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.: NMNM121490

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.: BARLOW XL 22-34 FED COM 746H

2. Name of Operator: EOG RESOURCES INCORPORATED

9. API Well No.: 30-025-55187

3a. Address: 1111 BAGBY SKY LOBBY 2, HOUSTON, TX 77002

3b. Phone No. *(include area code)*: (713) 651-7000

10. Field and Pool, or Exploratory: SANDER TANK/UPPER WOLFCAMP

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

At surface: TR F / 2042 FNL / 1526 FWL / LAT 32.0306046 / LONG -103.5637918

At proposed prod. zone: LOT 4 / 100 FSL / 1320 FWL / LAT 32.0005275 / LONG -103.564458

11. Sec., T. R. M. or Blk. and Survey or Area: SEC 22/T26S/R33E/NMP

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

12. County or Parish: LEA

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any): 100 feet

16. No of acres in lease:

17. Spacing Unit dedicated to this well: 1266.0

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: 33 feet

19. Proposed Depth: 12870 feet / 23304 feet

20. BLM/BIA Bond No. in file: FED: NM2308

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3294 feet

22. Approximate date work will start*: 12/25/2025

23. Estimated duration: 25 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)	SHEA BAILEY / Ph: (713) 651-7000	11/15/2024

Title: Regulatory Contractor

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	TANJA BACA / Ph: (575) 234-5940	08/27/2025

Title	Office
Supervisory Land Law Examiner	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: 08/27/2025

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

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Approval Date: 08/27/2025

Additional Operator Remarks

Location of Well

0. SHL: TR F / 2042 FNL / 1526 FWL / TWSP: 26S / RANGE: 33E / SECTION: 22 / LAT: 32.0306046 / LONG: -103.5637918 (TVD: 0 feet, MD: 0 feet)

PPP: TR L / 2541 FSL / 1320 FWL / TWSP: 26S / RANGE: 33E / SECTION: 22 / LAT: 32.0286865 / LONG: -103.5644564 (TVD: 12827 feet, MD: 12869 feet)

PPP: TR L / 2639 FNL / 1320 FWL / TWSP: 26S / RANGE: 33E / SECTION: 27 / LAT: 32.0144416 / LONG: -103.5644572 (TVD: 12870 feet, MD: 18238 feet)

BHL: LOT 4 / 100 FSL / 1320 FWL / TWSP: 26S / RANGE: 33E / SECTION: 22 / LAT: 32.0005275 / LONG: -103.564458 (TVD: 12870 feet, MD: 23304 feet)

BLM Point of Contact

Name: MARIAH HUGHES
Title: Land Law Examiner
Phone: (575) 234-5972
Email: mhughes@blm.gov

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024 Submittal Type: ☒ Initial Submittal ☐ Amended Report ☐ As Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025- 55187	~~98097~~ 84410	~~Sanders Tank, Upper Wolfcamp~~ SALADO DRAW;WOLFCAMP (GAS)

Property Code	Property Name	Well Number
337725	BARLOW XL 22-34 FED COM	746H

OGRID No.	Operator Name	Ground Level Elevation
7377	EOG RESOURCES, INC.	3294'

Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal | Mineral Owner: ☐ State ☒ Fee ☐ Tribal ☒ Federal

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
F	22	26-S	33-E	-	2042' N	1526' W	N 32.0306046	W 103.5637918	LEA

Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
4	34	26-S	33-E	-	100' S	1320' W	N 32.0005275	W 103.5644580	LEA

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidated Code
1266.00	DEFINING		Y	C

Order Numbers: PENDING COM AGREEMENT | Well Setbacks are under Common Ownership: ☐ Yes ☐ No

Kick Off Point (KOP)

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
L	22	26-S	33-E	-	2591' S	1320' W	N 32.0288240	W 103.5644564	LEA

First Take Point (FTP)

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
L	22	26-S	33-E	-	2541' S	1320' W	N 32.0286865	W 103.5644564	LEA

Last Take Point (LTP)

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
4	34	26-S	33-E	-	100' S	1320' W	N 32.0005275	W 103.5644580	LEA

Unitized Area or Area of Uniform Intrest	Spacing Unity Type	Ground Floor Elevation
COM AGREEMENT	☒ Horizontal ☐ Vertical	3319'

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief; and, if the well is a vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received The consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Shea Bailey 11/5/24

Signature Date

Shea Bailey

Print Name

sbailey1@eogresources.com

E-mail Address

SURVEYORS CERTIFICATION

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

BARON DOMINGUEZ NEW MEXICO 24508 PROFESSIONAL SURVEYOR

8/27/2024 10:08:59 AM

Signature and Seal of Professional Surveyor Date

Certificate Number	Date of Survey
	05/25/2024

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C-102	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
Submit Electronically Via OCD Permitting		Submittal Type: ☒ Initial Submittal ☐ Amended Report ☐ As Drilled

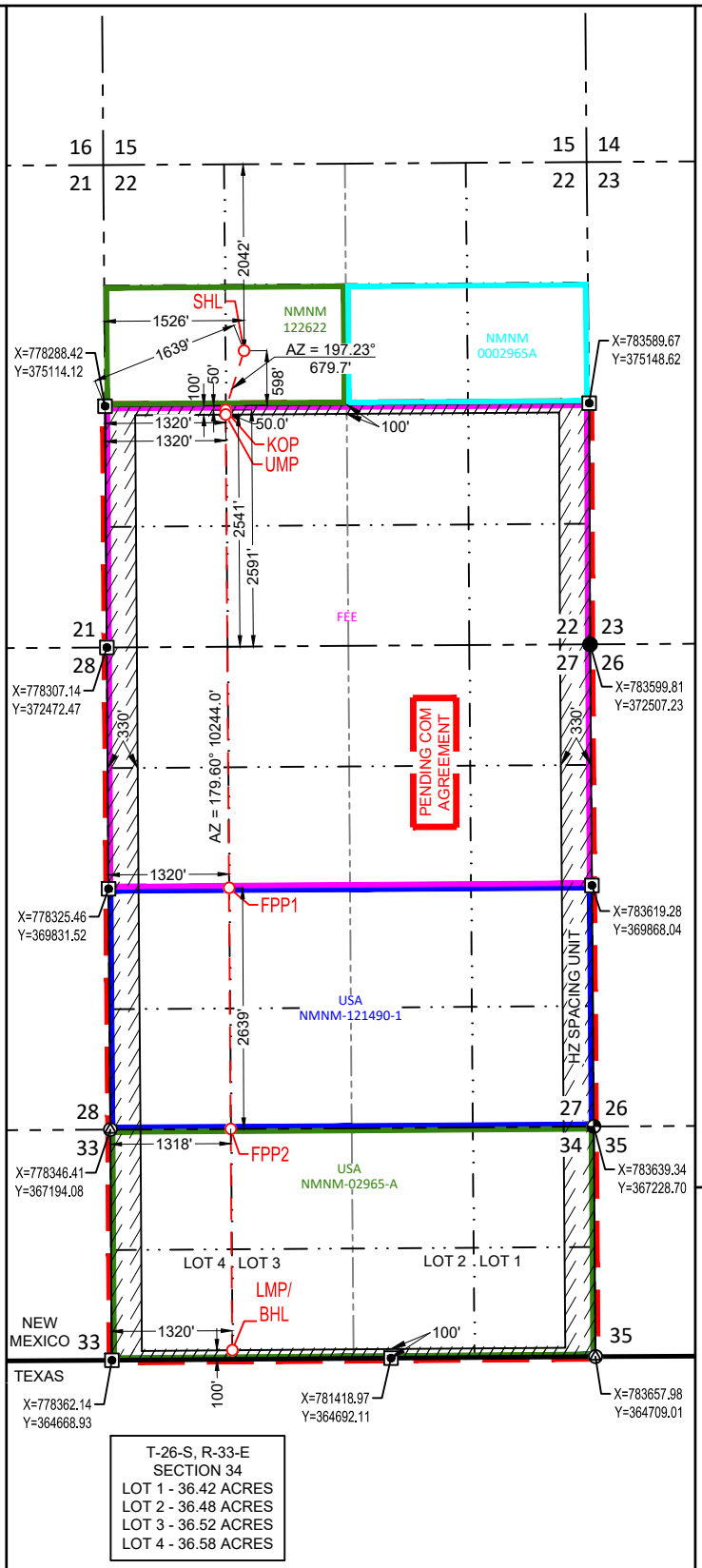
Property Name and Well Number

BARLOW XL 22-34 FED COM 746H

SURFACE LOCATION (SHL)
NEW MEXICO EAST
NAD 1983
X=779810 Y=375722
LAT.: N 32.0306046
LONG.: W 103.5637918
NAD 1927
X=738622 Y=375665
LAT.: N 32.0304794
LONG.: W 103.5633257
2042' FNL 1526' FWL

KICK OFF POINT (KOP)
NEW MEXICO EAST
NAD 1983
X=779609 Y=375073
LAT.: N 32.0288240
LONG.: W 103.5644564
NAD 1927
X=738421 Y=375016
LAT.: N 32.0286988
LONG.: W 103.5639904
2591' FSL 1320' FWL

UPPER MOST PERF. (UMP)
NEW MEXICO EAST
NAD 1983
X=779609 Y=375023
LAT.: N 32.0286865
LONG.: W 103.5644564
NAD 1927
X=738421 Y=374966
LAT.: N 32.0285613
LONG.: W 103.5639904
2541' FSL 1320' FWL



T-26-S, R-33-E
SECTION 34
LOT 1 - 36.42 ACRES
LOT 2 - 36.48 ACRES
LOT 3 - 36.52 ACRES
LOT 4 - 36.58 ACRES

FED PERF. POINT (FPP1)
NEW MEXICO EAST
NAD 1983
X=779646 Y=369841
LAT.: N 32.0144416
LONG.: W 103.5644572
NAD 1927
X=738458 Y=369784
LAT.: N 32.0143163
LONG.: W 103.5639921
2639' FSL 1320' FWL

FED PERF. POINT (FPP2)
NEW MEXICO EAST
NAD 1983
X=779664 Y=367201
LAT.: N 32.0071866
LONG.: W 103.5644576
NAD 1927
X=738476 Y=367145
LAT.: N 32.0070612
LONG.: W 103.5639929
0' FNL 1318' FWL

LOWER MOST PERF. (LMP)
BOTTOM HOLE LOCATION (BHL)
NEW MEXICO EAST
NAD 1983
X=779681 Y=364779
LAT.: N 32.0005275
LONG.: W 103.5644580
NAD 1927
X=738493 Y=364722
LAT.: N 32.0004021
LONG.: W 103.5639937
100' FSL 1320' FWL

SURVEYORS CERTIFICATION

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

05/25/2024
Date of Survey
Signature and Seal of Professional Surveyor:

RAMON DOMINGUEZ
NEW MEXICO
24508
PROFESSIONAL SURVEYOR

8/27/2024 10:09:00 AM

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Barlow XL 22-34 Fed Com 746H

1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	1,033'
Tamarisk Anhydrite	1,111'
Top of Salt	1,380'
Base of Salt	4,725'
Lamar	4,960'
Bell Canyon	4,986'
Cherry Canyon	5,881'
Brushy Canyon	7,548'
Bone Spring Lime	9,091'
Leonard Shale	9,167'
1st Bone Spring Sand	10,054'
2nd Bone Spring Shale	10,269'
2nd Bone Spring Sand	10,570'
3rd Bone Spring Carb	11,095'
3rd Bone Spring Sand	11,804'
Wolfcamp	12,267'
TD	12,870'

3. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Upper Permian Sands	0- 400’	Fresh Water
Bell Canyon	4,986'	Oil
Cherry Canyon	5,881'	Oil
Brushy Canyon	7,548'	Oil
Leonard (Avalon) Shale	9,167'	Oil
1st Bone Spring Sand	10,054'	Oil
2nd Bone Spring Shale	10,269'	Oil
2nd Bone Spring Sand	10,570'	Oil
3rd Bone Spring Carb	11,095'	Oil
3rd Bone Spring Sand	11,804'	Oil
Wolfcamp	12,267'	Oil

No other Formations are expected to give up oil, gas or fresh water in measurable quantities. Surface fresh water sands will be protected by setting 9-5/8" or 10-3/4" casing at 1,136' and circulating cement back to surface.

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4. CASING PROGRAM - Design A

Hole Size	Interval MD From (ft)	Interval MD To (ft)	Interval TVD From (ft)	Interval TVD To (ft)	Csg OD	Weight	Grade	Conn
12-1/4"	0	1,136	0	1,136	9-5/8"	36#	J-55	LTC
8-3/4"	0	12,431	0	12,393	7-5/8"	29.7#	ICYP-110	MO FXL
6-3/4"	0	11,931	0	11,893	5-1/2"	20#	P110-EC	DWC/C IS MS
6-3/4"	11,931	12,431	11,893	12,393	5-1/2"	20#	P110-EC	VAM Sprint SF
6-3/4"	12,431	23,304	12,393	12,870	5-1/2"	20#	P110-EC	DWC/C IS MS

Variance is requested to waive the centralizer requirements for the 7-5/8" casing in the 8-3/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 8-3/4" hole interval to maximize cement bond and zonal isolation.

Variance is also requested to waive any centralizer requirements for the 5-1/2" casing in the 6-3/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 6-3/4" hole interval to maximize cement bond and zonal isolation.

Variance is also requested to waive the annular clearance requirements for the 5-1/2" casing by 7-5/8" casing annulus to the proposed top of cement.

EOG requests permission to allow deviation from the 0.422'' annulus clearance requirement from Onshore Order #2 under the following conditions:

- Annular clearance to meet or exceed 0.422'' between intermediate casing ID and production casing coupling only on the first 500' overlap between both casing strings.
- Annular clearance less than 0.422'' is acceptable for the production open hole section.

5. CEMENTING PROGRAM:

Depth MD	No. Sacks	Wt. ppg	Yld Ft3/sk	Slurry Description
1,136' 9-5/8"	320	13.5	1.73	Lead: Class C/H + 4.0% Bentonite Gel + 0.5% CaCl2 + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	100	14.8	1.34	Tail: Class C/H + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate (TOC @ 936')
12,431' 7-5/8"	600	14.2	1.11	1st Stage (Tail): Class C/H + 0.6% Halad-9 + 0.45% HR-601 + 3% Microbond (TOC @ 7,350')
	1000	14.8	1.5	2nd Stage (Bradenhead squeeze): Class C/H + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (TOC @ surface)
23,304' 5-1/2"	1422	12.5	2.05	Lead: Class C/H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ Surface)
5-1/2"	954	13.2	1.47	Tail: Class C/H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 10,234')

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Additive	Purpose
Bentonite Gel	Lightweight/Lost circulation prevention
Calcium Chloride	Accelerator
Cello-flake	Lost circulation prevention
Sodium Metasilicate	Accelerator
MagOx	Expansive agent
Pre-Mag-M	Expansive agent
Sodium Chloride	Accelerator
FL-62	Fluid loss control
Halad-344	Fluid loss control
Halad-9	Fluid loss control
HR-601	Retarder
Microbond	Expansive Agent

EOG requests variance from minimum standards to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon (7,548') and the second stage performed as a 1000 sack bradenhead squeeze with planned cement from the Brushy Canyon to surface. If necessary, a top out consisting of 100 sacks of Class C/H cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. Top will be verified by Echo-meter.

EOG will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program.

EOG will report to the BLM the volume of fluid (limited to 5 bbls) used to flush intermediate casing valves following backside cementing procedures.

Cement integrity tests will be performed immediately following plug bump.

Note: Cement volumes based on bit size plus at least 25% excess in the open hole plus 10% excess in the cased-hole overlap section.

EOG requests a variance to set the intermediate casing shoe in the Bone Spring formation OR the Wolfcamp formation, depending on depletion in the area and well conditions. EOG will monitor the well and ensure the well is static before casing operations begin.

6. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

Variance is requested to use a co-flex line between the BOP and choke manifold (instead of using a 4" OD steel line).

The minimum blowout preventer equipment (BOPE) shown in Exhibit #1 will consist of a single ram, mud cross and double ram-type (10,000 psi WP) preventer and an annular preventer (5,000 psi WP). Both units will be hydraulically operated and the ram-type will be equipped with blind rams on bottom and drill pipe rams on top.

EOG will utilize wing unions on BOPE connections that can be isolated from wellbore pressure through means of a choke. All wing unions will be rated to a pressure that meets or exceeds the pressure rating of the BOPE system.

Variance is requested to use a 5,000 psi annular BOP with the 10,000 psi BOP stack.

Pipe rams and blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

A hydraulically operated choke will be installed prior to drilling out of the intermediate casing shoe.

7. TYPES AND CHARACTERISTICS OF THE PROPOSED MUD SYSTEM:

During this procedure we plan to use a Closed-Loop System and haul contents to the required disposal.

The applicable depths and properties of the drilling fluid systems are as follows:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,136'	Fresh - Gel	8.6-8.8	28-34	N/c
1,136' – 11,195'	Brine	10.0-10.2	28-34	N/c
11,195’ – 12,430'	Oil Base	8.7-9.4	58-68	N/c - 6
12,430’ – 23,304’ Lateral	Oil Base	10.0-14.0	58-68	4 - 6

The highest mud weight needed to balance formation is expected to be 11.5 ppg. In order to maintain hole stability, mud weights up to 14.0 ppg may be utilized.

An electronic pit volume totalizer (PVT) will be utilized on the circulating system, to monitor pit volume, flow rate, pump pressure and stroke rate.

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

8. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

(A) A kelly cock will be kept in the drill string at all times.

(B) A full opening drill pipe-stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.

(C) H2S monitoring and detection equipment will be utilized from surface casing point to TD.

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Barlow XL 22-34 Fed Com 746H

9. LOGGING, TESTING AND CORING PROGRAM:

Open-hole logs are not planned for this well.

GR-CCL Will be run in cased hole during completions phase of operations.

10. ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES AND POTENTIAL HAZARDS:

The estimated bottom-hole temperature (BHT) at TD is 199 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 9,369 psig and a maximum anticipated surface pressure of 6,538 psig (based on 14.0 ppg MW). No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. Severe loss circulation is expected from 7,548' to intermediate casing point.

11. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

The drilling operation should be finished in approximately one month. If the well is productive, an additional 60-90 days will be required for completion and testing before a decision is made to install permanent facilities.

EOG Resources 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 1,500 psi. All valves will be closed and a wellhead cap will be installed (diagram attached). If the timing between rigs is such that EOG Resources would not be able to preset the surface, the Primary Rig will MIRU and drill the well in its entirety per the APD.

12. WELLHEAD:

A multi-bowl wellhead system will be utilized.

After running the surface casing, a BOP/BOPE system with a minimum working pressure of 10,000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 10,000 psi pressure test. This pressure test will be repeated at least every 30 days, as per Onshore Order No. 2.

The minimum working pressure of the BOP and related BOPE required for drilling below the surface casing shoe shall be 10,000 psi.

The multi-bowl wellhead will be installed by vendor’s representative(s). A copy of the installation instructions for the Cactus Multi-Bowl WH system has been sent to the NM BLM office in Carlsbad, NM.

Barlow XL 22-34 Fed Com 746H

The wellhead will be installed by a third party welder while being monitored by WH vendor's representative.

All BOP equipment will be tested utilizing a conventional test plug. Not a cup or J-packer type. EOG Resources reserves the option to conduct BOPE testing during wait on cement periods provided a test plug is utilized.

A solid steel body pack-off will be utilized after running and cementing the intermediate casing. After installation the pack-off and lower flange will be pressure tested to 5,000 psi.

Casing strings will be tested as per Onshore Order No. 2 to at least 0.22 psi/ft or 1,500 psi, whichever is greater.

EOG Resources Inc. (EOG) respectfully requests a variance from the minimum standards for well control equipment testing of Onshore Order No. 2 (item III.A.2.a.i) to allow a testing schedule of the blow out preventer (BOP) and blow out prevention equipment (BOPE) along with Batch Drilling & Offline cement operations to include the following:

- Full BOPE test at first installation on the pad.
- Full BOPE test every 21 days per Onshore Order No. 2.
- Function test BOP elements per Onshore Order No. 2.
- Break testing BOP and BOPE coupled with batch drilling operations and option to offline cement and/or remediate (if needed) any surface or intermediate sections, according to attached offline cementing support documentation.
- After the well section is secured, the BOP will be disconnected from the wellhead and walked with the rig to another well on the pad.
- TA cap will also be installed per Wellhead vendor procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.
- See attached "EOG BLM Variance 3a_b - BOP Break-test and Offline Intermediate Cement 8.15.2023"

eog resources

Barlow XL 22-34 Fed Com 746H

13. TUBING REQUIREMENTS

EOG respectively requests an exception to the following NMOCD rule:

- 19.15.16.10 Casing AND TUBING RQUIREMENTS:
  J (3): "The operator shall set tubing as near the bottom as practical and tubing perforations shall not be more than 250 feet above top of pay zone."

With horizontal flowing and gas lifted wells an end of tubing depth placed at or slightly above KOP is a conservative way to ensure the tubing stays clean from debris, plugging, and allows for fewer well interventions post offset completion. The deeper the tubulars are run into the curve, the higher the probability is that the tubing will become stuck in sand and or well debris as the well produces over time. An additional consideration for EOT placement during artificial lift installations is avoiding the high dog leg severity and inclinations found in the curve section of the wellbore to help improve reliability and performance. Dog leg severity and inclinations tend not to hamper gas lifted or flowing wells, but they do effect other forms of artificial lift like rod pump or ESP (electric submersible pump). Keeping the EOT above KOP is an industry best practice for those respective forms of artificial lift.

14. VARIANCE REQUESTS:

EOG requests the additional variance(s) in the attached document(s):

- Intermediate Bradenhead Cement: see attached "EOG BLM Variance 2a - Intermediate Bradenhead Cement 8.15.2023" document
- Break-test BOP and Offline Cementing: see attached "EOG BLM Variance 3a_b - BOP Break-test and Offline Intermediate Cement 8.15.2023" document
- Production Offline Cement - EOG BLM Variance 3d document
- EOG requests a variance to set the intermediate casing shoe in the Bone Spring formation OR the Wolfcamp formation, depending on depletion in the area and well conditions. EOG will monitor the well and ensure the well is static before casing operations begin. See attached "EOG BLM Variance 2b - Wolfcamp Intermediate Casing Setpoint 2024.06.26" document

eog resources

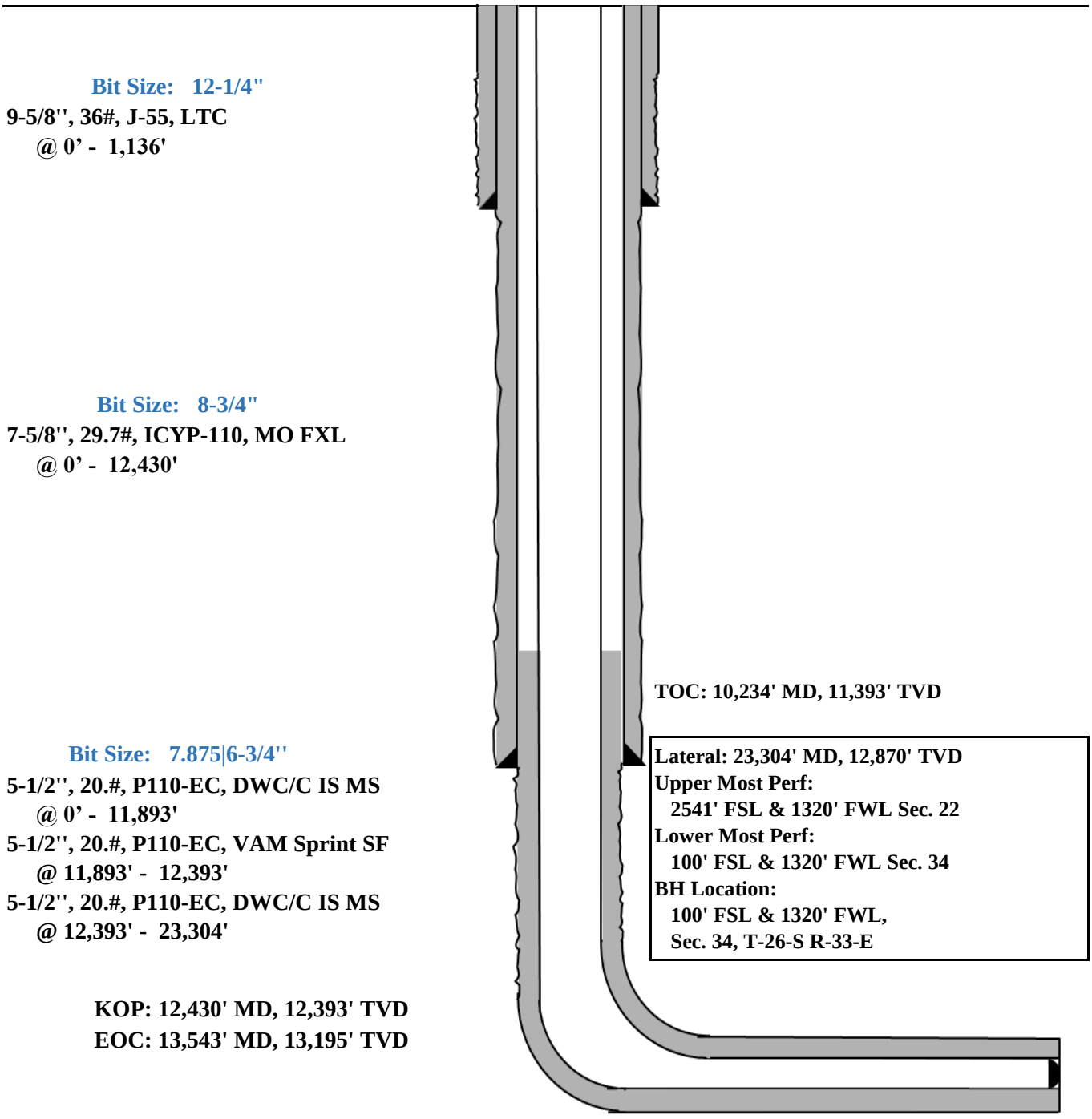
Barlow XL 22-34 Fed Com 746H

2042' FNL
1526' FWL
Section 22
T-26-S, R-33-E

Proposed Wellbore

KB: 3319'
GL: 3294'

API: 30-025-***



Bit Size: 12-1/4"
9-5/8'', 36#, J-55, LTC
@ 0' - 1,136'

Bit Size: 8-3/4"
7-5/8'', 29.7#, ICYP-110, MO FXL
@ 0' - 12,430'

Bit Size: 7.875|6-3/4''
5-1/2'', 20.#, P110-EC, DWC/C IS MS
@ 0' - 11,893'
5-1/2'', 20.#, P110-EC, VAM Sprint SF
@ 11,893' - 12,393'
5-1/2'', 20.#, P110-EC, DWC/C IS MS
@ 12,393' - 23,304'

KOP: 12,430' MD, 12,393' TVD
EOC: 13,543' MD, 13,195' TVD

TOC: 10,234' MD, 11,393' TVD

Lateral: 23,304' MD, 12,870' TVD
Upper Most Perf:
2541' FSL & 1320' FWL Sec. 22
Lower Most Perf:
100' FSL & 1320' FWL Sec. 34
BH Location:
100' FSL & 1320' FWL,
Sec. 34, T-26-S R-33-E

eog resources

Barlow XL 22-34 Fed Com 746H

Design B

4. CASING PROGRAM

Hole Size	Interval MD From (ft)	Interval MD To (ft)	Interval TVD From (ft)	Interval TVD To (ft)	Csg OD	Weight	Grade	Conn
13"	0	1,136	0	1,136	10-3/4"	40.5#	J-55	STC
9-7/8"	0	12,431	0	12,393	8-3/4"	38.5#	P110-EC	VAM Sprint-SF
7-7/8"	0	12,431	0	11893	6"	22.3#	P110-EC	DWC/C IS
6-3/4"	12,431	23,304	11893	12,870	5-1/2"	20#	P110-EC	DWC/C IS MS

**For highlighted rows above, variance is requested to run entire string of either 6'' or 5-1/2'' casing string above.

Variance is requested to waive the centralizer requirements for the 8-3/4" casing in the 9-7/8" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 9-7/8" hole interval to maximize cement bond and zonal isolation.

Variance is also requested to waive any centralizer requirements for the 6" casing in the 7-7/8" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 7-7/8" hole interval to maximize cement bond and zonal isolation.

Variance is also requested to waive the annular clearance requirements for the 6" and 5-1/2" casings by 8-3/4" casing annulus to the proposed top of cement.

EOG requests permission to allow deviation from the 0.422'' annulus clearance requirement from Onshore Order #2 under the following conditions:

- Annular clearance to meet or exceed 0.422'' between intermediate casing ID and production casing coupling only on the first 500' overlap between both casing strings.
- Annular clearance less than 0.422'' is acceptable for the production open hole section.

5. CEMENTING PROGRAM:

Depth MD	No. Sacks	Wt. ppg	Yld Ft3/sk	Slurry Description
1,136' 10-3/4"	290	13.5	1.73	Lead: Class C/H + 4.0% Bentonite Gel + 0.5% CaCl2 + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	100	14.8	1.34	Tail: Class C/H + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate (TOC @ 936')
12,431' 8-3/4"	680	14.2	1.11	1st Stage (Tail): Class C/H + 0.6% Halad-9 + 0.45% HR-601 + 3% Microbond (TOC @ 7,350')
	1000	14.8	1.5	2nd Stage (Bradenhead squeeze): Class C/H + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (TOC @ surface)
23,304' 6" 5-1/2"	1000	12.5	2.05	Lead: Class C/H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ Surface)
	960	13.2	1.47	Tail: Class C/H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 10,234')

eog resources

Barlow XL 22-34 Fed Com 746H

EOG requests variance from minimum standards to pump a two stage cement job on the 8-3/4" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon (7,548') and the second stage performed as a 1000 sack bradenhead squeeze with planned cement from the Brushy Canyon to surface. If necessary, a top out consisting of 100 sacks of Class C/H cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. Top will be verified by Echo-meter.

EOG will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program.

EOG will report to the BLM the volume of fluid (limited to 5 bbls) used to flush intermediate casing valves following backside cementing procedures.

Cement integrity tests will be performed immediately following plug bump.

Note: Cement volumes based on bit size plus at least 25% excess in the open hole plus 10% excess in the cased-hole overlap section.

EOG requests a variance to set the intermediate casing shoe in the Bone Spring formation OR the Wolfcamp formation, depending on depletion in the area and well conditions. EOG will monitor the well and ensure the well is static before casing operations begin.

6. **WELLHEAD:**

EOG Resources Inc. (EOG) respectfully requests a variance from the minimum standards for well control equipment testing of Onshore Order No. 2 (item III.A.2.a.i) to allow a testing schedule of the blow out preventer (BOP) and blow out prevention equipment (BOPE) along with Batch Drilling & Offline cement operations to include the following:

- Full BOPE test at first installation on the pad.
- Full BOPE test every 20 days per Onshore Order No. 2.
- Function test BOP elements per Onshore Order No. 2.
- Break testing BOP and BOPE coupled with batch drilling operations and option to offline cement and/or remediate (if needed) any surface or intermediate sections, according to attached offline cementing support documentation.
- After the well section is secured, the BOP will be disconnected from the wellhead and walked with the rig to another well on the pad.
- TA cap will also be installed per Wellhead vendor procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.
- See attached "EOG BLM Variance 3a -Offline Cement Intermediate Operational Procedure"

eog resources

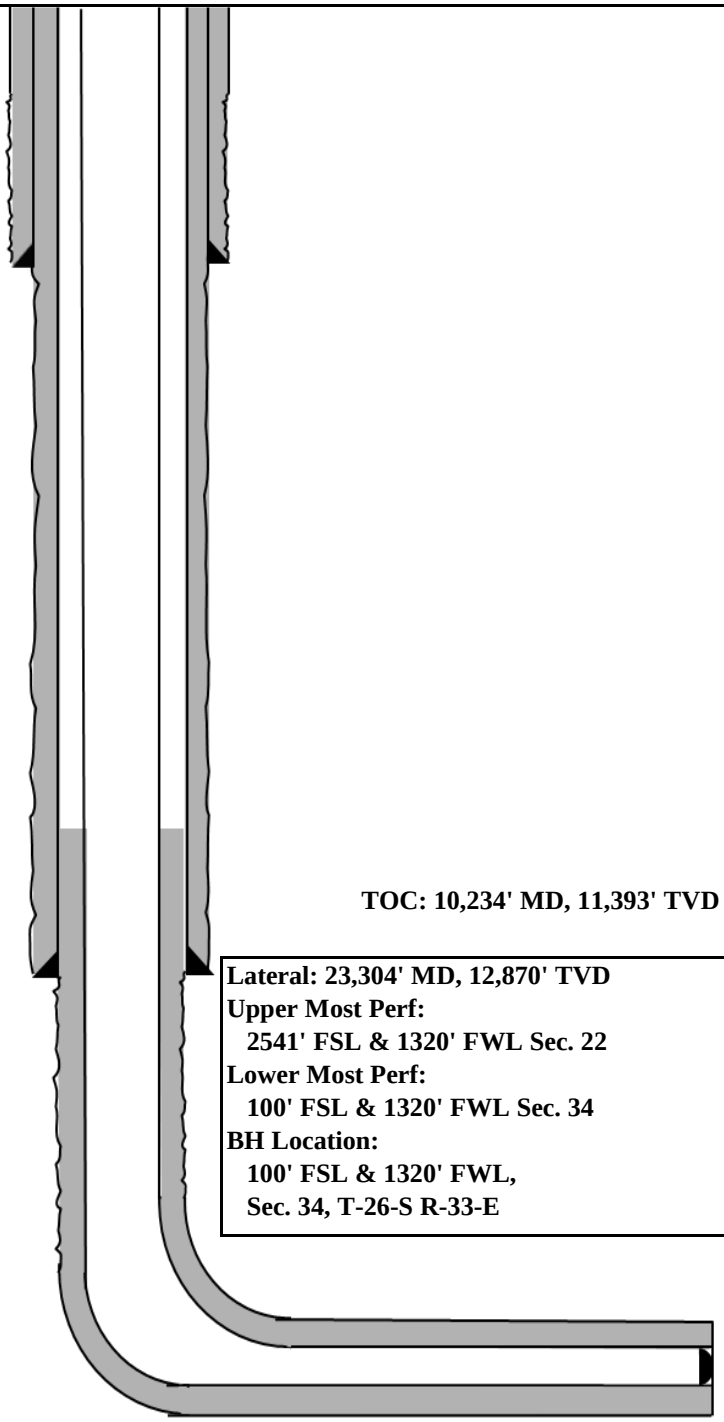
Barlow XL 22-34 Fed Com 746H

2042' FNL
1526' FWL
Section 22
T-26-S, R-33-E

Proposed Wellbore

API: 30-025-***

KB: 3319'
GL: 3294'



Bit Size: 13"
10-3/4'', 40.5#, J-55, STC,
0' - 1,136'

Bit Size: 9-7/8"
8-3/4'', 38.5#, P110-EC, VAM Sprint-SF
@ 0' - 12,430'

Bit Size: 7-7/8''|6-3/4''
6'', 22.3#, P110-EC, DWC/C IS
@ 0' - 12,430'
5-1/2'', 20.#, P110-EC, DWC/C IS MS
@ 12,430' - 23,304'

KOP: 12,430' MD, 12,393' TVD
EOC: 13,543' MD, 13,195' TVD

TOC: 10,234' MD, 11,393' TVD

Lateral: 23,304' MD, 12,870' TVD
Upper Most Perf:
2541' FSL & 1320' FWL Sec. 22
Lower Most Perf:
100' FSL & 1320' FWL Sec. 34
BH Location:
100' FSL & 1320' FWL,
Sec. 34, T-26-S R-33-E

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EOG Batch Casing

Pad Name: Barlow XL 22-34 Fed Com DEEP

SHL: Section 22, Township 26-S, Range 33-E, LEA County, NM

Well Name	API #	Surface		Intermediate		Production	
		MD	TVD	MD	TVD	MD	TVD
Barlow XL 22-34 Fed Com #741H	30-025-*****	1,136	1,136	12,474	12,393	23,033	12,870
Barlow XL 22-34 Fed Com #742H	30-025-*****	1,136	1,136	12,449	12,393	23,011	12,870
Barlow XL 22-34 Fed Com #743H	30-025-*****	1,136	1,136	12,428	12,393	22,992	12,870
Barlow XL 22-34 Fed Com #744H	30-025-*****	1,136	1,136	12,479	12,393	23,041	12,870
Barlow XL 22-34 Fed Com #745H	30-025-*****	1,136	1,136	12,606	12,393	23,462	12,870
Barlow XL 22-34 Fed Com #746H	30-025-*****	1,136	1,136	12,431	12,393	23,304	12,870
Barlow XL 22-34 Fed Com #747H	30-025-*****	1,136	1,136	12,493	12,393	23,363	12,870

EOG Batch Casing

Variances

EOG requests the additional variance(s) in the attached document(s):

- EOG BLM Variance 2a - Intermediate Bradenhead Cement
- EOG BLM Variance 2b - Wolfcamp Intermediate Casing Setpoint
- EOG BLM Variance 3a_b - BOP Break-test and Offline Intermediate Cement

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EOG Batch Casing

GEOLOGIC NAME OF SURFACE FORMATION:

Permian

ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	1,033'
Tamarisk Anhydrite	1,111'
Top of Salt	1,380'
Base of Salt	4,725'
Lamar	4,960'
Bell Canyon	4,986'
Cherry Canyon	5,881'
Brushy Canyon	7,548'
Bone Spring Lime	9,091'
Leonard (Avalon) Shale	9,167'
1st Bone Spring Sand	10,054'
2nd Bone Spring Shale	10,269'
2nd Bone Spring Sand	10,570'
3rd Bone Spring Carb	11,095'
3rd Bone Spring Sand	11,804'
Wolfcamp	12,267'

ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Upper Permian Sands	0- 400’	Fresh Water
Bell Canyon	4,986'	Oil
Cherry Canyon	5,881'	Oil
Brushy Canyon	7,548'	Oil
Leonard (Avalon) Shale	9,167'	Oil
1st Bone Spring Sand	10,054'	Oil
2nd Bone Spring Shale	10,269'	Oil
2nd Bone Spring Sand	10,570'	Oil

No other Formations are expected to give up oil, gas or fresh water in measurable quantities. Surface fresh water sands will be protected by setting surface casing at 1,140' and circulating cement back to surface.

Midland

Lea County, NM (NAD 83 NME)
Barlow XL 22-34 Fed Com
#746H

OH

Plan: Plan #0.1 RT

Standard Planning Report

04 November, 2024

eog resources

Planning Report

Database:	PEDMB	**Local Co-ordinate Reference:**	Well #746H
Company:	Midland	**TVD Reference:**	kb = 26' @ 3320.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	kb = 26' @ 3320.0usft
Site:	Barlow XL 22-34 Fed Com	**North Reference:**	Grid
Well:	#746H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1 RT		

Project Lea County, NM (NAD 83 NME)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site Barlow XL 22-34 Fed Com

Site Position:		**Northing:**	375,543.00 usft	**Latitude:**	32° 1' 48.213 N
From:	Map	**Easting:**	782,531.00 usft	**Longitude:**	103° 33' 18.059 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "		

Well #746H

Well Position	**+N/-S**	0.0 usft	**Northing:**	375,722.00 usft	**Latitude:**	32° 1' 50.177 N
	+E/-W	0.0 usft	**Easting:**	779,810.00 usft	**Longitude:**	103° 33' 49.651 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,294.0 usft
Grid Convergence:		0.41 °				

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	10/31/2024	6.13	59.61	47,029.04902387

Design Plan #0.1 RT

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	180.68

Plan Survey Tool Program **Date** 10/31/2024

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	23,304.1	Plan #0.1 RT (OH)	EOG MWD+IFR1	
				MWD + IFR1	

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Planning Report

Database:	PEDMB	**Local Co-ordinate Reference:**	Well #746H
Company:	Midland	**TVD Reference:**	kb = 26' @ 3320.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	kb = 26' @ 3320.0usft
Site:	Barlow XL 22-34 Fed Com	**North Reference:**	Grid
Well:	#746H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1 RT		

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,236.0	0.00	0.00	1,236.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,559.7	6.47	197.21	1,559.0	-17.4	-5.4	2.00	2.00	0.00	197.21	
7,262.1	6.47	197.21	7,225.0	-631.6	-195.6	0.00	0.00	0.00	0.00	
7,585.7	0.00	0.00	7,548.0	-649.0	-201.0	2.00	-2.00	0.00	180.00	
12,430.2	0.00	0.00	12,392.5	-649.0	-201.0	0.00	0.00	0.00	0.00	KOP(Barlow XL 22-34
12,868.9	13.12	180.00	12,827.3	-699.0	-201.0	2.99	2.99	41.04	180.00	FTP(Barlow XL 22-34
13,542.6	93.97	179.58	13,195.2	-1,197.1	-198.1	12.00	12.00	-0.06	-0.42	
18,238.0	93.97	179.58	12,870.0	-5,881.0	-164.0	0.00	0.00	0.00	0.00	Fed Perf 1(Barlow XL
20,880.1	86.03	179.64	12,870.0	-8,521.0	-146.0	0.30	-0.30	0.00	179.63	Fed Perf 2(Barlow XL
23,304.1	93.97	179.56	12,870.0	-10,943.0	-129.0	0.33	0.33	0.00	-0.54	PBHL(Barlow XL 22-3

eog resources

Planning Report

Database:	PEDMB	**Local Co-ordinate Reference:**	Well #746H
Company:	Midland	**TVD Reference:**	kb = 26' @ 3320.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	kb = 26' @ 3320.0usft
Site:	Barlow XL 22-34 Fed Com	**North Reference:**	Grid
Well:	#746H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1 RT		

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,236.0	0.00	0.00	1,236.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	1.28	197.21	1,300.0	-0.7	-0.2	0.7	2.00	2.00	0.00
1,400.0	3.28	197.21	1,399.9	-4.5	-1.4	4.5	2.00	2.00	0.00
1,500.0	5.28	197.21	1,499.6	-11.6	-3.6	11.7	2.00	2.00	0.00
1,559.7	6.47	197.21	1,559.0	-17.4	-5.4	17.5	2.00	2.00	0.00
1,600.0	6.47	197.21	1,599.1	-21.8	-6.7	21.9	0.00	0.00	0.00
1,700.0	6.47	197.21	1,698.4	-32.6	-10.1	32.7	0.00	0.00	0.00
1,800.0	6.47	197.21	1,797.8	-43.3	-13.4	43.5	0.00	0.00	0.00
1,900.0	6.47	197.21	1,897.1	-54.1	-16.8	54.3	0.00	0.00	0.00
2,000.0	6.47	197.21	1,996.5	-64.9	-20.1	65.1	0.00	0.00	0.00
2,100.0	6.47	197.21	2,095.9	-75.6	-23.4	75.9	0.00	0.00	0.00
2,200.0	6.47	197.21	2,195.2	-86.4	-26.8	86.7	0.00	0.00	0.00
2,300.0	6.47	197.21	2,294.6	-97.2	-30.1	97.5	0.00	0.00	0.00
2,400.0	6.47	197.21	2,394.0	-107.9	-33.4	108.3	0.00	0.00	0.00
2,500.0	6.47	197.21	2,493.3	-118.7	-36.8	119.1	0.00	0.00	0.00
2,600.0	6.47	197.21	2,592.7	-129.5	-40.1	129.9	0.00	0.00	0.00
2,700.0	6.47	197.21	2,692.0	-140.3	-43.4	140.8	0.00	0.00	0.00
2,800.0	6.47	197.21	2,791.4	-151.0	-46.8	151.6	0.00	0.00	0.00
2,900.0	6.47	197.21	2,890.8	-161.8	-50.1	162.4	0.00	0.00	0.00
3,000.0	6.47	197.21	2,990.1	-172.6	-53.4	173.2	0.00	0.00	0.00
3,100.0	6.47	197.21	3,089.5	-183.3	-56.8	184.0	0.00	0.00	0.00
3,200.0	6.47	197.21	3,188.9	-194.1	-60.1	194.8	0.00	0.00	0.00
3,300.0	6.47	197.21	3,288.2	-204.9	-63.4	205.6	0.00	0.00	0.00
3,400.0	6.47	197.21	3,387.6	-215.6	-66.8	216.4	0.00	0.00	0.00
3,500.0	6.47	197.21	3,486.9	-226.4	-70.1	227.2	0.00	0.00	0.00
3,600.0	6.47	197.21	3,586.3	-237.2	-73.5	238.0	0.00	0.00	0.00
3,700.0	6.47	197.21	3,685.7	-247.9	-76.8	248.8	0.00	0.00	0.00
3,800.0	6.47	197.21	3,785.0	-258.7	-80.1	259.6	0.00	0.00	0.00
3,900.0	6.47	197.21	3,884.4	-269.5	-83.5	270.4	0.00	0.00	0.00
4,000.0	6.47	197.21	3,983.8	-280.3	-86.8	281.3	0.00	0.00	0.00
4,100.0	6.47	197.21	4,083.1	-291.0	-90.1	292.1	0.00	0.00	0.00
4,200.0	6.47	197.21	4,182.5	-301.8	-93.5	302.9	0.00	0.00	0.00
4,300.0	6.47	197.21	4,281.8	-312.6	-96.8	313.7	0.00	0.00	0.00
4,400.0	6.47	197.21	4,381.2	-323.3	-100.1	324.5	0.00	0.00	0.00
4,500.0	6.47	197.21	4,480.6	-334.1	-103.5	335.3	0.00	0.00	0.00
4,600.0	6.47	197.21	4,579.9	-344.9	-106.8	346.1	0.00	0.00	0.00
4,700.0	6.47	197.21	4,679.3	-355.6	-110.1	356.9	0.00	0.00	0.00
4,800.0	6.47	197.21	4,778.7	-366.4	-113.5	367.7	0.00	0.00	0.00
4,900.0	6.47	197.21	4,878.0	-377.2	-116.8	378.5	0.00	0.00	0.00
5,000.0	6.47	197.21	4,977.4	-387.9	-120.1	389.3	0.00	0.00	0.00
5,100.0	6.47	197.21	5,076.7	-398.7	-123.5	400.1	0.00	0.00	0.00

eog resources

Planning Report

Database:	PEDMB	**Local Co-ordinate Reference:**	Well #746H
Company:	Midland	**TVD Reference:**	kb = 26' @ 3320.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	kb = 26' @ 3320.0usft
Site:	Barlow XL 22-34 Fed Com	**North Reference:**	Grid
Well:	#746H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1 RT		

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)
5,200.0	6.47	197.21	5,176.1	-409.5	-126.8	411.0	0.00	0.00	0.00
5,300.0	6.47	197.21	5,275.5	-420.3	-130.2	421.8	0.00	0.00	0.00
5,400.0	6.47	197.21	5,374.8	-431.0	-133.5	432.6	0.00	0.00	0.00
5,500.0	6.47	197.21	5,474.2	-441.8	-136.8	443.4	0.00	0.00	0.00
5,600.0	6.47	197.21	5,573.6	-452.6	-140.2	454.2	0.00	0.00	0.00
5,700.0	6.47	197.21	5,672.9	-463.3	-143.5	465.0	0.00	0.00	0.00
5,800.0	6.47	197.21	5,772.3	-474.1	-146.8	475.8	0.00	0.00	0.00
5,900.0	6.47	197.21	5,871.6	-484.9	-150.2	486.6	0.00	0.00	0.00
6,000.0	6.47	197.21	5,971.0	-495.6	-153.5	497.4	0.00	0.00	0.00
6,100.0	6.47	197.21	6,070.4	-506.4	-156.8	508.2	0.00	0.00	0.00
6,200.0	6.47	197.21	6,169.7	-517.2	-160.2	519.0	0.00	0.00	0.00
6,300.0	6.47	197.21	6,269.1	-527.9	-163.5	529.8	0.00	0.00	0.00
6,400.0	6.47	197.21	6,368.5	-538.7	-166.8	540.6	0.00	0.00	0.00
6,500.0	6.47	197.21	6,467.8	-549.5	-170.2	551.5	0.00	0.00	0.00
6,600.0	6.47	197.21	6,567.2	-560.3	-173.5	562.3	0.00	0.00	0.00
6,700.0	6.47	197.21	6,666.5	-571.0	-176.8	573.1	0.00	0.00	0.00
6,800.0	6.47	197.21	6,765.9	-581.8	-180.2	583.9	0.00	0.00	0.00
6,900.0	6.47	197.21	6,865.3	-592.6	-183.5	594.7	0.00	0.00	0.00
7,000.0	6.47	197.21	6,964.6	-603.3	-186.9	605.5	0.00	0.00	0.00
7,100.0	6.47	197.21	7,064.0	-614.1	-190.2	616.3	0.00	0.00	0.00
7,200.0	6.47	197.21	7,163.4	-624.9	-193.5	627.1	0.00	0.00	0.00
7,262.1	6.47	197.21	7,225.0	-631.6	-195.6	633.8	0.00	0.00	0.00
7,300.0	5.71	197.21	7,262.7	-635.4	-196.8	637.7	2.00	-2.00	0.00
7,400.0	3.71	197.21	7,362.4	-643.3	-199.2	645.6	2.00	-2.00	0.00
7,500.0	1.71	197.21	7,462.3	-647.8	-200.6	650.1	2.00	-2.00	0.00
7,585.7	0.00	0.00	7,548.0	-649.0	-201.0	651.3	2.00	-2.00	0.00
7,600.0	0.00	0.00	7,562.3	-649.0	-201.0	651.3	0.00	0.00	0.00
7,700.0	0.00	0.00	7,662.3	-649.0	-201.0	651.3	0.00	0.00	0.00
7,800.0	0.00	0.00	7,762.3	-649.0	-201.0	651.3	0.00	0.00	0.00
7,900.0	0.00	0.00	7,862.3	-649.0	-201.0	651.3	0.00	0.00	0.00
8,000.0	0.00	0.00	7,962.3	-649.0	-201.0	651.3	0.00	0.00	0.00
8,100.0	0.00	0.00	8,062.3	-649.0	-201.0	651.3	0.00	0.00	0.00
8,200.0	0.00	0.00	8,162.3	-649.0	-201.0	651.3	0.00	0.00	0.00
8,300.0	0.00	0.00	8,262.3	-649.0	-201.0	651.3	0.00	0.00	0.00
8,400.0	0.00	0.00	8,362.3	-649.0	-201.0	651.3	0.00	0.00	0.00
8,500.0	0.00	0.00	8,462.3	-649.0	-201.0	651.3	0.00	0.00	0.00
8,600.0	0.00	0.00	8,562.3	-649.0	-201.0	651.3	0.00	0.00	0.00
8,700.0	0.00	0.00	8,662.3	-649.0	-201.0	651.3	0.00	0.00	0.00
8,800.0	0.00	0.00	8,762.3	-649.0	-201.0	651.3	0.00	0.00	0.00
8,900.0	0.00	0.00	8,862.3	-649.0	-201.0	651.3	0.00	0.00	0.00
9,000.0	0.00	0.00	8,962.3	-649.0	-201.0	651.3	0.00	0.00	0.00
9,100.0	0.00	0.00	9,062.3	-649.0	-201.0	651.3	0.00	0.00	0.00
9,200.0	0.00	0.00	9,162.3	-649.0	-201.0	651.3	0.00	0.00	0.00
9,300.0	0.00	0.00	9,262.3	-649.0	-201.0	651.3	0.00	0.00	0.00
9,400.0	0.00	0.00	9,362.3	-649.0	-201.0	651.3	0.00	0.00	0.00
9,500.0	0.00	0.00	9,462.3	-649.0	-201.0	651.3	0.00	0.00	0.00
9,600.0	0.00	0.00	9,562.3	-649.0	-201.0	651.3	0.00	0.00	0.00
9,700.0	0.00	0.00	9,662.3	-649.0	-201.0	651.3	0.00	0.00	0.00
9,800.0	0.00	0.00	9,762.3	-649.0	-201.0	651.3	0.00	0.00	0.00
9,900.0	0.00	0.00	9,862.3	-649.0	-201.0	651.3	0.00	0.00	0.00
10,000.0	0.00	0.00	9,962.3	-649.0	-201.0	651.3	0.00	0.00	0.00
10,100.0	0.00	0.00	10,062.3	-649.0	-201.0	651.3	0.00	0.00	0.00
10,200.0	0.00	0.00	10,162.3	-649.0	-201.0	651.3	0.00	0.00	0.00
10,300.0	0.00	0.00	10,262.3	-649.0	-201.0	651.3	0.00	0.00	0.00

eog resources

Planning Report

Database:	PEDMB	**Local Co-ordinate Reference:**	Well #746H
Company:	Midland	**TVD Reference:**	kb = 26' @ 3320.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	kb = 26' @ 3320.0usft
Site:	Barlow XL 22-34 Fed Com	**North Reference:**	Grid
Well:	#746H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1 RT		

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)
10,400.0	0.00	0.00	10,362.3	-649.0	-201.0	651.3	0.00	0.00	0.00
10,500.0	0.00	0.00	10,462.3	-649.0	-201.0	651.3	0.00	0.00	0.00
10,600.0	0.00	0.00	10,562.3	-649.0	-201.0	651.3	0.00	0.00	0.00
10,700.0	0.00	0.00	10,662.3	-649.0	-201.0	651.3	0.00	0.00	0.00
10,800.0	0.00	0.00	10,762.3	-649.0	-201.0	651.3	0.00	0.00	0.00
10,900.0	0.00	0.00	10,862.3	-649.0	-201.0	651.3	0.00	0.00	0.00
11,000.0	0.00	0.00	10,962.3	-649.0	-201.0	651.3	0.00	0.00	0.00
11,100.0	0.00	0.00	11,062.3	-649.0	-201.0	651.3	0.00	0.00	0.00
11,200.0	0.00	0.00	11,162.3	-649.0	-201.0	651.3	0.00	0.00	0.00
11,300.0	0.00	0.00	11,262.3	-649.0	-201.0	651.3	0.00	0.00	0.00
11,400.0	0.00	0.00	11,362.3	-649.0	-201.0	651.3	0.00	0.00	0.00
11,500.0	0.00	0.00	11,462.3	-649.0	-201.0	651.3	0.00	0.00	0.00
11,600.0	0.00	0.00	11,562.3	-649.0	-201.0	651.3	0.00	0.00	0.00
11,700.0	0.00	0.00	11,662.3	-649.0	-201.0	651.3	0.00	0.00	0.00
11,800.0	0.00	0.00	11,762.3	-649.0	-201.0	651.3	0.00	0.00	0.00
11,900.0	0.00	0.00	11,862.3	-649.0	-201.0	651.3	0.00	0.00	0.00
12,000.0	0.00	0.00	11,962.3	-649.0	-201.0	651.3	0.00	0.00	0.00
12,100.0	0.00	0.00	12,062.3	-649.0	-201.0	651.3	0.00	0.00	0.00
12,200.0	0.00	0.00	12,162.3	-649.0	-201.0	651.3	0.00	0.00	0.00
12,300.0	0.00	0.00	12,262.3	-649.0	-201.0	651.3	0.00	0.00	0.00
12,400.0	0.00	0.00	12,362.3	-649.0	-201.0	651.3	0.00	0.00	0.00
12,430.2	0.00	0.00	12,392.5	-649.0	-201.0	651.3	0.00	0.00	0.00
12,500.0	2.09	180.00	12,462.3	-650.3	-201.0	652.6	2.99	2.99	0.00
12,600.0	5.08	180.00	12,562.0	-656.5	-201.0	658.8	2.99	2.99	0.00
12,700.0	8.07	180.00	12,661.4	-668.0	-201.0	670.3	2.99	2.99	0.00
12,800.0	11.06	180.00	12,760.0	-684.6	-201.0	686.9	2.99	2.99	0.00
12,868.9	13.12	180.00	12,827.3	-699.0	-201.0	701.3	2.99	2.99	0.00
12,875.0	13.86	179.98	12,833.3	-700.4	-201.0	702.8	12.00	12.00	-0.37
12,900.0	16.86	179.91	12,857.4	-707.1	-201.0	709.4	12.00	12.00	-0.29
12,925.0	19.86	179.85	12,881.1	-714.9	-201.0	717.2	12.00	12.00	-0.20
12,950.0	22.86	179.82	12,904.4	-724.0	-200.9	726.3	12.00	12.00	-0.15
12,975.0	25.86	179.79	12,927.2	-734.3	-200.9	736.7	12.00	12.00	-0.12
13,000.0	28.86	179.76	12,949.4	-745.8	-200.9	748.1	12.00	12.00	-0.10
13,025.0	31.86	179.74	12,970.9	-758.5	-200.8	760.8	12.00	12.00	-0.08
13,050.0	34.86	179.73	12,991.8	-772.2	-200.8	774.5	12.00	12.00	-0.07
13,075.0	37.86	179.71	13,011.9	-787.0	-200.7	789.3	12.00	12.00	-0.06
13,100.0	40.86	179.70	13,031.3	-802.9	-200.6	805.2	12.00	12.00	-0.05
13,125.0	43.86	179.69	13,049.7	-819.7	-200.5	822.0	12.00	12.00	-0.04
13,150.0	46.86	179.68	13,067.3	-837.5	-200.4	839.8	12.00	12.00	-0.04
13,175.0	49.86	179.67	13,083.9	-856.2	-200.3	858.5	12.00	12.00	-0.04
13,200.0	52.86	179.66	13,099.5	-875.7	-200.2	878.0	12.00	12.00	-0.03
13,225.0	55.86	179.65	13,114.1	-896.0	-200.1	898.3	12.00	12.00	-0.03
13,250.0	58.86	179.65	13,127.6	-917.1	-199.9	919.4	12.00	12.00	-0.03
13,275.0	61.86	179.64	13,139.9	-938.8	-199.8	941.1	12.00	12.00	-0.03
13,300.0	64.86	179.63	13,151.1	-961.1	-199.7	963.4	12.00	12.00	-0.03
13,325.0	67.86	179.63	13,161.2	-984.0	-199.5	986.3	12.00	12.00	-0.02
13,350.0	70.86	179.62	13,170.0	-1,007.4	-199.4	1,009.7	12.00	12.00	-0.02
13,375.0	73.86	179.62	13,177.6	-1,031.2	-199.2	1,033.5	12.00	12.00	-0.02
13,400.0	76.86	179.61	13,183.9	-1,055.4	-199.0	1,057.7	12.00	12.00	-0.02
13,425.0	79.86	179.61	13,188.9	-1,079.9	-198.9	1,082.2	12.00	12.00	-0.02
13,450.0	82.86	179.60	13,192.7	-1,104.6	-198.7	1,106.9	12.00	12.00	-0.02
13,475.0	85.86	179.60	13,195.1	-1,129.5	-198.5	1,131.8	12.00	12.00	-0.02
13,500.0	88.86	179.59	13,196.3	-1,154.5	-198.4	1,156.7	12.00	12.00	-0.02
13,525.0	91.86	179.59	13,196.1	-1,179.5	-198.2	1,181.7	12.00	12.00	-0.02

eog resources

Planning Report

Database:	PEDMB	**Local Co-ordinate Reference:**	Well #746H
Company:	Midland	**TVD Reference:**	kb = 26' @ 3320.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	kb = 26' @ 3320.0usft
Site:	Barlow XL 22-34 Fed Com	**North Reference:**	Grid
Well:	#746H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1 RT		

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)
13,542.6	93.97	179.58	13,195.2	-1,197.1	-198.1	1,199.3	12.00	12.00	-0.02
13,600.0	93.97	179.58	13,191.3	-1,254.3	-197.6	1,256.5	0.00	0.00	0.00
13,700.0	93.97	179.58	13,184.3	-1,354.1	-196.9	1,356.3	0.00	0.00	0.00
13,800.0	93.97	179.58	13,177.4	-1,453.8	-196.2	1,456.0	0.00	0.00	0.00
13,900.0	93.97	179.58	13,170.5	-1,553.6	-195.5	1,555.8	0.00	0.00	0.00
14,000.0	93.97	179.58	13,163.6	-1,653.3	-194.7	1,655.5	0.00	0.00	0.00
14,100.0	93.97	179.58	13,156.6	-1,753.1	-194.0	1,755.3	0.00	0.00	0.00
14,200.0	93.97	179.58	13,149.7	-1,852.8	-193.3	1,855.0	0.00	0.00	0.00
14,300.0	93.97	179.58	13,142.8	-1,952.6	-192.6	1,954.7	0.00	0.00	0.00
14,400.0	93.97	179.58	13,135.9	-2,052.4	-191.8	2,054.5	0.00	0.00	0.00
14,500.0	93.97	179.58	13,128.9	-2,152.1	-191.1	2,154.2	0.00	0.00	0.00
14,600.0	93.97	179.58	13,122.0	-2,251.9	-190.4	2,254.0	0.00	0.00	0.00
14,700.0	93.97	179.58	13,115.1	-2,351.6	-189.7	2,353.7	0.00	0.00	0.00
14,800.0	93.97	179.58	13,108.1	-2,451.4	-188.9	2,453.4	0.00	0.00	0.00
14,900.0	93.97	179.58	13,101.2	-2,551.1	-188.2	2,553.2	0.00	0.00	0.00
15,000.0	93.97	179.58	13,094.3	-2,650.9	-187.5	2,652.9	0.00	0.00	0.00
15,100.0	93.97	179.58	13,087.4	-2,750.7	-186.8	2,752.7	0.00	0.00	0.00
15,200.0	93.97	179.58	13,080.4	-2,850.4	-186.0	2,852.4	0.00	0.00	0.00
15,300.0	93.97	179.58	13,073.5	-2,950.2	-185.3	2,952.2	0.00	0.00	0.00
15,400.0	93.97	179.58	13,066.6	-3,049.9	-184.6	3,051.9	0.00	0.00	0.00
15,500.0	93.97	179.58	13,059.7	-3,149.7	-183.9	3,151.6	0.00	0.00	0.00
15,600.0	93.97	179.58	13,052.7	-3,249.4	-183.1	3,251.4	0.00	0.00	0.00
15,700.0	93.97	179.58	13,045.8	-3,349.2	-182.4	3,351.1	0.00	0.00	0.00
15,800.0	93.97	179.58	13,038.9	-3,449.0	-181.7	3,450.9	0.00	0.00	0.00
15,900.0	93.97	179.58	13,031.9	-3,548.7	-181.0	3,550.6	0.00	0.00	0.00
16,000.0	93.97	179.58	13,025.0	-3,648.5	-180.2	3,650.3	0.00	0.00	0.00
16,100.0	93.97	179.58	13,018.1	-3,748.2	-179.5	3,750.1	0.00	0.00	0.00
16,200.0	93.97	179.58	13,011.2	-3,848.0	-178.8	3,849.8	0.00	0.00	0.00
16,300.0	93.97	179.58	13,004.2	-3,947.7	-178.1	3,949.6	0.00	0.00	0.00
16,400.0	93.97	179.58	12,997.3	-4,047.5	-177.3	4,049.3	0.00	0.00	0.00
16,500.0	93.97	179.58	12,990.4	-4,147.3	-176.6	4,149.1	0.00	0.00	0.00
16,600.0	93.97	179.58	12,983.5	-4,247.0	-175.9	4,248.8	0.00	0.00	0.00
16,700.0	93.97	179.58	12,976.5	-4,346.8	-175.2	4,348.5	0.00	0.00	0.00
16,800.0	93.97	179.58	12,969.6	-4,446.5	-174.4	4,448.3	0.00	0.00	0.00
16,900.0	93.97	179.58	12,962.7	-4,546.3	-173.7	4,548.0	0.00	0.00	0.00
17,000.0	93.97	179.58	12,955.8	-4,646.0	-173.0	4,647.8	0.00	0.00	0.00
17,100.0	93.97	179.58	12,948.8	-4,745.8	-172.3	4,747.5	0.00	0.00	0.00
17,200.0	93.97	179.58	12,941.9	-4,845.6	-171.5	4,847.2	0.00	0.00	0.00
17,300.0	93.97	179.58	12,935.0	-4,945.3	-170.8	4,947.0	0.00	0.00	0.00
17,400.0	93.97	179.58	12,928.0	-5,045.1	-170.1	5,046.7	0.00	0.00	0.00
17,500.0	93.97	179.58	12,921.1	-5,144.8	-169.4	5,146.5	0.00	0.00	0.00
17,600.0	93.97	179.58	12,914.2	-5,244.6	-168.6	5,246.2	0.00	0.00	0.00
17,700.0	93.97	179.58	12,907.3	-5,344.3	-167.9	5,346.0	0.00	0.00	0.00
17,800.0	93.97	179.58	12,900.3	-5,444.1	-167.2	5,445.7	0.00	0.00	0.00
17,900.0	93.97	179.58	12,893.4	-5,543.9	-166.5	5,545.4	0.00	0.00	0.00
18,000.0	93.97	179.58	12,886.5	-5,643.6	-165.7	5,645.2	0.00	0.00	0.00
18,100.0	93.97	179.58	12,879.6	-5,743.4	-165.0	5,744.9	0.00	0.00	0.00
18,200.0	93.97	179.58	12,872.6	-5,843.1	-164.3	5,844.7	0.00	0.00	0.00
18,238.0	93.97	179.58	12,870.0	-5,881.0	-164.0	5,882.5	0.00	0.00	0.00
18,300.0	93.79	179.58	12,865.8	-5,942.9	-163.6	5,944.4	0.30	-0.30	0.00
18,400.0	93.48	179.59	12,859.5	-6,042.7	-162.8	6,044.2	0.30	-0.30	0.00
18,500.0	93.18	179.59	12,853.6	-6,142.5	-162.1	6,144.0	0.30	-0.30	0.00
18,600.0	92.88	179.59	12,848.4	-6,242.4	-161.4	6,243.8	0.30	-0.30	0.00
18,700.0	92.58	179.59	12,843.6	-6,342.3	-160.7	6,343.7	0.30	-0.30	0.00

eog resources

Planning Report

Database:	PEDMB	**Local Co-ordinate Reference:**	Well #746H
Company:	Midland	**TVD Reference:**	kb = 26' @ 3320.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	kb = 26' @ 3320.0usft
Site:	Barlow XL 22-34 Fed Com	**North Reference:**	Grid
Well:	#746H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1 RT		

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)
18,800.0	92.28	179.59	12,839.3	-6,442.2	-160.0	6,443.6	0.30	-0.30	0.00
18,900.0	91.98	179.60	12,835.6	-6,542.1	-159.3	6,543.5	0.30	-0.30	0.00
19,000.0	91.68	179.60	12,832.4	-6,642.0	-158.6	6,643.5	0.30	-0.30	0.00
19,100.0	91.38	179.60	12,829.8	-6,742.0	-157.9	6,743.4	0.30	-0.30	0.00
19,200.0	91.08	179.60	12,827.6	-6,842.0	-157.2	6,843.4	0.30	-0.30	0.00
19,300.0	90.78	179.60	12,826.0	-6,942.0	-156.5	6,943.3	0.30	-0.30	0.00
19,400.0	90.48	179.61	12,824.9	-7,042.0	-155.8	7,043.3	0.30	-0.30	0.00
19,500.0	90.18	179.61	12,824.3	-7,142.0	-155.1	7,143.3	0.30	-0.30	0.00
19,600.0	89.88	179.61	12,824.3	-7,241.9	-154.4	7,243.3	0.30	-0.30	0.00
19,700.0	89.58	179.61	12,824.7	-7,341.9	-153.7	7,343.2	0.30	-0.30	0.00
19,800.0	89.28	179.61	12,825.7	-7,441.9	-153.1	7,443.2	0.30	-0.30	0.00
19,900.0	88.97	179.62	12,827.3	-7,541.9	-152.4	7,543.2	0.30	-0.30	0.00
20,000.0	88.67	179.62	12,829.3	-7,641.9	-151.7	7,643.2	0.30	-0.30	0.00
20,100.0	88.37	179.62	12,831.9	-7,741.9	-151.1	7,743.1	0.30	-0.30	0.00
20,200.0	88.07	179.62	12,835.0	-7,841.8	-150.4	7,843.0	0.30	-0.30	0.00
20,300.0	87.77	179.62	12,838.6	-7,941.7	-149.7	7,943.0	0.30	-0.30	0.00
20,400.0	87.47	179.63	12,842.8	-8,041.7	-149.1	8,042.9	0.30	-0.30	0.00
20,500.0	87.17	179.63	12,847.5	-8,141.5	-148.4	8,142.7	0.30	-0.30	0.00
20,600.0	86.87	179.63	12,852.6	-8,241.4	-147.8	8,242.6	0.30	-0.30	0.00
20,700.0	86.57	179.63	12,858.4	-8,341.2	-147.2	8,342.4	0.30	-0.30	0.00
20,800.0	86.27	179.63	12,864.6	-8,441.0	-146.5	8,442.2	0.30	-0.30	0.00
20,880.1	86.03	179.64	12,870.0	-8,521.0	-146.0	8,522.1	0.30	-0.30	0.00
20,900.0	86.09	179.63	12,871.4	-8,540.8	-145.9	8,541.9	0.33	0.33	0.00
21,000.0	86.42	179.63	12,877.9	-8,640.6	-145.2	8,641.7	0.33	0.33	0.00
21,100.0	86.75	179.63	12,883.8	-8,740.4	-144.6	8,741.5	0.33	0.33	0.00
21,200.0	87.08	179.63	12,889.2	-8,840.3	-143.9	8,841.4	0.33	0.33	0.00
21,300.0	87.40	179.62	12,894.1	-8,940.2	-143.3	8,941.2	0.33	0.33	0.00
21,400.0	87.73	179.62	12,898.3	-9,040.1	-142.6	9,041.1	0.33	0.33	0.00
21,500.0	88.06	179.62	12,902.0	-9,140.0	-142.0	9,141.0	0.33	0.33	0.00
21,600.0	88.39	179.61	12,905.1	-9,239.9	-141.3	9,241.0	0.33	0.33	0.00
21,700.0	88.71	179.61	12,907.6	-9,339.9	-140.6	9,340.9	0.33	0.33	0.00
21,800.0	89.04	179.61	12,909.6	-9,439.9	-139.9	9,440.9	0.33	0.33	0.00
21,900.0	89.37	179.60	12,910.9	-9,539.9	-139.2	9,540.9	0.33	0.33	0.00
22,000.0	89.70	179.60	12,911.8	-9,639.9	-138.5	9,640.8	0.33	0.33	0.00
22,100.0	90.03	179.60	12,912.0	-9,739.9	-137.8	9,740.8	0.33	0.33	0.00
22,200.0	90.35	179.59	12,911.7	-9,839.9	-137.1	9,840.8	0.33	0.33	0.00
22,300.0	90.68	179.59	12,910.8	-9,939.9	-136.4	9,940.8	0.33	0.33	0.00
22,400.0	91.01	179.59	12,909.3	-10,039.8	-135.7	10,040.7	0.33	0.33	0.00
22,500.0	91.34	179.59	12,907.2	-10,139.8	-135.0	10,140.7	0.33	0.33	0.00
22,600.0	91.66	179.58	12,904.6	-10,239.8	-134.3	10,240.7	0.33	0.33	0.00
22,700.0	91.99	179.58	12,901.4	-10,339.7	-133.5	10,340.6	0.33	0.33	0.00
22,800.0	92.32	179.58	12,897.7	-10,439.7	-132.8	10,440.5	0.33	0.33	0.00
22,900.0	92.65	179.57	12,893.3	-10,539.6	-132.1	10,540.4	0.33	0.33	0.00
23,000.0	92.98	179.57	12,888.4	-10,639.4	-131.3	10,640.2	0.33	0.33	0.00
23,100.0	93.30	179.57	12,883.0	-10,739.3	-130.6	10,740.1	0.33	0.33	0.00
23,200.0	93.63	179.56	12,876.9	-10,839.1	-129.8	10,839.9	0.33	0.33	0.00
23,304.1	93.97	179.56	12,870.0	-10,943.0	-129.0	10,943.8	0.33	0.33	0.00

eog resources

Planning Report

Database:	PEDMB	**Local Co-ordinate Reference:**	Well #746H
Company:	Midland	**TVD Reference:**	kb = 26' @ 3320.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	kb = 26' @ 3320.0usft
Site:	Barlow XL 22-34 Fed Com	**North Reference:**	Grid
Well:	#746H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1 RT		

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
KOP(Barlow XL 22-34 F - plan hits target center - Point	0.00	0.00	12,392.5	-649.0	-201.0	375,073.00	779,609.00	32° 1' 43.769 N	103° 33' 52.040 W
FTP(Barlow XL 22-34 Fe - plan hits target center - Point	0.00	0.00	12,827.3	-699.0	-201.0	375,023.00	779,609.00	32° 1' 43.274 N	103° 33' 52.044 W
Fed Perf 1(Barlow XL 22 - plan hits target center - Point	0.00	0.00	12,870.0	-5,881.0	-164.0	369,841.00	779,646.00	32° 0' 51.993 N	103° 33' 52.043 W
PBHL(Barlow XL 22-34 I - plan hits target center - Point	0.00	0.00	12,870.0	-10,943.0	-129.0	364,779.00	779,681.00	32° 0' 1.900 N	103° 33' 52.054 W
Fed Perf 2(Barlow XL 22 - plan hits target center - Point	0.00	0.00	12,870.0	-8,521.0	-146.0	367,201.00	779,664.00	32° 0' 25.868 N	103° 33' 52.052 W

eog resources

Lea County, NM (NAD 83 NME)

Barlow XL 22-34 Fed Com #746H

Plan #0.1 RT

Azimuths to Grid North
True North: -0.41°
Magnetic North: 5.72°

Magnetic Field
Strength: 47029.0nT
Dip Angle: 59.61°
Date: 10/31/2024
Model: IGRF2020

To convert a Magnetic Direction to a Grid Direction, Add 5.72°
To convert a Magnetic Direction to a True Direction, Add 6.13° East
To convert a True Direction to a Grid Direction, Subtract 0.41°

PROJECT DETAILS: Lea County, NM (NAD 83 NME)

Geodetic System:	US State Plane 1983
Datum:	North American Datum 1983
Ellipsoid:	GRS 1980
Zone:	New Mexico Eastern Zone
System Datum:	Mean Sea Level

WELL DETAILS: #746H

3294.0
kb = 26' @ 3320.0usft

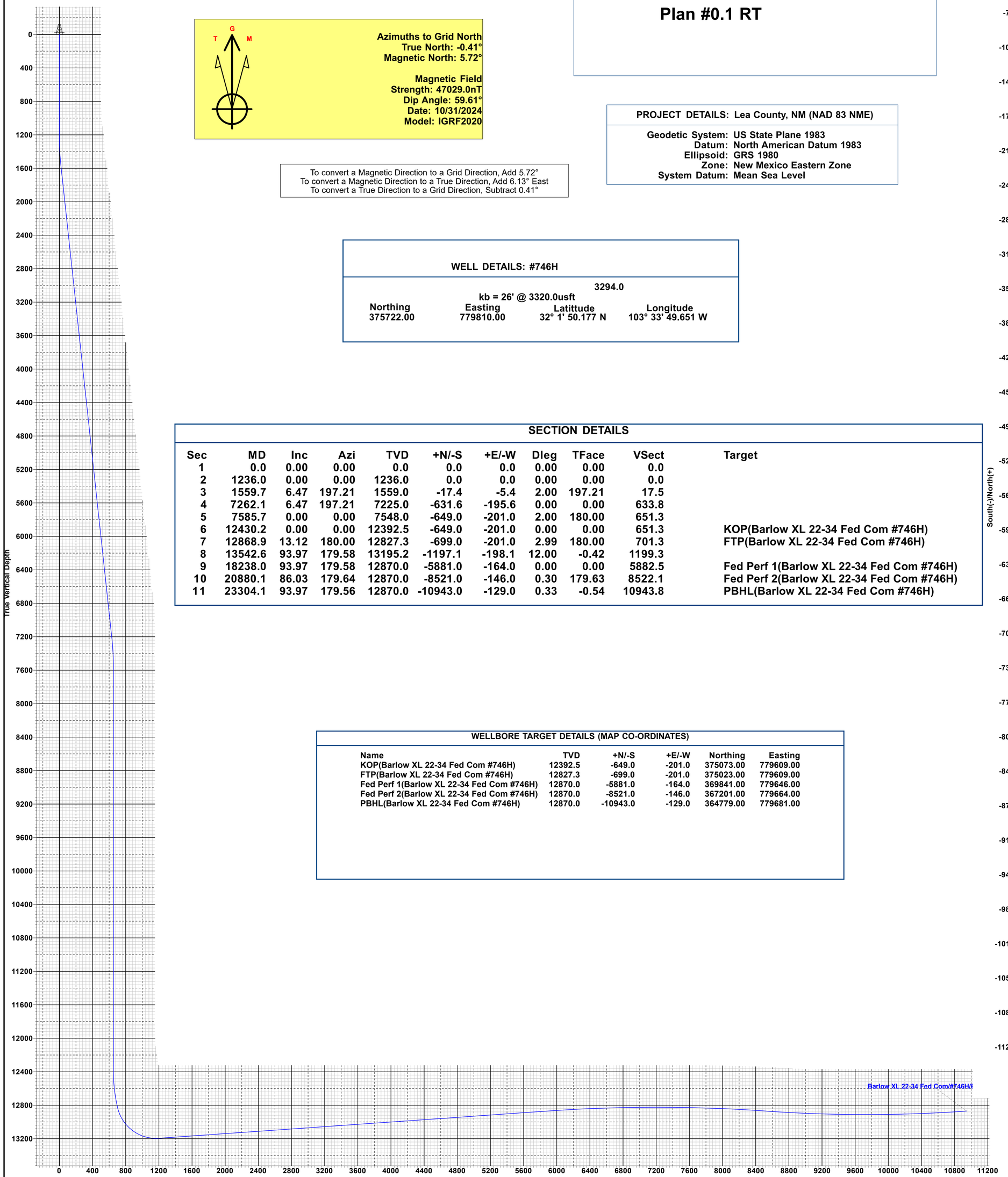
Northing	Easting	Latittude	Longitude
375722.00	779810.00	32° 1' 50.177 N	103° 33' 49.651 W

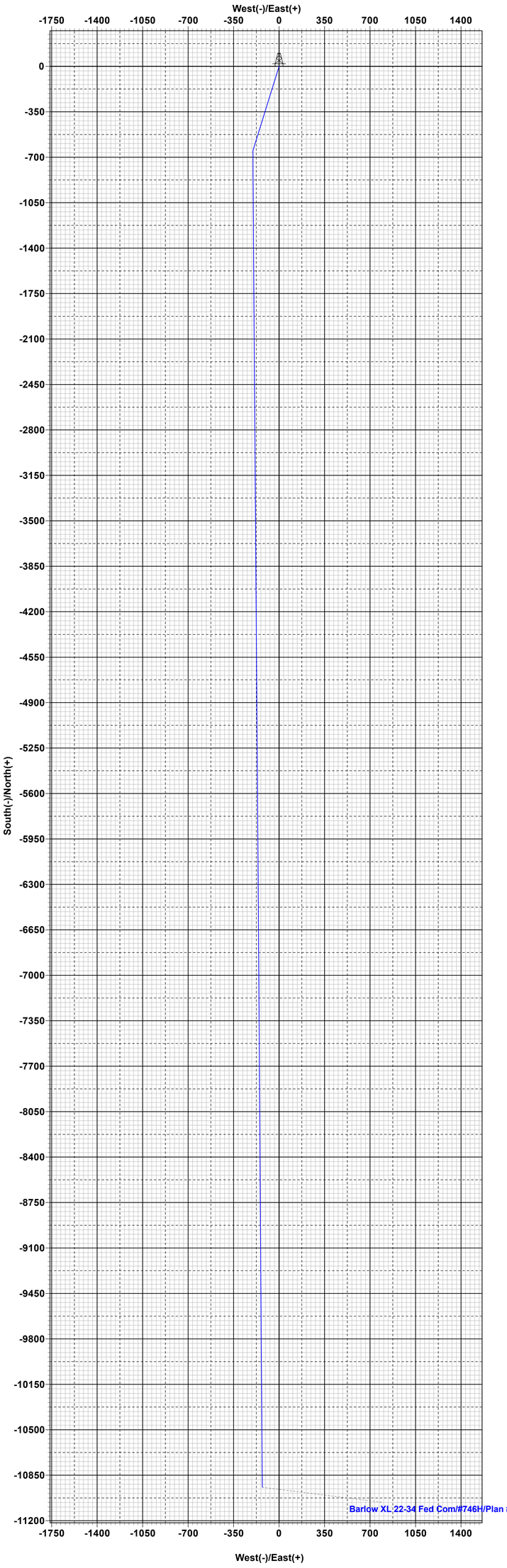
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1236.0	0.00	0.00	1236.0	0.0	0.0	0.00	0.00	0.0	
3	1559.7	6.47	197.21	1559.0	-17.4	-5.4	2.00	197.21	17.5	
4	7262.1	6.47	197.21	7225.0	-631.6	-195.6	0.00	0.00	633.8	
5	7585.7	0.00	0.00	7548.0	-649.0	-201.0	2.00	180.00	651.3	
6	12430.2	0.00	0.00	12392.5	-649.0	-201.0	0.00	0.00	651.3	KOP(Barlow XL 22-34 Fed Com #746H)
7	12868.9	13.12	180.00	12827.3	-699.0	-201.0	2.99	180.00	701.3	FTP(Barlow XL 22-34 Fed Com #746H)
8	13542.6	93.97	179.58	13195.2	-1197.1	-198.1	12.00	-0.42	1199.3	
9	18238.0	93.97	179.58	12870.0	-5881.0	-164.0	0.00	0.00	5882.5	Fed Perf 1(Barlow XL 22-34 Fed Com #746H)
10	20880.1	86.03	179.64	12870.0	-8521.0	-146.0	0.30	179.63	8522.1	Fed Perf 2(Barlow XL 22-34 Fed Com #746H)
11	23304.1	93.97	179.56	12870.0	-10943.0	-129.0	0.33	-0.54	10943.8	PBHL(Barlow XL 22-34 Fed Com #746H)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP(Barlow XL 22-34 Fed Com #746H)	12392.5	-649.0	-201.0	375073.00	779609.00
FTP(Barlow XL 22-34 Fed Com #746H)	12827.3	-699.0	-201.0	375023.00	779609.00
Fed Perf 1(Barlow XL 22-34 Fed Com #746H)	12870.0	-5881.0	-164.0	369841.00	779646.00
Fed Perf 2(Barlow XL 22-34 Fed Com #746H)	12870.0	-8521.0	-146.0	367201.00	779664.00
PBHL(Barlow XL 22-34 Fed Com #746H)	12870.0	-10943.0	-129.0	364779.00	779681.00





PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	EOG Resources Incorporated
WELL NAME & NO.:	Barlow XL 22-34 Fed Com 746H
LOCATION:	Sec 22-26S-33E-NMP
COUNTY:	Lea County, New Mexico

Create COAs

H_2S	Cave / Karst	Waste Prevention Rule
Not Reported	Medium	Waste Minimization Plan

Potash	R-111-Q Design
None	

Wellhead	Casing	
Multibowl	3-String Well	
	☐ Liner	☑ Fluid Filled ☑ Casing Clearance
☑ Flex Hose	**Cementing**	
☑ Break Testing	☐ DV Tool	☑ Bradenhead ☑ Echometer
	☑ Offline Cement	☐ Open Annulus ☐ Pilot Hole

Special Requirements

☐ Capitan Reef ☐ Water Disposal ☑ COM ☐ Unit

*Operator has proposed four casing design options. **Design A** consists of 9-5/8" surface / 7-5/8" intermediate / 5-1/2" production casing. **Design B** consists of 10-3/4" surface, 8-3/4" intermediate, with a 6" production with 5-1/2" taper. **Design C** consists of 10-3/4" surface, 8-3/4" intermediate, with a 6" production. **Design D** consists of 10-3/4" surface, 8-3/4" intermediate, with a 5-1/2" production.*

This design contains intervals with an expected MASP over 5000 psi. Break testing is only approved on those intervals whose MASP is expected to be under 5000 psi.

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H_2S) monitors shall be installed prior to drilling out the surface shoe. If H_2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet 43 CFR 3176 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

Approval Date: 08/27/2025

B. CASING

1. The **A: 9-5/8 / B, C, D: 10-3/4** inch surface casing shall be set at approximately **1136** feet (a minimum of **25 feet (Lea 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 (including 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.

For all designs, the intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

2. The minimum required fill of cement behind the **A: 7-5/8 / B, C, D: 8-3/4** 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 the presence of cave/karst, Capitan Reef, or potash features.

    Bradenhead Squeeze: Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.
    a. **First stage:** Operator will cement with intent to reach the top of the **Brushy Canyon**.
    b. **Second stage:** Operator to squeeze and top-out. Cement to meet requirements listed for this casing string. If cement does not circulate see B.1.a, c-d above.

    Operator has proposed to pump down **Surface X Intermediate 1** annulus. Submit results to the BLM. If cement does not tie-back into the previous casing shoe, a third stage remediation BH may be performed. The appropriate BLM office shall be notified.
    - Operator shall run a CBL from TD of the **Intermediate 1** casing to tieback requirements listed above after the second stage BH to verify TOC.
    - **Operator shall run Echo-meter to verify Cement Slurry/Fluid top in the annulus.** Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out.
        - Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

- No displacement fluid/wash out shall be utilized at the top of the cement slurry during second stage bradenhead when running Echo-meter if cement is required to surface.
- Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

Design C production casing must be kept fluid filled to meet BLM minimum collapse requirement.

3. The minimum required fill of cement behind the **A: 5-1/2 / B: 6 w 5-1/2 taper / C: 6 / D: 5-1/2** inch production casing is at least **300 feet** into previous casing string (tieback increased due to string not meeting 0.422" clearance requirement per 43 CFR 3172 on all four designs.) Operator shall provide method of verification.
   - If cement does not circulate to surface on the previous casing, this string must come to surface.
   - **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry** due to the presence of cave/karst, Capitan Reef, or potash features.

C. PRESSURE CONTROL

1. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M)** psi. **Variance is approved to use a 5000 (5M) annular which shall be tested to 5000 (5M) 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.

2. 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).

3. Break testing has been approved for this well ONLY on those intervals utilizing a 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE**

working pressure and shall be higher than the MASP.) If in the event break testing is not utilized, then a full BOPE test would be conducted.

a. Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation. **BOPE Break Testing is NOT permitted to drilling the production hole section.**
b. While in transfer between wells, BOPE shall be secured by the hydraulic carrier or cradle.
c. A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
d. As a minimum, a full BOPE test shall be performed at 21-day intervals.
e. In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per **43 CFR 3172**. Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing operations.

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.

Offline Cementing

Offline cementing has been approved for **all hole sections, excluding production.** Contact the BLM prior to the commencement of any offline cementing procedure.

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)

Contact Lea County Petroleum Engineering Inspection Staff:

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
        i. Notify the BLM when moving in and removing the Spudder Rig.
        ii. 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.
        iii. BOP/BOPE test to be conducted per **43 CFR 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. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

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 of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-Q 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 3172**.
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:
    i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    ii. 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.
    iii. Manufacturer representative shall install the test plug for the initial BOP test.
    iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
    v. 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.
    i. 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).
    ii. 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.)
    iii. 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 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 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

iv. 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.

v. The results of the test shall be reported to the appropriate BLM office.

vi. 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.

vii. 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.

viii. 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 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.

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Barlow XL 22-34 Fed Com #746H

Hydrogen Sulfide Plan Summary

A. All personnel shall receive proper H2S training in accordance with Onshore Order III.C.3.a.

B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.

C. Required Emergency Equipment:

- **Well control equipment**
  a. Flare line 150' from wellhead to be ignited by flare gun.
  b. Choke manifold with a remotely operated choke.
  c. Mud/gas separator
- **Protective equipment for essential personnel:**
  a. Breathing Apparatus:
    i. Rescue Packs (SCBA) — 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.
    ii. Work/Escape packs —4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity.
    iii. Emergency Escape Packs —4 packs shall be stored in the doghouse for emergency evacuation.
  b. Auxiliary Rescue Equipment:
    i. Stretcher
    ii. Two OSHA full body harness
    iii. 100 ft 5/8 inch OSHA approved rope
    iv. 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 flow line or where well bore fluid is being discharged. (Gas sample tubes will be stored in the safety trailer)

- **Visual Warning System:**
  a. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
  b. A colored condition flag will be on display, reflecting the current condition at the site at the time.
  c. Two wind socks will be placed in strategic locations, visible from all angles.

Barlow XL 22-34 Fed Com #746H

- **Mud Program:**
  The mud program has been 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 spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.

- **Communication:**
  Communication will be via cell phones and land lines where available.

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Barlow XL 22-34 Fed Com #746H

Emergency Assistance Telephone List

PUBLIC SAFETY:	911 or
Lea County Sheriff's Department	(575) 396-3611
Corey Helton	
Fire Department	
Carlsbad	(575) 885-3125
Artesia	(575) 746-5050
Hospitals	
Carlsbad	(575) 887-4121
Artesia	(575) 748-3333
Hobbs	(575) 392-1979
Dept. of Public Safety/Carlsbad	(575) 748-9718
Highway Department	(575) 885-3281
U.S. Department of Labor	(575) 887-1174
Bureau of Land Management - Hobbs (Lea Co)	(575) 393-3612
PET On Call - Hobbs	(575) 706-2779
Bureau of Land Management - Carlsbad (Eddy Co)	(575) 234-5972
PET On Call - Carlsbad	(575) 706-2779
New Mexico Oil Conservation Division - Artesia	(575) 748-1283
Inspection Group South - Gilbert Gordero	(575) 626-0830
EOG Resources, Inc.	
EOG Midland	(432) 686-3600
Company Drilling Consultants:	
Jett Dueitt	(432) 230-4840
Blake Burney	
Drilling Engineers	
Stephen Davis	(432) 235-9789
Matt Day	(210) 296-4456
Drilling Managers	
Branden Keener	(210) 294-3729
Drilling Superintendents	
Lance Hardy	(432) 215-8152
Ryan Reynolds	(432) 215-5978
Steve Kelly	(210) 416-7894
H&P Drilling	
H&P Drilling	(432) 563-5757
Nabors Drilling	
Nabors Drilling	(432) 363-8180
Patterson UTI	
Patterson UTI	(432) 561-9382
EOG Safety	
Brian Chandler (HSE Manager)	(817) 239-0251

Barlow XL 22-34 Fed Com 746H API #: 30-025-*** Variances**

EOG respectfully requests the below variances to be applied to the above well:

- Variance is requested to waive the centralizer requirements for the intermediate casing in the intermediate hole. An expansion additive will be utilized, in the cement slurry, for the entire length of the intermediate interval to maximize cement bond and zonal isolation.
- Variance is also requested to waive the centralizer requirements for the production casing in the production hole. An expansion additive will be utilized, in the cement slurry, for the entire length of the production interval to maximize cement bond and zonal isolation.
- EOG requests a variance to set the intermediate casing shoe in the Bone Spring formation or the Wolfcamp formation, depending on depletion in the area and well conditions. EOG will monitor the well and ensure the well is static before casing operations begin.

- Variance is requested to use a co-flex line between the BOP and choke manifold (instead of using a 4" OD steel line).
- Variance is requested to use a 5,000 psi annular BOP with the 10,000 psi BOP stack.
- EOG Resources 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 1,500 psi. All valves will be closed and a wellhead cap will be installed (diagram attached). If the timing between rigs is such that EOG Resources would not be able to preset the surface, the Primary Rig will MIRU and drill the well in its entirety per the APD.

EOG requests the additional variance(s) in the attached document(s):

- EOG BLM Variance 2a - Inermediate Bradenhead Cement
- EOG BLM Variance 3a_b - BOP Break-test and Offline Intermediate Cement

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: ___EOG Resources, Inc._____ **OGRID:** _____7377_____ **Date:** 8/27/2025

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
BARLOW XL 22-34 FED COM 746H		F-22-26S-33E	2042' FNL & 1526' FWL	+/- 1000	+/- 3500	+/- 3000

IV. Central Delivery Point Name: ___Barlow N 22-34 Fed Com CTB_____ [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
BARLOW XL 22-34 FED COM 746H		9/30/25	10/15/25	12/01/25	2/01/26	3/01/26

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: Star L Harrell
Printed Name: Star L Harrell
Title: Regulatory Advisor
E-mail Address: Star_Harrell@eogresources.com
Date: 8/27/2025
Phone: (432) 848-9161

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

Natural Gas Management Plan
Items VI-VIII

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

- Separation equipment will be sized to provide adequate separation for anticipated rates.
- Adequate separation relates to retention time for Liquid – Liquid separation and velocity for Gas-Liquid separation.
- Collection systems are appropriately sized to handle facility production rates on all (3) phases.
- Ancillary equipment and metering is selected to be serviced without flow interruptions or the need to release gas from the well.

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

Drilling Operations

- All flare stacks will be properly sized. The flare stacks will be located at a minimum 100' from the nearest surface hole location on the pad.
- All natural gas produced during drilling operations will be flared, unless there is an equipment malfunction and/or to avoid risk of an immediate and substantial adverse impact on safety and the environment, at which point the gas will be vented.

Completions/Recompletions Operations

- New wells will not be flowed back until they are connected to a properly sized gathering system.
- The facility will be built/sized for maximum anticipated flowrates and pressures to minimize waste.
- For flowback operations, multiple stages of separation will be used as well as excess VRU and blowers to make sure waste is minimized off the storage tanks and facility.
- During initial flowback, the well stream will be routed to separation equipment.
- At an existing facility, when necessary, post separation natural gas will be flared until it meets pipeline specifications, at which point it will be turned into a collection system.
- At a new facility, post separation natural gas will be vented until storage tanks can safely function, at which point it will be flared until it meets pipeline spec.

Production Operations

- Weekly AVOs will be performed on all facilities.
- All flares will be equipped with auto-ignition systems and continuous pilot operations.
- After a well is stabilized from liquid unloading, the well will be turned back into the collection system.
- All plunger lift systems will be optimized to limit the amount of waste.
- All tanks will have automatic gauging equipment installed.
- Leaking thief hatches found during AVOs will be cleaned and properly re-sealed.

Performance Standards

- Production equipment will be designed to handle maximum anticipated rates and pressure.
- All flared gas will be combusted in a flare stack that is properly sized and designed to ensure proper combustion.
- Weekly AVOs will be performed on all wells and facilities that produce more than 60 Mcfd.

Measurement & Estimation

- All volume that is flared and vented that is not measured will be estimated.
- All measurement equipment for flared volumes will conform to API 14.10.
- No meter bypasses with be installed.

- When metering is not practical due to low pressure/low rate, the vented or flared volume will be estimated.

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

- During downhole well maintenance, EOG will use best management practices to vent as minimally as possible.
- Prior to the commencement of any maintenance, the tank or vessel will be isolated from the rest of the facilities.
- All valves upstream of the equipment will be closed and isolated.
- After equipment has been isolated, the equipment will be blown down to as low a pressure as possible into the collection system.
- If the equipment being maintained cannot be relieved into the collection system, it shall be released to a tank where the vapor can either be captured or combusted if possible.
- After downhole well maintenance, natural gas will be flared until it reaches pipeline specification.

Intermediate Bradenhead Cement:
EOG requests variance from minimum standards to pump a two stage cement job on the intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon and the second stage performed as 1000 sack bradenhead squeeze with planned cement from the Brushy Canyon to surface. If necessary, a top out consisting of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. Top of cement will be verified by Echo-meter.

EOG will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program.

EOG will report to the BLM the volume of fluid (limited to 5 bbls) used to flush intermediate casing valves following backside cementing procedures.

Wolfcamp Intermediate Casing Setpoint:
EOG Resources Inc. (EOG) requests a variance to set the intermediate casing shoe in the Bone Spring formation OR the Wolfcamp formation, depending on depletion in the area and well conditions. EOG will monitor the well and ensure the well is static before casing operations begin.

Offline Production Cement Variance

EOG Offline Production Checklist

Offline Checklist

All items below must be met. If not, the production cement will be done online.

1. Offline production cement jobs must be above the Atoka formation.
2. Nothing out of the ordinary observed during drilling, tripping or casing running operations in the Production Hole Section.
3. Casing must be landed with Hanger.
4. EOG Company Man and Superintendent with Well Control certification must be present to monitor returns.
5. EOG Cement Advisor must be present to oversee the Cement Job.
6. Rig Manager is responsible for walking the rig to the next well.
7. The BOP will ***NOT*** be nippled down if:
    1. **ANY** barrier fails to test.
    2. **ANY** offset frac operations are observed within 1 mile and within the same producing horizon.
8. After all barriers test and the BLM has been notified, the BOP may be nippled down to proceed with offline operations.
9. EOG will not Drill out of the next well until Cement Operations have concluded on the offline well.

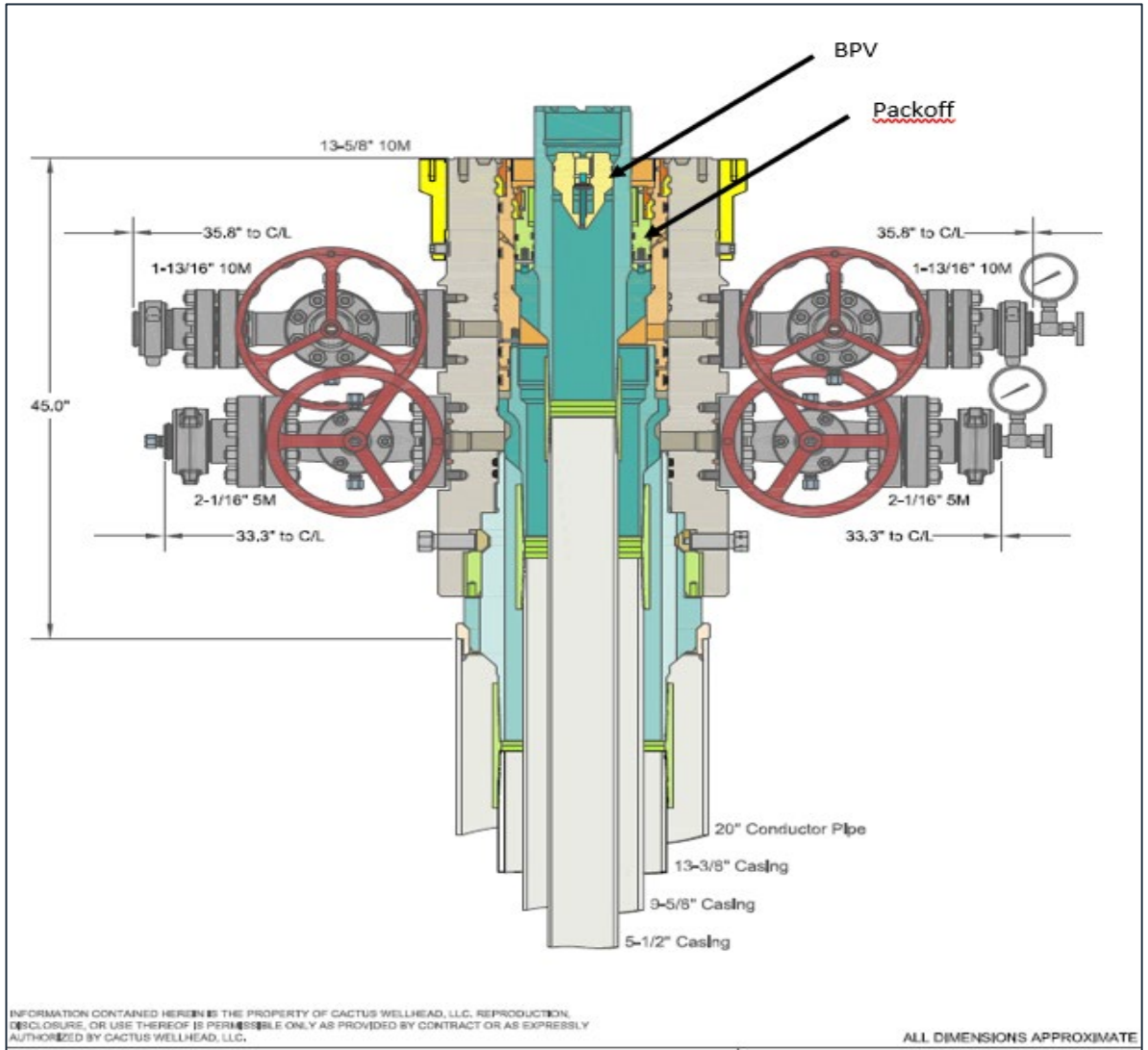
Offline Procedure

1. Run casing as per normal operations. Review EOG Offline Requirements Checklist, if the well is a candidate for Offline Cement on the Production continue following this procedure. Conduct negative pressure test while running casing and confirm integrity of the float equipment back pressure valves.
   a. Float equipment is equipped with two back pressure valves rated to 15,000 psi.
2. Land production casing on mandrel hanger.
   a. If casing is unable to be landed with a mandrel hanger, then the casing will be cemented online.
   b. If utilizing a fluted/ported mandrel hanger, ensure well is static on the annulus and inside the casing by filling the pipe with kill weight fluid, remove landing joint, and set annular packoff rated to 10,000 psi. Pressure test same to 10,000 psi.
   c. If utilizing a solid mandrel hanger, ensure well is static on the annulus and inside the casing by filling the pipe with kill weight fluid. Pressure test seals to 10,000 psi. Remove landing joint.
3. Install back pressure valve in the casing for a 3rd casing barrier.
   a. Back pressure valve rated to a minimum of 10,000 psi.
4. With the well Secured and BLM notified; Nipple down BOP and secure on hydraulic carrier or cradle and Skid/Walk rig to next well on pad.
   a. Note, if any of the barriers fail to test, the BOP stack will not be nippled down until after the cement job has concluded.
   b. Note, EOG Company Man and Cement Advisor will oversee Cementing Operations while Rig Manager walks the rig and nipples up the BOP.
   c. Note, EOG will not drill out of the subsequent well until after plug bump.
5. Install 10M Gate Valve, with Wellhead Adapter.
   a. This creates an additional barrier on the annulus and inside the casing.
   b. Gate valve rated to a minimum of 10,000 psi.
6. Test connection between Wellhead Adapter seals against hanger neck and ring gasket to 10,000 psi.
7. Remove backpressure valve from the casing.
8. Rig up cement head and cementing lines.
9. After rig up of cement head and cement lines, and confirmation of the annular barriers and casing barriers, notify the BLM with intent to proceed offline cementing.
10. Perform cement job.
11. *Note* – Procedure continued on the next page.

Offline Procedure

12. If an influx is noted during the Cement Job:
    a. It is the Company Man and Superintendent's responsibility to maintain well control.
    b. The aux manifold will be redirected to the rig's chokes.
    c. Backpressure will be held on the well with the chokes to ensure well control is maintained through the remainder of the cement job while circulating out the influx.
    d. If annular surface pressure approaches 90% tested pressure of the manifold or if circulating the influx out with the cementing pumps is not feasible, the well can be secured by closing the casing valves (10M).
    e. Once cement is in place, we will close the casing valves and confirm the well is static and floats are holding.
    f. If the floats fail, the gate valve (10M) or cement head (10M) can be closed to secure the well.
13. Confirm well is static and floats are holding after cement job.
14. Remove cement head.
15. Install back pressure valve.
16. Remove 10M Gate Valve and Wellhead Adapter.
17. Install night cap with pressure gauge for monitoring.
18. Test night cap to 5,000 psi.

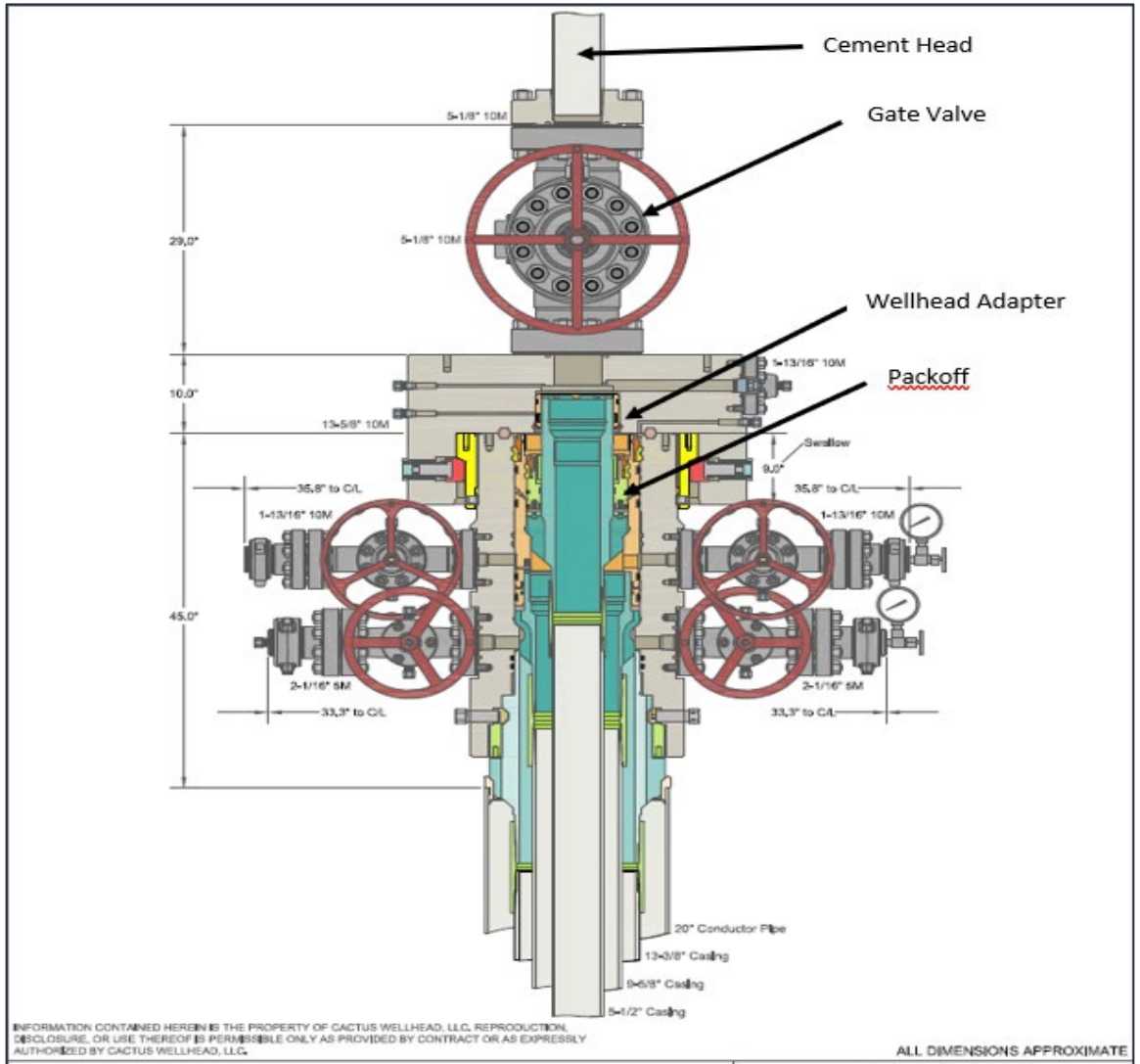
Offline Barrier Overview



Barriers in Place during removal of BOP		
Operation	Casing	Annulus
Nippling Down BOP	1. BPV 2. Hydrostatic Barrier 3. Float Valves	1. Hydrostatic Barrier 2. Mechanical 10M Packoff

Barriers in Place during Offline Cementing of Production Casing		
Operation	Casing	Annulus
Pull BPV	1. Hydrostatic Barrier 2. Float Valves 3. 10M Gate Valve	1. Hydrostatic Barrier 2. Mechanical Packoff 3. 10M Wellhead Adapter
Install Cement Head	1. Hydrostatic Barrier 2. Float Valves 3. 10M Gate Valve	1. Hydrostatic Barrier 2. Mechanical 10M Packoff 3. 10M Wellhead Adapter
Cement Job	1. Hydrostatic Barrier 2. Float Valves 3. 10M Gate Valve 4. Cement Head	1. Hydrostatic Barrier 2. Mechanical 10M Packoff 3. 10M Wellhead Adapter
Remove Cement Head	1. Float Valves 2. 10M Gate Valve	1. Hydrostatic Barrier 2. Mechanical 10M Packoff 3. 10M Wellhead Adapter
Install BPV	1. Float Valves 2. 10M Gate Valve	1. Hydrostatic Barrier 2. Mechanical 10M Packoff 3. 10M Wellhead Adapter
Remove 10M Gate Valve	1. Float Valves 2. BPV	1. Hydrostatic Barrier 2. Mechanical 10M Packoff
Nipple Up TA Cap	1. Float Valves 2. BPV	1. Hydrostatic Barrier 2. Mechanical 10M Packoff

Offline Barrier Overview



Barriers in Place during removal of BOP		
Operation	Casing	Annulus
Nippling Down BOP	1. BPV 2. Hydrostatic Barrier 3. Float Valves	1. Hydrostatic Barrier 2. Mechanical 10M Packoff

Barriers in Place during Offline Cementing of Production Casing		
Operation	Casing	Annulus
Pull BPV	1. Hydrostatic Barrier 2. Float Valves 3. 10M Gate Valve	1. Hydrostatic Barrier 2. Mechanical Packoff 3. 10M Wellhead Adapter
Install Cement Head	1. Hydrostatic Barrier 2. Float Valves 3. 10M Gate Valve	1. Hydrostatic Barrier 2. Mechanical 10M Packoff 3. 10M Wellhead Adapter
Cement Job	1. Hydrostatic Barrier 2. Float Valves 3. 10M Gate Valve 4. Cement Head	1. Hydrostatic Barrier 2. Mechanical 10M Packoff 3. 10M Wellhead Adapter
Remove Cement Head	1. Float Valves 2. 10M Gate Valve	1. Hydrostatic Barrier 2. Mechanical 10M Packoff 3. 10M Wellhead Adapter
Install BPV	1. Float Valves 2. 10M Gate Valve	1. Hydrostatic Barrier 2. Mechanical 10M Packoff 3. 10M Wellhead Adapter
Remove 10M Gate Valve	1. Float Valves 2. BPV	1. Hydrostatic Barrier 2. Mechanical 10M Packoff
Nipple Up TA Cap	1. Float Valves 2. BPV	1. Hydrostatic Barrier 2. Mechanical 10M Packoff

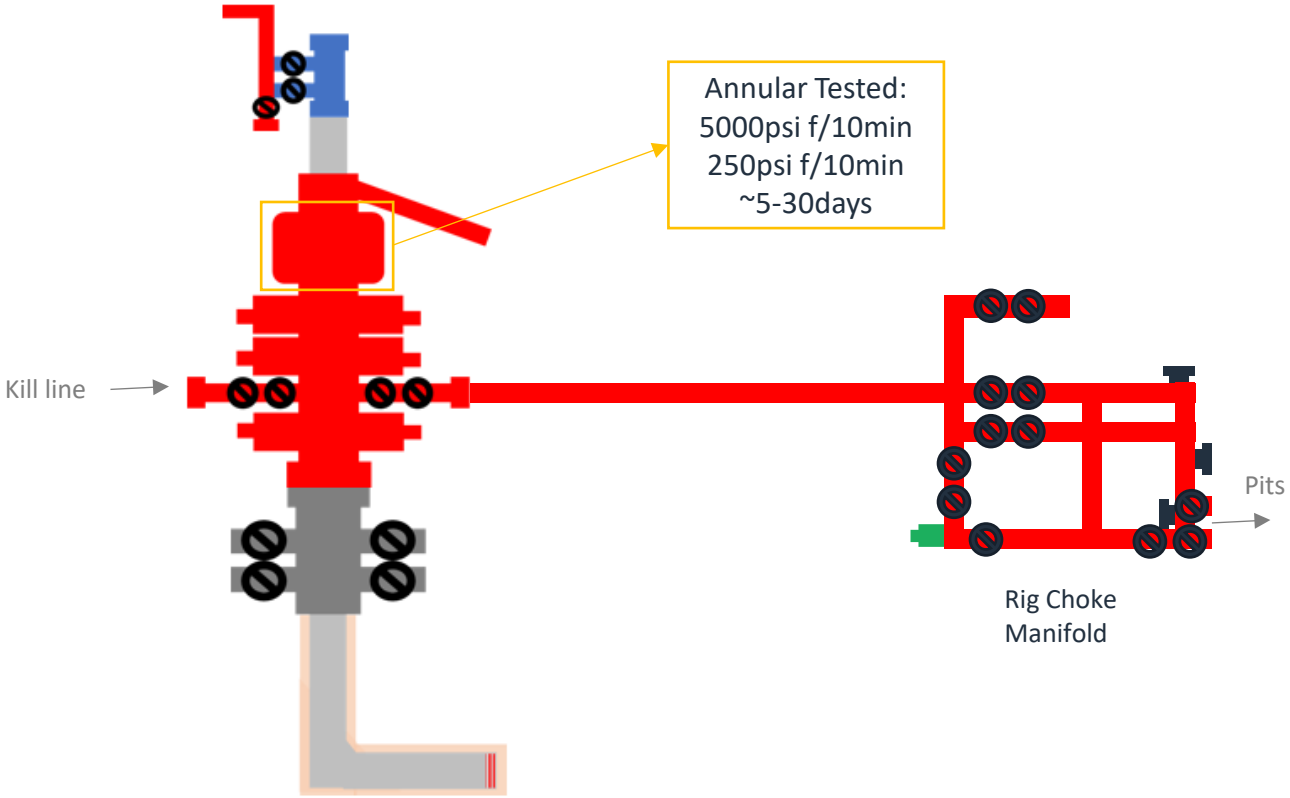
More Control: Meeting/Exceeding Barrier Requirements

Casing Barriers – Online vs Offline		
Operation	Online	Offline
Install Cement Head	1. Hydrostatic Barrier 2. Float Valves	1. Hydrostatic Barrier 2. Float Valves 3. 10M Gate Valve ✓
Cement Job	1. Hydrostatic Barrier 2. Float Valves 3. Cement Head	1. Hydrostatic Barrier 2. Float Valves 3. 10M Gate Valve 4. Cement Head ✓
Remove Cement Head	1. Float Valves	1. Float Valves 2. 10M Gate Valve ✓
Install BPV & Nipple Down BOP / Offline Adapter	1. Float Valves	1. Float Valves 2. BPV ✓
Nipple Up TA Cap	1. Float Valves	1. Float Valves 2. BPV ✓

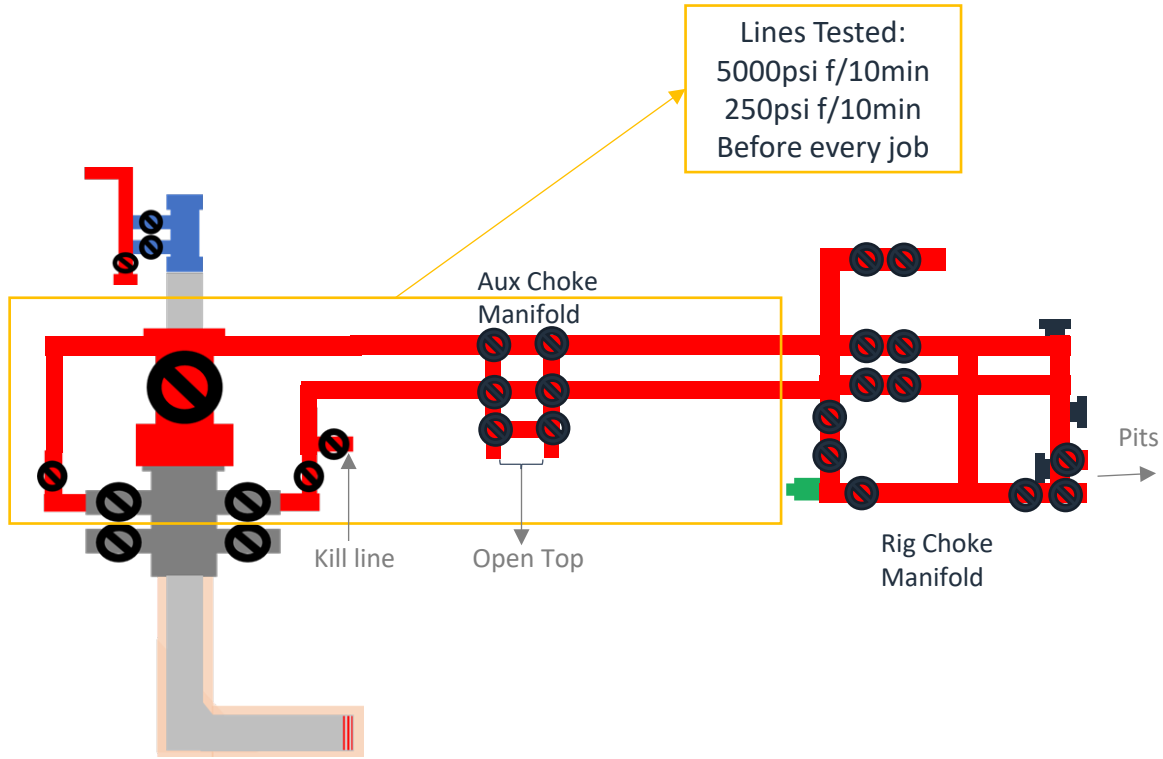
Annulus Barriers – Online vs Offline		
Operation	Online	Offline
Install Cement Head	1. Hydrostatic Barrier 2. Annular 3. VBR	1. Hydrostatic Barrier 2. Mechanical Pack-off 3. 10M Wellhead Adapter ✓
Cement Job	1. Hydrostatic Barrier 2. Annular 3. VBR	1. Hydrostatic Barrier 2. Mechanical Pack-off 3. 10M Wellhead Adapter ✓
Remove Cement Head	1. Hydrostatic Barrier 2. Annular 3. VBR	1. Hydrostatic Barrier 2. Mechanical Pack-off 3. 10M Wellhead Adapter ✓
Install BPV & Nipple Down BOP / Offline Adapter	1. Hydrostatic barrier 2. Mechanical Pack-off	1. Hydrostatic Barrier 2. Mechanical Pack-off ✓
Nipple Up TA Cap	1. Hydrostatic barrier 2. Mechanical Pack-off	1. Hydrostatic Barrier 2. Mechanical Pack-off ✓

Return Rig Up Diagram

Online



Offline



Note:

1) Have the Rig's same Well Control Capabilities as Online
2) Have more flexibility with Gate Valve than with a Landing Joint through BOP
3) Never had to circulate out a kick during Offline

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

ACKNOWLEDGMENTS

Operator: EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706	OGRID: 7377
	Action Number: 500332
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

ACKNOWLEDGMENTS

☑	I hereby certify that no additives containing PFAS chemicals will be added to the completion or recompletion of this well.

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CONDITIONS

Action 500332

CONDITIONS

Operator: EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706	OGRID: 7377
	Action Number: 500332
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
sharrell1	Cement is required to circulate on both surface and intermediate1 strings of casing.	8/28/2025
sharrell1	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	8/28/2025
matthew.gomez	Administrative order required for non-standard spacing unit prior to production.	9/10/2025
matthew.gomez	Administrative order required for non-standard location prior to production.	9/10/2025
matthew.gomez	If an alteration to the setting depth of the intermediate casing shoe is desired a form C-103A must be approved prior to the change being made.	9/10/2025
matthew.gomez	Notify the OCD 24 hours prior to casing & cement.	9/10/2025
matthew.gomez	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.	9/10/2025
matthew.gomez	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.	9/10/2025
matthew.gomez	File As Drilled C-102 and a directional Survey with C-104 completion packet.	9/10/2025