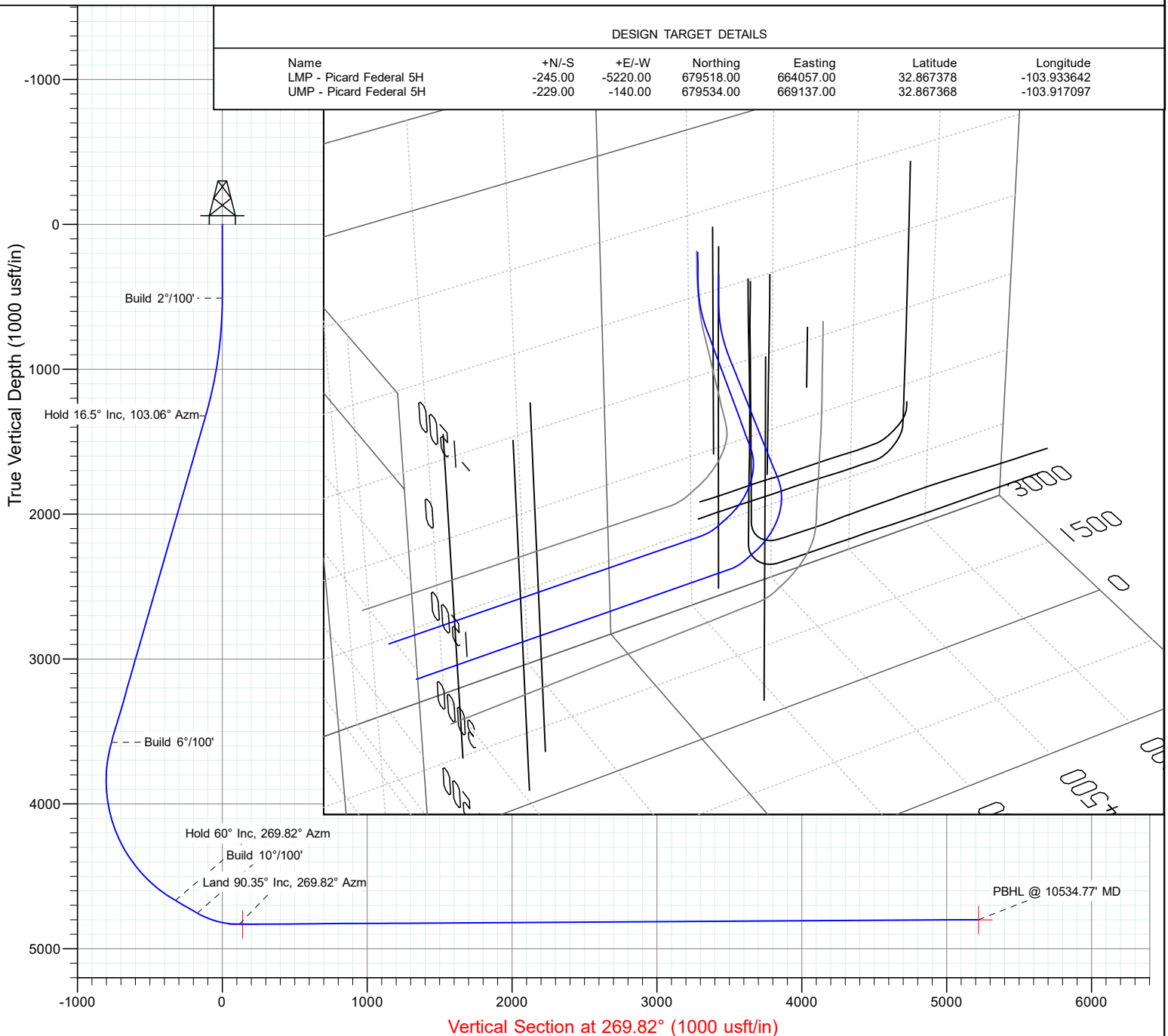
Magnetic Field
Strength: 47784.1nT
Dip Angle: 60.56°
Date: 1/22/2023
Model: HRGM

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DIeg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
509.00	0.00	0.00	509.00	0.00	0.00	0.00	0.00	0.00	Build 2°/100'
1333.92	16.50	103.06	1322.57	-26.66	114.90	2.00	103.06	-114.81	Hold 16.5° Inc, 103.06° Azm
3684.56	16.50	103.06	3576.43	-177.52	765.18	0.00	0.00	-764.62	Build 6°/100'
4953.11	60.00	269.82	4667.03	-227.54	324.57	6.00	168.21	-323.85	Hold 60° Inc, 269.82° Azm
5128.11	60.00	269.82	4754.53	-228.02	173.02	0.00	0.00	-172.30	Build 10°/100'
5431.61	90.35	269.82	4831.28	-228.93	-116.96	10.00	0.00	117.68	Land 90.35° Inc, 269.82° Azm
10534.77	90.35	269.82	4800.11	-245.00	-5220.00	0.00	0.00	5220.74	PBHL @ 10534.77' MD

DESIGN TARGET DETAILS

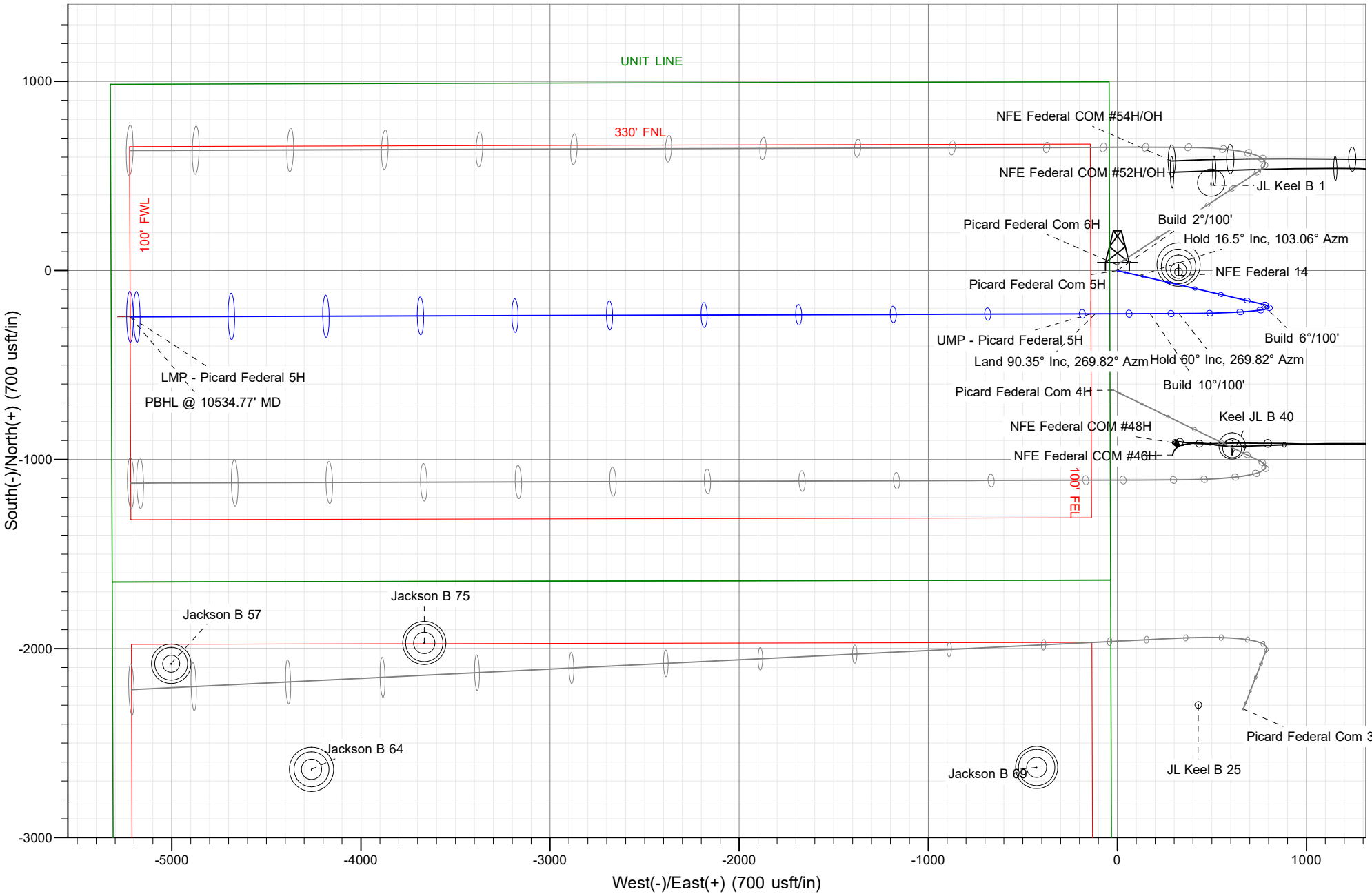
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LMP - Picard Federal 5H	-245.00	-5220.00	679518.00	664057.00	32.867378	-103.933642
UMP - Picard Federal 5H	-229.00	-140.00	679534.00	669137.00	32.867368	-103.917097



CYPRESS NATURAL RESOURCES

US State Plane 1983
New Mexico Eastern Zone
Project: Eddy County, NM (NAD 83)
Site: SEC 6 - T17S - R31E
Well: Picard Federal Com 5H
OH
25' KB @ 3801.00usft
Ground Elevation: 3776.00
Plan #0

ALTITUDE ENERGY PARTNERS



Planning Report

Database:	EDM 5000.16 Single User Db	**Local Co-ordinate Reference:**	Well Picard Federal Com 5H
Company:	Cypress Natural Resources	**TVD Reference:**	25' KB @ 3801.00usft
Project:	Eddy County, NM (NAD 83)	**MD Reference:**	25' KB @ 3801.00usft
Site:	SEC 6 - T17S - R31E	**North Reference:**	Grid
Well:	Picard Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0		

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 6 - T17S - R31E				
Site Position:		**Northing:**	677,443.45 usft	**Latitude:**	32.861613
From:	Map	**Easting:**	669,943.08 usft	**Longitude:**	-103.914498
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "		

Well	Picard Federal Com 5H					
Well Position	**+N/-S**	0.00 usft	**Northing:**	679,763.00 usft	**Latitude:**	32.867996
	+E/-W	0.00 usft	**Easting:**	669,277.00 usft	**Longitude:**	-103.916638
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,776.00 usft
Grid Convergence:		0.23 °				

Wellbore	OH				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	HRGM	1/22/2023	6.89	60.56	47,784.12861431

Design	Plan #0			
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	269.82

Plan Survey Tool Program **Date** 1/24/2023

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	10,534.77	Plan #0 (OH)	MWD+HRGM	
				OWSG MWD + HRGM	

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	
509.00	0.00	0.00	509.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,333.92	16.50	103.06	1,322.57	-26.66	114.90	2.00	2.00	0.00	103.06	
3,684.56	16.50	103.06	3,576.43	-177.52	765.18	0.00	0.00	0.00	0.00	
4,953.11	60.00	269.82	4,667.03	-227.54	324.57	6.00	3.43	13.15	168.21	
5,128.11	60.00	269.82	4,754.53	-228.02	173.02	0.00	0.00	0.00	0.00	
5,431.61	90.35	269.82	4,831.28	-228.93	-116.96	10.00	10.00	0.00	0.00	
10,534.77	90.35	269.82	4,800.11	-245.00	-5,220.00	0.00	0.00	0.00	0.00	

Planning Report

Database:	EDM 5000.16 Single User Db	**Local Co-ordinate Reference:**	Well Picard Federal Com 5H
Company:	Cypress Natural Resources	**TVD Reference:**	25' KB @ 3801.00usft
Project:	Eddy County, NM (NAD 83)	**MD Reference:**	25' KB @ 3801.00usft
Site:	SEC 6 - T17S - R31E	**North Reference:**	Grid
Well:	Picard Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0		

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
509.00	0.00	0.00	509.00	0.00	0.00	0.00	0.00	0.00	0.00
Build 2°/100'									
600.00	1.82	103.06	599.98	-0.33	1.41	-1.41	2.00	2.00	0.00
700.00	3.82	103.06	699.86	-1.44	6.20	-6.20	2.00	2.00	0.00
800.00	5.82	103.06	799.50	-3.34	14.38	-14.37	2.00	2.00	0.00
900.00	7.82	103.06	898.79	-6.02	25.95	-25.93	2.00	2.00	0.00
1,000.00	9.82	103.06	997.60	-9.49	40.89	-40.86	2.00	2.00	0.00
1,100.00	11.82	103.06	1,095.82	-13.73	59.17	-59.13	2.00	2.00	0.00
1,200.00	13.82	103.06	1,193.32	-18.74	80.79	-80.73	2.00	2.00	0.00
1,300.00	15.82	103.06	1,289.99	-24.52	105.70	-105.62	2.00	2.00	0.00
1,333.92	16.50	103.06	1,322.57	-26.66	114.90	-114.81	2.00	2.00	0.00
Hold 16.5° Inc, 103.06° Azm									
1,400.00	16.50	103.06	1,385.93	-30.90	133.18	-133.08	0.00	0.00	0.00
1,500.00	16.50	103.06	1,481.81	-37.32	160.84	-160.72	0.00	0.00	0.00
1,600.00	16.50	103.06	1,577.69	-43.73	188.51	-188.37	0.00	0.00	0.00
1,700.00	16.50	103.06	1,673.57	-50.15	216.17	-216.01	0.00	0.00	0.00
1,800.00	16.50	103.06	1,769.46	-56.57	243.84	-243.66	0.00	0.00	0.00
1,900.00	16.50	103.06	1,865.34	-62.99	271.50	-271.30	0.00	0.00	0.00
2,000.00	16.50	103.06	1,961.22	-69.41	299.16	-298.94	0.00	0.00	0.00
2,100.00	16.50	103.06	2,057.11	-75.82	326.83	-326.59	0.00	0.00	0.00
2,200.00	16.50	103.06	2,152.99	-82.24	354.49	-354.23	0.00	0.00	0.00
2,300.00	16.50	103.06	2,248.87	-88.66	382.16	-381.88	0.00	0.00	0.00
2,400.00	16.50	103.06	2,344.75	-95.08	409.82	-409.52	0.00	0.00	0.00
2,500.00	16.50	103.06	2,440.64	-101.50	437.48	-437.16	0.00	0.00	0.00
2,600.00	16.50	103.06	2,536.52	-107.92	465.15	-464.81	0.00	0.00	0.00
2,700.00	16.50	103.06	2,632.40	-114.33	492.81	-492.45	0.00	0.00	0.00
2,800.00	16.50	103.06	2,728.29	-120.75	520.48	-520.09	0.00	0.00	0.00
2,900.00	16.50	103.06	2,824.17	-127.17	548.14	-547.74	0.00	0.00	0.00
3,000.00	16.50	103.06	2,920.05	-133.59	575.80	-575.38	0.00	0.00	0.00
3,100.00	16.50	103.06	3,015.93	-140.01	603.47	-603.03	0.00	0.00	0.00
3,200.00	16.50	103.06	3,111.82	-146.42	631.13	-630.67	0.00	0.00	0.00
3,300.00	16.50	103.06	3,207.70	-152.84	658.80	-658.31	0.00	0.00	0.00
3,400.00	16.50	103.06	3,303.58	-159.26	686.46	-685.96	0.00	0.00	0.00
3,500.00	16.50	103.06	3,399.46	-165.68	714.13	-713.60	0.00	0.00	0.00
3,600.00	16.50	103.06	3,495.35	-172.10	741.79	-741.25	0.00	0.00	0.00
3,684.56	16.50	103.06	3,576.43	-177.52	765.18	-764.62	0.00	0.00	0.00
Build 6°/100'									
3,700.00	15.59	103.77	3,591.26	-178.51	769.33	-768.77	6.00	-5.87	4.56
3,800.00	9.82	111.37	3,688.78	-184.82	790.35	-789.76	6.00	-5.77	7.60
3,900.00	4.64	137.43	3,787.97	-190.92	801.03	-800.43	6.00	-5.17	26.06
4,000.00	4.32	221.44	3,887.76	-196.73	801.28	-800.66	6.00	-0.32	84.00
4,100.00	9.36	251.10	3,987.04	-202.19	791.08	-790.44	6.00	5.04	29.67
4,200.00	15.12	259.32	4,084.73	-207.25	770.55	-769.90	6.00	5.76	8.22
4,300.00	21.01	263.04	4,179.77	-211.84	739.91	-739.24	6.00	5.89	3.72
4,400.00	26.95	265.18	4,271.10	-215.93	699.50	-698.82	6.00	5.94	2.14
4,500.00	32.91	266.59	4,357.72	-219.45	649.76	-649.07	6.00	5.96	1.41
4,600.00	38.88	267.61	4,438.70	-222.38	591.24	-590.53	6.00	5.97	1.02

Planning Report

Database:	EDM 5000.16 Single User Db	**Local Co-ordinate Reference:**	Well Picard Federal Com 5H
Company:	Cypress Natural Resources	**TVD Reference:**	25' KB @ 3801.00usft
Project:	Eddy County, NM (NAD 83)	**MD Reference:**	25' KB @ 3801.00usft
Site:	SEC 6 - T17S - R31E	**North Reference:**	Grid
Well:	Picard Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0		

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)
4,700.00	44.85	268.39	4,513.14	-224.68	524.57	-523.86	6.00	5.98	0.79
4,800.00	50.84	269.03	4,580.22	-226.32	450.49	-449.77	6.00	5.98	0.64
4,900.00	56.82	269.57	4,639.21	-227.30	369.80	-369.09	6.00	5.98	0.54
4,953.11	60.00	269.82	4,667.03	-227.54	324.57	-323.85	6.00	5.99	0.48
Hold 60° Inc, 269.82° Azm									
5,000.00	60.00	269.82	4,690.48	-227.67	283.96	-283.25	0.00	0.00	0.00
5,100.00	60.00	269.82	4,740.48	-227.94	197.36	-196.64	0.00	0.00	0.00
5,128.11	60.00	269.82	4,754.53	-228.02	173.02	-172.30	0.00	0.00	0.00
Build 10°/100'									
5,200.00	67.19	269.82	4,786.48	-228.22	108.67	-107.95	10.00	10.00	0.00
5,300.00	77.19	269.82	4,817.03	-228.52	13.58	-12.86	10.00	10.00	0.00
5,400.00	87.19	269.82	4,830.60	-228.83	-85.36	86.08	10.00	10.00	0.00
5,431.61	90.35	269.82	4,831.28	-228.93	-116.96	117.68	10.00	10.00	0.00
Land 90.35° Inc, 269.82° Azm									
5,500.00	90.35	269.82	4,830.86	-229.14	-185.35	186.07	0.00	0.00	0.00
5,600.00	90.35	269.82	4,830.25	-229.46	-285.35	286.07	0.00	0.00	0.00
5,700.00	90.35	269.82	4,829.64	-229.77	-385.35	386.07	0.00	0.00	0.00
5,800.00	90.35	269.82	4,829.03	-230.09	-485.34	486.06	0.00	0.00	0.00
5,900.00	90.35	269.82	4,828.42	-230.40	-585.34	586.06	0.00	0.00	0.00
6,000.00	90.35	269.82	4,827.81	-230.72	-685.34	686.06	0.00	0.00	0.00
6,100.00	90.35	269.82	4,827.20	-231.03	-785.34	786.06	0.00	0.00	0.00
6,200.00	90.35	269.82	4,826.59	-231.35	-885.33	886.06	0.00	0.00	0.00
6,300.00	90.35	269.82	4,825.98	-231.66	-985.33	986.05	0.00	0.00	0.00
6,400.00	90.35	269.82	4,825.37	-231.98	-1,085.33	1,086.05	0.00	0.00	0.00
6,500.00	90.35	269.82	4,824.75	-232.29	-1,185.33	1,186.05	0.00	0.00	0.00
6,600.00	90.35	269.82	4,824.14	-232.61	-1,285.32	1,286.05	0.00	0.00	0.00
6,700.00	90.35	269.82	4,823.53	-232.92	-1,385.32	1,386.05	0.00	0.00	0.00
6,800.00	90.35	269.82	4,822.92	-233.24	-1,485.32	1,486.04	0.00	0.00	0.00
6,900.00	90.35	269.82	4,822.31	-233.55	-1,585.32	1,586.04	0.00	0.00	0.00
7,000.00	90.35	269.82	4,821.70	-233.87	-1,685.31	1,686.04	0.00	0.00	0.00
7,100.00	90.35	269.82	4,821.09	-234.18	-1,785.31	1,786.04	0.00	0.00	0.00
7,200.00	90.35	269.82	4,820.48	-234.50	-1,885.31	1,886.04	0.00	0.00	0.00
7,300.00	90.35	269.82	4,819.87	-234.81	-1,985.31	1,986.04	0.00	0.00	0.00
7,400.00	90.35	269.82	4,819.26	-235.13	-2,085.31	2,086.03	0.00	0.00	0.00
7,500.00	90.35	269.82	4,818.65	-235.44	-2,185.30	2,186.03	0.00	0.00	0.00
7,600.00	90.35	269.82	4,818.03	-235.76	-2,285.30	2,286.03	0.00	0.00	0.00
7,700.00	90.35	269.82	4,817.42	-236.07	-2,385.30	2,386.03	0.00	0.00	0.00
7,800.00	90.35	269.82	4,816.81	-236.39	-2,485.30	2,486.03	0.00	0.00	0.00
7,900.00	90.35	269.82	4,816.20	-236.70	-2,585.29	2,586.02	0.00	0.00	0.00
8,000.00	90.35	269.82	4,815.59	-237.02	-2,685.29	2,686.02	0.00	0.00	0.00
8,100.00	90.35	269.82	4,814.98	-237.33	-2,785.29	2,786.02	0.00	0.00	0.00
8,200.00	90.35	269.82	4,814.37	-237.65	-2,885.29	2,886.02	0.00	0.00	0.00
8,300.00	90.35	269.82	4,813.76	-237.96	-2,985.28	2,986.02	0.00	0.00	0.00
8,400.00	90.35	269.82	4,813.15	-238.28	-3,085.28	3,086.02	0.00	0.00	0.00
8,500.00	90.35	269.82	4,812.54	-238.59	-3,185.28	3,186.01	0.00	0.00	0.00
8,600.00	90.35	269.82	4,811.93	-238.91	-3,285.28	3,286.01	0.00	0.00	0.00
8,700.00	90.35	269.82	4,811.32	-239.22	-3,385.27	3,386.01	0.00	0.00	0.00
8,800.00	90.35	269.82	4,810.70	-239.54	-3,485.27	3,486.01	0.00	0.00	0.00
8,900.00	90.35	269.82	4,810.09	-239.85	-3,585.27	3,586.01	0.00	0.00	0.00
9,000.00	90.35	269.82	4,809.48	-240.17	-3,685.27	3,686.00	0.00	0.00	0.00
9,100.00	90.35	269.82	4,808.87	-240.48	-3,785.27	3,786.00	0.00	0.00	0.00
9,200.00	90.35	269.82	4,808.26	-240.80	-3,885.26	3,886.00	0.00	0.00	0.00
9,300.00	90.35	269.82	4,807.65	-241.11	-3,985.26	3,986.00	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	**Local Co-ordinate Reference:**	Well Picard Federal Com 5H
Company:	Cypress Natural Resources	**TVD Reference:**	25' KB @ 3801.00usft
Project:	Eddy County, NM (NAD 83)	**MD Reference:**	25' KB @ 3801.00usft
Site:	SEC 6 - T17S - R31E	**North Reference:**	Grid
Well:	Picard Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0		

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)
9,400.00	90.35	269.82	4,807.04	-241.43	-4,085.26	4,086.00	0.00	0.00	0.00
9,500.00	90.35	269.82	4,806.43	-241.74	-4,185.26	4,185.99	0.00	0.00	0.00
9,600.00	90.35	269.82	4,805.82	-242.06	-4,285.25	4,285.99	0.00	0.00	0.00
9,700.00	90.35	269.82	4,805.21	-242.37	-4,385.25	4,385.99	0.00	0.00	0.00
9,800.00	90.35	269.82	4,804.60	-242.69	-4,485.25	4,485.99	0.00	0.00	0.00
9,900.00	90.35	269.82	4,803.98	-243.00	-4,585.25	4,585.99	0.00	0.00	0.00
10,000.00	90.35	269.82	4,803.37	-243.32	-4,685.24	4,685.99	0.00	0.00	0.00
10,100.00	90.35	269.82	4,802.76	-243.63	-4,785.24	4,785.98	0.00	0.00	0.00
10,200.00	90.35	269.82	4,802.15	-243.95	-4,885.24	4,885.98	0.00	0.00	0.00
10,300.00	90.35	269.82	4,801.54	-244.26	-4,985.24	4,985.98	0.00	0.00	0.00
10,400.00	90.35	269.82	4,800.93	-244.58	-5,085.23	5,085.98	0.00	0.00	0.00
10,500.00	90.35	269.82	4,800.32	-244.89	-5,185.23	5,185.98	0.00	0.00	0.00
10,534.77	90.35	269.82	4,800.11	-245.00	-5,220.00	5,220.74	0.00	0.00	0.00
PBHL @ 10534.77' 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
LMP - Picard Federal 5H	0.00	0.00	4,801.00	-245.00	-5,220.00	679,518.00	664,057.00	32.867378	-103.933642
- plan misses target center by 0.89usft at 10534.76usft MD (4800.11 TVD, -245.00 N, -5219.99 E)									
- Point									
UMP - Picard Federal 5H	0.00	0.00	4,832.00	-229.00	-140.00	679,534.00	669,137.00	32.867368	-103.917097
- plan misses target center by 0.86usft at 5454.64usft MD (4831.14 TVD, -229.00 N, -139.99 E)									
- Point									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
509.00	509.00	0.00	0.00	Build 2°/100'
1,333.92	1,322.57	-26.66	114.90	Hold 16.5° Inc, 103.06° Azm
3,684.56	3,576.43	-177.52	765.18	Build 6°/100'
4,953.11	4,667.03	-227.54	324.57	Hold 60° Inc, 269.82° Azm
5,128.11	4,754.53	-228.02	173.02	Build 10°/100'
5,431.61	4,831.28	-228.93	-116.96	Land 90.35° Inc, 269.82° Azm
10,534.77	4,800.11	-245.00	-5,220.00	PBHL @ 10534.77' MD

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MR NM
LEASE NO.:	**NMLC029339B**
LOCATION:	Section 6, T.17 S, R.31 E., NMPM
COUNTY:	Eddy County, New Mexico
WELL NAME & NO.:	Picard Fed Com 006H
SURFACE HOLE FOOTAGE:	972'/N & 40'/W
BOTTOM HOLE FOOTAGE:	350'/N & 100'/W

WELL NAME & NO.:	Picard Fed Com 005H
SURFACE HOLE FOOTAGE:	1002'/N & 40'/W
BOTTOM HOLE FOOTAGE	1230'/N & 100'/W

WELL NAME & NO.:	Picard Fed Com 004H
SURFACE HOLE FOOTAGE:	1633'/N & 16'/W
BOTTOM HOLE FOOTAGE	2110'/N & 100'/W

COA

H_2S	◉ Yes	○ No		
Potash / WIPP	◉ None	○ Secretary	○ R-111-P	☐ WIPP
Cave / Karst	◉ Low	○ Medium	○ High	○ Critical
Wellhead	○ Conventional	◉ Multibowl	○ Both	○ Diverter
Cementing	☐ Primary Squeeze	☐ Cont. Squeeze	☐ EchoMeter	☐ DV Tool
Special Req	☐ Break Testing	☐ Water Disposal	☑ COM	☐ Unit
Variance	☑ Flex Hose	☐ Casing Clearance	☐ Pilot Hole	☐ Capitan Reef
Variance	☐ Four-String	☐ Offline Cementing	☐ Fluid-Filled	☐ Open Annulus
☐ **Batch APD / Sundry**				

Any previous COAs not addressed within the updated COAs still apply.

BOP Brake Test (shelf test) variance is not approved.

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **San Andres** formation. As a result, the Hydrogen Sulfide area must meet all requirements from **43 CFR 3176**, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

Approval Date: 09/28/2023

B. CASING

1. The **9-5/8** inch surface casing shall be set at approximately **475** feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) 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 **7 x 5-1/2**-inch production casing is:
    - Cement to surface. Operator shall provide method of verification.

CONTINGENCY PLAN

Operator is approved to use a contingency plan. Operator shall notify the BLM before proceeding with the contingency casing and cementing plan.

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 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 43 CFR 3172 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.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
- 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
Email **or** call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, **BLM_NM_CFO_DrillingNotifications@BLM.GOV**
(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 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 **43 CFR part 3170 Subpart 3172** 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

3. test can be done (prior to the cement setting up) immediately after bumping the plug.

4. 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.

5. 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.

6. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

7. 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.

8. 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.

9. 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 **43 CFR part 3170 Subpart 3172** and **API STD 53 Sec. 5.3**.

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 **43 CFR part 3170 Subpart 3172** 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 **43 CFR part 3170**

Subpart 3172 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 **43 CFR part 3170 Subpart 3172**.

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.

ZS 9/9/2023

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

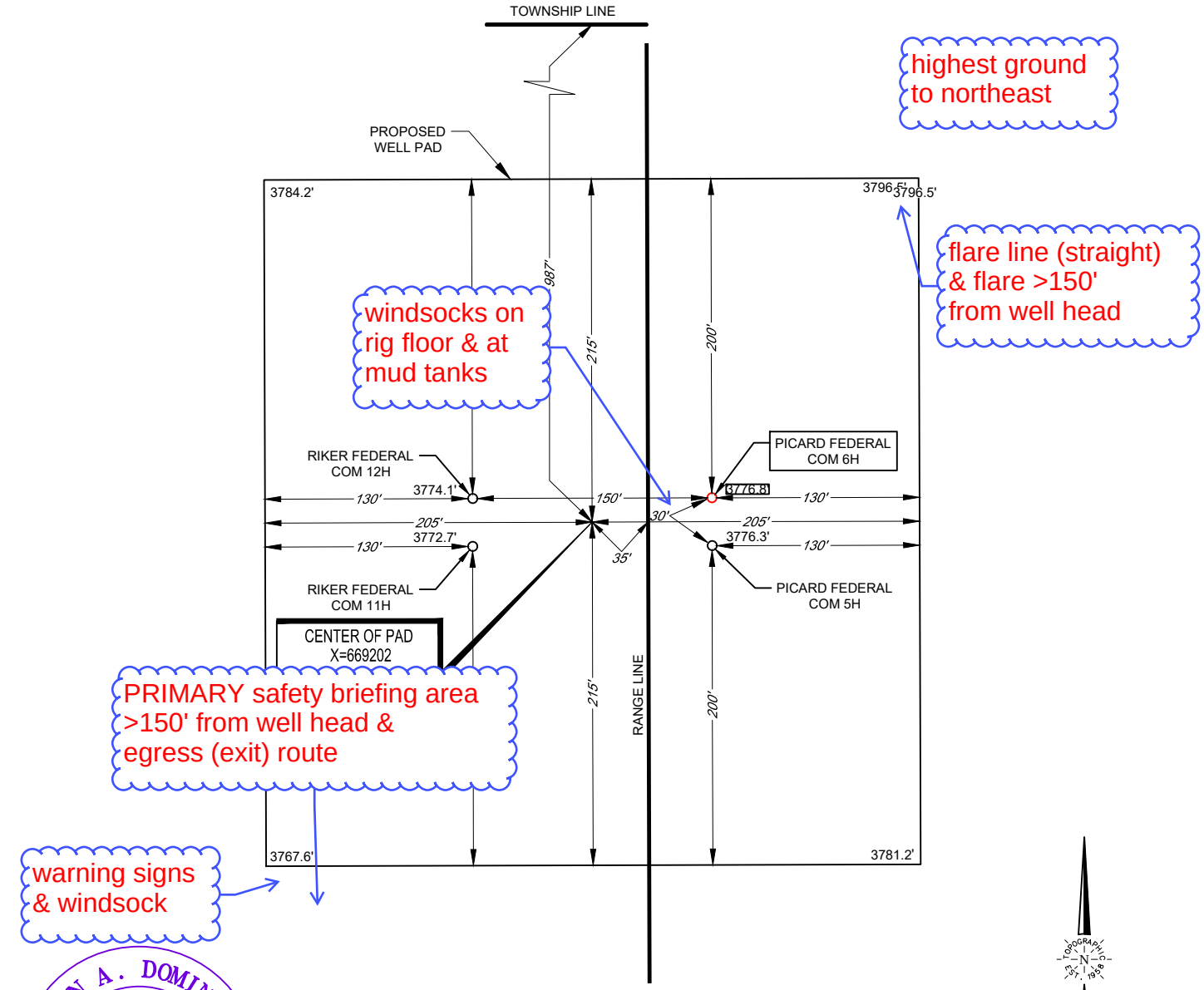
- One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site
- A colored condition flag will be on display, reflecting the current condition at the site at the time
- Two wind socks will be placed in strategic locations, visible from all angles

- 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

EXHIBIT 2B
MR NM OPERATING, LLC.

SECTION 6, TOWNSHIP 17-S, RANGE 31-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

DETAIL VIEW
SCALE: 1" = 100'



LEASE NAME & WELL NO.: PICARD FEDERAL COM 6H

6H LATITUDE N 32.8680781 6H LONGITUDE W 103.9166389

CENTER OF PAD IS 987' FNL & 35' FEL

prevailing winds blow from south

RAMON A. DOMINGUEZ NEW MEXICO 24508 PROFESSIONAL SURVEYOR

Ramon A. Dominguez, P.S. No. 24508
DECEMBER 30, 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

Picard-Riker Pad
H2S Contingency Plan:
Radius Map

Section 6, Township 17S, Range 31E
Eddy County, New Mexico

Pad Center

1:27,000

0 0.25 0.5 1

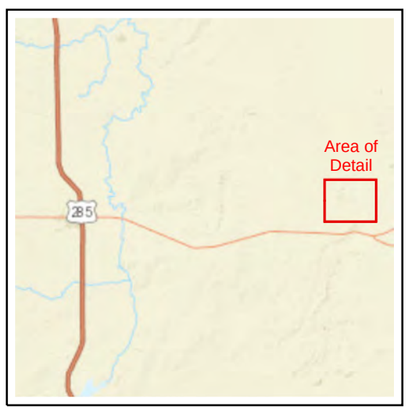
Miles

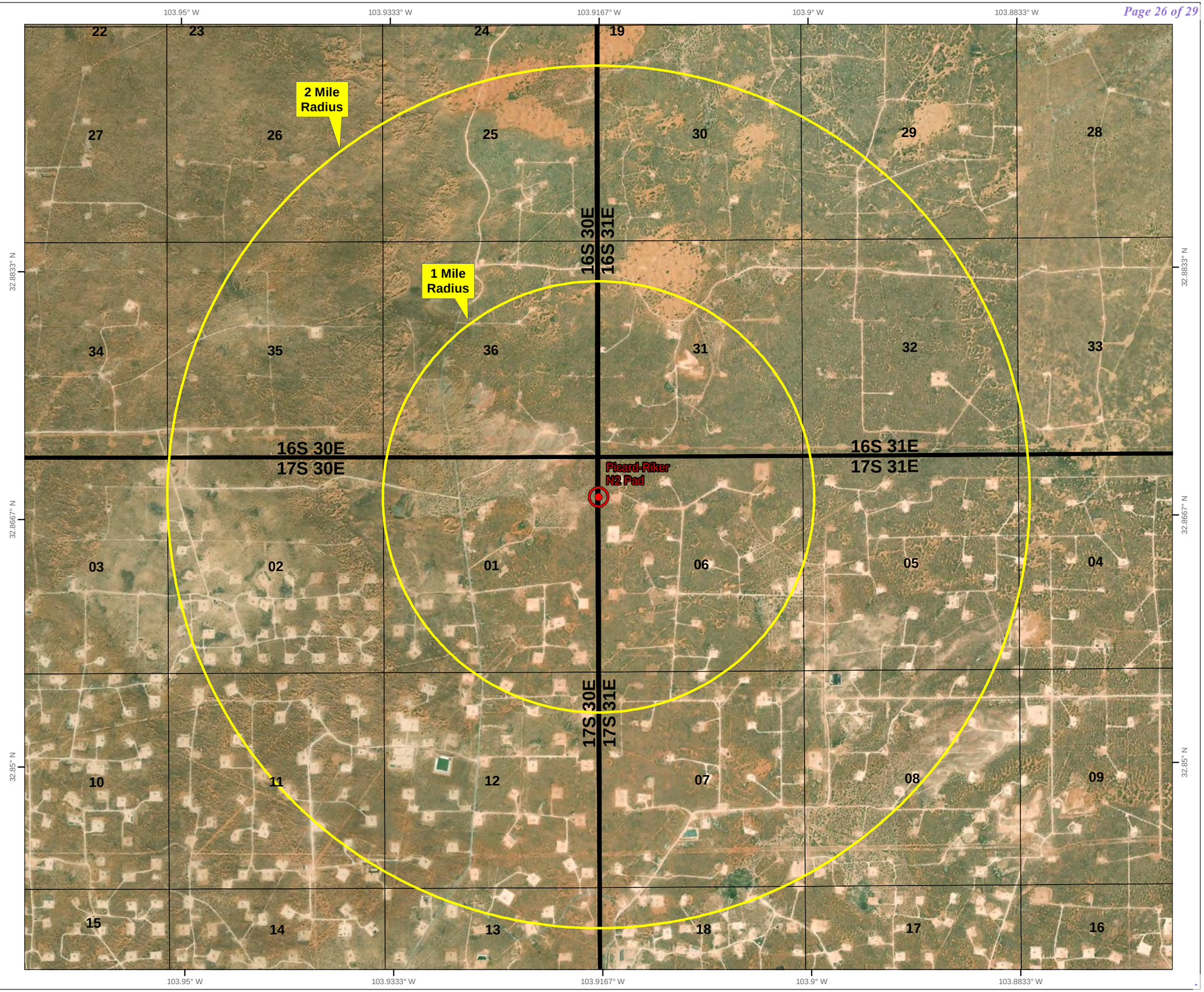
N

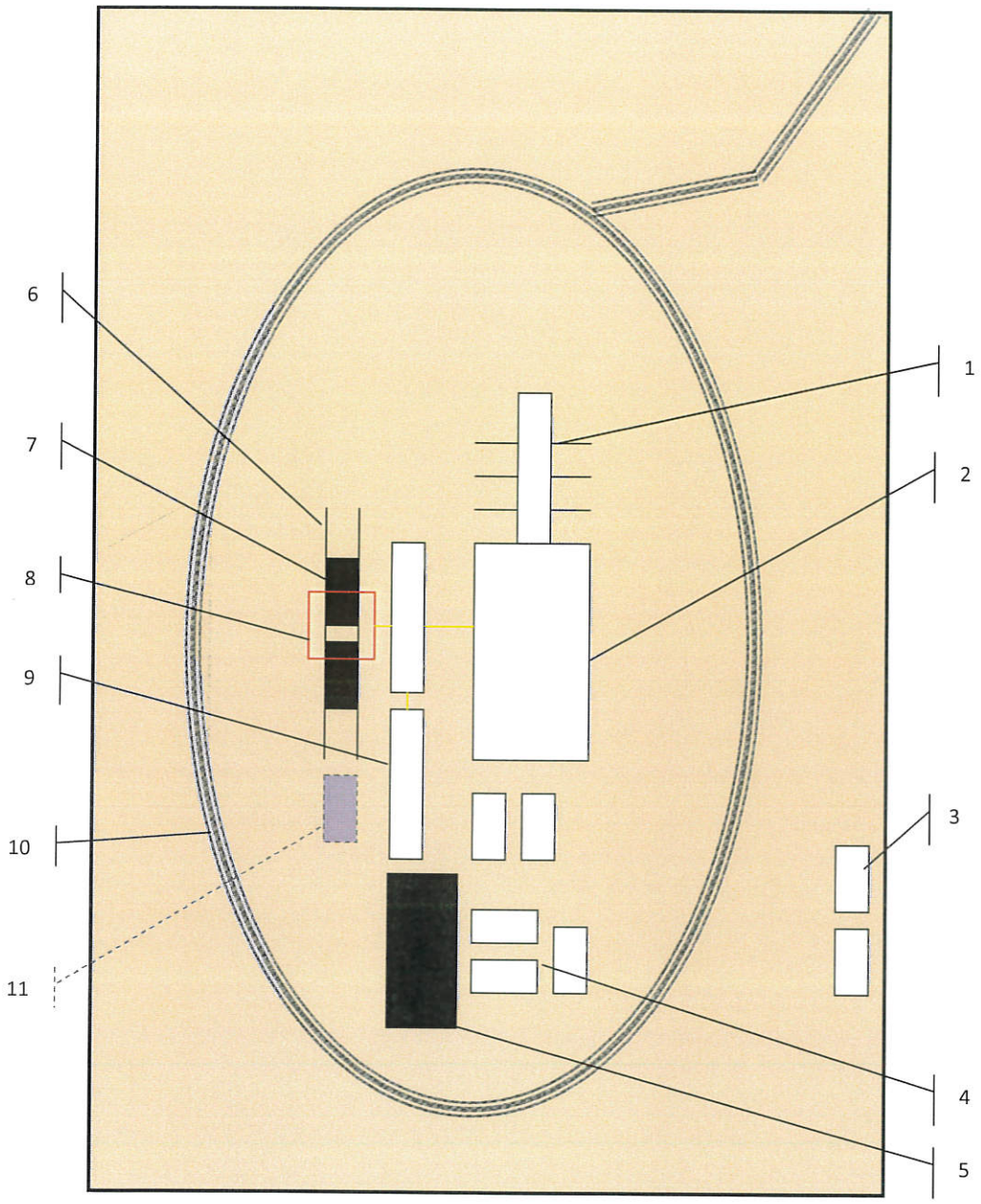
NAD 1983 New Mexico State Plane East
FIPS 3001 Feet

PERMITS WEST

Prepared by Permits West, Inc., February 17, 2023
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)

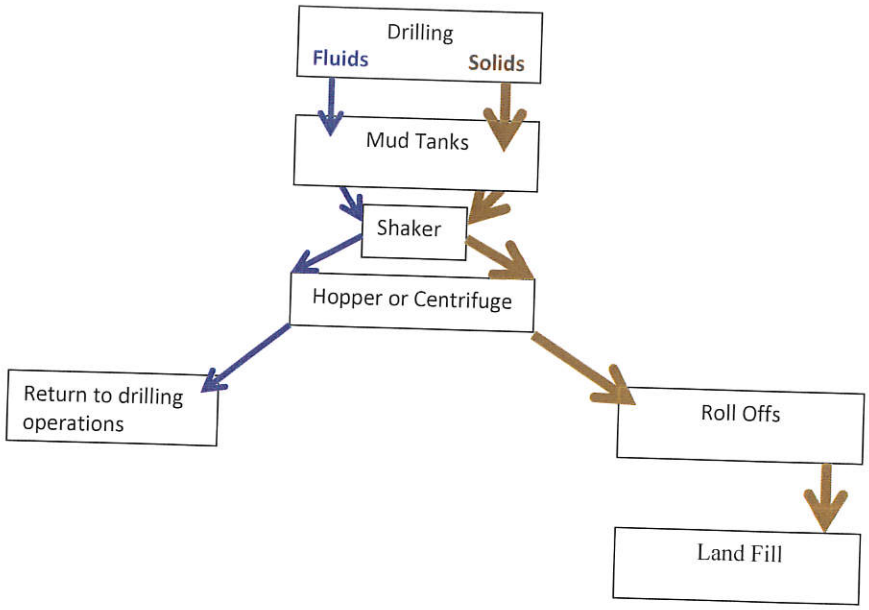
*Not drawn to scale: Closed loop system requires at least 30 feet beyond mud tanks. Ideally 60 feet would be available

Above: Centrifugal Closed Loop System

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS
37Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120

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

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS
37Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 270607

CONDITIONS

Operator: MR NM Operating LLC 5950 Berkshire Lane Dallas, TX 75225	OGRID: 330506
	Action Number: 270607
	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	10/3/2023
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	10/3/2023
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	10/3/2023
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	10/3/2023
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing	10/3/2023
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	10/3/2023