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

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

Form C-101
August 1, 2011

Permit 288807

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

| 1. Operator Name and Address | 2. OGRID Number |
|---|---|
| EOG RESOURCES INC<br>P.O. Box 2267<br>Midland, TX 79702 | 7377 |
| | 3. API Number<br>30-025-48298 |

| 4. Property Code | 5. Property Name | 6. Well No. |
|---|---|---|
| 319634 | MAMBA 30 STATE COM | 207H |

**7. Surface Location**

| UL - Lot | Section | Township | Range | Lot Idn | Feet From | N/S Line | Feet From | E/W Line | County |
|---|---|---|---|---|---|---|---|---|---|
| B | 30 | 24S | 33E | B | 1053 | N | 1677 | E | Lea |

**8. Proposed Bottom Hole Location**

| UL - Lot | Section | Township | Range | Lot Idn | Feet From | N/S Line | Feet From | E/W Line | County |
|---|---|---|---|---|---|---|---|---|---|
| P | 31 | 24S | 33E | P | 100 | S | 1265 | E | Lea |

**9. Pool Information**

| | |
|---|---|
| WC-025 G-06 S253201M;UPPER BONE SPR | 97784 |

**Additional Well Information**

| 11. Work Type | 12. Well Type | 13. Cable/Rotary | 14. Lease Type | 15. Ground Level Elevation |
|---|---|---|---|---|
| New Well | OIL | | State | 3541 |
| **16. Multiple** | **17. Proposed Depth** | **18. Formation** | **19. Contractor** | **20. Spud Date** |
| N | 20133 | Upper Bone Spring | | 12/2/2020 |
| 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 | 17.5 | 13.375 | 54.5 | 1145 | 850 | 0 |
| Int1 | 12.25 | 9.625 | 40 | 4000 | 440 | 0 |
| Int1 | 12.25 | 9.625 | 40 | 4350 | 300 | 0 |
| Prod | 8.75 | 5.5 | 17 | 10199 | 560 | 0 |
| Prod | 8.5 | 5.5 | 17 | 20133 | 2820 | 3850 |

**Casing/Cement Program: Additional Comments**

**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 ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.** Signature: | | **OIL CONSERVATION DIVISION** | |
|---|---|---|---|
| Printed Name: | Electronically filed by Kay Maddox | Approved By: | Paul F Kautz |
| Title: | Regulatory Agent | Title: | Geologist |
| Email Address: | kay_maddox@eogresources.com | Approved Date: | 1/3/2021 Expiration Date: 1/3/2023 |
| Date: | 12/23/2020 Phone: 432-686-3658 | Conditions of Approval Attached | |

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State of New Mexico
Energy, Minerals & Natural Resources
Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

**FORM C-102**
**Revised August 1, 2011**
**Submit one copy to appropriate District Office**

☐ **AMENDED REPORT**

# WELL LOCATION AND ACREAGE DEDICATION PLAT

| [1]API Number | [2]Pool Code | [3]Pool Name |
|---|---|---|
| 30-025- | 97784 | WC-025 G-06 S253201M; Upper Bone Spring |

| [4]Property Code | [5]Property Name | [6]Well Number |
|---|---|---|
| 319634 | MAMBA 30 STATE COM | 207H |

| [7]OGRID No. | [8]Operator Name | [9]Elevation |
|---|---|---|
| 7377 | EOG RESOURCES, INC. | 3541' |

## [10]Surface Location

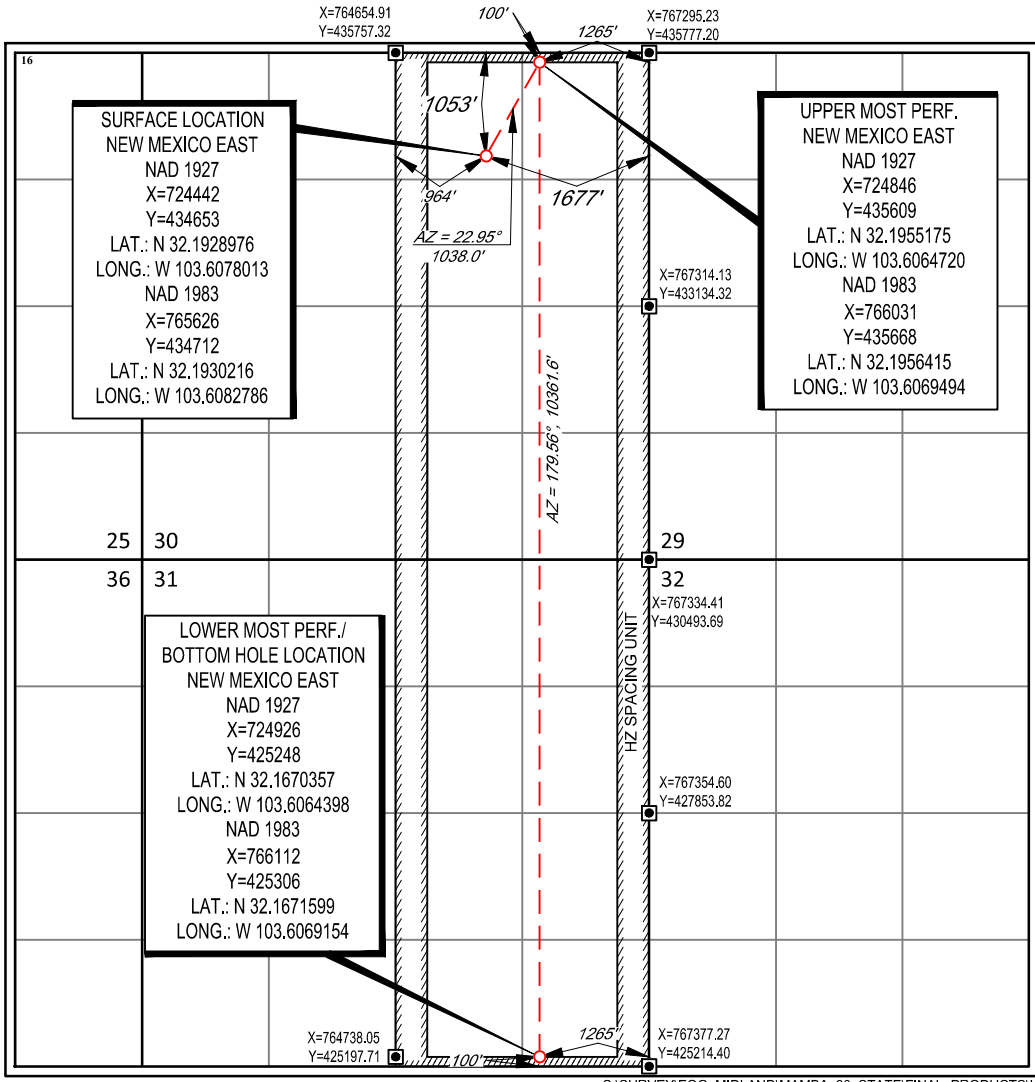
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| B | 30 | 24-S | 33-E | – | 1053' | NORTH | 1677' | EAST | LEA |

## [11]Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| P | 31 | 24-S | 33-E | – | 100' | SOUTH | 1265' | EAST | LEA |

| [12]Dedicated Acres | [13]Joint or Infill | [14]Consolidation Code | [15]Order No. |
|---|---|---|---|
| 640.00 | | | |

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




## [17]OPERATOR CERTIFICATION

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

Star L Harrell 1/11/2020
Signature Date

Star L Harrell
Printed Name

star_harrell@eogresources.com
E-mail Address

## [18]SURVEYOR CERTIFICATION

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

04/10/2020
Date of Survey
Signature and Seal of Professional Surveyor

RAMON A. DOMINGUEZ
NEW MEXICO
24508
PROFESSIONAL SURVEYOR

Certificate Number

S:\SURVEY\EOG_MIDLAND\MAMBA_30_STATE\FINAL_PRODUCTS\LO_MAMBA_30_STATE_COM_207H.DWG 5/8/2020 9:05:56 AM rdominguez

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

## GAS CAPTURE PLAN

Date: 1/4/2021

☒ Original

☐ Amended - Reason for Amendment:

Operator & OGRID No.: [7377] EOG RESOURCES INC

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

*Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).*

**Well(s)/Production Facility – Name of facility**

The well(s) that will be located at the production facility are shown in the table below.

| Well Name | API | Well Location (ULSTR) | Footages | Expected MCF/D | Flared or Vented | Comments |
|---|---|---|---|---|---|---|
| MAMBA 30 STATE COM #207H | 30-025-48298 | B-30-24S-33E | 1053N 1677E | 300 | None | CTB already exist to EOG low pressure gathering system. MMCF/D is +/-. EOG Resources, Inc. to Red Hills Compressor Station |

**Gathering System and Pipeline Notification**

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to EOG RESOURCES INC and will be connected to EOG RESOURCES INC Low Pressure gathering system located in Lea County, New Mexico. It will require 0' of pipeline to connect the facility to Low Pressure gathering system. EOG RESOURCES INC provides (periodically) to EOG RESOURCES INC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, EOG RESOURCES INC and EOG RESOURCES INC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at EOG RESOURCES INC Processing Plant located in Sec. 13, Twn. 24S, Rng. 33E, Lea County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

**Flowback Strategy**

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on EOG RESOURCES INC system at that time. Based on current information, it is EOG RESOURCES INC's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

**Alternatives to Reduce Flaring**

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
  - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
  - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

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

Form APD Comments

Permit 288807

## PERMIT COMMENTS

| Operator Name and Address: | API Number: |
|---|---|
| EOG RESOURCES INC [7377]<br>P.O. Box 2267<br>Midland, TX 79702 | 30-025-48298 |
| | Well: MAMBA 30 STATE COM #207H |

| Created By | Comment | Comment Date |
|---|---|---|

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

Form APD Conditions

Permit 288807

## PERMIT CONDITIONS OF APPROVAL

| Operator Name and Address: | API Number: |
|---|---|
| EOG RESOURCES INC [7377]<br>P.O. Box 2267<br>Midland, TX 79702 | 30-025-48298 |
| | Well:<br>MAMBA 30 STATE COM #207H |

| OCD Reviewer | Condition |
|---|---|
| pkautz | Notify OCD 24 hours prior to casing &cement |
| pkautz | Will require a File As Drilled C-102 and a Directional Survey with the C-104 |
| pkautz | 1) SURFACE & INTERMEDIATE CASING - Cement must circulate to surface -- 2) PRODUCTION CASING - Cement must tie back into intermediate casing -- |
| pkautz | If cement does not circulate to surface, must run temperature survey or other log to determine top of cement |
| pkautz | Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water |
| pkautz | 1)- The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud 2)- Drilling Sundries Form C-103 (Casing and Cement test are to be submitted within 10 days 3)- Completion Reports & Logs are to be submitted within 45 days 4)- Deviation / Directional Drill Survey are to be filed with or prior to C-104 |
| pkautz | It is the operator's responsibility to monitor cancellation dates of approved APDs. APD's are good for 2 years and may be extended for one year. Only one 1 year extension will be granted if submitted by C-103 before expiration date. After expiration date or after a 1 year extension must submit new APD. If an APD expires and if site construction has occurred, site remediation is required. |
| pkautz | Stage Tool 1) Must notify OCD Hobbs Office prior to running Stage Tool at 5753703186 2) If using Stage Tool on Surface casing, Stage Tool must be set greater than 350' from surface and a minimum of 200 feet above surface shoe. 3) When using a Stage Tool on Intermediate or Production Casing Stage must be a minimum of 50 feet below previous casing shoe. |

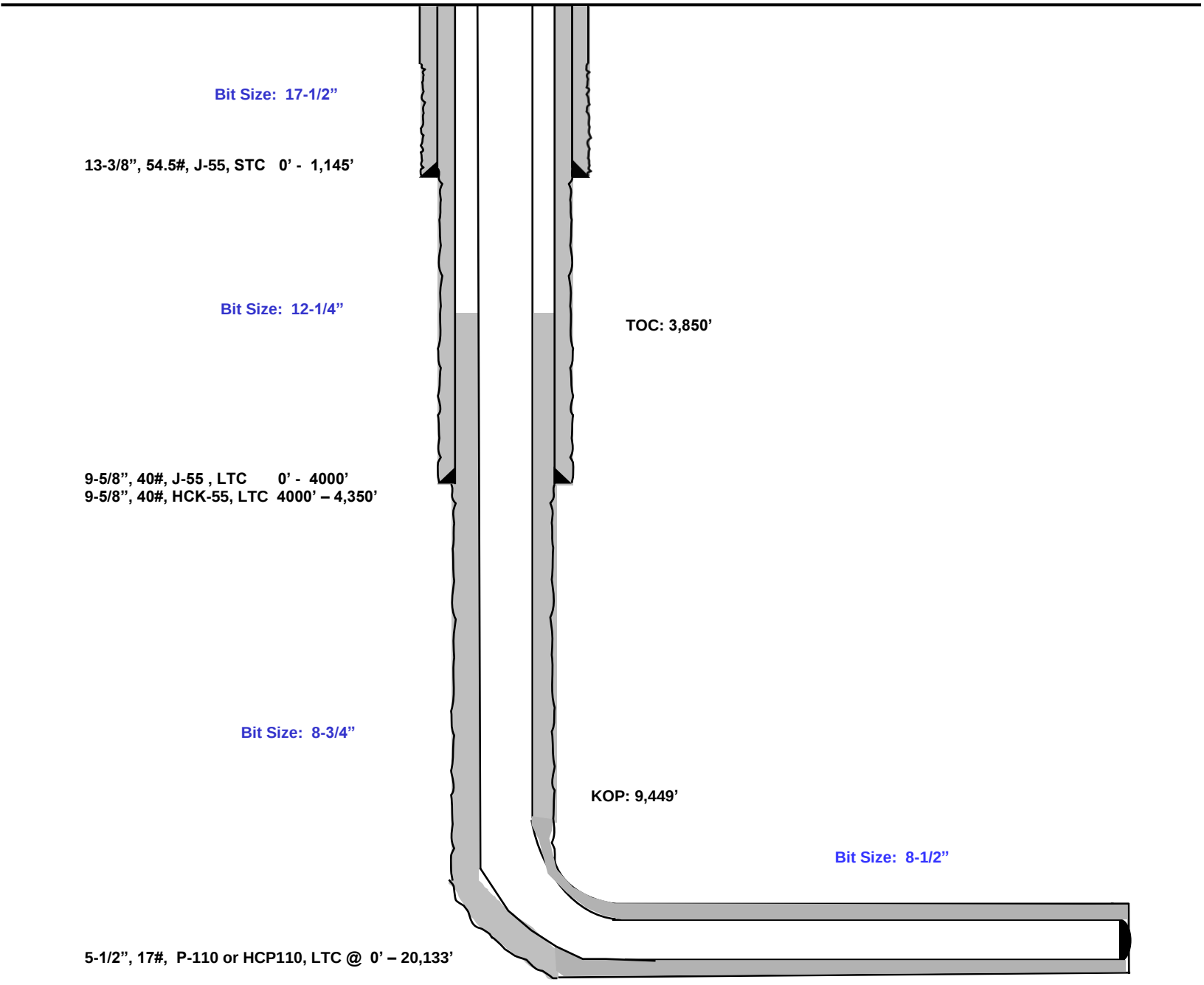
# Mamba 30 State Com #207H
# Lea County, New Mexico

## Proposed Wellbore

1053’ FNL
1677’ FEL
Section 30
T-24-S, R-33-E

API: 30-025-*****

KB: 3,566’
GL: 3,541’




Lateral: 20,133’ MD, 9,852’ TVD
BH Location: 100’ FSL & 1265’ FEL
Section 31
T-24-S, R-33-E

**EOG RESOURCES, INC.**
**MAMBA 30 STATE COM #207H**

**Permit Information**:

Well Name: Mamba 30 State Com #207H

Location:
SHL: 1053' FNL & 1677' FEL, Section 30, T-24-S, R-33-E, Lea Co., N.M.
BHL: 100' FSL & 1265' FEL, Section 31, T-24-S, R-33-E, Lea Co., N.M.

**Casing Program**:

| Hole Size | Interval | Csg OD | Weight | Grade | Conn | $DF_{min}$ Collapse | $DF_{min}$ Burst | $DF_{min}$ Tension |
|---|---|---|---|---|---|---|---|---|
| 17.5" | 0' – 1,145' | 13.375" | 54.5# | J-55 | STC | 1.125 | 1.25 | 1.60 |
| 12.25" | 0' – 4,000' | 9.625" | 40# | J-55 | LTC | 1.125 | 1.25 | 1.60 |
| 12.25" | 4000' – 4,350' | 9.625" | 40# | HCK-55 | LTC | 1.125 | 1.25 | 1.60 |
| 8.75" | 0'– 10,199' | 5.5" | 17# | HCP-110 | LTC | 1.125 | 1.25 | 1.60 |
| 8.5" | 10,199'– 20,133' | 5.5" | 17# | HCP-110 | LTC | 1.125 | 1.25 | 1.60 |

**Cement Program**:

| Depth | No. Sacks | Wt. ppg | Yld $Ft^3/ft$ | Slurry Description |
|---|---|---|---|---|
| 1,145' | 690 | 13.5 | 1.73 | Lead: Class C + 4.0% Bentonite + 0.5% $CaCl_2$ + 0.25 lb/sk Cello-Flake (TOC @ Surface) |
| | 160 | 14.8 | 1.34 | Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate |
| 4,350' | 440 | 9.0 | 3.5 | Lead: Class C + 10% NaCl + 6% Bentonite Gel + 3% MagOx (TOC @ Surface) |
| | 300 | 14.4 | 1.20 | Tail: Class C + 10% NaCl + 3% MagOx |
| 20,133' | 560 | 11.0 | 3.21 | Lead: Class C + 3% CaCl2 + 3% Microbond (TOC @ 3,850') |
| | 2,820 | 14.4 | 1.2 | Tail: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond |

**Mud Program**:

| Depth | Type | Weight (ppg) | Viscosity | Water Loss |
|---|---|---|---|---|
| 0' – 1,145' | Fresh - Gel | 8.6-8.8 | 28-34 | N/c |
| 1,145' – 4,350' | Brine | 10.0-10.2 | 28-34 | N/c |
| 4,350' – 9,449' | Cut Brine | 8.4-9.0 | 28-34 | N/c |
| 9,449' – 20,133' Lateral | Oil Base | 9.0-9.5 | 40-42 | 8-10 |

**EOG RESOURCES, INC.**
**MAMBA 30 STATE COM #207H**

# 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.

  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

- 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 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.

**EOG RESOURCES, INC.**
**MAMBA 30 STATE COM #207H**

- 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.

**EOG RESOURCES, INC.**
**MAMBA 30 STATE COM #207H**

## Emergency Assistance Telephone List

| **PUBLIC SAFETY:** | | **911 or** |
|---|---|---|
| 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 |
| U.S. Dept. of Labor | | (575) 887-1174 |
| **EOG Resources, Inc.** | | |
| EOG / Midland | Office | (432) 686-3600 |
| **Company Drilling Consultants:** | | |
| David Dominque | Cell | (985) 518-5839 |
| Mike Vann | Cell | (817) 980-5507 |
| **Drilling Engineer** | | |
| Steve Munsell | Office | (432) 686-3609 |
| | Cell | (432) 894-1256 |
| **Drilling Manager** | | |
| Aj Dach | Office | (432) 686-3751 |
| | Cell | (817) 480-1167 |
| **Drilling Superintendent** | | |
| Jason Townsend | Office | (432) 848-9209 |
| | Cell | (210) 776-5131 |
| **H&P Drilling** | | |
| H&P Drilling | Office | (432) 563-5757 |
| H&P 651 Drilling Rig | Rig | (903) 509-7131 |
| **Tool Pusher:** | | |
| Johnathan Craig | Cell | (817) 760-6374 |
| Brad Garrett | | |
| **Safety** | | |
| Brian Chandler (HSE Manager) | Office | (432) 686-3695 |
| | Cell | (817) 239-0251 |

# EOG Resources - Midland

**Lea County, NM (NAD 83 NME)**
**Mamba 30 State Com**
**#207H**

**OH**

**Plan: Plan #0.1**

# Standard Planning Report

**16 June, 2020**

# EOG Resources

## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDM | **Local Co-ordinate Reference:** | Well #207H |
| **Company:** | EOG Resources - Midland | **TVD Reference:** | KB = 25' @ 3566.0usft |
| **Project:** | Lea County, NM (NAD 83 NME) | **MD Reference:** | KB = 25' @ 3566.0usft |
| **Site:** | Mamba 30 State Com | **North Reference:** | Grid |
| **Well:** | #207H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OH | | |
| **Design:** | Plan #0.1 | | |

**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** Mamba 30 State Com

| | | | | | |
|---|---|---|---|---|---|
| **Site Position:** | | **Northing:** | 430,807.00 usft | **Latitude:** | 32° 10' 56.143 N |
| **From:** | Map | **Easting:** | 767,053.00 usft | **Longitude:** | 103° 36' 13.509 W |
| **Position Uncertainty:** | 0.0 usft | **Slot Radius:** | 13-3/16 " | **Grid Convergence:** | 0.39 ° |

**Well** #207H

| | | | | | | |
|---|---|---|---|---|---|---|
| **Well Position** | **+N/-S** | 3,905.0 usft | **Northing:** | 434,712.00 usft | **Latitude:** | 32° 11' 34.880 N |
| | **+E/-W** | -1,427.0 usft | **Easting:** | 765,626.00 usft | **Longitude:** | 103° 36' 29.806 W |
| **Position Uncertainty** | | 0.0 usft | **Wellhead Elevation:** | | **Ground Level:** | 3,541.0 usft |

**Wellbore** OH

| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|---|---|---|---|---|---|
| | IGRF2020 | 6/16/2020 | 6.68 | 59.90 | 47,574.75529773 |

**Design** Plan #0.1

**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 | 177.04 |

**Plan Survey Tool Program** **Date** 6/16/2020

| | Depth From (usft) | Depth To (usft) | Survey (Wellbore) | Tool Name | Remarks |
|---|---|---|---|---|---|
| 1 | 0.0 | 20,133.3 | Plan #0.1 (OH) | EOG MWD+IFR1 | |
| | | | | MWD + IFR1 | |

**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 | |
| 1,200.0 | 0.00 | 0.00 | 1,200.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,596.9 | 7.94 | 21.93 | 1,595.7 | 25.5 | 10.3 | 2.00 | 2.00 | 0.00 | 21.93 | |
| 9,051.6 | 7.94 | 21.93 | 8,978.8 | 980.5 | 394.7 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 9,448.5 | 0.00 | 0.00 | 9,374.5 | 1,006.0 | 405.0 | 2.00 | -2.00 | 0.00 | 180.00 | KOP(Mamba 30 State |
| 9,668.9 | 26.46 | 180.00 | 9,587.2 | 956.0 | 405.0 | 12.00 | 12.00 | 81.65 | 180.00 | FTP(Mamba 30 State |
| 10,198.5 | 90.00 | 179.55 | 9,851.9 | 528.5 | 407.3 | 12.00 | 12.00 | -0.09 | -0.51 | |
| 20,133.3 | 90.00 | 179.55 | 9,852.0 | -9,406.0 | 486.0 | 0.00 | 0.00 | 0.00 | 0.00 | PBHL(Mamba 30 Stat |

eog resources

# EOG Resources

Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDM | **Local Co-ordinate Reference:** | Well #207H |
| **Company:** | EOG Resources - Midland | **TVD Reference:** | KB = 25' @ 3566.0usft |
| **Project:** | Lea County, NM (NAD 83 NME) | **MD Reference:** | KB = 25' @ 3566.0usft |
| **Site:** | Mamba 30 State Com | **North Reference:** | Grid |
| **Well:** | #207H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OH | | |
| **Design:** | Plan #0.1 | | |

**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 | 2.00 | 21.93 | 1,300.0 | 1.6 | 0.7 | -1.6 | 2.00 | 2.00 | 0.00 |
| 1,400.0 | 4.00 | 21.93 | 1,399.8 | 6.5 | 2.6 | -6.3 | 2.00 | 2.00 | 0.00 |
| 1,500.0 | 6.00 | 21.93 | 1,499.5 | 14.6 | 5.9 | -14.2 | 2.00 | 2.00 | 0.00 |
| 1,596.9 | 7.94 | 21.93 | 1,595.7 | 25.5 | 10.3 | -24.9 | 2.00 | 2.00 | 0.00 |
| 1,600.0 | 7.94 | 21.93 | 1,598.7 | 25.9 | 10.4 | -25.3 | 0.00 | 0.00 | 0.00 |
| 1,700.0 | 7.94 | 21.93 | 1,697.7 | 38.7 | 15.6 | -37.8 | 0.00 | 0.00 | 0.00 |
| 1,800.0 | 7.94 | 21.93 | 1,796.8 | 51.5 | 20.7 | -50.3 | 0.00 | 0.00 | 0.00 |
| 1,900.0 | 7.94 | 21.93 | 1,895.8 | 64.3 | 25.9 | -62.9 | 0.00 | 0.00 | 0.00 |
| 2,000.0 | 7.94 | 21.93 | 1,994.9 | 77.1 | 31.0 | -75.4 | 0.00 | 0.00 | 0.00 |
| 2,100.0 | 7.94 | 21.93 | 2,093.9 | 89.9 | 36.2 | -87.9 | 0.00 | 0.00 | 0.00 |
| 2,200.0 | 7.94 | 21.93 | 2,193.0 | 102.7 | 41.4 | -100.5 | 0.00 | 0.00 | 0.00 |
| 2,300.0 | 7.94 | 21.93 | 2,292.0 | 115.5 | 46.5 | -113.0 | 0.00 | 0.00 | 0.00 |
| 2,400.0 | 7.94 | 21.93 | 2,391.0 | 128.4 | 51.7 | -125.5 | 0.00 | 0.00 | 0.00 |
| 2,500.0 | 7.94 | 21.93 | 2,490.1 | 141.2 | 56.8 | -138.0 | 0.00 | 0.00 | 0.00 |
| 2,600.0 | 7.94 | 21.93 | 2,589.1 | 154.0 | 62.0 | -150.6 | 0.00 | 0.00 | 0.00 |
| 2,700.0 | 7.94 | 21.93 | 2,688.2 | 166.8 | 67.1 | -163.1 | 0.00 | 0.00 | 0.00 |
| 2,800.0 | 7.94 | 21.93 | 2,787.2 | 179.6 | 72.3 | -175.6 | 0.00 | 0.00 | 0.00 |
| 2,900.0 | 7.94 | 21.93 | 2,886.2 | 192.4 | 77.5 | -188.2 | 0.00 | 0.00 | 0.00 |
| 3,000.0 | 7.94 | 21.93 | 2,985.3 | 205.2 | 82.6 | -200.7 | 0.00 | 0.00 | 0.00 |
| 3,100.0 | 7.94 | 21.93 | 3,084.3 | 218.0 | 87.8 | -213.2 | 0.00 | 0.00 | 0.00 |
| 3,200.0 | 7.94 | 21.93 | 3,183.4 | 230.8 | 92.9 | -225.7 | 0.00 | 0.00 | 0.00 |
| 3,300.0 | 7.94 | 21.93 | 3,282.4 | 243.7 | 98.1 | -238.3 | 0.00 | 0.00 | 0.00 |
| 3,400.0 | 7.94 | 21.93 | 3,381.5 | 256.5 | 103.3 | -250.8 | 0.00 | 0.00 | 0.00 |
| 3,500.0 | 7.94 | 21.93 | 3,480.5 | 269.3 | 108.4 | -263.3 | 0.00 | 0.00 | 0.00 |
| 3,600.0 | 7.94 | 21.93 | 3,579.5 | 282.1 | 113.6 | -275.9 | 0.00 | 0.00 | 0.00 |
| 3,700.0 | 7.94 | 21.93 | 3,678.6 | 294.9 | 118.7 | -288.4 | 0.00 | 0.00 | 0.00 |
| 3,800.0 | 7.94 | 21.93 | 3,777.6 | 307.7 | 123.9 | -300.9 | 0.00 | 0.00 | 0.00 |
| 3,900.0 | 7.94 | 21.93 | 3,876.7 | 320.5 | 129.0 | -313.4 | 0.00 | 0.00 | 0.00 |
| 4,000.0 | 7.94 | 21.93 | 3,975.7 | 333.3 | 134.2 | -326.0 | 0.00 | 0.00 | 0.00 |
| 4,100.0 | 7.94 | 21.93 | 4,074.7 | 346.2 | 139.4 | -338.5 | 0.00 | 0.00 | 0.00 |
| 4,200.0 | 7.94 | 21.93 | 4,173.8 | 359.0 | 144.5 | -351.0 | 0.00 | 0.00 | 0.00 |
| 4,300.0 | 7.94 | 21.93 | 4,272.8 | 371.8 | 149.7 | -363.6 | 0.00 | 0.00 | 0.00 |
| 4,400.0 | 7.94 | 21.93 | 4,371.9 | 384.6 | 154.8 | -376.1 | 0.00 | 0.00 | 0.00 |
| 4,500.0 | 7.94 | 21.93 | 4,470.9 | 397.4 | 160.0 | -388.6 | 0.00 | 0.00 | 0.00 |
| 4,600.0 | 7.94 | 21.93 | 4,570.0 | 410.2 | 165.1 | -401.1 | 0.00 | 0.00 | 0.00 |
| 4,700.0 | 7.94 | 21.93 | 4,669.0 | 423.0 | 170.3 | -413.7 | 0.00 | 0.00 | 0.00 |
| 4,800.0 | 7.94 | 21.93 | 4,768.0 | 435.8 | 175.5 | -426.2 | 0.00 | 0.00 | 0.00 |
| 4,900.0 | 7.94 | 21.93 | 4,867.1 | 448.6 | 180.6 | -438.7 | 0.00 | 0.00 | 0.00 |
| 5,000.0 | 7.94 | 21.93 | 4,966.1 | 461.5 | 185.8 | -451.3 | 0.00 | 0.00 | 0.00 |
| 5,100.0 | 7.94 | 21.93 | 5,065.2 | 474.3 | 190.9 | -463.8 | 0.00 | 0.00 | 0.00 |
| 5,200.0 | 7.94 | 21.93 | 5,164.2 | 487.1 | 196.1 | -476.3 | 0.00 | 0.00 | 0.00 |

eog resources

# EOG Resources

## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDM | **Local Co-ordinate Reference:** | Well #207H |
| **Company:** | EOG Resources - Midland | **TVD Reference:** | KB = 25' @ 3566.0usft |
| **Project:** | Lea County, NM (NAD 83 NME) | **MD Reference:** | KB = 25' @ 3566.0usft |
| **Site:** | Mamba 30 State Com | **North Reference:** | Grid |
| **Well:** | #207H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OH | | |
| **Design:** | Plan #0.1 | | |

**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 | 7.94 | 21.93 | 5,263.2 | 499.9 | 201.2 | -488.8 | 0.00 | 0.00 | 0.00 |
| 5,400.0 | 7.94 | 21.93 | 5,362.3 | 512.7 | 206.4 | -501.4 | 0.00 | 0.00 | 0.00 |
| 5,500.0 | 7.94 | 21.93 | 5,461.3 | 525.5 | 211.6 | -513.9 | 0.00 | 0.00 | 0.00 |
| 5,600.0 | 7.94 | 21.93 | 5,560.4 | 538.3 | 216.7 | -526.4 | 0.00 | 0.00 | 0.00 |
| 5,700.0 | 7.94 | 21.93 | 5,659.4 | 551.1 | 221.9 | -539.0 | 0.00 | 0.00 | 0.00 |
| 5,800.0 | 7.94 | 21.93 | 5,758.5 | 564.0 | 227.0 | -551.5 | 0.00 | 0.00 | 0.00 |
| 5,900.0 | 7.94 | 21.93 | 5,857.5 | 576.8 | 232.2 | -564.0 | 0.00 | 0.00 | 0.00 |
| 6,000.0 | 7.94 | 21.93 | 5,956.5 | 589.6 | 237.4 | -576.5 | 0.00 | 0.00 | 0.00 |
| 6,100.0 | 7.94 | 21.93 | 6,055.6 | 602.4 | 242.5 | -589.1 | 0.00 | 0.00 | 0.00 |
| 6,200.0 | 7.94 | 21.93 | 6,154.6 | 615.2 | 247.7 | -601.6 | 0.00 | 0.00 | 0.00 |
| 6,300.0 | 7.94 | 21.93 | 6,253.7 | 628.0 | 252.8 | -614.1 | 0.00 | 0.00 | 0.00 |
| 6,400.0 | 7.94 | 21.93 | 6,352.7 | 640.8 | 258.0 | -626.7 | 0.00 | 0.00 | 0.00 |
| 6,500.0 | 7.94 | 21.93 | 6,451.7 | 653.6 | 263.1 | -639.2 | 0.00 | 0.00 | 0.00 |
| 6,600.0 | 7.94 | 21.93 | 6,550.8 | 666.4 | 268.3 | -651.7 | 0.00 | 0.00 | 0.00 |
| 6,700.0 | 7.94 | 21.93 | 6,649.8 | 679.3 | 273.5 | -664.2 | 0.00 | 0.00 | 0.00 |
| 6,800.0 | 7.94 | 21.93 | 6,748.9 | 692.1 | 278.6 | -676.8 | 0.00 | 0.00 | 0.00 |
| 6,900.0 | 7.94 | 21.93 | 6,847.9 | 704.9 | 283.8 | -689.3 | 0.00 | 0.00 | 0.00 |
| 7,000.0 | 7.94 | 21.93 | 6,947.0 | 717.7 | 288.9 | -701.8 | 0.00 | 0.00 | 0.00 |
| 7,100.0 | 7.94 | 21.93 | 7,046.0 | 730.5 | 294.1 | -714.4 | 0.00 | 0.00 | 0.00 |
| 7,200.0 | 7.94 | 21.93 | 7,145.0 | 743.3 | 299.2 | -726.9 | 0.00 | 0.00 | 0.00 |
| 7,300.0 | 7.94 | 21.93 | 7,244.1 | 756.1 | 304.4 | -739.4 | 0.00 | 0.00 | 0.00 |
| 7,400.0 | 7.94 | 21.93 | 7,343.1 | 768.9 | 309.6 | -751.9 | 0.00 | 0.00 | 0.00 |
| 7,500.0 | 7.94 | 21.93 | 7,442.2 | 781.8 | 314.7 | -764.5 | 0.00 | 0.00 | 0.00 |
| 7,600.0 | 7.94 | 21.93 | 7,541.2 | 794.6 | 319.9 | -777.0 | 0.00 | 0.00 | 0.00 |
| 7,700.0 | 7.94 | 21.93 | 7,640.2 | 807.4 | 325.0 | -789.5 | 0.00 | 0.00 | 0.00 |
| 7,800.0 | 7.94 | 21.93 | 7,739.3 | 820.2 | 330.2 | -802.1 | 0.00 | 0.00 | 0.00 |
| 7,900.0 | 7.94 | 21.93 | 7,838.3 | 833.0 | 335.4 | -814.6 | 0.00 | 0.00 | 0.00 |
| 8,000.0 | 7.94 | 21.93 | 7,937.4 | 845.8 | 340.5 | -827.1 | 0.00 | 0.00 | 0.00 |
| 8,100.0 | 7.94 | 21.93 | 8,036.4 | 858.6 | 345.7 | -839.6 | 0.00 | 0.00 | 0.00 |
| 8,200.0 | 7.94 | 21.93 | 8,135.5 | 871.4 | 350.8 | -852.2 | 0.00 | 0.00 | 0.00 |
| 8,300.0 | 7.94 | 21.93 | 8,234.5 | 884.2 | 356.0 | -864.7 | 0.00 | 0.00 | 0.00 |
| 8,400.0 | 7.94 | 21.93 | 8,333.5 | 897.1 | 361.1 | -877.2 | 0.00 | 0.00 | 0.00 |
| 8,500.0 | 7.94 | 21.93 | 8,432.6 | 909.9 | 366.3 | -889.8 | 0.00 | 0.00 | 0.00 |
| 8,600.0 | 7.94 | 21.93 | 8,531.6 | 922.7 | 371.5 | -902.3 | 0.00 | 0.00 | 0.00 |
| 8,700.0 | 7.94 | 21.93 | 8,630.7 | 935.5 | 376.6 | -914.8 | 0.00 | 0.00 | 0.00 |
| 8,800.0 | 7.94 | 21.93 | 8,729.7 | 948.3 | 381.8 | -927.3 | 0.00 | 0.00 | 0.00 |
| 8,900.0 | 7.94 | 21.93 | 8,828.7 | 961.1 | 386.9 | -939.9 | 0.00 | 0.00 | 0.00 |
| 9,000.0 | 7.94 | 21.93 | 8,927.8 | 973.9 | 392.1 | -952.4 | 0.00 | 0.00 | 0.00 |
| 9,051.6 | 7.94 | 21.93 | 8,978.8 | 980.5 | 394.7 | -958.9 | 0.00 | 0.00 | 0.00 |
| 9,100.0 | 6.97 | 21.93 | 9,026.9 | 986.4 | 397.1 | -964.6 | 2.00 | -2.00 | 0.00 |
| 9,200.0 | 4.97 | 21.93 | 9,126.3 | 996.0 | 401.0 | -974.0 | 2.00 | -2.00 | 0.00 |
| 9,300.0 | 2.97 | 21.93 | 9,226.1 | 1,002.4 | 403.6 | -980.3 | 2.00 | -2.00 | 0.00 |
| 9,400.0 | 0.97 | 21.93 | 9,326.0 | 1,005.6 | 404.8 | -983.4 | 2.00 | -2.00 | 0.00 |
| 9,448.5 | 0.00 | 0.00 | 9,374.5 | 1,006.0 | 405.0 | -983.8 | 2.00 | -2.00 | 0.00 |
| **KOP(Mamba 30 State Com #207H)** | | | | | | | | | |
| 9,450.0 | 0.18 | 180.00 | 9,376.0 | 1,006.0 | 405.0 | -983.8 | 12.00 | 12.00 | 0.00 |
| 9,475.0 | 3.18 | 180.00 | 9,401.0 | 1,005.3 | 405.0 | -983.0 | 12.00 | 12.00 | 0.00 |
| 9,500.0 | 6.18 | 180.00 | 9,425.9 | 1,003.2 | 405.0 | -981.0 | 12.00 | 12.00 | 0.00 |
| 9,525.0 | 9.18 | 180.00 | 9,450.7 | 999.9 | 405.0 | -977.6 | 12.00 | 12.00 | 0.00 |
| 9,550.0 | 12.18 | 180.00 | 9,475.3 | 995.2 | 405.0 | -973.0 | 12.00 | 12.00 | 0.00 |
| 9,575.0 | 15.18 | 180.00 | 9,499.5 | 989.3 | 405.0 | -967.1 | 12.00 | 12.00 | 0.00 |
| 9,600.0 | 18.18 | 180.00 | 9,523.5 | 982.2 | 405.0 | -959.9 | 12.00 | 12.00 | 0.00 |
| 9,625.0 | 21.19 | 180.00 | 9,547.0 | 973.7 | 405.0 | -951.5 | 12.00 | 12.00 | 0.00 |

# EOG Resources

Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDM | **Local Co-ordinate Reference:** | Well #207H |
| **Company:** | EOG Resources - Midland | **TVD Reference:** | KB = 25' @ 3566.0usft |
| **Project:** | Lea County, NM (NAD 83 NME) | **MD Reference:** | KB = 25' @ 3566.0usft |
| **Site:** | Mamba 30 State Com | **North Reference:** | Grid |
| **Well:** | #207H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OH | | |
| **Design:** | Plan #0.1 | | |

**Planned Survey**

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|---|---|---|---|---|---|---|---|---|---|
| 9,650.0 | 24.19 | 180.00 | 9,570.1 | 964.1 | 405.0 | -941.9 | 12.00 | 12.00 | 0.00 |
| 9,668.9 | 26.46 | 180.00 | 9,587.2 | 956.0 | 405.0 | -933.8 | 12.00 | 12.00 | 0.00 |
| **FTP(Mamba 30 State Com #207H)** | | | | | | | | | |
| 9,675.0 | 27.19 | 179.99 | 9,592.6 | 953.3 | 405.0 | -931.1 | 12.00 | 12.00 | -0.23 |
| 9,700.0 | 30.19 | 179.93 | 9,614.5 | 941.3 | 405.0 | -919.1 | 12.00 | 12.00 | -0.21 |
| 9,725.0 | 33.19 | 179.89 | 9,635.8 | 928.1 | 405.0 | -906.0 | 12.00 | 12.00 | -0.17 |
| 9,750.0 | 36.19 | 179.85 | 9,656.4 | 913.9 | 405.1 | -891.8 | 12.00 | 12.00 | -0.15 |
| 9,775.0 | 39.19 | 179.82 | 9,676.2 | 898.6 | 405.1 | -876.5 | 12.00 | 12.00 | -0.13 |
| 9,800.0 | 42.19 | 179.80 | 9,695.1 | 882.3 | 405.2 | -860.2 | 12.00 | 12.00 | -0.11 |
| 9,825.0 | 45.19 | 179.77 | 9,713.2 | 865.1 | 405.2 | -843.0 | 12.00 | 12.00 | -0.10 |
| 9,850.0 | 48.19 | 179.75 | 9,730.3 | 846.9 | 405.3 | -824.8 | 12.00 | 12.00 | -0.09 |
| 9,875.0 | 51.19 | 179.73 | 9,746.5 | 827.8 | 405.4 | -805.8 | 12.00 | 12.00 | -0.08 |
| 9,900.0 | 54.19 | 179.71 | 9,761.7 | 807.9 | 405.5 | -785.9 | 12.00 | 12.00 | -0.07 |
| 9,925.0 | 57.19 | 179.69 | 9,775.8 | 787.3 | 405.6 | -765.3 | 12.00 | 12.00 | -0.07 |
| 9,950.0 | 60.19 | 179.68 | 9,788.7 | 765.9 | 405.7 | -744.0 | 12.00 | 12.00 | -0.06 |
| 9,975.0 | 63.19 | 179.66 | 9,800.6 | 743.9 | 405.8 | -722.0 | 12.00 | 12.00 | -0.06 |
| 10,000.0 | 66.19 | 179.65 | 9,811.3 | 721.3 | 406.0 | -699.4 | 12.00 | 12.00 | -0.06 |
| 10,025.0 | 69.19 | 179.63 | 9,820.8 | 698.2 | 406.1 | -676.3 | 12.00 | 12.00 | -0.06 |
| 10,050.0 | 72.19 | 179.62 | 9,829.1 | 674.6 | 406.3 | -652.8 | 12.00 | 12.00 | -0.05 |
| 10,075.0 | 75.19 | 179.61 | 9,836.1 | 650.6 | 406.4 | -628.8 | 12.00 | 12.00 | -0.05 |
| 10,100.0 | 78.19 | 179.59 | 9,841.8 | 626.3 | 406.6 | -604.5 | 12.00 | 12.00 | -0.05 |
| 10,125.0 | 81.18 | 179.58 | 9,846.3 | 601.7 | 406.8 | -579.9 | 12.00 | 12.00 | -0.05 |
| 10,150.0 | 84.18 | 179.57 | 9,849.5 | 576.9 | 407.0 | -555.1 | 12.00 | 12.00 | -0.05 |
| 10,175.0 | 87.18 | 179.56 | 9,851.4 | 552.0 | 407.2 | -530.2 | 12.00 | 12.00 | -0.05 |
| 10,198.5 | 90.00 | 179.55 | 9,851.9 | 528.5 | 407.3 | -506.8 | 12.00 | 12.00 | -0.05 |
| 10,200.0 | 90.00 | 179.55 | 9,851.9 | 527.0 | 407.4 | -505.3 | 0.00 | 0.00 | 0.00 |
| 10,300.0 | 90.00 | 179.55 | 9,851.9 | 427.0 | 408.1 | -405.4 | 0.00 | 0.00 | 0.00 |
| 10,400.0 | 90.00 | 179.55 | 9,851.9 | 327.0 | 408.9 | -305.5 | 0.00 | 0.00 | 0.00 |
| 10,500.0 | 90.00 | 179.55 | 9,851.9 | 227.0 | 409.7 | -205.6 | 0.00 | 0.00 | 0.00 |
| 10,600.0 | 90.00 | 179.55 | 9,851.9 | 127.0 | 410.5 | -105.7 | 0.00 | 0.00 | 0.00 |
| 10,700.0 | 90.00 | 179.55 | 9,851.9 | 27.0 | 411.3 | -5.8 | 0.00 | 0.00 | 0.00 |
| 10,800.0 | 90.00 | 179.55 | 9,851.9 | -73.0 | 412.1 | 94.1 | 0.00 | 0.00 | 0.00 |
| 10,900.0 | 90.00 | 179.55 | 9,851.9 | -173.0 | 412.9 | 194.1 | 0.00 | 0.00 | 0.00 |
| 11,000.0 | 90.00 | 179.55 | 9,852.0 | -273.0 | 413.7 | 294.0 | 0.00 | 0.00 | 0.00 |
| 11,100.0 | 90.00 | 179.55 | 9,852.0 | -373.0 | 414.5 | 393.9 | 0.00 | 0.00 | 0.00 |
| 11,200.0 | 90.00 | 179.55 | 9,852.0 | -473.0 | 415.3 | 493.8 | 0.00 | 0.00 | 0.00 |
| 11,300.0 | 90.00 | 179.55 | 9,852.0 | -573.0 | 416.1 | 593.7 | 0.00 | 0.00 | 0.00 |
| 11,400.0 | 90.00 | 179.55 | 9,852.0 | -673.0 | 416.9 | 693.6 | 0.00 | 0.00 | 0.00 |
| 11,500.0 | 90.00 | 179.55 | 9,852.0 | -773.0 | 417.6 | 793.5 | 0.00 | 0.00 | 0.00 |
| 11,600.0 | 90.00 | 179.55 | 9,852.0 | -873.0 | 418.4 | 893.4 | 0.00 | 0.00 | 0.00 |
| 11,700.0 | 90.00 | 179.55 | 9,852.0 | -973.0 | 419.2 | 993.3 | 0.00 | 0.00 | 0.00 |
| 11,800.0 | 90.00 | 179.55 | 9,852.0 | -1,072.9 | 420.0 | 1,093.2 | 0.00 | 0.00 | 0.00 |
| 11,900.0 | 90.00 | 179.55 | 9,852.0 | -1,172.9 | 420.8 | 1,193.1 | 0.00 | 0.00 | 0.00 |
| 12,000.0 | 90.00 | 179.55 | 9,852.0 | -1,272.9 | 421.6 | 1,293.0 | 0.00 | 0.00 | 0.00 |
| 12,100.0 | 90.00 | 179.55 | 9,852.0 | -1,372.9 | 422.4 | 1,392.9 | 0.00 | 0.00 | 0.00 |
| 12,200.0 | 90.00 | 179.55 | 9,852.0 | -1,472.9 | 423.2 | 1,492.8 | 0.00 | 0.00 | 0.00 |
| 12,300.0 | 90.00 | 179.55 | 9,852.0 | -1,572.9 | 424.0 | 1,592.7 | 0.00 | 0.00 | 0.00 |
| 12,400.0 | 90.00 | 179.55 | 9,852.0 | -1,672.9 | 424.8 | 1,692.6 | 0.00 | 0.00 | 0.00 |
| 12,500.0 | 90.00 | 179.55 | 9,852.0 | -1,772.9 | 425.6 | 1,792.5 | 0.00 | 0.00 | 0.00 |
| 12,600.0 | 90.00 | 179.55 | 9,852.0 | -1,872.9 | 426.4 | 1,892.4 | 0.00 | 0.00 | 0.00 |
| 12,700.0 | 90.00 | 179.55 | 9,852.0 | -1,972.9 | 427.1 | 1,992.3 | 0.00 | 0.00 | 0.00 |
| 12,800.0 | 90.00 | 179.55 | 9,852.0 | -2,072.9 | 427.9 | 2,092.2 | 0.00 | 0.00 | 0.00 |
| 12,900.0 | 90.00 | 179.55 | 9,852.0 | -2,172.9 | 428.7 | 2,192.1 | 0.00 | 0.00 | 0.00 |
| 13,000.0 | 90.00 | 179.55 | 9,852.0 | -2,272.9 | 429.5 | 2,292.0 | 0.00 | 0.00 | 0.00 |

# EOG Resources

Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDM | **Local Co-ordinate Reference:** | Well #207H |
| **Company:** | EOG Resources - Midland | **TVD Reference:** | KB = 25' @ 3566.0usft |
| **Project:** | Lea County, NM (NAD 83 NME) | **MD Reference:** | KB = 25' @ 3566.0usft |
| **Site:** | Mamba 30 State Com | **North Reference:** | Grid |
| **Well:** | #207H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OH | | |
| **Design:** | Plan #0.1 | | |

**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) |
|---|---|---|---|---|---|---|---|---|---|
| 13,100.0 | 90.00 | 179.55 | 9,852.0 | -2,372.9 | 430.3 | 2,392.0 | 0.00 | 0.00 | 0.00 |
| 13,200.0 | 90.00 | 179.55 | 9,852.0 | -2,472.9 | 431.1 | 2,491.9 | 0.00 | 0.00 | 0.00 |
| 13,300.0 | 90.00 | 179.55 | 9,852.0 | -2,572.9 | 431.9 | 2,591.8 | 0.00 | 0.00 | 0.00 |
| 13,400.0 | 90.00 | 179.55 | 9,852.0 | -2,672.9 | 432.7 | 2,691.7 | 0.00 | 0.00 | 0.00 |
| 13,500.0 | 90.00 | 179.55 | 9,852.0 | -2,772.9 | 433.5 | 2,791.6 | 0.00 | 0.00 | 0.00 |
| 13,600.0 | 90.00 | 179.55 | 9,852.0 | -2,872.9 | 434.3 | 2,891.5 | 0.00 | 0.00 | 0.00 |
| 13,700.0 | 90.00 | 179.55 | 9,852.0 | -2,972.9 | 435.1 | 2,991.4 | 0.00 | 0.00 | 0.00 |
| 13,800.0 | 90.00 | 179.55 | 9,852.0 | -3,072.9 | 435.9 | 3,091.3 | 0.00 | 0.00 | 0.00 |
| 13,900.0 | 90.00 | 179.55 | 9,852.0 | -3,172.9 | 436.6 | 3,191.2 | 0.00 | 0.00 | 0.00 |
| 14,000.0 | 90.00 | 179.55 | 9,852.0 | -3,272.9 | 437.4 | 3,291.1 | 0.00 | 0.00 | 0.00 |
| 14,100.0 | 90.00 | 179.55 | 9,852.0 | -3,372.9 | 438.2 | 3,391.0 | 0.00 | 0.00 | 0.00 |
| 14,200.0 | 90.00 | 179.55 | 9,852.0 | -3,472.9 | 439.0 | 3,490.9 | 0.00 | 0.00 | 0.00 |
| 14,300.0 | 90.00 | 179.55 | 9,852.0 | -3,572.9 | 439.8 | 3,590.8 | 0.00 | 0.00 | 0.00 |
| 14,400.0 | 90.00 | 179.55 | 9,852.0 | -3,672.9 | 440.6 | 3,690.7 | 0.00 | 0.00 | 0.00 |
| 14,500.0 | 90.00 | 179.55 | 9,852.0 | -3,772.9 | 441.4 | 3,790.6 | 0.00 | 0.00 | 0.00 |
| 14,600.0 | 90.00 | 179.55 | 9,852.0 | -3,872.9 | 442.2 | 3,890.5 | 0.00 | 0.00 | 0.00 |
| 14,700.0 | 90.00 | 179.55 | 9,852.0 | -3,972.9 | 443.0 | 3,990.4 | 0.00 | 0.00 | 0.00 |
| 14,800.0 | 90.00 | 179.55 | 9,852.0 | -4,072.9 | 443.8 | 4,090.3 | 0.00 | 0.00 | 0.00 |
| 14,900.0 | 90.00 | 179.55 | 9,852.0 | -4,172.9 | 444.6 | 4,190.2 | 0.00 | 0.00 | 0.00 |
| 15,000.0 | 90.00 | 179.55 | 9,852.0 | -4,272.8 | 445.4 | 4,290.1 | 0.00 | 0.00 | 0.00 |
| 15,100.0 | 90.00 | 179.55 | 9,852.0 | -4,372.8 | 446.1 | 4,390.0 | 0.00 | 0.00 | 0.00 |
| 15,200.0 | 90.00 | 179.55 | 9,852.0 | -4,472.8 | 446.9 | 4,489.9 | 0.00 | 0.00 | 0.00 |
| 15,300.0 | 90.00 | 179.55 | 9,852.0 | -4,572.8 | 447.7 | 4,589.8 | 0.00 | 0.00 | 0.00 |
| 15,400.0 | 90.00 | 179.55 | 9,852.0 | -4,672.8 | 448.5 | 4,689.8 | 0.00 | 0.00 | 0.00 |
| 15,500.0 | 90.00 | 179.55 | 9,852.0 | -4,772.8 | 449.3 | 4,789.7 | 0.00 | 0.00 | 0.00 |
| 15,600.0 | 90.00 | 179.55 | 9,852.0 | -4,872.8 | 450.1 | 4,889.6 | 0.00 | 0.00 | 0.00 |
| 15,700.0 | 90.00 | 179.55 | 9,852.0 | -4,972.8 | 450.9 | 4,989.5 | 0.00 | 0.00 | 0.00 |
| 15,800.0 | 90.00 | 179.55 | 9,852.0 | -5,072.8 | 451.7 | 5,089.4 | 0.00 | 0.00 | 0.00 |
| 15,900.0 | 90.00 | 179.55 | 9,852.0 | -5,172.8 | 452.5 | 5,189.3 | 0.00 | 0.00 | 0.00 |
| 16,000.0 | 90.00 | 179.55 | 9,852.0 | -5,272.8 | 453.3 | 5,289.2 | 0.00 | 0.00 | 0.00 |
| 16,100.0 | 90.00 | 179.55 | 9,852.0 | -5,372.8 | 454.1 | 5,389.1 | 0.00 | 0.00 | 0.00 |
| 16,200.0 | 90.00 | 179.55 | 9,852.0 | -5,472.8 | 454.9 | 5,489.0 | 0.00 | 0.00 | 0.00 |
| 16,300.0 | 90.00 | 179.55 | 9,852.0 | -5,572.8 | 455.6 | 5,588.9 | 0.00 | 0.00 | 0.00 |
| 16,400.0 | 90.00 | 179.55 | 9,852.0 | -5,672.8 | 456.4 | 5,688.8 | 0.00 | 0.00 | 0.00 |
| 16,500.0 | 90.00 | 179.55 | 9,852.0 | -5,772.8 | 457.2 | 5,788.7 | 0.00 | 0.00 | 0.00 |
| 16,600.0 | 90.00 | 179.55 | 9,852.0 | -5,872.8 | 458.0 | 5,888.6 | 0.00 | 0.00 | 0.00 |
| 16,700.0 | 90.00 | 179.55 | 9,852.0 | -5,972.8 | 458.8 | 5,988.5 | 0.00 | 0.00 | 0.00 |
| 16,800.0 | 90.00 | 179.55 | 9,852.0 | -6,072.8 | 459.6 | 6,088.4 | 0.00 | 0.00 | 0.00 |
| 16,900.0 | 90.00 | 179.55 | 9,852.0 | -6,172.8 | 460.4 | 6,188.3 | 0.00 | 0.00 | 0.00 |
| 17,000.0 | 90.00 | 179.55 | 9,852.0 | -6,272.8 | 461.2 | 6,288.2 | 0.00 | 0.00 | 0.00 |
| 17,100.0 | 90.00 | 179.55 | 9,852.0 | -6,372.8 | 462.0 | 6,388.1 | 0.00 | 0.00 | 0.00 |
| 17,200.0 | 90.00 | 179.55 | 9,852.0 | -6,472.8 | 462.8 | 6,488.0 | 0.00 | 0.00 | 0.00 |
| 17,300.0 | 90.00 | 179.55 | 9,852.0 | -6,572.8 | 463.6 | 6,587.9 | 0.00 | 0.00 | 0.00 |
| 17,400.0 | 90.00 | 179.55 | 9,852.0 | -6,672.8 | 464.4 | 6,687.8 | 0.00 | 0.00 | 0.00 |
| 17,500.0 | 90.00 | 179.55 | 9,852.0 | -6,772.8 | 465.2 | 6,787.7 | 0.00 | 0.00 | 0.00 |
| 17,600.0 | 90.00 | 179.55 | 9,852.0 | -6,872.8 | 465.9 | 6,887.7 | 0.00 | 0.00 | 0.00 |
| 17,700.0 | 90.00 | 179.55 | 9,852.0 | -6,972.8 | 466.7 | 6,987.6 | 0.00 | 0.00 | 0.00 |
| 17,800.0 | 90.00 | 179.55 | 9,852.0 | -7,072.8 | 467.5 | 7,087.5 | 0.00 | 0.00 | 0.00 |
| 17,900.0 | 90.00 | 179.55 | 9,852.0 | -7,172.8 | 468.3 | 7,187.4 | 0.00 | 0.00 | 0.00 |
| 18,000.0 | 90.00 | 179.55 | 9,852.0 | -7,272.8 | 469.1 | 7,287.3 | 0.00 | 0.00 | 0.00 |
| 18,100.0 | 90.00 | 179.55 | 9,852.0 | -7,372.8 | 469.9 | 7,387.2 | 0.00 | 0.00 | 0.00 |
| 18,200.0 | 90.00 | 179.55 | 9,852.0 | -7,472.7 | 470.7 | 7,487.1 | 0.00 | 0.00 | 0.00 |
| 18,300.0 | 90.00 | 179.55 | 9,852.0 | -7,572.7 | 471.5 | 7,587.0 | 0.00 | 0.00 | 0.00 |
| 18,400.0 | 90.00 | 179.55 | 9,852.0 | -7,672.7 | 472.3 | 7,686.9 | 0.00 | 0.00 | 0.00 |

eog resources

# EOG Resources

## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDM | **Local Co-ordinate Reference:** | Well #207H |
| **Company:** | EOG Resources - Midland | **TVD Reference:** | KB = 25' @ 3566.0usft |
| **Project:** | Lea County, NM (NAD 83 NME) | **MD Reference:** | KB = 25' @ 3566.0usft |
| **Site:** | Mamba 30 State Com | **North Reference:** | Grid |
| **Well:** | #207H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OH | | |
| **Design:** | Plan #0.1 | | |

**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) |
|---|---|---|---|---|---|---|---|---|---|
| 18,500.0 | 90.00 | 179.55 | 9,852.0 | -7,772.7 | 473.1 | 7,786.8 | 0.00 | 0.00 | 0.00 |
| 18,600.0 | 90.00 | 179.55 | 9,852.0 | -7,872.7 | 473.9 | 7,886.7 | 0.00 | 0.00 | 0.00 |
| 18,700.0 | 90.00 | 179.55 | 9,852.0 | -7,972.7 | 474.7 | 7,986.6 | 0.00 | 0.00 | 0.00 |
| 18,800.0 | 90.00 | 179.55 | 9,852.0 | -8,072.7 | 475.4 | 8,086.5 | 0.00 | 0.00 | 0.00 |
| 18,900.0 | 90.00 | 179.55 | 9,852.0 | -8,172.7 | 476.2 | 8,186.4 | 0.00 | 0.00 | 0.00 |
| 19,000.0 | 90.00 | 179.55 | 9,852.0 | -8,272.7 | 477.0 | 8,286.3 | 0.00 | 0.00 | 0.00 |
| 19,100.0 | 90.00 | 179.55 | 9,852.0 | -8,372.7 | 477.8 | 8,386.2 | 0.00 | 0.00 | 0.00 |
| 19,200.0 | 90.00 | 179.55 | 9,852.0 | -8,472.7 | 478.6 | 8,486.1 | 0.00 | 0.00 | 0.00 |
| 19,300.0 | 90.00 | 179.55 | 9,852.0 | -8,572.7 | 479.4 | 8,586.0 | 0.00 | 0.00 | 0.00 |
| 19,400.0 | 90.00 | 179.55 | 9,852.0 | -8,672.7 | 480.2 | 8,685.9 | 0.00 | 0.00 | 0.00 |
| 19,500.0 | 90.00 | 179.55 | 9,852.0 | -8,772.7 | 481.0 | 8,785.8 | 0.00 | 0.00 | 0.00 |
| 19,600.0 | 90.00 | 179.55 | 9,852.0 | -8,872.7 | 481.8 | 8,885.7 | 0.00 | 0.00 | 0.00 |
| 19,700.0 | 90.00 | 179.55 | 9,852.0 | -8,972.7 | 482.6 | 8,985.6 | 0.00 | 0.00 | 0.00 |
| 19,800.0 | 90.00 | 179.55 | 9,852.0 | -9,072.7 | 483.4 | 9,085.6 | 0.00 | 0.00 | 0.00 |
| 19,900.0 | 90.00 | 179.55 | 9,852.0 | -9,172.7 | 484.2 | 9,185.5 | 0.00 | 0.00 | 0.00 |
| 20,000.0 | 90.00 | 179.55 | 9,852.0 | -9,272.7 | 484.9 | 9,285.4 | 0.00 | 0.00 | 0.00 |
| 20,100.0 | 90.00 | 179.55 | 9,852.0 | -9,372.7 | 485.7 | 9,385.3 | 0.00 | 0.00 | 0.00 |
| 20,133.3 | 90.00 | 179.55 | 9,852.0 | -9,406.0 | 486.0 | 9,418.5 | 0.00 | 0.00 | 0.00 |
| **PBHL(Mamba 30 State Com #207H)** | | | | | | | | | |

**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(Mamba 30 State C<br>- plan hits target center<br>- Point | 0.00 | 0.00 | 9,374.5 | 1,006.0 | 405.0 | 435,718.00 | 766,031.00 | 32° 11' 44.807 N | 103° 36' 25.014 W |
| FTP(Mamba 30 State C<br>- plan hits target center<br>- Point | 0.00 | 0.00 | 9,587.2 | 956.0 | 405.0 | 435,668.00 | 766,031.00 | 32° 11' 44.313 N | 103° 36' 25.018 W |
| PBHL(Mamba 30 State (<br>- plan hits target center<br>- Point | 0.00 | 0.00 | 9,852.0 | -9,406.0 | 486.0 | 425,306.00 | 766,112.00 | 32° 10' 1.772 N | 103° 36' 24.890 W |

Intent ☐ As Drilled ☐

| API # | | |
|---|---|---|
| Operator Name: | Property Name: | Well Number |

Kick Off Point (KOP)

| UL | Section | Township | Range | Lot | Feet | From N/S | Feet | From E/W | County |
|---|---|---|---|---|---|---|---|---|---|
| Latitude | | | | | Longitude | | | | NAD |

First Take Point (FTP)

| UL | Section | Township | Range | Lot | Feet | From N/S | Feet | From E/W | County |
|---|---|---|---|---|---|---|---|---|---|
| Latitude | | | | | Longitude | | | | NAD |

Last Take Point (LTP)

| UL | Section | Township | Range | Lot | Feet | From N/S | Feet | From E/W | County |
|---|---|---|---|---|---|---|---|---|---|
| Latitude | | | | | Longitude | | | | NAD |

Is this well the defining well for the Horizontal Spacing Unit? ☐

Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

| API # | | |
|---|---|---|
| Operator Name: | Property Name: | Well Number |

KZ 06/29/2018