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.: NMNM141395

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.: CLYDESDALE FED COM 1H

2. Name of Operator: MR NM OPERATING LLC

9. API Well No.: 30-015-53740

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: WC 015 G-5 1627S35M; ABO

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

At surface: NWSW / 2563 FSL / 781 FWL / LAT 32.8787776 / LONG -104.2542961

At proposed prod. zone: SWNW / 2315 FNL / 100 FWL / LAT 32.8800477 / LONG -104.2743535

11. Sec., T. R. M. or Blk. and Survey or Area: SEC 35/T16S/R27E/NMP

14. Distance in miles and direction from nearest town or post office*: 8 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): 781 feet

16. No of acres in lease:

17. Spacing Unit dedicated to this well: 160.0

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

19. Proposed Depth: 6017 feet / 11626 feet

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

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3422 feet

22. Approximate date work will start*: 12/01/2022

23. Estimated duration: 90 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	08/24/2022

Title: President

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	CODY LAYTON / Ph: (575) 234-5959	04/19/2023

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

Accepted for record – NMOCD

JRH 04/28/2023

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 04/19/2023

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- 53740	98312	WC 015 G-5 1627S35M; ABO

[4]Property Code	[5]Property Name	[6]Well Number
333955	CLYDESDALE FED COM	1H

[7]OGRID No.	[8]Operator Name	[9]Elevation
330506	MR NM OPERATING LLC.	3422'

[10]Surface Location

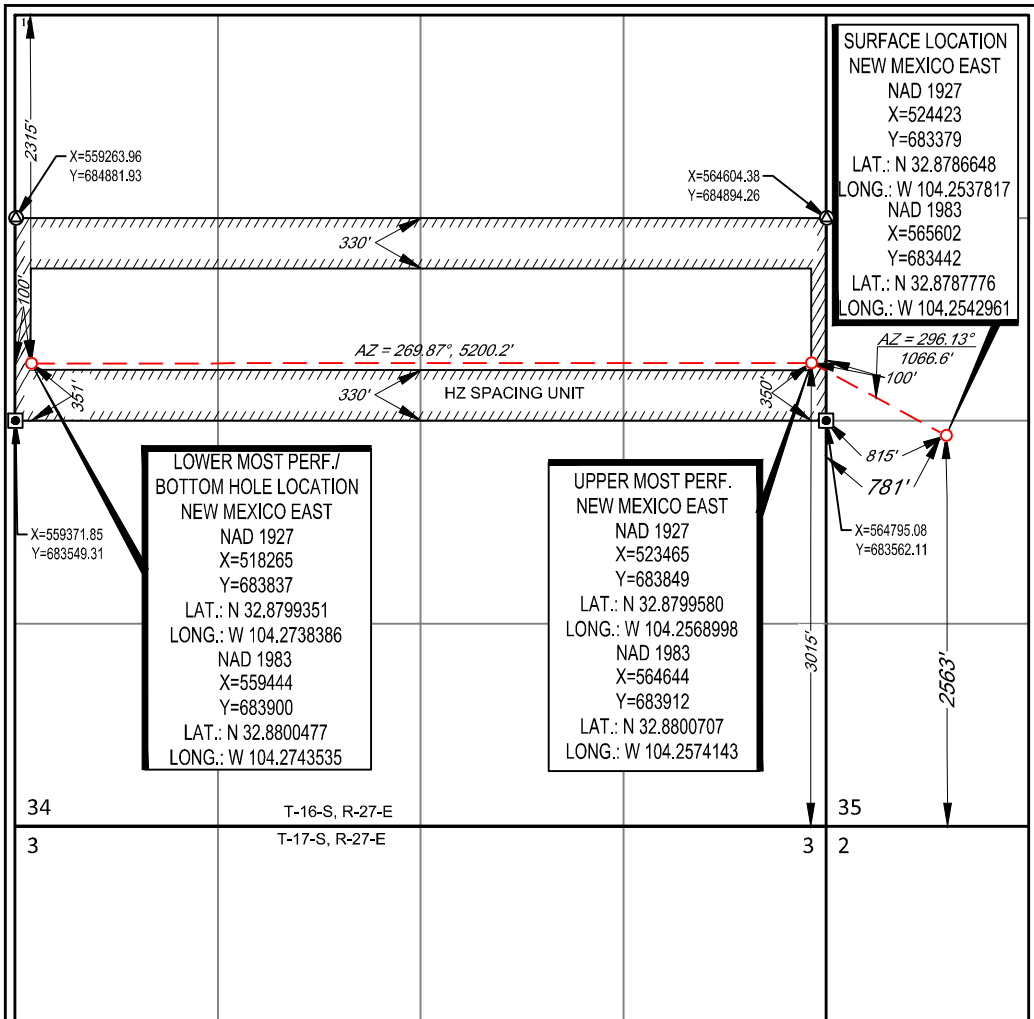
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	35	16-S	27-E	-	2563'	SOUTH	781'	WEST	EDDY

[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
E	34	16-S	27-E	-	2315'	NORTH	100'	WEST	EDDY

[12]Dedicated Acres	[13]Joint or Infill	[14]Consolidation Code	[15]Order No.
160.00			

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.



[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 — 08/19/2022
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.

05/18/2022
Date of Survey
Signature and Seal of Professional Surveyor

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

Certificate Number

\SURVEY\CYPRESS_NATURAL_RESOURCES_LLC\CLYDESDALE_1H\FINAL_PRODUCTS\LO_CLYDESDALE_FED_COM_1H.DWG 6/1/2022 11:35:01 AM bzollinger

a

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: MR NM OPERATING **OGRID:** 330506 **Date:** 4-19-23

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Clydesdale Fed Com 1H	30-15-xxxxx	L-35-16S-27E	2563 FSL & 781 FWL	500	1,000	1,900

IV. Central Delivery Point Name: DCP Midstream, LLC in E-12-17S-30E [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Clydesdale Fed Com 1H	30-015-xxxxx	9-1-23	9-20-23	11-1-23	11-15-23	11-20-23

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☒ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☒ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☒ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.
If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- **(a)** power generation on lease;
- **(b)** power generation for grid;
- **(c)** compression on lease;
- **(d)** liquids removal on lease;
- **(e)** reinjection for underground storage;
- **(f)** reinjection for temporary storage;
- **(g)** reinjection for enhanced oil recovery;
- **(h)** fuel cell production; and
- **(i)** other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: 
Printed Name: Aaron Ausburn
Title: VP
E-mail Address: aaron@cypressnr.com
Date: 4-19-23
Phone: 214-500-8352

OIL CONSERVATION DIVISION **(Only applicable when submitted as a standalone form)**
Approved By:
Title:
Approval Date:
Conditions of Approval:

MR NM Operating, LLC Natural Gas Management Plan

VI. Separation Equipment

Separation equipment will be built on the Clydesdale 1H pad. The anticipated production rates from the Clydesdale 1H will be accounted for during design/construction to ensure sufficient capacity exists at the surface to capture all produced fluids.

VII. Operational Practices

MR NM Operating, LLC will take the following actions outlined below to comply with 19.15.27.8 NMAC

A. MR NM Operating, LLC plans to maximize recovery of natural gas and minimize waste thru venting/flaring

B. MR NM Operating, LLC plans to flare during drilling operations from a location exceeding 100' away from the SHL. The flare will be used to combust natural gas brought to the surface during normal drilling operations. Safety will remain priority #1, and MR NM Operating, LLC will account and report appropriately pertaining to any potential emergency.

C. MR NM Operating, LLC plans flare any natural gas brought to the surface during normal completions operations. During flowback, fluids will immediately flow thru a separator on location. Gas will not be flared/vented unless there's a safety concern with pressures at the surface. Gas is expected to meet pipeline standards; if not, MR NM Operating, LLC will flare for the allowed 60 days or less until the gas meets quality specifications. MR NM Operating, LLC plans to sample the produced gas at a reasonable frequency or upon request from regulatory bodies.

D. MR NM Operating, LLC does not plan to flare or vent natural gas except during the situations outlined in 19.15.27.8 D. (1-4).

E. MR NM Operating, LLC will comply with standards outlined in 19.15.27.8 E. (1-8). EOG Resources, Inc. will conduct AVO inspections as described in 19.15.27.8 E (5) (a) with frequencies specified in 19.15.27.8 E (5) (b) and (c). All emergencies will be resolved as quickly and safely as feasible to minimize waste.

F. The volume of natural gas that is vented or flared as the result of malfunction or emergency during drilling and completions operations will be estimated. The volume of natural gas that is vented, flared, or beneficially used during production operations, will be measured, or estimated. If metering is not practicable due to circumstances such as low flow rate or low pressure venting and flaring, EOG Resources, Inc. will estimate the volume of vented or flared natural gas. Measuring equipment will conform to industry standards and will not be designed or equipped with a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment.

VIII. Best Management Practices

Pressure maintenance at surface is vital to maintain safe working conditions; venting will be utilized only to depressurize our surface equipment. When maintaining surface or downhole equipment associated with the current production, the well will be shut-in to eliminate venting. If maintenance work takes place on the gas gathering side, gas will route to the flare to eliminate venting.

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

Drilling Plan Data Report
04/20/2023

APD ID: 10400087646
Submission Date: 08/24/2022

Operator Name: MR NM OPERATING LLC

Well Name: CLYDESDALE FED COM
Well Number: 1H

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
9087738	QUATERNARY	3422	0	0	ANHYDRITE, OTHER : Mixed Clastics	NONE	N
9087739	YATES	3234	188	188	ANHYDRITE, OTHER : Dolomitic Anhydrite	USEABLE WATER	N
9087740	SEVEN RIVERS	3096	326	326	ANHYDRITE, DOLOMITE	USEABLE WATER	N
9087741	QUEEN	2684	738	738	SANDSTONE	NATURAL GAS, OIL	N
9087742	GRAYBURG	2274	1148	1150	ANHYDRITE, DOLOMITE, SANDSTONE, SHALE	NATURAL GAS, OIL	N
9087743	SAN ANDRES	1914	1508	1508	ANHYDRITE, DOLOMITE	NATURAL GAS, OIL	N
9087744	GLORIETA	489	2933	2956	DOLOMITE	NATURAL GAS, OIL	N
9087745	YESO	444	2978	3001	OTHER, SANDSTONE : Anhydritic Dolomite	NATURAL GAS	N
9087746	TUBB	-781	4203	4350	OTHER, SANDSTONE : Anhydritic Dolomite	NATURAL GAS, OIL	N
9087747	DRINKARD	-961	4383	4432	OTHER, SANDSTONE : Anhydritic Dolomite	NATURAL GAS, OIL	N
9087748	ABO	-1506	4928	4988	ANHYDRITE, DOLOMITE, SHALE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

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

Equipment: 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. 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.

Operator Name: MR NM OPERATING LLC

Well Name: CLYDESDALE FED COM **Well Number:** 1H

Testing Procedure: All BOPE will be tested in accordance with Onshore Oil & Gas Order No. 2. Prior to drilling out of the surface casing, ram type BOPE and accessory equipment will be tested to 250/3,000 psig and the annular preventer to 250/1,500 psig. All installed casing strings will be tested to 1,500 psi for 30 minutes prior before drilling out. BOPE 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. A BOP system with a minimum working pressure of 3,000 psi will be installed on the wellhead system and will be pressure tested to 250/3,000 psi. The pressure test will be repeated no less than every 30 days per Onshore Order No. 2. All BOP equipment will be tested utilizing a conventional test plug.

Choke Diagram Attachment:

Choke_Diagram_3k_20220824090535.pdf

BOP Diagram Attachment:

BOP_3k_20220824090543.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	3422	2922	500	H-40	48	ST&C	1.125	1.125	DRY	1.6	DRY	1.6
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	1600	0	1500	3429	1922	1600	J-55	40	LT&C	1.125	1.125	DRY	1.6	DRY	1.6
3	PRODUCTION	8.75	5.5	NEW	API	N	0	11626	0	6018	3429	-2596	11626	P-110	20	BUTT	1.125	1.125	DRY	1.6	DRY	1.6

Casing Attachments

Operator Name: MR NM OPERATING LLC

Well Name: CLYDESDALE FED COM **Well Number:** 1H

Casing Attachments

Casing ID: 1 **String** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Design_Info_20220824090628.pdf

Casing ID: 2 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Design_Info_20220824090652.pdf

Casing ID: 3 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Design_Info_20220824090831.pdf

Section 4 - Cement

Operator Name: MR NM OPERATING LLC

Well Name: CLYDESDALE FED COM **Well Number:** 1H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
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	1280	312	2.17	12.5	677	100	35/65 Poz/C	5% Salt + 5% Strength Enhancer + 4% Bentonite
INTERMEDIATE	Tail		1280	1600	152	1.32	14.8	201	100	C Neat	Neat
PRODUCTION	Lead		1100	5650	539	2.81	11.5	1515	35	50/50 Poz/C	10% Bentonite + 5% Salt
PRODUCTION	Tail		5650	11626	1465	1.39	14	2036	35	50/50 Poz/C	2% Bentonite + 5% Salt

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

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

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

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	500	OTHER : Fresh Water	8.6	8.8							
500	1600	OTHER : Cut Brine	8.8	9.4							

Operator Name: MR NM OPERATING LLC

Well Name: CLYDESDALE FED COM **Well Number:** 1H

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
1600	11626	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,DIRECTIONAL SURVEY,

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:** 1413

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

CB_H2S_Contingency_Plan_20220824091522.pdf

Operator Name: MR NM OPERATING LLC

Well Name: CLYDESDALE FED COM **Well Number:** 1H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Clydesdale_1H_Horizontal_Plan_20220824091535.pdf

Other proposed operations facets description:

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.

The multi-bowl wellhead system will be installed by vendor's representative. Any required welding will be monitored by vendor's representative.

Other proposed operations facets attachment:

Clydesdale_1H_Drill_Plan_20220824091554.pdf

Wellhead_Diagram_3_String_RDC_20220824091604.pdf

Clydesdale_1H_Anticollision_Report_20220824091614.pdf

CoFlex_Certs_3k_20220824091622.pdf

Other Variance attachment:

MR NM OPERATING, LLC.

Eddy County, NM (NAD 83)
SEC 35, T-16-S, R-27-E
LO CLYDESDALE FED COM 1H

ORIGINAL HOLE

Plan: PRELIM #0

Standard Planning Report

29 June, 2022

Project: Eddy County, NM (NAD 83)
Site: SEC 35, T-16-S, R-27-E
Well: LO CLYDESDALE FED COM 1H
Wellbore: ORIGINAL HOLE
PRELIM #0

WELL DETAILS: LO CLYDESDALE FED COM 1H

16' KB @ 3438.00usft
Ground Level: 3422.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	683442.00	565602.00	32.878777	-104.254295

US State Plane 1983
New Mexico Eastern Zone

T G M

Total Azimuth to Grid North
True North: -0.04°
Magnetic North: 6.87°

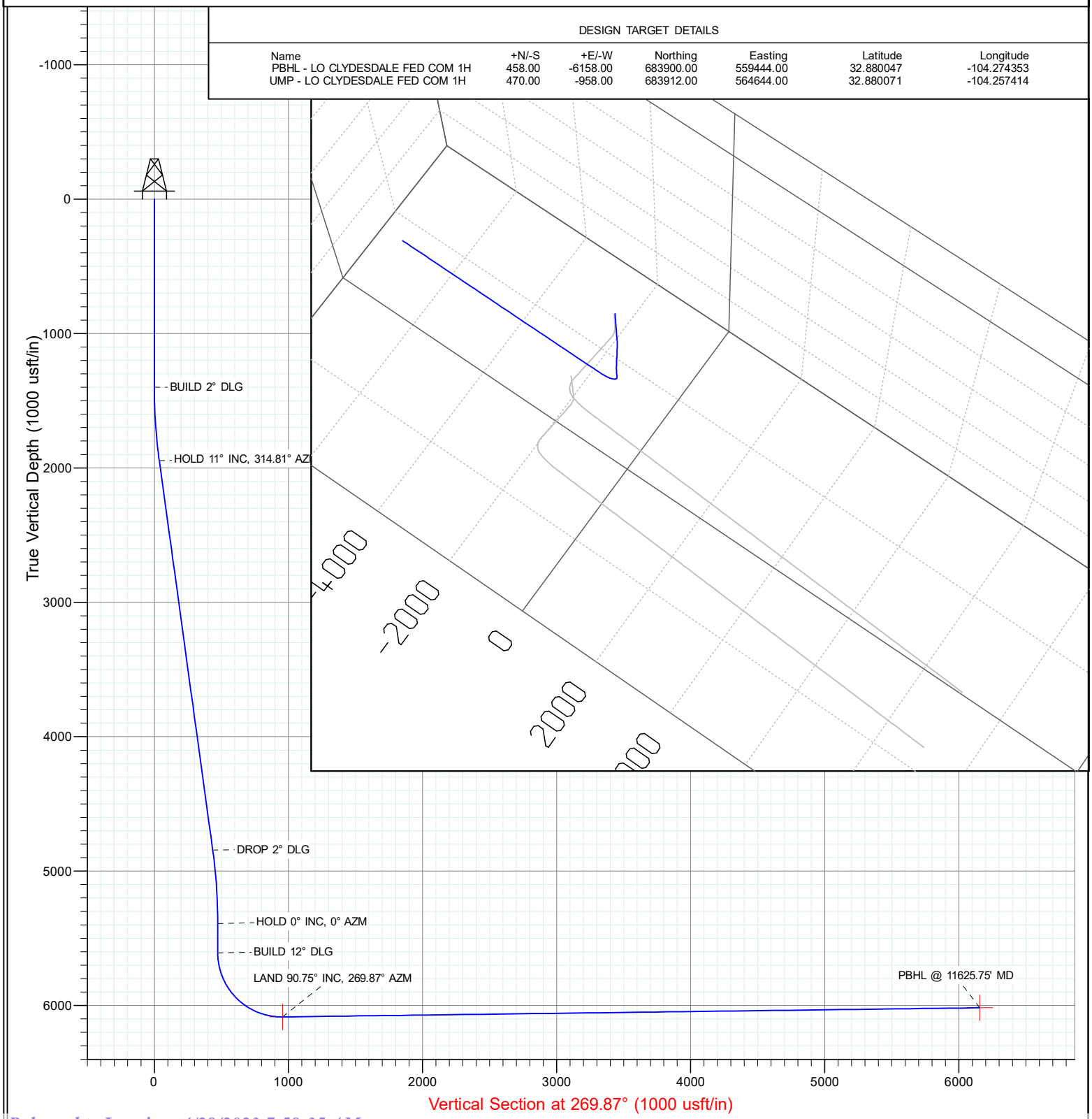
Magnetic Field
Strength: 47690.2nT
Dip Angle: 60.44°
Date: 6/10/2022
Model: HRGM

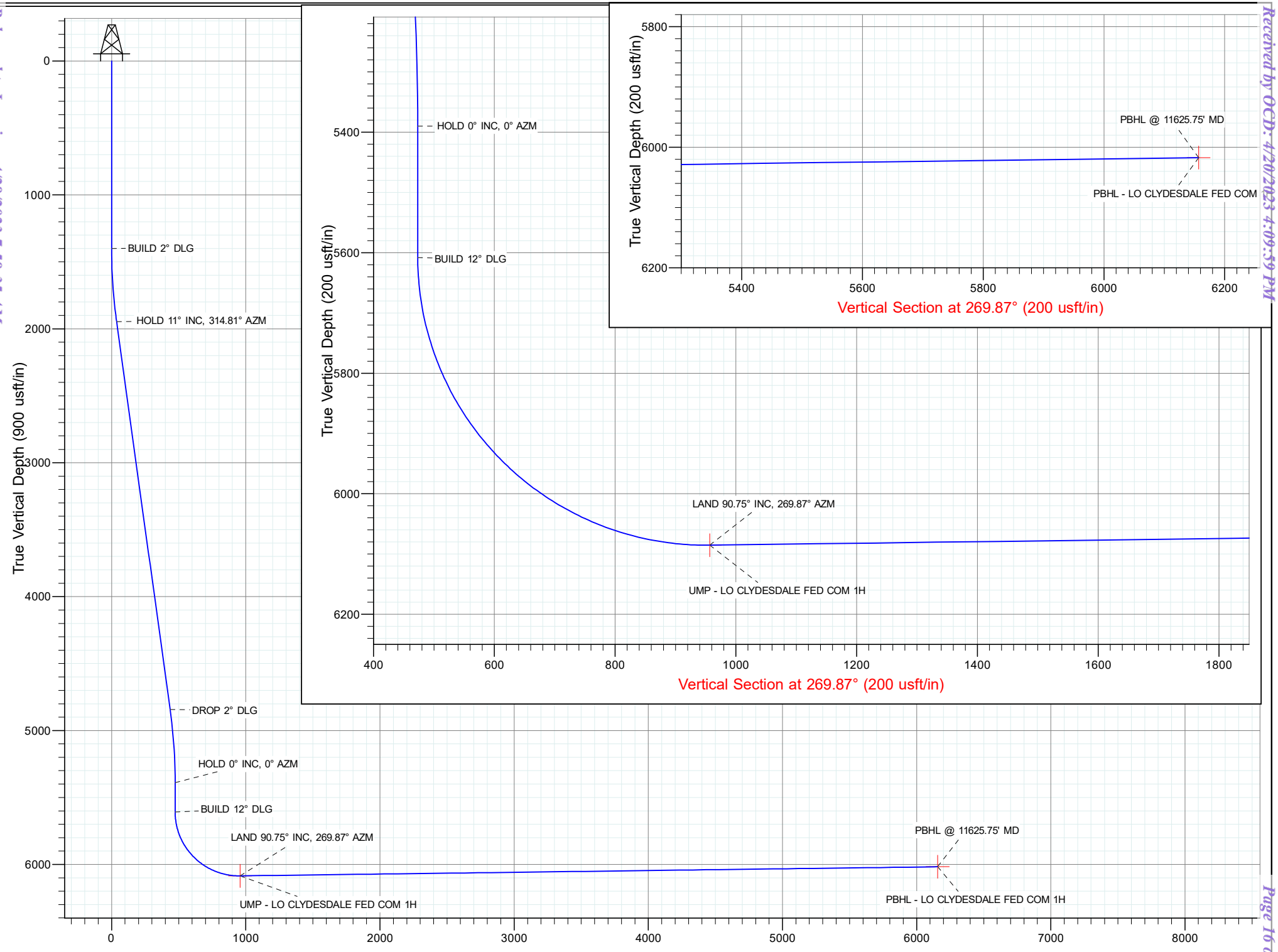
SECTION DETAILS

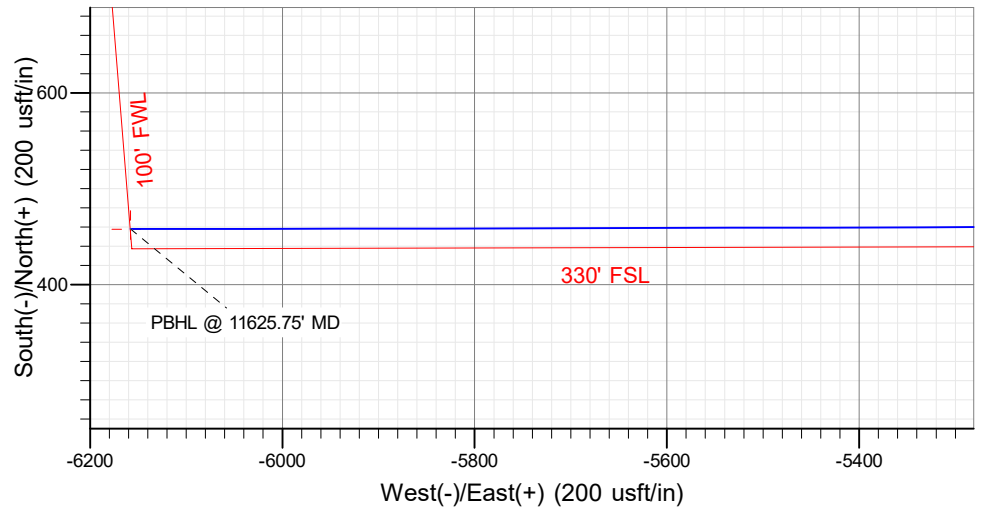
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	
1400.00	0.00	0.00	1400.00	0.00	0.00	0.0	0.00	0.00	BUILD 2° DLG
1950.16	11.00	314.81	1946.79	37.11	-37.36	2.0	314.81	37.28	HOLD 11° INC, 314.81° AZM
4900.83	11.00	314.81	4843.21	434.01	-436.93	0.0	0.00	435.94	DROP 2° DLG
5451.00	0.00	0.00	5390.00	471.12	-474.29	2.0	180.00	473.22	HOLD 0° INC, 0° AZM
5669.04	0.00	0.00	5608.05	471.12	-474.29	0.0	0.00	473.22	BUILD 12° DLG
6425.29	90.75	269.87	6085.47	470.00	-958.00	12.0	269.87	956.93	LAND 90.75° INC, 269.87° AZM
11625.75	90.75	269.87	6017.40	458.00	-6158.00	0.0	0.00	6156.94	PBHL @ 11625.75' MD

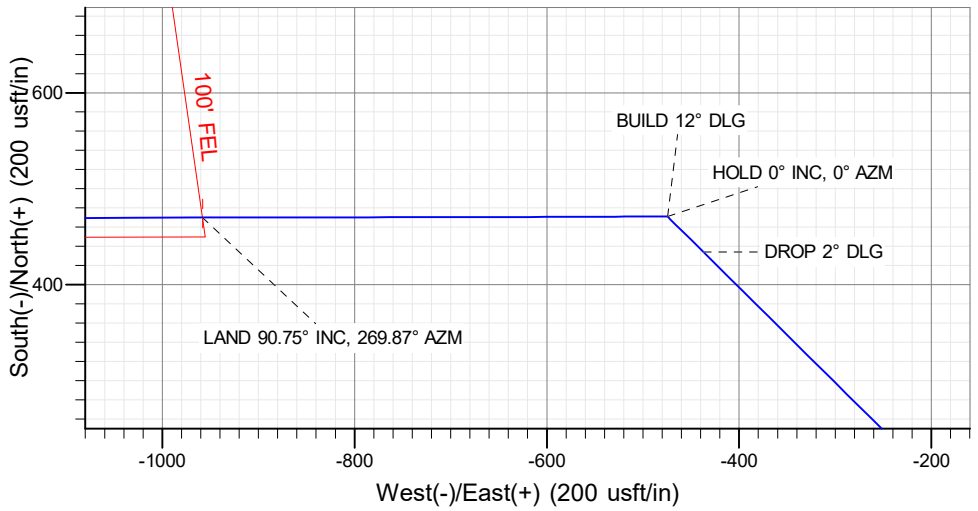
DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL - LO CLYDESDALE FED COM 1H	458.00	-6158.00	683900.00	559444.00	32.880047	-104.274353
UMP - LO CLYDESDALE FED COM 1H	470.00	-958.00	683912.00	564644.00	32.880071	-104.257414

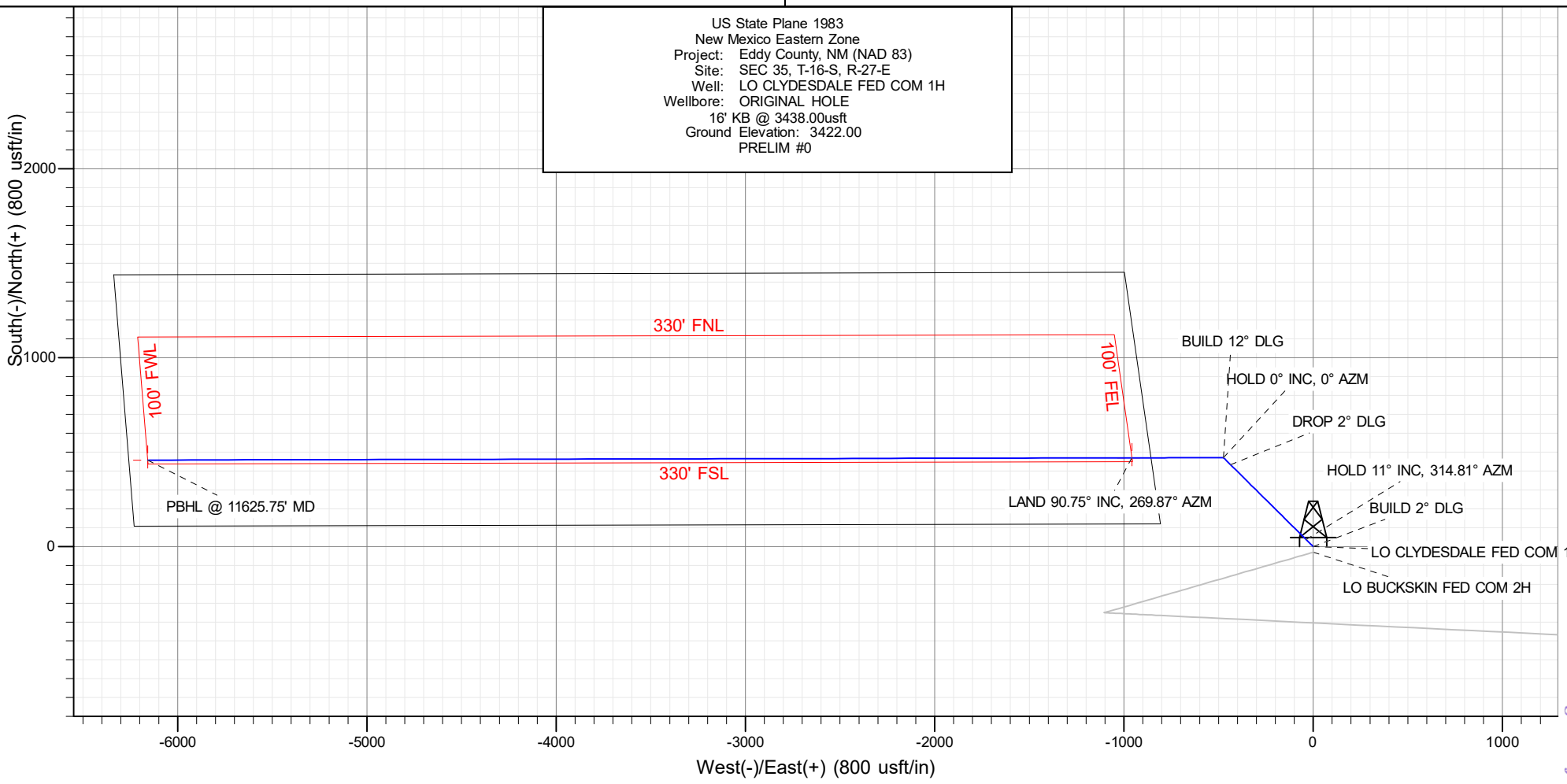








US State Plane 1983
New Mexico Eastern Zone
Project: Eddy County, NM (NAD 83)
Site: SEC 35, T-16-S, R-27-E
Well: LO CLYDESDALE FED COM 1H
Wellbore: ORIGINAL HOLE
16' KB @ 3438.00usft
Ground Elevation: 3422.00
PRELIM #0



Planning Report

CATHEDRAL

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well LO CLYDESDALE FED COM 1H
Company:	MR NM OPERATING, LLC.	**TVD Reference:**	16' KB @ 3438.00usft
Project:	Eddy County, NM (NAD 83)	**MD Reference:**	16' KB @ 3438.00usft
Site:	SEC 35, T-16-S, R-27-E	**North Reference:**	Grid
Well:	LO CLYDESDALE FED COM 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL HOLE		
Design:	PRELIM #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 35, T-16-S, R-27-E

Site Position:		**Northing:**	683,442.00 usft	**Latitude:**	32.878777
From:	Map	**Easting:**	565,602.00 usft	**Longitude:**	-104.254295
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.04 °

Well LO CLYDESDALE FED COM 1H

Well Position	**+N/-S**	0.00 usft	**Northing:**	683,442.00 usft	**Latitude:**	32.878777
	+E/-W	0.00 usft	**Easting:**	565,602.00 usft	**Longitude:**	-104.254295
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	3,422.00 usft

Wellbore ORIGINAL HOLE

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HRGM	6/10/2022	6.91	60.44	47,690.20524812

Design PRELIM #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	269.87

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	0.0	0.0	0.0	0.00	
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.0	0.0	0.0	0.00	
1,950.16	11.00	314.81	1,946.79	37.11	-37.36	2.0	2.0	0.0	314.81	
4,900.83	11.00	314.81	4,843.21	434.01	-436.93	0.0	0.0	0.0	0.00	
5,451.00	0.00	0.00	5,390.00	471.12	-474.29	2.0	-2.0	0.0	180.00	
5,669.04	0.00	0.00	5,608.05	471.12	-474.29	0.0	0.0	0.0	0.00	
6,425.29	90.75	269.87	6,085.47	470.00	-958.00	12.0	12.0	0.0	269.87	
11,625.75	90.75	269.87	6,017.40	458.00	-6,158.00	0.0	0.0	0.0	0.00	

Planning Report

CATHEDRAL

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well LO CLYDESDALE FED COM 1H
Company:	MR NM OPERATING, LLC.	**TVD Reference:**	16' KB @ 3438.00usft
Project:	Eddy County, NM (NAD 83)	**MD Reference:**	16' KB @ 3438.00usft
Site:	SEC 35, T-16-S, R-27-E	**North Reference:**	Grid
Well:	LO CLYDESDALE FED COM 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL HOLE		
Design:	PRELIM #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	0.0	0.0	0.0
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.0	0.0	0.0
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.0	0.0	0.0
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.0	0.0	0.0
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.0	0.0	0.0
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.0	0.0	0.0
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.0	0.0	0.0
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.0	0.0	0.0
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.0	0.0	0.0
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.0	0.0	0.0
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.0	0.0	0.0
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.0	0.0	0.0
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.0	0.0	0.0
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.0	0.0	0.0
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.0	0.0	0.0
BUILD 2° DLG									
1,500.00	2.00	314.81	1,499.98	1.23	-1.24	1.24	2.0	2.0	0.0
1,600.00	4.00	314.81	1,599.84	4.92	-4.95	4.94	2.0	2.0	0.0
1,700.00	6.00	314.81	1,699.45	11.06	-11.13	11.11	2.0	2.0	0.0
1,800.00	8.00	314.81	1,798.70	19.65	-19.78	19.74	2.0	2.0	0.0
1,900.00	10.00	314.81	1,897.47	30.67	-30.88	30.81	2.0	2.0	0.0
1,950.16	11.00	314.81	1,946.79	37.11	-37.36	37.28	2.0	2.0	0.0
HOLD 11° INC, 314.81° AZM									
2,000.00	11.00	314.81	1,995.71	43.82	-44.11	44.01	0.0	0.0	0.0
2,100.00	11.00	314.81	2,093.87	57.27	-57.65	57.52	0.0	0.0	0.0
2,200.00	11.00	314.81	2,192.03	70.72	-71.20	71.04	0.0	0.0	0.0
2,300.00	11.00	314.81	2,290.19	84.17	-84.74	84.55	0.0	0.0	0.0
2,400.00	11.00	314.81	2,388.35	97.62	-98.28	98.06	0.0	0.0	0.0
2,500.00	11.00	314.81	2,486.52	111.07	-111.82	111.57	0.0	0.0	0.0
2,600.00	11.00	314.81	2,584.68	124.52	-125.36	125.08	0.0	0.0	0.0
2,700.00	11.00	314.81	2,682.84	137.97	-138.90	138.59	0.0	0.0	0.0
2,800.00	11.00	314.81	2,781.00	151.43	-152.44	152.10	0.0	0.0	0.0
2,900.00	11.00	314.81	2,879.16	164.88	-165.99	165.61	0.0	0.0	0.0
3,000.00	11.00	314.81	2,977.32	178.33	-179.53	179.12	0.0	0.0	0.0
3,100.00	11.00	314.81	3,075.49	191.78	-193.07	192.63	0.0	0.0	0.0
3,200.00	11.00	314.81	3,173.65	205.23	-206.61	206.14	0.0	0.0	0.0
3,300.00	11.00	314.81	3,271.81	218.68	-220.15	219.65	0.0	0.0	0.0
3,400.00	11.00	314.81	3,369.97	232.13	-233.69	233.17	0.0	0.0	0.0
3,500.00	11.00	314.81	3,468.13	245.58	-247.23	246.68	0.0	0.0	0.0
3,600.00	11.00	314.81	3,566.29	259.03	-260.78	260.19	0.0	0.0	0.0
3,700.00	11.00	314.81	3,664.46	272.48	-274.32	273.70	0.0	0.0	0.0
3,800.00	11.00	314.81	3,762.62	285.93	-287.86	287.21	0.0	0.0	0.0
3,900.00	11.00	314.81	3,860.78	299.38	-301.40	300.72	0.0	0.0	0.0
4,000.00	11.00	314.81	3,958.94	312.84	-314.94	314.23	0.0	0.0	0.0
4,100.00	11.00	314.81	4,057.10	326.29	-328.48	327.74	0.0	0.0	0.0
4,200.00	11.00	314.81	4,155.26	339.74	-342.02	341.25	0.0	0.0	0.0
4,300.00	11.00	314.81	4,253.43	353.19	-355.56	354.76	0.0	0.0	0.0
4,400.00	11.00	314.81	4,351.59	366.64	-369.11	368.27	0.0	0.0	0.0
4,500.00	11.00	314.81	4,449.75	380.09	-382.65	381.78	0.0	0.0	0.0
4,600.00	11.00	314.81	4,547.91	393.54	-396.19	395.29	0.0	0.0	0.0
4,700.00	11.00	314.81	4,646.07	406.99	-409.73	408.81	0.0	0.0	0.0
4,800.00	11.00	314.81	4,744.23	420.44	-423.27	422.32	0.0	0.0	0.0
4,900.00	11.00	314.81	4,842.40	433.89	-436.81	435.83	0.0	0.0	0.0
4,900.83	11.00	314.81	4,843.21	434.01	-436.93	435.94	0.0	0.0	0.0

Planning Report

CATHEDRAL

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well LO CLYDESDALE FED COM 1H
Company:	MR NM OPERATING, LLC.	**TVD Reference:**	16' KB @ 3438.00usft
Project:	Eddy County, NM (NAD 83)	**MD Reference:**	16' KB @ 3438.00usft
Site:	SEC 35, T-16-S, R-27-E	**North Reference:**	Grid
Well:	LO CLYDESDALE FED COM 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL HOLE		
Design:	PRELIM #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)
DROP 2° DLG									
5,000.00	9.02	314.81	4,940.87	446.15	-449.16	448.14	2.0	-2.0	0.0
5,100.00	7.02	314.81	5,039.88	455.99	-459.05	458.02	2.0	-2.0	0.0
5,200.00	5.02	314.81	5,139.33	463.38	-466.49	465.44	2.0	-2.0	0.0
5,300.00	3.02	314.81	5,239.07	468.32	-471.47	470.40	2.0	-2.0	0.0
5,400.00	1.02	314.81	5,339.01	470.80	-473.97	472.90	2.0	-2.0	0.0
5,451.00	0.00	0.00	5,390.00	471.12	-474.29	473.22	2.0	-2.0	0.0
HOLD 0° INC, 0° AZM									
5,500.00	0.00	0.00	5,439.01	471.12	-474.29	473.22	0.0	0.0	0.0
5,600.00	0.00	0.00	5,539.01	471.12	-474.29	473.22	0.0	0.0	0.0
5,669.04	0.00	0.00	5,608.05	471.12	-474.29	473.22	0.0	0.0	0.0
BUILD 12° DLG									
5,700.00	3.71	269.87	5,638.98	471.12	-475.29	474.22	12.0	12.0	0.0
5,800.00	15.71	269.87	5,737.37	471.08	-492.14	491.07	12.0	12.0	0.0
5,900.00	27.71	269.87	5,830.10	470.99	-529.07	528.00	12.0	12.0	0.0
6,000.00	39.71	269.87	5,913.13	470.87	-584.47	583.40	12.0	12.0	0.0
6,100.00	51.71	269.87	5,982.83	470.70	-655.93	654.86	12.0	12.0	0.0
6,200.00	63.71	269.87	6,036.14	470.51	-740.31	739.24	12.0	12.0	0.0
6,300.00	75.71	269.87	6,070.75	470.29	-833.94	832.87	12.0	12.0	0.0
6,400.00	87.71	269.87	6,085.13	470.06	-932.72	931.65	12.0	12.0	0.0
6,425.29	90.75	269.87	6,085.47	470.00	-958.00	956.94	12.0	12.0	0.0
LAND 90.75° INC, 269.87° AZM									
6,500.00	90.75	269.87	6,084.49	469.83	-1,032.70	1,031.64	0.0	0.0	0.0
6,600.00	90.75	269.87	6,083.19	469.60	-1,132.69	1,131.63	0.0	0.0	0.0
6,700.00	90.75	269.87	6,081.88	469.37	-1,232.69	1,231.62	0.0	0.0	0.0
6,800.00	90.75	269.87	6,080.57	469.14	-1,332.68	1,331.61	0.0	0.0	0.0
6,900.00	90.75	269.87	6,079.26	468.91	-1,432.67	1,431.60	0.0	0.0	0.0
7,000.00	90.75	269.87	6,077.95	468.68	-1,532.66	1,531.59	0.0	0.0	0.0
7,100.00	90.75	269.87	6,076.64	468.45	-1,632.65	1,631.58	0.0	0.0	0.0
7,200.00	90.75	269.87	6,075.33	468.22	-1,732.64	1,731.58	0.0	0.0	0.0
7,300.00	90.75	269.87	6,074.02	467.98	-1,832.63	1,831.57	0.0	0.0	0.0
7,400.00	90.75	269.87	6,072.71	467.75	-1,932.62	1,931.56	0.0	0.0	0.0
7,500.00	90.75	269.87	6,071.40	467.52	-2,032.62	2,031.55	0.0	0.0	0.0
7,600.00	90.75	269.87	6,070.10	467.29	-2,132.61	2,131.54	0.0	0.0	0.0
7,700.00	90.75	269.87	6,068.79	467.06	-2,232.60	2,231.53	0.0	0.0	0.0
7,800.00	90.75	269.87	6,067.48	466.83	-2,332.59	2,331.52	0.0	0.0	0.0
7,900.00	90.75	269.87	6,066.17	466.60	-2,432.58	2,431.52	0.0	0.0	0.0
8,000.00	90.75	269.87	6,064.86	466.37	-2,532.57	2,531.51	0.0	0.0	0.0
8,100.00	90.75	269.87	6,063.55	466.14	-2,632.56	2,631.50	0.0	0.0	0.0
8,200.00	90.75	269.87	6,062.24	465.91	-2,732.55	2,731.49	0.0	0.0	0.0
8,300.00	90.75	269.87	6,060.93	465.68	-2,832.54	2,831.48	0.0	0.0	0.0
8,400.00	90.75	269.87	6,059.62	465.45	-2,932.54	2,931.47	0.0	0.0	0.0
8,500.00	90.75	269.87	6,058.31	465.21	-3,032.53	3,031.46	0.0	0.0	0.0
8,600.00	90.75	269.87	6,057.01	464.98	-3,132.52	3,131.46	0.0	0.0	0.0
8,700.00	90.75	269.87	6,055.70	464.75	-3,232.51	3,231.45	0.0	0.0	0.0
8,800.00	90.75	269.87	6,054.39	464.52	-3,332.50	3,331.44	0.0	0.0	0.0
8,900.00	90.75	269.87	6,053.08	464.29	-3,432.49	3,431.43	0.0	0.0	0.0
9,000.00	90.75	269.87	6,051.77	464.06	-3,532.48	3,531.42	0.0	0.0	0.0
9,100.00	90.75	269.87	6,050.46	463.83	-3,632.47	3,631.41	0.0	0.0	0.0
9,200.00	90.75	269.87	6,049.15	463.60	-3,732.47	3,731.40	0.0	0.0	0.0
9,300.00	90.75	269.87	6,047.84	463.37	-3,832.46	3,831.40	0.0	0.0	0.0
9,400.00	90.75	269.87	6,046.53	463.14	-3,932.45	3,931.39	0.0	0.0	0.0
9,500.00	90.75	269.87	6,045.23	462.91	-4,032.44	4,031.38	0.0	0.0	0.0

Planning Report

CATHEDRAL

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well LO CLYDESDALE FED COM 1H
Company:	MR NM OPERATING, LLC.	**TVD Reference:**	16' KB @ 3438.00usft
Project:	Eddy County, NM (NAD 83)	**MD Reference:**	16' KB @ 3438.00usft
Site:	SEC 35, T-16-S, R-27-E	**North Reference:**	Grid
Well:	LO CLYDESDALE FED COM 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL HOLE		
Design:	PRELIM #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)
9,600.00	90.75	269.87	6,043.92	462.68	-4,132.43	4,131.37	0.0	0.0	0.0
9,700.00	90.75	269.87	6,042.61	462.44	-4,232.42	4,231.36	0.0	0.0	0.0
9,800.00	90.75	269.87	6,041.30	462.21	-4,332.41	4,331.35	0.0	0.0	0.0
9,900.00	90.75	269.87	6,039.99	461.98	-4,432.40	4,431.34	0.0	0.0	0.0
10,000.00	90.75	269.87	6,038.68	461.75	-4,532.39	4,531.34	0.0	0.0	0.0
10,100.00	90.75	269.87	6,037.37	461.52	-4,632.39	4,631.33	0.0	0.0	0.0
10,200.00	90.75	269.87	6,036.06	461.29	-4,732.38	4,731.32	0.0	0.0	0.0
10,300.00	90.75	269.87	6,034.75	461.06	-4,832.37	4,831.31	0.0	0.0	0.0
10,400.00	90.75	269.87	6,033.44	460.83	-4,932.36	4,931.30	0.0	0.0	0.0
10,500.00	90.75	269.87	6,032.14	460.60	-5,032.35	5,031.29	0.0	0.0	0.0
10,600.00	90.75	269.87	6,030.83	460.37	-5,132.34	5,131.28	0.0	0.0	0.0
10,700.00	90.75	269.87	6,029.52	460.14	-5,232.33	5,231.28	0.0	0.0	0.0
10,800.00	90.75	269.87	6,028.21	459.91	-5,332.32	5,331.27	0.0	0.0	0.0
10,900.00	90.75	269.87	6,026.90	459.68	-5,432.32	5,431.26	0.0	0.0	0.0
11,000.00	90.75	269.87	6,025.59	459.44	-5,532.31	5,531.25	0.0	0.0	0.0
11,100.00	90.75	269.87	6,024.28	459.21	-5,632.30	5,631.24	0.0	0.0	0.0
11,200.00	90.75	269.87	6,022.97	458.98	-5,732.29	5,731.23	0.0	0.0	0.0
11,300.00	90.75	269.87	6,021.66	458.75	-5,832.28	5,831.22	0.0	0.0	0.0
11,400.00	90.75	269.87	6,020.36	458.52	-5,932.27	5,931.22	0.0	0.0	0.0
11,500.00	90.75	269.87	6,019.05	458.29	-6,032.26	6,031.21	0.0	0.0	0.0
11,600.00	90.75	269.87	6,017.74	458.06	-6,132.25	6,131.20	0.0	0.0	0.0
11,625.75	90.75	269.87	6,017.40	458.00	-6,158.00	6,156.95	0.0	0.0	0.0
PBHL @ 11625.75' 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
PBHL - LO CLYDESDAL - plan hits target center - Point	0.00	0.00	6,017.40	458.00	-6,158.00	683,900.00	559,444.00	32.880047	-104.274353
UMP - LO CLYDESDALI - plan hits target center - Point	0.00	0.01	6,085.47	470.00	-958.00	683,912.00	564,644.00	32.880071	-104.257414

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1,400.00	1,400.00	0.00	0.00	BUILD 2° DLG
1,950.16	1,946.79	37.11	-37.36	HOLD 11° INC, 314.81° AZM
4,900.83	4,843.21	434.01	-436.93	DROP 2° DLG
5,451.00	5,390.00	471.12	-474.29	HOLD 0° INC, 0° AZM
5,669.04	5,608.05	471.12	-474.29	BUILD 12° DLG
6,425.29	6,085.47	470.00	-958.00	LAND 90.75° INC, 269.87° AZM
11,625.75	6,017.40	458.00	-6,158.00	PBHL @ 11625.75' MD

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**MR NM**
LEASE NO.:	**NMNM141395**
LOCATION:	Section 35, T.16 S., R.27 E., NMPM
COUNTY:	Eddy County, New Mexico

WELL NAME & NO.:	Clydesdale Fed Com 1H
SURFACE HOLE FOOTAGE:	2563'/S & 781'/W
BOTTOM HOLE FOOTAGE	2315'/N & 100'/W

COA

H2S	○ Yes	◉ No	
Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	○ Low	○ Medium	◉ High
Cave/Karst Potential	○ Critical		
Variance	○ 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 **13-3/8** inch surface casing shall be set at approximately **500** feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
    b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8**

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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. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
   a. 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.
   b. Manufacturer representative shall install the test plug for the initial BOP test.
   c. 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.
   d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

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D. SPECIAL REQUIREMENT (S)

Communitization Agreement

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

GENERAL REQUIREMENTS

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

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

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

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig

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- 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.

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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.

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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.
ZS013023

 Approval Date: 04/19/2023

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

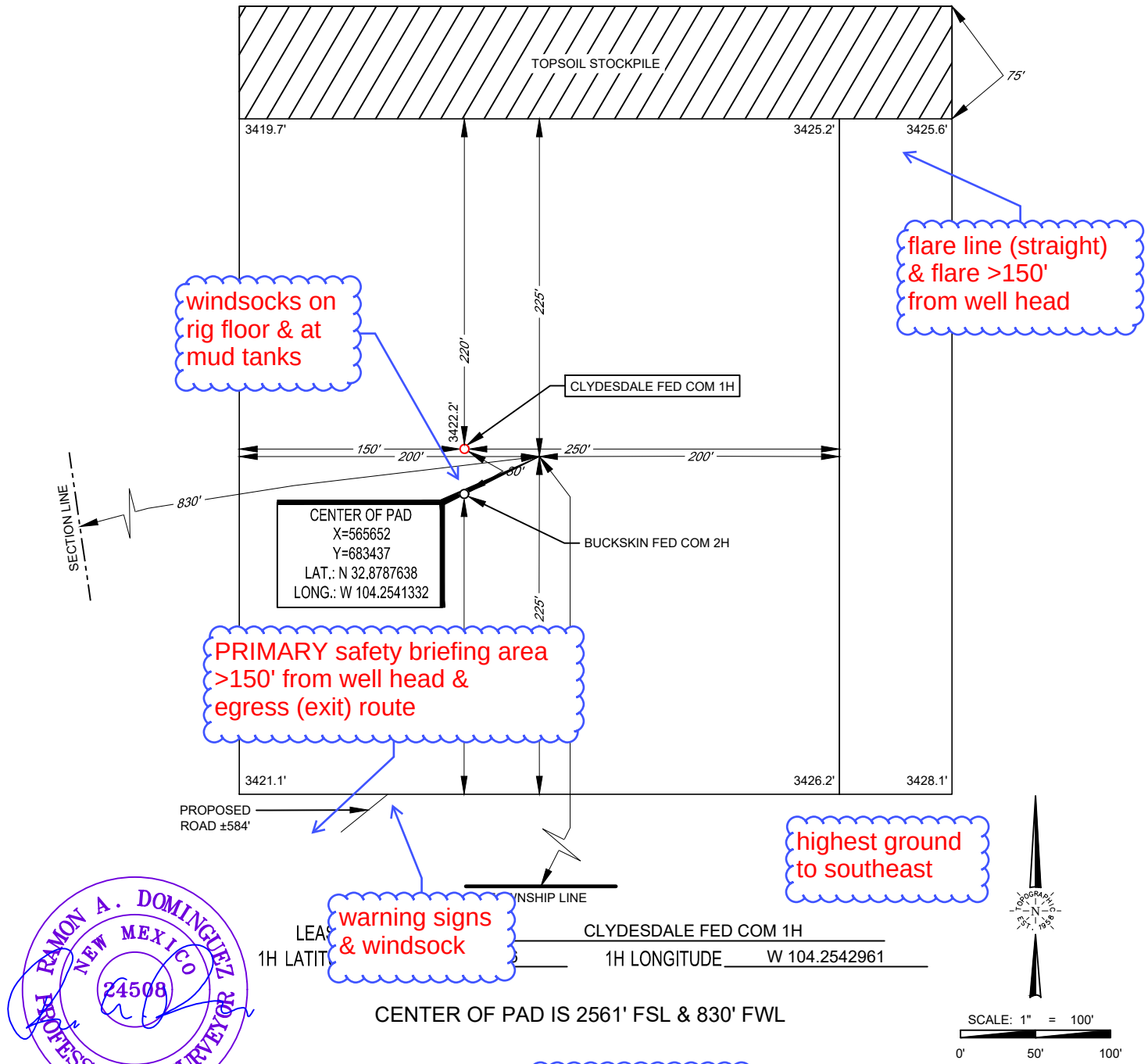
MR NM OPERATING LLC.

SECTION 35, TOWNSHIP 16-S, RANGE 27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

DETAIL VIEW
SCALE: 1" = 100'

LEGEND

TOWNSHIP LINE
SECTION LINE



RAMON A. DOMINGUEZ
NEW MEXICO
24508
PROFESSIONAL SURVEYOR

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

MAY 23, 2022

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

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

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
1400 EVERMAN PARKWAY, Ste. 146 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM

ORIGINAL DOCUMENT SIZE: 8.5" X 11"

MR NM Operating, LLC

Clydesdale-Buckskin Pad
H2S Contingency Plan:
Radius Map

Section 35, Township 16S, Range 27E
Eddy County, New Mexico

Pad Center

1:27,109

0 0.25 0.5 1

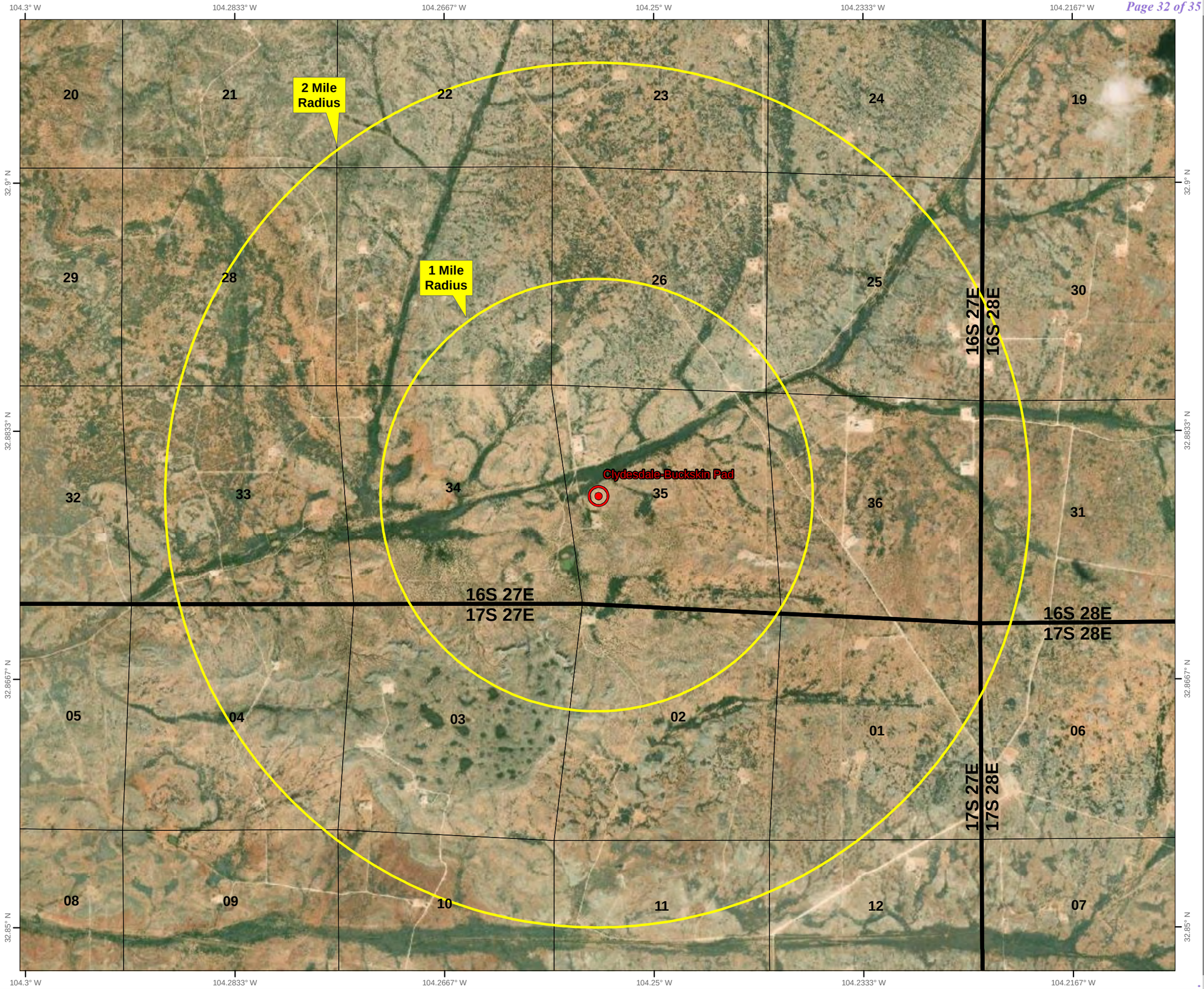
Miles

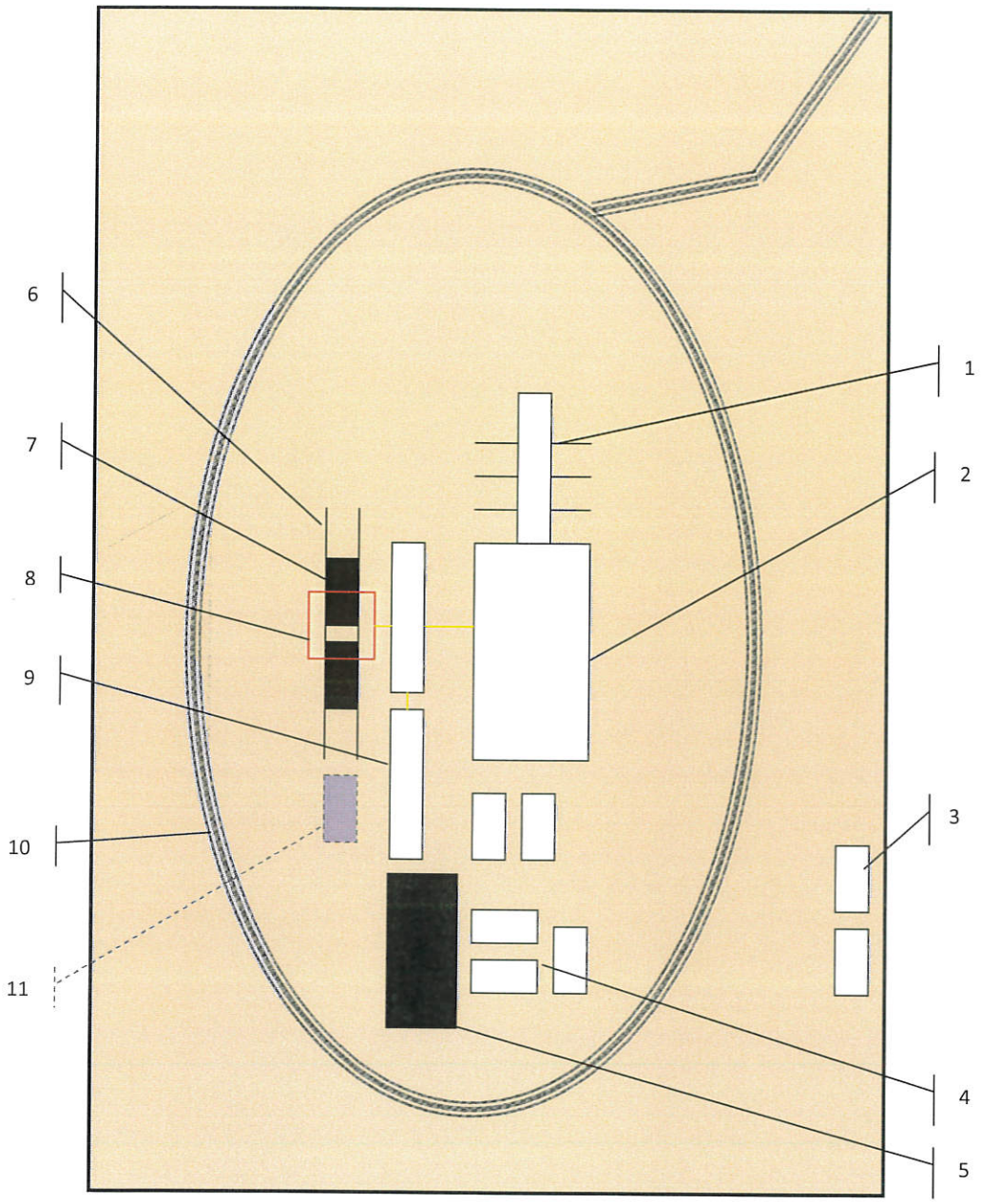
N

NAD 1983 New Mexico State Plane East
FIPS 3001 Feet

PERMITS WEST

Prepared by Permits West, Inc., August 16, 2022
for FAE II 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)

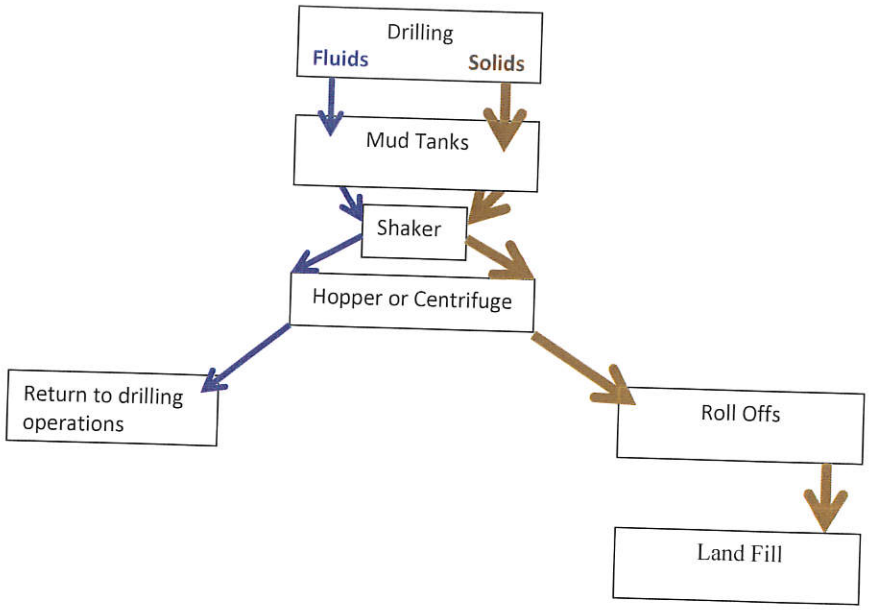
*Not drawn to scale: Closed loop system requires at least 30 feet beyond mud tanks. Ideally 60 feet would be available

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 209534

CONDITIONS

Operator: MR NM Operating LLC 5950 Berkshire Lane Dallas, TX 75225	OGRID: 330506
	Action Number: 209534
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
john.harrison	Notify OCD 24 hours prior to casing & cement	4/28/2023
john.harrison	Will require a File As Drilled C-102 and a Directional Survey with the C-104	4/28/2023
john.harrison	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	4/28/2023
john.harrison	Cement is required to circulate on both surface and intermediate1 strings of casing	4/28/2023
john.harrison	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	4/28/2023