

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**

Form C-101  
August 1, 2011

Permit 384585

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

1. Operator Name and Address EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706		2. OGRID Number 7377
4. Property Code 319585		3. API Number 30-025-54515
5. Property Name DATE 14 STATE COM		6. Well No. 505H

**7. Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
M	14	21S	33E		908	S	834	W	Lea

**8. Proposed Bottom Hole Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
C	11	21S	33E	C	100	N	1662	W	Lea

**9. Pool Information**

BERRY;BONE SPRING, NORTH	5535
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**Additional Well Information**

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3814
16. Multiple N	17. Proposed Depth 20971	18. Formation Bone Spring	19. Contractor	20. Spud Date 3/14/2025
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits

**21. Proposed Casing and Cement Program**

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	16	13.375	54.5	1908	642	0
Int1	12.25	10.75	45.5	4039	986	0
Int2	9.875	8.625	32	5934	878	0
Prod	7.875	6	24.5	10291	1635	8773
Prod	7.875	5.5	20	20971	1635	8773

**Casing/Cement Program: Additional Comments**

EOG respectfully requests the option to use the casing and cement program described in Design B of the drill plan. The NMOCD will be notified of EOG's election at spud.
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**22. Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	3000	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable.  Signature:	<b>OIL CONSERVATION DIVISION</b>
Printed Name: Electronically filed by Patricia Donald	Approved By: Matthew Gomez
Title: Regulatory Specialist	Title:
Email Address: Patricia_Donald@eogresources.com	Approved Date: 3/12/2025      Expiration Date: 3/12/2027
Date: 2/27/2025      Phone: 432-488-7684	Conditions of Approval Attached

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:	<input checked="" type="checkbox"/> Initial Submittal
			<input type="checkbox"/> Amended Report
		<input type="checkbox"/> As Drilled	

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-54515	Pool Code 5535	Pool Name BERRY; BONE SPRING, NORTH
Property Code 319585	Property Name DATE 14 STATE COM	Well Number 505H
OGRID No. 7377	Operator Name EOG RESOURCES, INC.	Ground Level Elevation 3814'
Surface Owner: <input checked="" type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input checked="" type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> 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
M	14	21-S	33-E	-	908' S	834' W	N 32.4740580	W 103.5490692	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
C	11	21-S	33-E	-	100' N	1662' W	N 32.5002932	W 103.5464150	LEA

Dedicated Acres 640.00	Infill or Defining Well INFILL	Defining Well API 30-025-46368	Overlapping Spacing Unit (Y/N) Y	Consolidated Code C
Order Numbers -			Well Setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> 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
N	14	21-S	33-E	-	50' S	1662' W	N 32.4716886	W 103.5463827	LEA


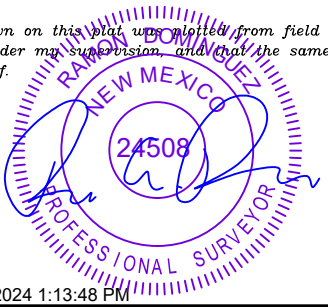
First Take Point (FTP)

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
N	14	21-S	33-E	-	100' S	1662' W	N 32.4718260	W 103.5463828	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
C	11	21-S	33-E	-	100' N	1662' W	N 32.5002932	W 103.5464150	LEA

Unitized Area or Area of Uniform Intrest COMM AGREEMENT	Spacing Unity Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation 3839'
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<b>OPERATOR CERTIFICATION</b>  <i>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.</i>  <i>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.</i>   02/26/2025		<b>SURVEYORS CERTIFICATION</b>  <i>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.</i>   10/21/2024 1:13:48 PM	
Signature KAYLA MCCONNELL		Signature and Seal of Professional Surveyor	
Print Name KAYLA_MCCONNELL@EOGRESOURCES.COM		Certificate Number	Date of Survey 10/12/2024
E-mail Address			

<b>C-102</b>  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department <b>OIL CONSERVATION DIVISION</b>	Revised July 9, 2024	
		Submittal Type:	<input checked="checked" type="checkbox"/> Initial Submittal
			<input type="checkbox"/> Amended Report
Property Name and Well Number		<input type="checkbox"/> As Drilled	

DATE 14 STATE COM 505H

**SURFACE LOCATION (SHL)**

NEW MEXICO EAST  
NAD 1983  
X=783194 Y=537082  
LAT.: N 32.4740580  
LONG.: W 103.5490692  
NAD 1927  
X=742012 Y=537020  
LAT.: N 32.4739346  
LONG.: W 103.5485829  
908' FSL 834' FWL

**KICK OFF POINT (KOP)**

NEW MEXICO EAST  
NAD 1983  
X=784029 Y=536226  
LAT.: N 32.4716886  
LONG.: W 103.5463827  
NAD 1927  
X=742847 Y=536165  
LAT.: N 32.4715652  
LONG.: W 103.5458965  
50' FSL 1662' FWL

**UPPER MOST PERF. (UMP)**

NEW MEXICO EAST  
NAD 1983  
X=784029 Y=536276  
LAT.: N 32.4718260  
LONG.: W 103.5463828  
NAD 1927  
X=742847 Y=536215  
LAT.: N 32.4717026  
LONG.: W 103.5458967  
100' FSL 1662' FWL

**LOWER MOST PERF. (LMP)**  
**BOTTOM HOLE LOCATION (BHL)**

NEW MEXICO EAST  
NAD 1983  
X=783942 Y=546633  
LAT.: N 32.5002932  
LONG.: W 103.5464150  
NAD 1927  
X=742760 Y=546571  
LAT.: N 32.5001698  
LONG.: W 103.5459279  
100' FNL 1662' 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.

10/12/2024

Date of Survey  
Signature and Seal of Professional Surveyor:

**RAMON DOMINGUEZ**  
NEW MEXICO  
24508  
PROFESSIONAL SURVEYOR

Released to Imaging: 3/12/2025 11:43:08 AM

10/21/2024 1:13:48 PM

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

Form APD Conditions

Permit 384585

**PERMIT CONDITIONS OF APPROVAL**

Operator Name and Address: EOG RESOURCES INC [7377] 5509 Champions Drive Midland, TX 79706	API Number: 30-025-54515
	Well: DATE 14 STATE COM #505H

OCD Reviewer	Condition
matthew.gomez	A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.
matthew.gomez	Notify the OCD 24 hours prior to casing & cement.
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.
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.
matthew.gomez	Cement is required to circulate on both surface and intermediate1 strings of casing.
matthew.gomez	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.
matthew.gomez	File As Drilled C-102 and a directional Survey with C-104 completion packet.
matthew.gomez	Administrative order required for non-standard spacing unit prior to production.
matthew.gomez	This well is within the Capitan Reef. The first intermediate casing string shall be sat and cemented back to surface immediately above the Capitan Reef. The second intermediate string shall be set and cemented back to surface immediately below the base of the Capitan Reef.
matthew.gomez	Brine water shall not be used in the Capitan Reef. Only fresh water shall be utilized until the Capitan Reef is cased and cemented.
matthew.gomez	Must comply with all R-111-Q requirements.



### EOG Batch Casing

**Pad Name:** Date 14 State KPLA

SHL: Section 14, Township 21-S, Range 33-E, LEA County, NM

Well Name	API #	Surface		Intermediate 1		Intermediate 2		Intermediate 3		Production	
		MD	TVD	MD	TVD	MD	TVD	MD	TVD	MD	TVD
Date 14 State Com #204H	30-025-*****	1,908	1,908	3,928	3,849	5,823	5,744	N/A	N/A	20,043	9,760
Date 14 State Com #205H	30-025-*****	1,908	1,908	4,169	3,849	6,064	5,744	N/A	N/A	20,239	9,760
Date 14 State Com #504H	30-025-*****	1,908	1,908	3,917	3,849	5,812	5,744	N/A	N/A	20,873	10,600
Date 14 State Com #505H	30-025-*****	1,908	1,908	4,039	3,849	5,934	5,744	N/A	N/A	20,971	10,600
Date 14 State Com #603H	30-025-*****	1,908	1,908	3,864	3,849	5,759	5,744	N/A	N/A	22,090	11,870
Date 14 State Com #604H	30-025-*****	1,908	1,908	4,059	3,849	5,954	5,744	N/A	N/A	22,257	11,870
Date 14 State Com #605H	30-025-*****	1,908	1,908	3,952	3,849	5,847	5,744	N/A	N/A	22,164	11,870
Date 14 State Com #801H	30-025-*****	1,908	1,908	4,312	3,849	6,207	5,744	12,060	11,698	22,741	12,175
Date 14 State Com #901H	30-025-*****	1,908	1,908	3,913	3,849	5,808	5,744	12,233	12,173	22,919	12,650



## EOG Batch Casing

**GEOLOGIC NAME OF SURFACE FORMATION:**

Permian

**ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:**

Rustler	1,883'
Tamarisk Anhydrite	1,990'
Top of Salt	2,320'
Capitan	3,949'
Base of Capitan	5,609'
Bell Canyon	5,750'
Cherry Canyon	5,894'
Brushy Canyon	6,912'
Bone Spring Lime	8,823'
Leonard (Avalon) Shale	9,049'
1st Bone Spring Sand	9,993'
2nd Bone Spring Shale	10,219'
2nd Bone Spring Sand	10,562'
3rd Bone Spring Carb	11,076'
3rd Bone Spring Sand	11,633'
Wolfcamp	11,869'

**ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:**

Upper Permian Sands	0- 400' Fresh Water
Cherry Canyon	5,894' Oil
Brushy Canyon	6,912' Oil
Bone Spring Lime	8,823' Oil
Leonard (Avalon) Shale	9,049' Oil
1st Bone Spring Sand	9,993' Oil
2nd Bone Spring Shale	10,219' Oil
2nd Bone Spring Sand	10,562' 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 2,020' and circulating cement back to surface.



## Midland

Lea County, NM (NAD 83 NME)

Date 14 State Com

#505H

OH

Plan: Plan #0.1 RT

## Standard Planning Report

23 October, 2024



## Planning Report

<b>Database:</b>	PEDMB	<b>Local Co-ordinate Reference:</b>	Well #505H
<b>Company:</b>	Midland	<b>TVD Reference:</b>	kb = 26' @ 3865.0usft
<b>Project:</b>	Lea County, NM (NAD 83 NME)	<b>MD Reference:</b>	kb = 26' @ 3865.0usft
<b>Site:</b>	Date 14 State Com	<b>North Reference:</b>	Grid
<b>Well:</b>	#505H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #0.1 RT		

<b>Project</b>	Lea County, NM (NAD 83 NME)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	New Mexico Eastern Zone		

Site	Date 14 State Com				
Site Position:		Northing:	536,428.00 usft	Latitude:	32° 28' 19.914 N
From:	Map	Easting:	786,265.00 usft	Longitude:	103° 32' 20.860 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "		

Well	#505H					
Well Position	+N/-S	0.0 usft	Northing:	537,082.00 usft	Latitude:	32° 28' 26.609 N
	+E/-W	0.0 usft	Easting:	783,194.00 usft	Longitude:	103° 32' 56.650 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,839.0 usft
Grid Convergence:		0.42 °				

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2020	10/23/2024	6.16	60.02	47,290.66786775

<b>Design</b>	Plan #0.1 RT				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0	
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	4.48	

<b>Plan Survey Tool Program</b>	<b>Date</b>	10/23/2024			
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>	
1	0.0	20,971.0	Plan #0.1 RT (OH)	EOG MWD+IFR1	
				MWD + IFR1	





Planning Report

Database:	PEDMB	Local Co-ordinate Reference:	Well #505H
Company:	Midland	TVD Reference:	kb = 26' @ 3865.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	kb = 26' @ 3865.0usft
Site:	Date 14 State Com	North Reference:	Grid
Well:	#505H	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	
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,064.7	17.29	135.71	3,051.6	-92.7	90.4	2.00	2.00	0.00	135.71	
6,215.9	17.29	135.71	6,060.4	-763.3	744.6	0.00	0.00	0.00	0.00	
7,080.6	0.00	0.00	6,912.0	-856.0	835.0	2.00	-2.00	0.00	180.00	
10,291.1	0.00	0.00	10,122.5	-856.0	835.0	0.00	0.00	0.00	0.00	KOP(Date 14 State #1
10,511.6	26.46	0.00	10,335.2	-806.0	835.0	12.00	12.00	0.00	0.00	FTP(Date 14 State #5
11,041.1	90.00	359.51	10,599.9	-378.5	832.5	12.00	12.00	-0.09	-0.54	
20,971.0	90.00	359.51	10,600.0	9,551.0	748.0	0.00	0.00	0.00	0.00	PBHL(Date 14 State #



## Planning Report

<b>Database:</b>	PEDMB	<b>Local Co-ordinate Reference:</b>	Well #505H
<b>Company:</b>	Midland	<b>TVD Reference:</b>	kb = 26' @ 3865.0usft
<b>Project:</b>	Lea County, NM (NAD 83 NME)	<b>MD Reference:</b>	kb = 26' @ 3865.0usft
<b>Site:</b>	Date 14 State Com	<b>North Reference:</b>	Grid
<b>Well:</b>	#505H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	2.00	135.71	2,300.0	-1.2	1.2	-1.2	2.00	2.00	0.00
2,400.0	4.00	135.71	2,399.8	-5.0	4.9	-4.6	2.00	2.00	0.00
2,500.0	6.00	135.71	2,499.5	-11.2	11.0	-10.3	2.00	2.00	0.00
2,600.0	8.00	135.71	2,598.7	-20.0	19.5	-18.4	2.00	2.00	0.00
2,700.0	10.00	135.71	2,697.5	-31.2	30.4	-28.7	2.00	2.00	0.00
2,800.0	12.00	135.71	2,795.6	-44.8	43.7	-41.3	2.00	2.00	0.00
2,900.0	14.00	135.71	2,893.1	-60.9	59.4	-56.1	2.00	2.00	0.00
3,000.0	16.00	135.71	2,989.6	-79.4	77.5	-73.1	2.00	2.00	0.00
3,064.7	17.29	135.71	3,051.6	-92.7	90.4	-85.4	2.00	2.00	0.00
3,100.0	17.29	135.71	3,085.3	-100.2	97.8	-92.3	0.00	0.00	0.00
3,200.0	17.29	135.71	3,180.8	-121.5	118.5	-111.9	0.00	0.00	0.00
3,300.0	17.29	135.71	3,276.3	-142.8	139.3	-131.5	0.00	0.00	0.00
3,400.0	17.29	135.71	3,371.8	-164.1	160.0	-151.1	0.00	0.00	0.00
3,500.0	17.29	135.71	3,467.3	-185.3	180.8	-170.7	0.00	0.00	0.00
3,600.0	17.29	135.71	3,562.7	-206.6	201.6	-190.3	0.00	0.00	0.00
3,700.0	17.29	135.71	3,658.2	-227.9	222.3	-209.8	0.00	0.00	0.00
3,800.0	17.29	135.71	3,753.7	-249.2	243.1	-229.4	0.00	0.00	0.00
3,900.0	17.29	135.71	3,849.2	-270.5	263.8	-249.0	0.00	0.00	0.00
4,000.0	17.29	135.71	3,944.6	-291.7	284.6	-268.6	0.00	0.00	0.00
4,100.0	17.29	135.71	4,040.1	-313.0	305.3	-288.2	0.00	0.00	0.00
4,200.0	17.29	135.71	4,135.6	-334.3	326.1	-307.8	0.00	0.00	0.00
4,300.0	17.29	135.71	4,231.1	-355.6	346.9	-327.4	0.00	0.00	0.00
4,400.0	17.29	135.71	4,326.6	-376.9	367.6	-347.0	0.00	0.00	0.00
4,500.0	17.29	135.71	4,422.0	-398.1	388.4	-366.6	0.00	0.00	0.00
4,600.0	17.29	135.71	4,517.5	-419.4	409.1	-386.2	0.00	0.00	0.00
4,700.0	17.29	135.71	4,613.0	-440.7	429.9	-405.8	0.00	0.00	0.00
4,800.0	17.29	135.71	4,708.5	-462.0	450.7	-425.4	0.00	0.00	0.00
4,900.0	17.29	135.71	4,804.0	-483.3	471.4	-445.0	0.00	0.00	0.00
5,000.0	17.29	135.71	4,899.4	-504.5	492.2	-464.6	0.00	0.00	0.00
5,100.0	17.29	135.71	4,994.9	-525.8	512.9	-484.2	0.00	0.00	0.00
5,200.0	17.29	135.71	5,090.4	-547.1	533.7	-503.8	0.00	0.00	0.00



## Planning Report

<b>Database:</b>	PEDMB	<b>Local Co-ordinate Reference:</b>	Well #505H
<b>Company:</b>	Midland	<b>TVD Reference:</b>	kb = 26' @ 3865.0usft
<b>Project:</b>	Lea County, NM (NAD 83 NME)	<b>MD Reference:</b>	kb = 26' @ 3865.0usft
<b>Site:</b>	Date 14 State Com	<b>North Reference:</b>	Grid
<b>Well:</b>	#505H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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)	
5,300.0	17.29	135.71	5,185.9	-568.4	554.4	-523.4	0.00	0.00	0.00	
5,400.0	17.29	135.71	5,281.4	-589.7	575.2	-543.0	0.00	0.00	0.00	
5,500.0	17.29	135.71	5,376.8	-610.9	596.0	-562.5	0.00	0.00	0.00	
5,600.0	17.29	135.71	5,472.3	-632.2	616.7	-582.1	0.00	0.00	0.00	
5,700.0	17.29	135.71	5,567.8	-653.5	637.5	-601.7	0.00	0.00	0.00	
5,800.0	17.29	135.71	5,663.3	-674.8	658.2	-621.3	0.00	0.00	0.00	
5,900.0	17.29	135.71	5,758.7	-696.1	679.0	-640.9	0.00	0.00	0.00	
6,000.0	17.29	135.71	5,854.2	-717.3	699.7	-660.5	0.00	0.00	0.00	
6,100.0	17.29	135.71	5,949.7	-738.6	720.5	-680.1	0.00	0.00	0.00	
6,200.0	17.29	135.71	6,045.2	-759.9	741.3	-699.7	0.00	0.00	0.00	
6,215.9	17.29	135.71	6,060.4	-763.3	744.6	-702.8	0.00	0.00	0.00	
6,300.0	15.61	135.71	6,141.0	-780.3	761.2	-718.5	2.00	-2.00	0.00	
6,400.0	13.61	135.71	6,237.8	-798.4	778.8	-735.2	2.00	-2.00	0.00	
6,500.0	11.61	135.71	6,335.4	-814.0	794.1	-749.5	2.00	-2.00	0.00	
6,600.0	9.61	135.71	6,433.6	-827.2	806.9	-761.7	2.00	-2.00	0.00	
6,700.0	7.61	135.71	6,532.5	-837.9	817.4	-771.6	2.00	-2.00	0.00	
6,800.0	5.61	135.71	6,631.8	-846.2	825.4	-779.1	2.00	-2.00	0.00	
6,900.0	3.61	135.71	6,731.5	-851.9	831.0	-784.4	2.00	-2.00	0.00	
7,000.0	1.61	135.71	6,831.4	-855.2	834.2	-787.4	2.00	-2.00	0.00	
7,080.6	0.00	0.00	6,912.0	-856.0	835.0	-788.2	2.00	-2.00	0.00	
7,100.0	0.00	0.00	6,931.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
7,200.0	0.00	0.00	7,031.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
7,300.0	0.00	0.00	7,131.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
7,400.0	0.00	0.00	7,231.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
7,500.0	0.00	0.00	7,331.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
7,600.0	0.00	0.00	7,431.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
7,700.0	0.00	0.00	7,531.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
7,800.0	0.00	0.00	7,631.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
7,900.0	0.00	0.00	7,731.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
8,000.0	0.00	0.00	7,831.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
8,100.0	0.00	0.00	7,931.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
8,200.0	0.00	0.00	8,031.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
8,300.0	0.00	0.00	8,131.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
8,400.0	0.00	0.00	8,231.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
8,500.0	0.00	0.00	8,331.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
8,600.0	0.00	0.00	8,431.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
8,700.0	0.00	0.00	8,531.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
8,800.0	0.00	0.00	8,631.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
8,900.0	0.00	0.00	8,731.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
9,000.0	0.00	0.00	8,831.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
9,100.0	0.00	0.00	8,931.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
9,200.0	0.00	0.00	9,031.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
9,300.0	0.00	0.00	9,131.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
9,400.0	0.00	0.00	9,231.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
9,500.0	0.00	0.00	9,331.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
9,600.0	0.00	0.00	9,431.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
9,700.0	0.00	0.00	9,531.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
9,800.0	0.00	0.00	9,631.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
9,900.0	0.00	0.00	9,731.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
10,000.0	0.00	0.00	9,831.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
10,100.0	0.00	0.00	9,931.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
10,200.0	0.00	0.00	10,031.4	-856.0	835.0	-788.2	0.00	0.00	0.00	
10,291.1	0.00	0.00	10,122.5	-856.0	835.0	-788.2	0.00	0.00	0.00	
10,300.0	1.07	0.00	10,131.4	-855.9	835.0	-788.1	12.00	12.00	0.00	



## Planning Report

<b>Database:</b>	PEDMB	<b>Local Co-ordinate Reference:</b>	Well #505H
<b>Company:</b>	Midland	<b>TVD Reference:</b>	kb = 26' @ 3865.0usft
<b>Project:</b>	Lea County, NM (NAD 83 NME)	<b>MD Reference:</b>	kb = 26' @ 3865.0usft
<b>Site:</b>	Date 14 State Com	<b>North Reference:</b>	Grid
<b>Well:</b>	#505H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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)
10,325.0	4.07	0.00	10,156.4	-854.8	835.0	-787.0	12.00	12.00	0.00
10,350.0	7.07	0.00	10,181.2	-852.4	835.0	-784.6	12.00	12.00	0.00
10,375.0	10.07	0.00	10,206.0	-848.6	835.0	-780.9	12.00	12.00	0.00
10,400.0	13.07	0.00	10,230.5	-843.6	835.0	-775.9	12.00	12.00	0.00
10,425.0	16.07	0.00	10,254.6	-837.3	835.0	-769.6	12.00	12.00	0.00
10,450.0	19.07	0.00	10,278.5	-829.8	835.0	-762.1	12.00	12.00	0.00
10,475.0	22.07	0.00	10,301.9	-821.0	835.0	-753.3	12.00	12.00	0.00
10,500.0	25.07	0.00	10,324.8	-811.0	835.0	-743.4	12.00	12.00	0.00
10,511.6	26.46	0.00	10,335.2	-806.0	835.0	-738.3	12.00	12.00	0.00
10,525.0	28.07	359.97	10,347.2	-799.8	835.0	-732.2	12.00	12.00	-0.24
10,550.0	31.07	359.92	10,368.9	-787.5	835.0	-719.9	12.00	12.00	-0.21
10,575.0	34.07	359.87	10,390.0	-774.0	835.0	-706.5	12.00	12.00	-0.18
10,600.0	37.07	359.83	10,410.3	-759.5	834.9	-692.0	12.00	12.00	-0.15
10,625.0	40.07	359.80	10,429.8	-743.9	834.9	-676.5	12.00	12.00	-0.13
10,650.0	43.07	359.77	10,448.5	-727.3	834.8	-659.9	12.00	12.00	-0.12
10,675.0	46.07	359.75	10,466.3	-709.8	834.7	-642.5	12.00	12.00	-0.10
10,700.0	49.07	359.72	10,483.2	-691.3	834.7	-624.1	12.00	12.00	-0.09
10,725.0	52.07	359.70	10,499.1	-672.0	834.6	-604.8	12.00	12.00	-0.09
10,750.0	55.07	359.68	10,513.9	-651.9	834.4	-584.8	12.00	12.00	-0.08
10,775.0	58.07	359.66	10,527.7	-631.1	834.3	-564.0	12.00	12.00	-0.07
10,800.0	61.07	359.65	10,540.4	-609.5	834.2	-542.5	12.00	12.00	-0.07
10,825.0	64.07	359.63	10,551.9	-587.3	834.1	-520.4	12.00	12.00	-0.06
10,850.0	67.07	359.62	10,562.2	-564.6	833.9	-497.7	12.00	12.00	-0.06
10,875.0	70.07	359.60	10,571.3	-541.3	833.7	-474.5	12.00	12.00	-0.06
10,900.0	73.07	359.59	10,579.3	-517.6	833.6	-450.9	12.00	12.00	-0.06
10,925.0	76.07	359.57	10,585.9	-493.5	833.4	-426.9	12.00	12.00	-0.05
10,950.0	79.07	359.56	10,591.3	-469.1	833.2	-402.6	12.00	12.00	-0.05
10,975.0	82.07	359.55	10,595.4	-444.4	833.0	-378.0	12.00	12.00	-0.05
11,000.0	85.07	359.53	10,598.2	-419.6	832.8	-353.3	12.00	12.00	-0.05
11,025.0	88.07	359.52	10,599.7	-394.6	832.6	-328.4	12.00	12.00	-0.05
11,041.1	90.00	359.51	10,599.9	-378.5	832.5	-312.4	12.00	12.00	-0.05
11,100.0	90.00	359.51	10,599.9	-319.6	832.0	-253.7	0.00	0.00	0.00
11,200.0	90.00	359.51	10,599.9	-219.6	831.1	-154.1	0.00	0.00	0.00
11,300.0	90.00	359.51	10,599.9	-119.6	830.3	-54.4	0.00	0.00	0.00
11,400.0	90.00	359.51	10,599.9	-19.6	829.4	45.2	0.00	0.00	0.00
11,500.0	90.00	359.51	10,599.9	80.4	828.6	144.8	0.00	0.00	0.00
11,600.0	90.00	359.51	10,599.9	180.3	827.7	244.4	0.00	0.00	0.00
11,700.0	90.00	359.51	10,600.0	280.3	826.9	344.0	0.00	0.00	0.00
11,800.0	90.00	359.51	10,600.0	380.3	826.0	443.7	0.00	0.00	0.00
11,900.0	90.00	359.51	10,600.0	480.3	825.2	543.3	0.00	0.00	0.00
12,000.0	90.00	359.51	10,600.0	580.3	824.3	642.9	0.00	0.00	0.00
12,100.0	90.00	359.51	10,600.0	680.3	823.5	742.5	0.00	0.00	0.00
12,200.0	90.00	359.51	10,600.0	780.3	822.6	842.2	0.00	0.00	0.00
12,300.0	90.00	359.51	10,600.0	880.3	821.8	941.8	0.00	0.00	0.00
12,400.0	90.00	359.51	10,600.0	980.3	820.9	1,041.4	0.00	0.00	0.00
12,500.0	90.00	359.51	10,600.0	1,080.3	820.1	1,141.0	0.00	0.00	0.00
12,600.0	90.00	359.51	10,600.0	1,180.3	819.2	1,240.7	0.00	0.00	0.00
12,700.0	90.00	359.51	10,600.0	1,280.3	818.4	1,340.3	0.00	0.00	0.00
12,800.0	90.00	359.51	10,600.0	1,380.3	817.5	1,439.9	0.00	0.00	0.00
12,900.0	90.00	359.51	10,600.0	1,480.3	816.7	1,539.5	0.00	0.00	0.00
13,000.0	90.00	359.51	10,600.0	1,580.3	815.8	1,639.2	0.00	0.00	0.00
13,100.0	90.00	359.51	10,600.0	1,680.3	815.0	1,738.8	0.00	0.00	0.00
13,200.0	90.00	359.51	10,600.0	1,780.3	814.1	1,838.4	0.00	0.00	0.00
13,300.0	90.00	359.51	10,600.0	1,880.3	813.3	1,938.0	0.00	0.00	0.00



## Planning Report

<b>Database:</b>	PEDMB	<b>Local Co-ordinate Reference:</b>	Well #505H
<b>Company:</b>	Midland	<b>TVD Reference:</b>	kb = 26' @ 3865.0usft
<b>Project:</b>	Lea County, NM (NAD 83 NME)	<b>MD Reference:</b>	kb = 26' @ 3865.0usft
<b>Site:</b>	Date 14 State Com	<b>North Reference:</b>	Grid
<b>Well:</b>	#505H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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)	
13,400.0	90.00	359.51	10,600.0	1,980.3	812.4	2,037.7	0.00	0.00	0.00	
13,500.0	90.00	359.51	10,600.0	2,080.3	811.6	2,137.3	0.00	0.00	0.00	
13,600.0	90.00	359.51	10,600.0	2,180.3	810.7	2,236.9	0.00	0.00	0.00	
13,700.0	90.00	359.51	10,600.0	2,280.3	809.9	2,336.5	0.00	0.00	0.00	
13,800.0	90.00	359.51	10,600.0	2,380.3	809.0	2,436.2	0.00	0.00	0.00	
13,900.0	90.00	359.51	10,600.0	2,480.3	808.2	2,535.8	0.00	0.00	0.00	
14,000.0	90.00	359.51	10,600.0	2,580.3	807.3	2,635.4	0.00	0.00	0.00	
14,100.0	90.00	359.51	10,600.0	2,680.3	806.5	2,735.0	0.00	0.00	0.00	
14,200.0	90.00	359.51	10,600.0	2,780.3	805.6	2,834.7	0.00	0.00	0.00	
14,300.0	90.00	359.51	10,600.0	2,880.3	804.8	2,934.3	0.00	0.00	0.00	
14,400.0	90.00	359.51	10,600.0	2,980.2	803.9	3,033.9	0.00	0.00	0.00	
14,500.0	90.00	359.51	10,600.0	3,080.2	803.1	3,133.5	0.00	0.00	0.00	
14,600.0	90.00	359.51	10,600.0	3,180.2	802.2	3,233.2	0.00	0.00	0.00	
14,700.0	90.00	359.51	10,600.0	3,280.2	801.4	3,332.8	0.00	0.00	0.00	
14,800.0	90.00	359.51	10,600.0	3,380.2	800.5	3,432.4	0.00	0.00	0.00	
14,900.0	90.00	359.51	10,600.0	3,480.2	799.7	3,532.0	0.00	0.00	0.00	
15,000.0	90.00	359.51	10,600.0	3,580.2	798.8	3,631.7	0.00	0.00	0.00	
15,100.0	90.00	359.51	10,600.0	3,680.2	798.0	3,731.3	0.00	0.00	0.00	
15,200.0	90.00	359.51	10,600.0	3,780.2	797.1	3,830.9	0.00	0.00	0.00	
15,300.0	90.00	359.51	10,600.0	3,880.2	796.2	3,930.5	0.00	0.00	0.00	
15,400.0	90.00	359.51	10,600.0	3,980.2	795.4	4,030.2	0.00	0.00	0.00	
15,500.0	90.00	359.51	10,600.0	4,080.2	794.5	4,129.8	0.00	0.00	0.00	
15,600.0	90.00	359.51	10,600.0	4,180.2	793.7	4,229.4	0.00	0.00	0.00	
15,700.0	90.00	359.51	10,600.0	4,280.2	792.8	4,329.0	0.00	0.00	0.00	
15,800.0	90.00	359.51	10,600.0	4,380.2	792.0	4,428.7	0.00	0.00	0.00	
15,900.0	90.00	359.51	10,600.0	4,480.2	791.1	4,528.3	0.00	0.00	0.00	
16,000.0	90.00	359.51	10,600.0	4,580.2	790.3	4,627.9	0.00	0.00	0.00	
16,100.0	90.00	359.51	10,600.0	4,680.2	789.4	4,727.5	0.00	0.00	0.00	
16,200.0	90.00	359.51	10,600.0	4,780.2	788.6	4,827.2	0.00	0.00	0.00	
16,300.0	90.00	359.51	10,600.0	4,880.2	787.7	4,926.8	0.00	0.00	0.00	
16,400.0	90.00	359.51	10,600.0	4,980.2	786.9	5,026.4	0.00	0.00	0.00	
16,500.0	90.00	359.51	10,600.0	5,080.2	786.0	5,126.0	0.00	0.00	0.00	
16,600.0	90.00	359.51	10,600.0	5,180.2	785.2	5,225.7	0.00	0.00	0.00	
16,700.0	90.00	359.51	10,600.0	5,280.2	784.3	5,325.3	0.00	0.00	0.00	
16,800.0	90.00	359.51	10,600.0	5,380.2	783.5	5,424.9	0.00	0.00	0.00	
16,900.0	90.00	359.51	10,600.0	5,480.2	782.6	5,524.5	0.00	0.00	0.00	
17,000.0	90.00	359.51	10,600.0	5,580.2	781.8	5,624.2	0.00	0.00	0.00	
17,100.0	90.00	359.51	10,600.0	5,680.1	780.9	5,723.8	0.00	0.00	0.00	
17,200.0	90.00	359.51	10,600.0	5,780.1	780.1	5,823.4	0.00	0.00	0.00	
17,300.0	90.00	359.51	10,600.0	5,880.1	779.2	5,923.0	0.00	0.00	0.00	
17,400.0	90.00	359.51	10,600.0	5,980.1	778.4	6,022.7	0.00	0.00	0.00	
17,500.0	90.00	359.51	10,600.0	6,080.1	777.5	6,122.3	0.00	0.00	0.00	
17,600.0	90.00	359.51	10,600.0	6,180.1	776.7	6,221.9	0.00	0.00	0.00	
17,700.0	90.00	359.51	10,600.0	6,280.1	775.8	6,321.5	0.00	0.00	0.00	
17,800.0	90.00	359.51	10,600.0	6,380.1	775.0	6,421.2	0.00	0.00	0.00	
17,900.0	90.00	359.51	10,600.0	6,480.1	774.1	6,520.8	0.00	0.00	0.00	
18,000.0	90.00	359.51	10,600.0	6,580.1	773.3	6,620.4	0.00	0.00	0.00	
18,100.0	90.00	359.51	10,600.0	6,680.1	772.4	6,720.0	0.00	0.00	0.00	
18,200.0	90.00	359.51	10,600.0	6,780.1	771.6	6,819.7	0.00	0.00	0.00	
18,300.0	90.00	359.51	10,600.0	6,880.1	770.7	6,919.3	0.00	0.00	0.00	
18,400.0	90.00	359.51	10,600.0	6,980.1	769.9	7,018.9	0.00	0.00	0.00	
18,500.0	90.00	359.51	10,600.0	7,080.1	769.0	7,118.5	0.00	0.00	0.00	
18,600.0	90.00	359.51	10,600.0	7,180.1	768.2	7,218.2	0.00	0.00	0.00	
18,700.0	90.00	359.51	10,600.0	7,280.1	767.3	7,317.8	0.00	0.00	0.00	



## Planning Report

<b>Database:</b>	PEDMB	<b>Local Co-ordinate Reference:</b>	Well #505H
<b>Company:</b>	Midland	<b>TVD Reference:</b>	kb = 26' @ 3865.0usft
<b>Project:</b>	Lea County, NM (NAD 83 NME)	<b>MD Reference:</b>	kb = 26' @ 3865.0usft
<b>Site:</b>	Date 14 State Com	<b>North Reference:</b>	Grid
<b>Well:</b>	#505H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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	90.00	359.51	10,600.0	7,380.1	766.5	7,417.4	0.00	0.00	0.00	
18,900.0	90.00	359.51	10,600.0	7,480.1	765.6	7,517.0	0.00	0.00	0.00	
19,000.0	90.00	359.51	10,600.0	7,580.1	764.8	7,616.7	0.00	0.00	0.00	
19,100.0	90.00	359.51	10,600.0	7,680.1	763.9	7,716.3	0.00	0.00	0.00	
19,200.0	90.00	359.51	10,600.0	7,780.1	763.1	7,815.9	0.00	0.00	0.00	
19,300.0	90.00	359.51	10,600.0	7,880.1	762.2	7,915.5	0.00	0.00	0.00	
19,400.0	90.00	359.51	10,600.0	7,980.1	761.4	8,015.2	0.00	0.00	0.00	
19,500.0	90.00	359.51	10,600.0	8,080.1	760.5	8,114.8	0.00	0.00	0.00	
19,600.0	90.00	359.51	10,600.0	8,180.1	759.7	8,214.4	0.00	0.00	0.00	
19,700.0	90.00	359.51	10,600.0	8,280.1	758.8	8,314.0	0.00	0.00	0.00	
19,800.0	90.00	359.51	10,600.0	8,380.1	758.0	8,413.6	0.00	0.00	0.00	
19,900.0	90.00	359.51	10,600.0	8,480.0	757.1	8,513.3	0.00	0.00	0.00	
20,000.0	90.00	359.51	10,600.0	8,580.0	756.3	8,612.9	0.00	0.00	0.00	
20,100.0	90.00	359.51	10,600.0	8,680.0	755.4	8,712.5	0.00	0.00	0.00	
20,200.0	90.00	359.51	10,600.0	8,780.0	754.6	8,812.1	0.00	0.00	0.00	
20,300.0	90.00	359.51	10,600.0	8,880.0	753.7	8,911.8	0.00	0.00	0.00	
20,400.0	90.00	359.51	10,600.0	8,980.0	752.9	9,011.4	0.00	0.00	0.00	
20,500.0	90.00	359.51	10,600.0	9,080.0	752.0	9,111.0	0.00	0.00	0.00	
20,600.0	90.00	359.51	10,600.0	9,180.0	751.2	9,210.6	0.00	0.00	0.00	
20,700.0	90.00	359.51	10,600.0	9,280.0	750.3	9,310.3	0.00	0.00	0.00	
20,800.0	90.00	359.51	10,600.0	9,380.0	749.5	9,409.9	0.00	0.00	0.00	
20,900.0	90.00	359.51	10,600.0	9,480.0	748.6	9,509.5	0.00	0.00	0.00	
20,971.0	90.00	359.51	10,600.0	9,551.0	748.0	9,580.2	0.00	0.00	0.00	

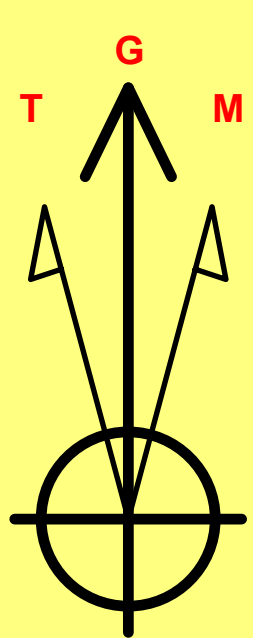
Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting		
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	Latitude	Longitude
KOP(Date 14 State #505 - plan hits target center - Point	0.00	0.00	10,122.5	-856.0	835.0	536,226.00	784,029.00	32° 28' 18.079 N	103° 32' 46.977 W
FTP(Date 14 State #505 - plan hits target center - Point	0.00	0.00	10,335.2	-806.0	835.0	536,276.00	784,029.00	32° 28' 18.573 N	103° 32' 46.973 W
PBHL(Date 14 State #505 - plan hits target center - Point	0.00	0.00	10,600.0	9,551.0	748.0	546,633.00	783,942.00	32° 30' 1.059 N	103° 32' 47.096 W



Lea County, NM (NAD 83 NME)

Date 14 State Com #505H

Plan #0.1 RT



Azimuths to Grid North  
True North: -0.42°  
Magnetic North: 5.74°

Magnetic Field  
Strength: 47290.7nT  
Dip Angle: 60.02°  
Date: 10/23/2024  
Model: IGRF2020

To convert a Magnetic Direction to a Grid Direction, Add 5.74°  
To convert a Magnetic Direction to a True Direction, Add 6.16° East  
To convert a True Direction to a Grid Direction, Subtract 0.42°

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: #505H

3839.0  
kb = 26' @ 3865.0usft  
Northing 537082.00 Easting 783194.00 Latitude 32° 28' 26.609 N Longitude 103° 32' 56.650 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	2200.0	0.00	0.00	2200.0	0.0	0.0	0.00	0.00	0.0	
3	3064.7	17.29	135.71	3051.6	-92.7	90.4	2.00	135.71	-85.4	
4	6215.9	17.29	135.71	6060.4	-763.3	744.6	0.00	0.00	-702.8	
5	7080.6	0.00	0.00	6912.0	-856.0	835.0	2.00	180.00	-788.2	
6	10291.1	0.00	0.00	10122.5	-856.0	835.0	0.00	0.00	-788.2	KOP(Date 14 State #505H)
7	10511.6	26.46	0.00	10335.2	-806.0	835.0	12.00	0.00	-738.3	FTP(Date 14 State #505H)
8	11041.1	90.00	359.51	10599.9	-378.5	832.5	12.00	-0.54	-312.4	
9	20971.0	90.00	359.51	10600.0	9551.0	748.0	0.00	0.00	9580.2	PBHL(Date 14 State #505H)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP(Date 14 State #505H)	10122.5	-856.0	835.0	536226.00	784029.00
FTP(Date 14 State #505H)	10335.2	-806.0	835.0	536276.00	784029.00
PBHL(Date 14 State #505H)	10600.0	9551.0	748.0	546633.00	783942.00

Vertical Section at 4.48°



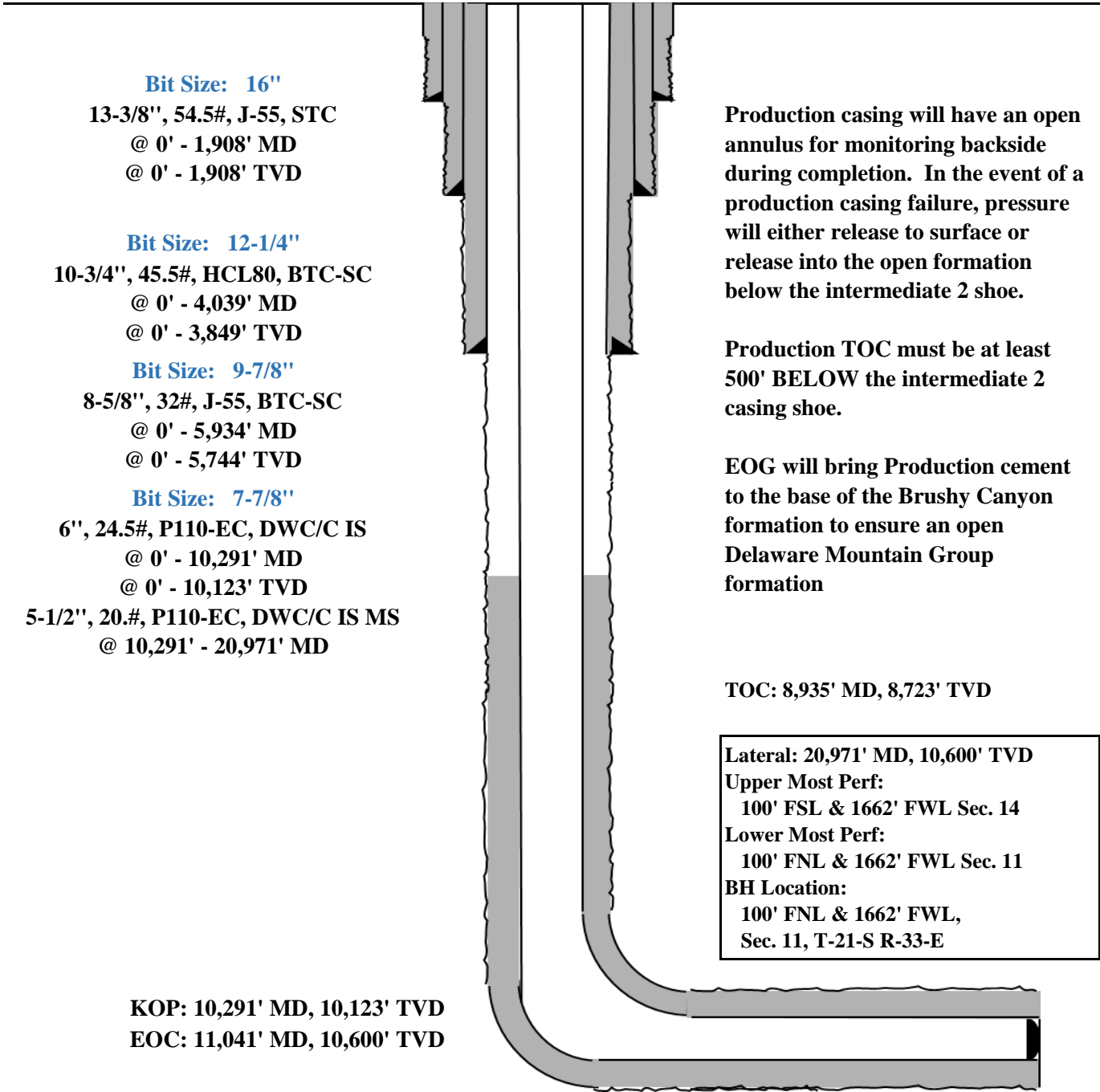
Date 14 State Com 505H

908' FSL  
834' FWL  
Section 14  
T-21-S, R-33-E

Proposed Wellbore

KB: 3839'  
GL: 3814'

API: 30-025-\*\*\*\*\*







Date 14 State Com 505H

**4. CASING PROGRAM**

Hole Size	Interval MD		Interval TVD		Csg OD	Weight	Grade	Conn
	From (ft)	To (ft)	From (ft)	To (ft)				
16"	0	1,908	0	1,908	13-3/8"	54.5#	J-55	STC
12-1/4"	0	4,039	0	3,849	10-3/4"	45.5#	HCL80	BTC-SC
9-7/8"	0	5,934	0	5,744	8-5/8"	32#	J-55	BTC-SC
7-7/8"	0	10,291	0	10,123	6"	24.5#	P110-EC	DWC/C IS
7-7/8"	10,291	20,971	10,123	10,600	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 due to availability.

Well is in the KPLA. EOG is aware of the updates to the KPLA requirements resulting in Order R-111-Q, and plans to comply with Order R-111-Q. EOG will monitor and meet the anticollision requirements of R-111-Q. EOG will also monitor the production by 2nd intermediate annulus during frac operations as per design specifications in the Order.

**5. CEMENTING PROGRAM:**

Depth	No. Sacks	Wt. ppg	Yld Ft3/sk	Slurry Description
1,908' 13-3/8"	510	13.2	1.73	Lead: Class C/H + Additives (TOC @ Surface)
	132	14.8	1.34	Tail: Class C/H + Additives (TOC @ 1,526' TVD)
3,849' 10-3/4"	811	12.7	1.11	Lead: Class C/H + Additives (High Surface Resistance slurry, min 10% BWOW Salt) + Expansive Additives (TOC @ Surface)
	175	14.8	1.50	Tail: Class C/H + Additives (High Surface Resistance slurry, min 10% BWOW Salt) + Expansive Additives (TOC @ 3,079' TVD)
5,744' 8-5/8"	749	14.2	1.11	1st Stage (Tail): Class C/H + Additives + Expansive Additives (TOC @ 4,595')
	129	14.8	1.50	2nd Stage: Class C/H + Additives + Expansion Additives (TOC @ surface)
20,971' 6"x5-1/2"	1647	13.2	1.52	Class C/H + Additives (TOC @ 8,773' - NO EXCESS)



## Date 14 State Com 505H

**6. MUD PROGRAM**

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,908' Surface	Fresh - Gel	8.6-8.8	28-34	N/c
1,908' – 3,849' 1st Int.	Brine	8.6-10.2	28-34	N/c
3,849' - 5,744' 2nd Int.	Fresh - Gel	8.6-9.2	28-34	N/c - 6
5,744' TVD – 20,971' MD Lateral	Oil Base	8.8-9.5	58-68	N/c - 6

**7. TUBING REQUIREMENTS**

EOG respectively requests an exception to the following NMOCD rule:

- 19.15.16.10 Casing AND TUBING REQUIREMENTS:  
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.



## Date 14 State Com 505H

### Potash Area Requirements

- (A) Since this well is in the Potash Area – R111-Q requires that a monitored open annulus shall incorporated during completion by leaving the annulus between the 1st and 2nd intermediate casing strings un-cemented and monitored inside the 1st intermediate string.
- 1) The top of cement in the annulus between the 2nd and 3rd intermediate casing strings shall stand uncemented at least 500 feet below the 2nd intermediate casing shoe. Zero percent excess shall be pumped on the 3rd intermediate cementing slurry to ensure no tie-back into the intermediate casing shoe.
  - 2) Not less than two (2) weeks prior to commencing hydraulic fracturing operations on wells of this design, EOG will provide notice to operators of offset wells actively producing from the Delaware Mountain Group located within one (1) mile of subject well's surface hole location. During hydraulic fracturing operations, the pump pressure and annulus between the intermediate and production casing strings shall be continuously monitored for signs of production casing failure.
  - 3) After hydraulic fracturing operations have been concluded and no longer than 180 days after the well is brought online, EOG will bradenhead cement to ensure at least 500 ft tie-back has been established inside the 2nd intermediate string but not higher than USGS Marker Bed No. 126.
  - 4) The top of cement may be estimated through pumped displacement volumes or with the use of a fluid shot tool prior to filling backside with fluid.
- (B) **Drilling Fluid for 1st Intermediate Hole Section**  
The fluid used while drilling the salt section shall consist of water, to which has been added sufficient salts of a character common to the zone penetrated to completely saturate the mixture or non-aqueous drill fluid. Other additives may be added to the fluid by the operator to address any specific well control problem. This requirement is specifically intended to prevent enlarged bore holes.
- (C) **Notificaiton Requirements to Potash Operator**  
EOG shall notify both potash operators as soon as possibly if any of the following conditions are encountered during operations:
- 1) Indication of any well collision event
  - 2) Suspected well fluid flow (oil, gas, produced water) outside of casing
  - 3) Sustained annulus pressure between 1st intermediate and next innermost casing string in excess of 500 psi above the baseline pressure of the well, or above 1500 psi total
  - 4) Increasing pressure buildup rates (psi/day) across multiple successive bleed-off cycles on the annulus between the 1st intermediate and next innermost casing during well production
  - 5) Sustained losses in excess of 50% through the salt formation during drilling.
- (D) See attached 4-string Design.



Date 14 State Com #505H

## Hydrogen Sulfide Plan Summary

A. All personnel shall receive proper H<sub>2</sub>S training in accordance with Onshore Order III.C.3.a.

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

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.

Breathing apparatus:

- a. Rescue Packs (SCBA) — 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.
- b. Work/Escape packs — 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity.
- c. Emergency Escape Packs — 4 packs shall be stored in the doghouse for emergency evacuation.

Auxiliary Rescue Equipment:

- a. Stretcher
- b. Two OSHA full body harness
- c. 100 ft 5/8 inch OSHA approved rope
- d. 1-20# class ABC fire extinguisher

■ H<sub>2</sub>S detection and monitoring equipment:

The stationary detector with three sensors will be placed in the upper dog house if equipped, set to visually alarm @ 10 ppm and audible @ 14 ppm. Calibrate a minimum of every 30 days or as needed. The sensors will be placed in the following places: Rig floor / Bell nipple / End of flow line or where well bore fluid is being discharged.

(Gas sample tubes will be stored in the safety trailer)

■ Visual warning systems.

- 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.



**Date 14 State Com #505H**

■ **Mud program:**

The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H<sub>2</sub>S bearing zones.

■ **Metallurgy:**

All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H<sub>2</sub>S service.

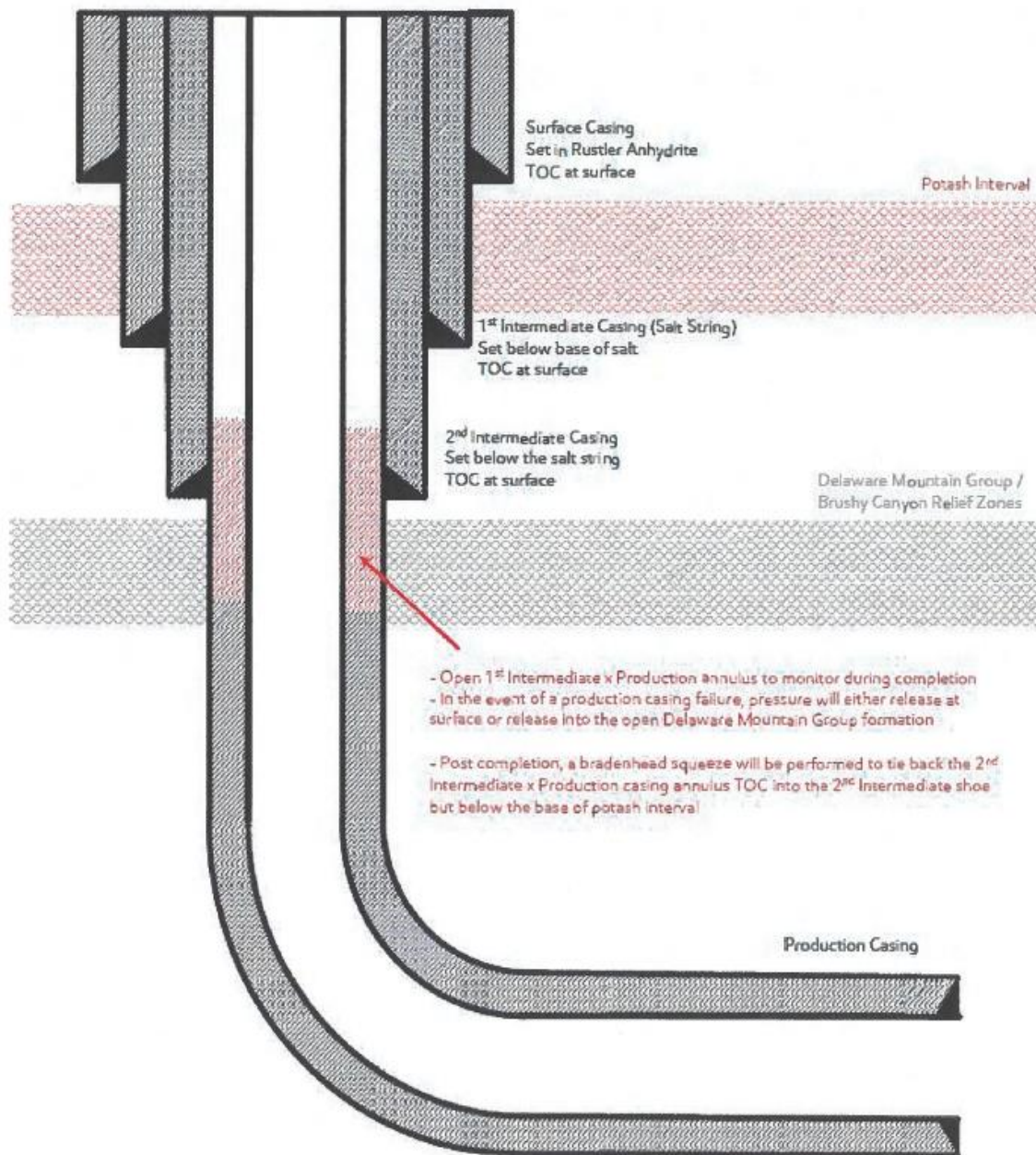
■ **Communication:**

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



Date 14 State Com #505H

## 4-String Design – Open 1<sup>st</sup> Int x Production Casing (ICP 2 above relief zone)



[Figure E] 4 String – Uncemented Annulus between 2<sup>nd</sup> Intermediate and Production Casing Strings



**Date 14 State Com #505H**  
**Emergency Assistance Telephone List**

**PUBLIC SAFETY:** **911 or**

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Lea County Sheriff's Department (575) 396-3611

Rod Coffman

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

New Mexico Oil Conservation (575) 476-3440

NMOCD Inspection Group - South (575) 626-0830

U.S. Dept. of Labor (575) 887-1174

**EOG Resources, Inc.**

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EOG / Midland	Office	(432) 686-3600
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**Safety:**

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Brian Chandler (HSE Manager)	Office	(432) 686-3695
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	Cell	(817) 239-0251
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## Date 14 State Com 505H

**1. GEOLOGIC NAME OF SURFACE FORMATION:**

Permian

**2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:**

Rustler	1,883'
Tamarisk Anhydrite	1,990'
Top of Salt	2,320'
Capitan	3,949'
Base of Capitan	5,609'
Bell Canyon	5,750'
Cherry Canyon	5,894'
Brushy Canyon	6,912'
Bone Spring Lime	8,823'
Leonard (Avalon) Shale	9,049'
1st Bone Spring Sand	9,993'
2nd Bone Spring Shale	10,219'
2nd Bone Spring Sand	10,562'
3rd Bone Spring Carb	11,076'
3rd Bone Spring Sand	11,633'
Wolfcamp	11,869'
TD	10,600'

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

Upper Permian Sands	0- 400' Fresh Water
Cherry Canyon	5,894' Oil
Brushy Canyon	6,912' Oil
Bone Spring Lime	8,823' Oil
Leonard (Avalon) Shale	9,049' Oil
1st Bone Spring Sand	9,993' Oil
2nd Bone Spring Shale	10,219' Oil
2nd Bone Spring Sand	10,562' Oil



**Date 14 State Com 505H**

EOG is aware of the updates to the KPLA requirements in R-111-Q and plans to comply with the R-111-Q order. Anticollision requirements will be monitored and met.

**R-111-Q Casing and Cementing Requirements:**

The surface casing string shall have at least the following centralization program:

- One centralizer per joint across the shoe track
- One centralizer per 2 joints from casing shoe to the top of useable fresh water
- Not less than one centralizer every 3 joints for surface casing

A casing pressure test shall be made before drilling below the casing seat or at the time of plug bump. The casing shall be tested to 0.22 psi/ft of casing string length or 1500 psi, whichever is greater, but not to exceed 70% of casing burst. If a drop of 10% or more should occur within 30 minutes, corrective measures shall be applied. Shoe integrity shall be verified via a formation integrity test (FIT).

The well path may be deviated from vertical after completely penetrating USGS Marker Bed No. 126

The 1st intermediate casing string shall be set at least 100 ft below the base of the salt interval and above the highest known oil/gas zone, and have at least the following centralization program:

- One centralizer per joint across the shoe track and not less than 1 centralizer every 3 joints to surface
- EOG will confirm the effectiveness of centralization program with cement placement simulations
- The Division (NMOCD) may require additional centralizers on the salt string, if it deems it necessary

The 1st intermediate cement slurry shall have the following characteristics:

- Cement will be a high sulfate resistance (HSR) slurry
- Include a minimum of 10% BWOW salt
- Include an expansion additive (1-3% BWO Magnesium Oxide or equivalent)

A casing pressure test shall be made before drilling below the casing seat or at the time of plug bump. The casing shall be tested to 0.22 psi/ft of casing string length or 1500 psi, whichever is greater, but not to exceed 70% of casing burst. If a drop of 10% or more should occur within 30 minutes, corrective measures shall be applied.

Shoe integrity shall be verified via a formation integrity test (FIT).

The 2nd intermediate casing string is required in areas of the Capitan Reef (unless exempted by the Division), and shall be set 150 ft above the Base of the Capitan formation.

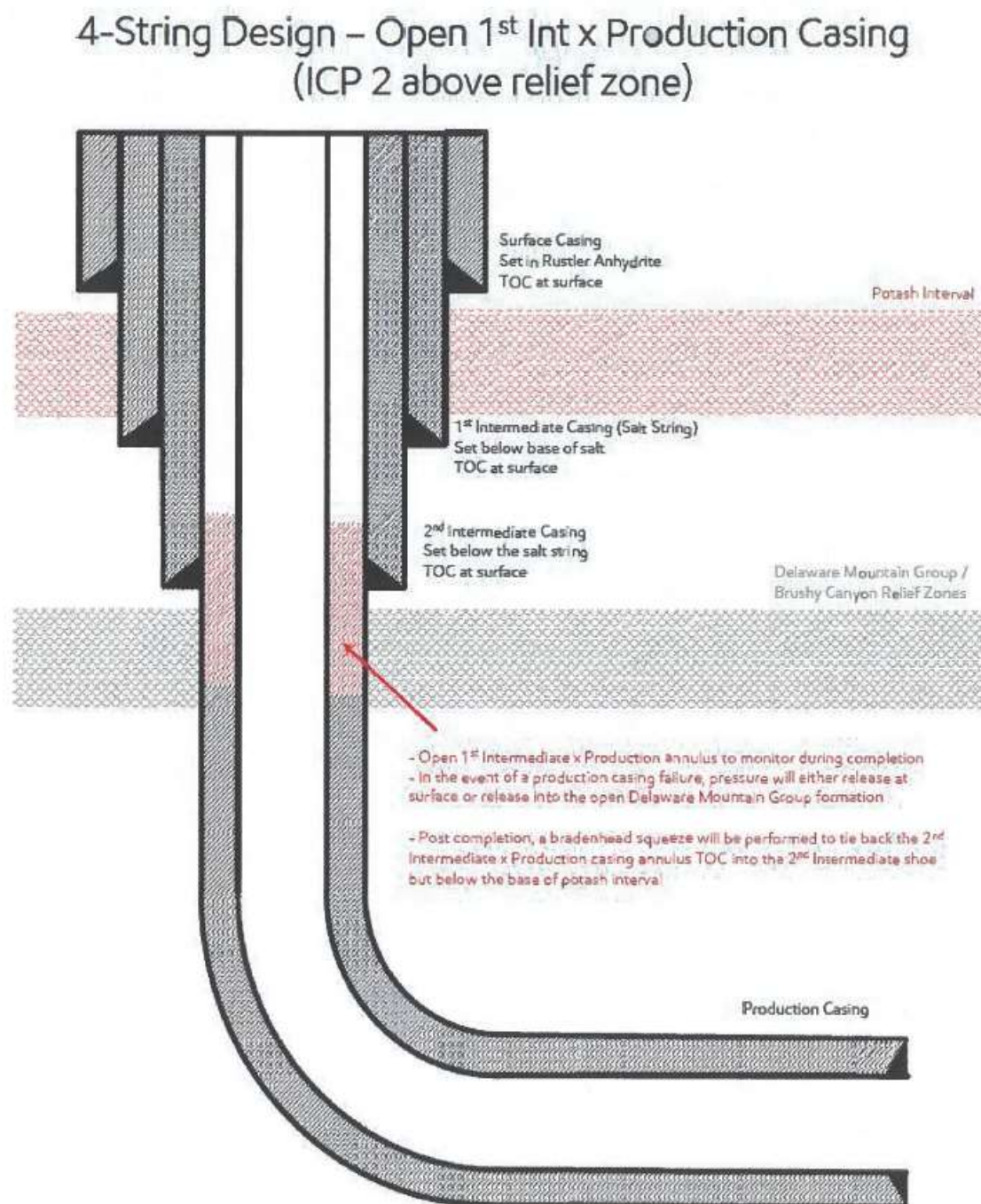
EOG will incorporate method C(5)(c)(iii) for the 4 string designs, leaving the annulus between the 2nd intermediate and the production string open and monitored. The top of production cement will be at least 500 ft below the 2nd intermediate casing point, and ZERO EXCESS will be pumped to ensure no tie-back into the 2nd intermediate.

EOG will incorporate a modified method C(5)(c)(ii) for the 5 string designs, leaving the annulus between the 2nd and 3rd intermediates open and monitored. The top of the 3rd intermediate cement will be at least 500 ft below the 2nd intermediate casing point, and ZERO EXCESS will be pumped to ensure no tie-back into the 2nd



After hydraulic fracturing operations have been concluded/no more than 180 days after the well is brought online, EOG will bradenhead cement to ensure at least 500 ft of tie-back inside the 2nd intermediate casing, but not higher than USGS Marker Bed No. 126.

See Attached Figure E from R-111-Q for 4 String - Uncemented Annulus WBD.

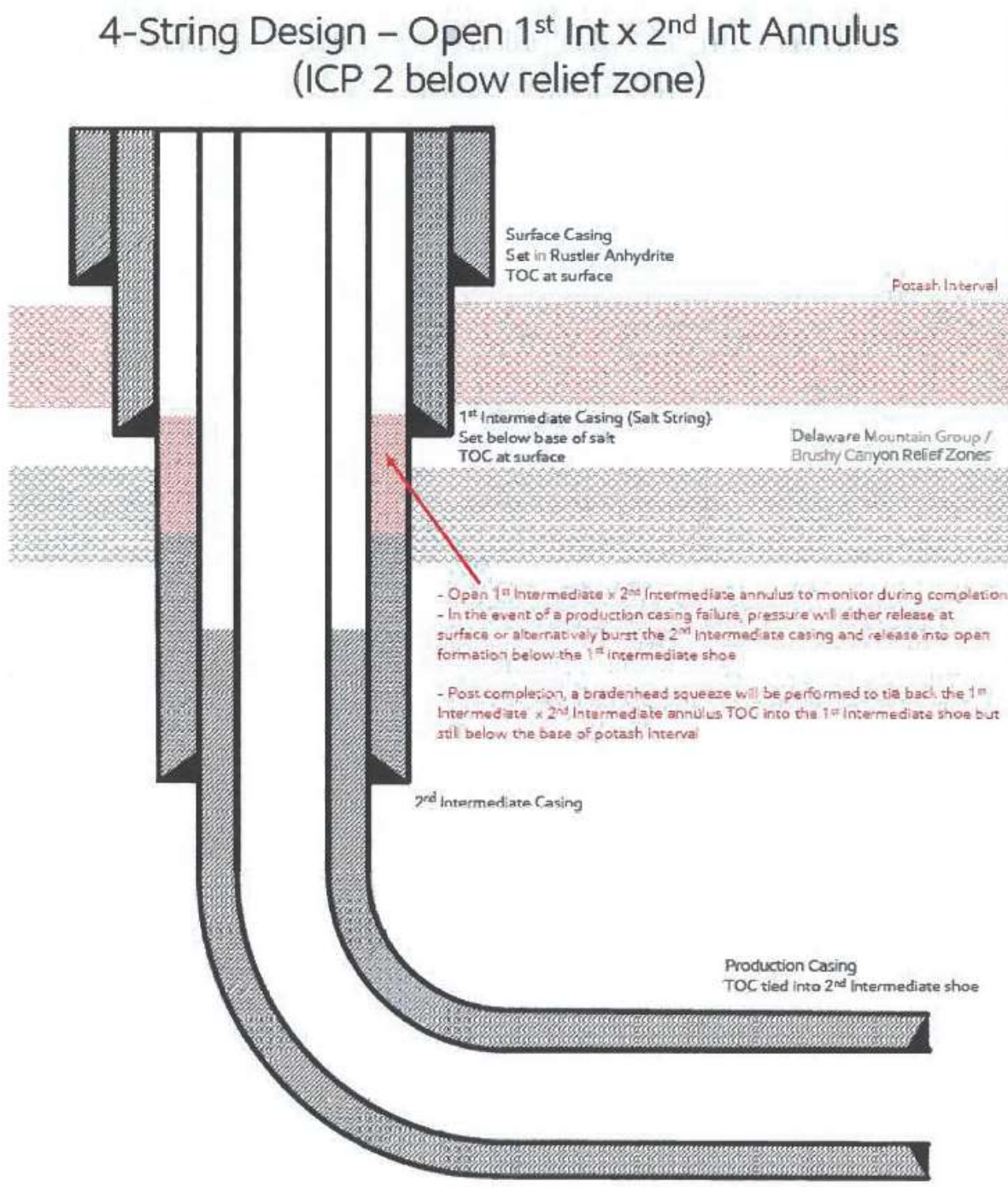


[Figure E] 4 String – Uncemented Annulus between 2<sup>nd</sup> Intermediate and Production Casing Strings



After hydraulic fracturing operations have been concluded/no more than 180 days after the well is brought online, EOG will bradenhead cement to ensure at least 500 ft of tie-back between the 3rd and the 2nd intermediate casings, but not higher than USGS Marker Bed No. 126.

See Attached Figure D from R-111-Q. This design will be modified for EOG's 5 string designs, where the annulus between the 3rd and 2nd intermediate casings will be left open below the 2nd intermediate casing shoe.



[Figure D] 4 String – Uncemented annulus between 1<sup>st</sup> and 2<sup>nd</sup> Intermediate casing strings



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:** 1/03/2025

**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
DATE 14 STATE COM 505H		M-14-21S-33E	908' FSL & 834' FWL	+/- 1000	+/- 3500	+/- 3000

**IV. Central Delivery Point Name:** DATE 14 STATE 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
DATE 14 STATE COM 505H		03/15/25	04/26/25	05/1/25	06/1/25	06/15/25

**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: <i>Kayla McConnell</i>
Printed Name: KAYLA MCCONNELL
Title: Regulatory Specialist
E-mail Address: KAYLA_MCCONNELL@EOGRESOURCES.COM
Date: 01/03/2025
Phone: (432) 265-6804
<b>OIL CONSERVATION DIVISION</b> <b>(Only applicable when submitted as a standalone form)</b>
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 will 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.**

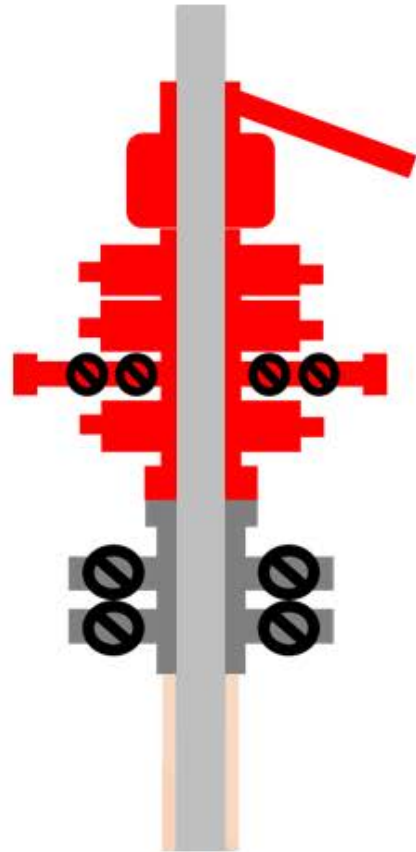
- During downhole well maintenance, EOG will use best management practices to vent as minimally as possible.
- Prior to the commencement of any maintenance, the tank or vessel will be isolated from the rest of the facilities.
- All valves upstream of the equipment will be closed and isolated.
- After 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.

**Break-test BOP & Offline Cementing:**

EOG Resources Inc. (EOG) respectfully requests a variance from the minimum standards for well control equipment testing of ECFR Title 43 Part 3172.6(b)(9)(iv) 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 30 days.
- This test will be conducted for 5M rated hole intervals only.
- Each rig requesting the break-test variance is capable of picking up the BOP without damaging components using winches, following API Standard 53, Well Control Equipment Systems for Drilling Wells (Fifth edition, December 2018, Annex C. Table C.4) which recognizes break testing as an acceptable practice.
- Function tests will be performed on the following BOP elements:
  - Annular ð during each full BOPE test
  - Upper Pipe Rams ð On trip ins where FIT required
  - Blind Rams ð Every trip
  - Lower Pipe Rams ð during each full BOPE test
- 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.

# Break Test Diagram (HCR valve)



## Steps

1. Set plug in wellhead (lower barrier)
2. Close Blind Rams (upper barrier)
3. Close roadside kill
4. Open HCR (pressure application)
5. Open wellhead valves below test plug to ensure if leak past test plug, pressure won't be applied to wellbore
6. Tie BOP testers high pressure line to main choke manifold crown valve
7. Pressure up to test break
8. Bleed test pressure from BOP testing unit

The diagrams show the following stages:

- Initial State:** A well with a break in the lower pipe. The upper pipe is red, and the lower pipe is grey. A break is indicated by a gap in the lower pipe.
- Deployment:** A plug and rams are deployed from the surface into the well. The plug is shown as a grey block with four red circles, and the rams are shown as red blocks with black circles.
- Completion:** The plug and rams are in place, isolating the break. The well is now sealed at the surface. Labels include: "Upper Pipe Rams", "Roadside Kill", "HCR", "Testing this break", and "Test plug".

1. Set plug in with test joint wellhead (lower barrier)
2. Close Upper Pipe Rams (upper barrier)
3. Close roadside kill
4. Close HCR
5. Open wellhead valves below test plug to ensure if leak past test plug, pressure won't be applied to wellbore
6. Tie BOP testers high pressure line to top of test joint
7. Pressure up to test break
8. Bleed test pressure from BOP testing unit



5509 Champions Drive, Midland, Texas 79706  
Phone: (432) 686-3661 Fax: (432) 686-6961

February 18, 2025

**SENT VIA EMAIL & FEDEX**

New Mexico Energy, Minerals & Natural Resources Department  
Oil Conservation Division – Hobbs District  
Attn: Paul Kautz  
1625 N. French Drive  
Hobbs, NM 88240

RE: R-111-P Potash Area – Statement from Operator  
Date 14 State Com #204H, #205H, #504H, #505H, #603H, #604H, #605H, #801H,  
#901H  
Sections 11 & 14, 21S-33E, Lea County, NM

Dear Mr. Kautz,

EOG has reviewed the area surrounding the subject sections for the purpose of identifying Potash Leases within a one (1) mile radius of the pending subject well APDs.

The records maintained by the Lea County Clerk's Office, Lea County, NM online records, the map in the Mineral & Land Records System of the Bureau of Land Management, the New Mexico Oil Conservation Division Map, the New Mexico State Land Office Lease Portal, and the New Mexico State Land Office Land Status Map were used to make this determination.

As of the date of this letter, EOG finds no active Potash Leases within a one (1) mile radius of the subject sections. If you have any questions or concerns, please give me a call or send me an email.

Sincerely,

EOG Resources, Inc.

*Bella Sikes*

Bella Sikes | Landman  
432.236.1283  
Bella\_Sikes@eogresources.com