

|                                |                                                                       |                                      |
|--------------------------------|-----------------------------------------------------------------------|--------------------------------------|
| Well Name: ANTIETAM 9 FED COM  | Well Location: T25S / R33E / SEC 9 / NWNW / 32.1502382 / -103.5822986 | County or Parish/State: LEA / NM     |
| Well Number: 753H              | Type of Well: OIL WELL                                                | Allottee or Tribe Name:              |
| Lease Number: NMNM118726       | Unit or CA Name:                                                      | Unit or CA Number:                   |
| US Well Number: 300254735800X1 | Well Status: Approved Application for Permit to Drill                 | Operator: EOG RESOURCES INCORPORATED |

KZ

Notice of Intent

Type of Submission: Notice of Intent

Type of Action Other

Date Sundry Submitted: 04/27/2021

Time Sundry Submitted: 09:48

Date proposed operation will begin: 04/19/2021

Procedure Description: EOG respectfully requests an amendment to our approved APD for this well to reflect the following changes: Change well number from 201H to 753H Update casing program to current design Change BHL to T-25-S R-33-E Sec 16 2540 feet FNL 1530 feet FWL Lea Co, NM

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

- Wellhead\_9.675\_x\_7.625\_x\_5.5\_in\_csg\_20210427093811.pdf
- Antietam\_9\_Fed\_Com\_753H\_Permit\_Info\_\_\_Rev\_Name\_\_tgt\_\_csg\_\_BHL\_\_\_2.4.2021\_20210415142443.pdf
- Antietam\_9\_Fed\_Com\_753H\_Planning\_Report\_20210415142443.pdf
- Antietam\_9\_Fed\_Com\_753H\_Wall\_Plot\_20210415142443.pdf
- 7.625in\_29.70\_P110HC\_FXL\_20210415142443.pdf
- 9\_5\_8\_\_36\_J\_55\_LTC\_20210415142443.pdf
- 5.500in\_20.00\_VST\_P110EC\_VAM\_SFC\_20210415142433.pdf
- 5.500in\_20.00\_VST\_P110EC\_DWC\_C\_IS\_MS\_Spec\_Sheet\_20210415142432.pdf
- ANTIETAM\_9\_FED\_COM\_753H\_C102\_20210415142414.pdf

|                                       |                                                                              |                                             |
|---------------------------------------|------------------------------------------------------------------------------|---------------------------------------------|
| <b>Well Name:</b> ANTIETAM 9 FED COM  | <b>Well Location:</b> T25S / R33E / SEC 9 / NWNW / 32.1502382 / -103.5822986 | <b>County or Parish/State:</b> LEA / NM     |
| <b>Well Number:</b> 753H              | <b>Type of Well:</b> OIL WELL                                                | <b>Allottee or Tribe Name:</b>              |
| <b>Lease Number:</b> NMNM118726       | <b>Unit or CA Name:</b>                                                      | <b>Unit or CA Number:</b>                   |
| <b>US Well Number:</b> 300254735800X1 | <b>Well Status:</b> Approved Application for Permit to Drill                 | <b>Operator:</b> EOG RESOURCES INCORPORATED |

Conditions of Approval

Additional Reviews

Antietam\_9\_FED\_COM\_753H\_APD\_CHANGE\_SUNDRY\_2157068\_Drilling\_COAs\_20210430095640.pdf

Operator Certification

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

**Operator Electronic Signature:** STAR HARRELL  
**Signed on:** APR 27, 2021 09:38 AM  
**Name:** EOG RESOURCES INCORPORATED  
**Title:** Regulatory Specialist  
**Street Address:** 5509 CHAMPIONS DRIVE  
**City:** MIDLAND **State:** TX  
**Phone:** (432) 848-9161  
**Email address:** Star\_Harrell@eogresources.com

Field Representative

**Representative Name:**  
**Street Address:**  
**City:** **State:** **Zip:**  
**Phone:**  
**Email address:** x

BLM Point of Contact

|                                        |                                              |
|----------------------------------------|----------------------------------------------|
| <b>BLM POC Name:</b> CHRISTOPHER WALLS | <b>BLM POC Title:</b> Petroleum Engineer     |
| <b>BLM POC Phone:</b> 5752342234       | <b>BLM POC Email Address:</b> cwalls@blm.gov |
| <b>Disposition:</b> Approved           | <b>Disposition Date:</b> 04/30/2021          |
| <b>Signature:</b> Chris Walls          |                                              |

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
District II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

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

FORM C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                                |                                                          |                                        |                                                                       |
|------------------------------------------------|----------------------------------------------------------|----------------------------------------|-----------------------------------------------------------------------|
| <sup>1</sup> API Number<br><b>30-025-47358</b> |                                                          | <sup>2</sup> Pool Code<br><b>98180</b> | <sup>3</sup> Pool Name<br><b>WC-025 G-09 S253309P; Upper Wolfcamp</b> |
| <sup>4</sup> Property Code<br><b>317131</b>    | <sup>5</sup> Property Name<br><b>ANTIETAM 9 FED COM</b>  |                                        | <sup>6</sup> Well Number<br><b>753H</b>                               |
| <sup>7</sup> OGRID No.<br><b>7377</b>          | <sup>8</sup> Operator Name<br><b>EOG RESOURCES, INC.</b> |                                        | <sup>9</sup> Elevation<br><b>3429'</b>                                |

<sup>10</sup>Surface Location

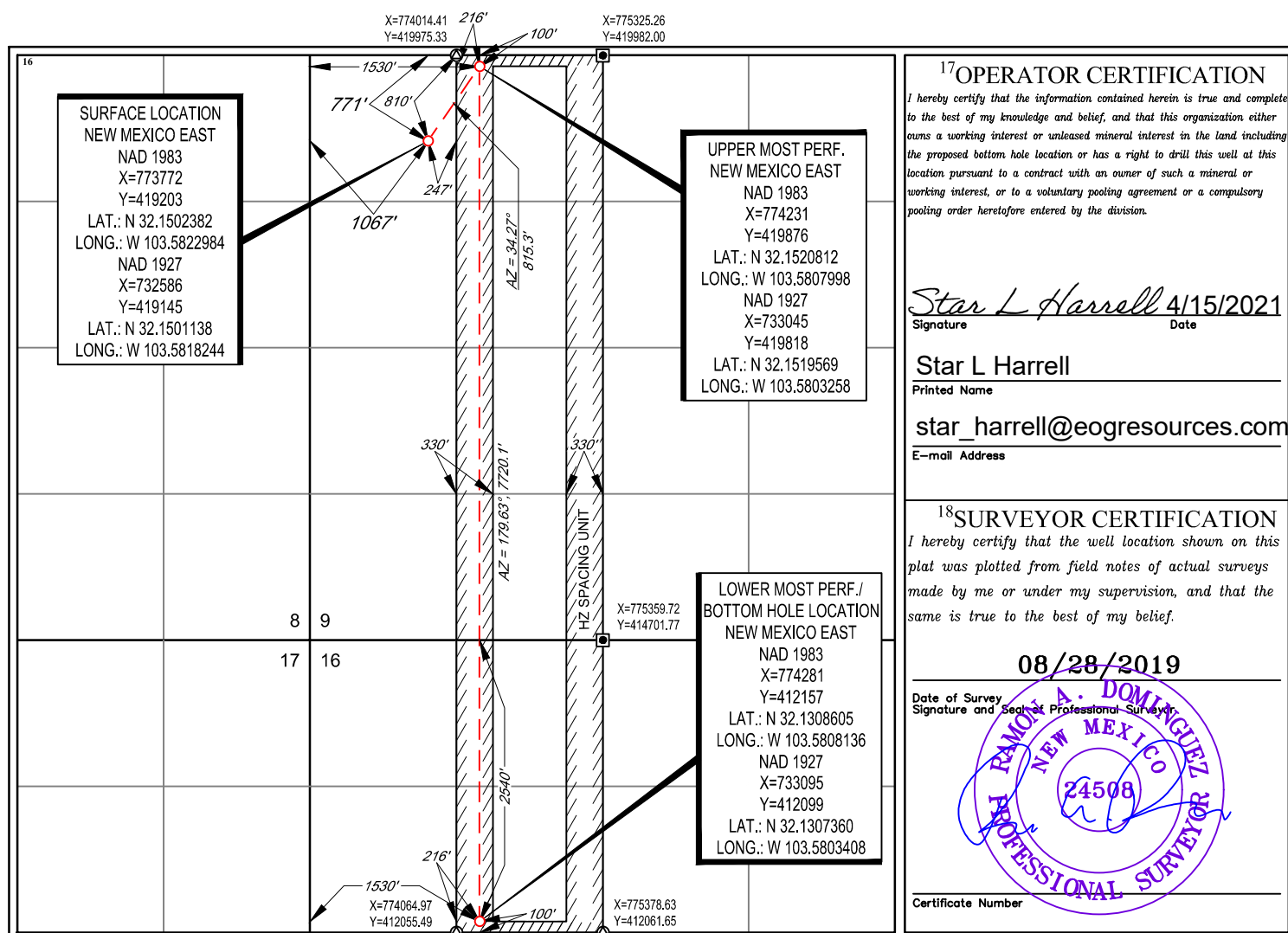
| UL or lot no. | Section  | Township    | Range       | Lot Idn  | Feet from the | North/South line | Feet from the | East/West line | County     |
|---------------|----------|-------------|-------------|----------|---------------|------------------|---------------|----------------|------------|
| <b>D</b>      | <b>9</b> | <b>25-S</b> | <b>33-E</b> | <b>-</b> | <b>771'</b>   | <b>NORTH</b>     | <b>1067'</b>  | <b>WEST</b>    | <b>LEA</b> |

<sup>11</sup>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     |
|---------------|-----------|-------------|-------------|----------|---------------|------------------|---------------|----------------|------------|
| <b>F</b>      | <b>16</b> | <b>25-S</b> | <b>33-E</b> | <b>-</b> | <b>2540'</b>  | <b>NORTH</b>     | <b>1530'</b>  | <b>WEST</b>    | <b>LEA</b> |

|                                                |                               |                                  |                         |
|------------------------------------------------|-------------------------------|----------------------------------|-------------------------|
| <sup>12</sup> Dedicated Acres<br><b>240.00</b> | <sup>13</sup> Joint or Infill | <sup>14</sup> Consolidation Code | <sup>15</sup> Order No. |
|------------------------------------------------|-------------------------------|----------------------------------|-------------------------|

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.



**Revised Permit Information 4/14/2021:**

Well Name: Antietam 9 Fed Com #753H

**Location:**

SHL: 771' FNL &amp; 1067' FWL, Section 9, T-25-S, R-33-E, Lea Co., N.M.

BHL: 2540' FNL &amp; 1530' FWL, Section 16, T-25-S, R-33-E, Lea Co., N.M.

**Casing Program:**

| Hole Size | Interval          | Csg OD | Weight | Grade   | Conn        | DF <sub>min</sub> Collapse | DF <sub>min</sub> Burst | DF <sub>min</sub> Tension |
|-----------|-------------------|--------|--------|---------|-------------|----------------------------|-------------------------|---------------------------|
| 12.25"    | 0' – 1,200'       | 9.625" | 36#    | J-55    | LTC         | 1.125                      | 1.25                    | 1.60                      |
| 8.75"     | 0' – 11,260'      | 7.625" | 29.7#  | HCP-110 | FXL         | 1.125                      | 1.25                    | 1.60                      |
| 6.75"     | 0' – 10,760'      | 5.5"   | 20#    | P-110EC | DWC/C-IS MS | 1.125                      | 1.25                    | 1.60                      |
| 6.75"     | 10,760' – 11,260' | 5.5"   | 20#    | P-110EC | VAM SFC     | 1.125                      | 1.25                    | 1.60                      |
| 6.75"     | 11,260' – 20,488' | 5.5"   | 20#    | P-110EC | DWC/C-IS MS | 1.125                      | 1.25                    | 1.60                      |

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

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

**Cement Program:**

| Depth             | No. Sacks | Wt. ppg | Yld Ft <sup>3</sup> /sk | Slurry Description                                                                                             |
|-------------------|-----------|---------|-------------------------|----------------------------------------------------------------------------------------------------------------|
| 1,200'<br>10-3/4" | 330       | 13.5    | 1.73                    | Lead: Class C + 4.0% Bentonite Gel + 0.5% CaCl <sub>2</sub> + 0.25 lb/sk Cello-Flake (TOC @ Surface)           |
|                   | 80        | 14.8    | 1.34                    | Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate (TOC @ 1,000')                  |
| 11,260'<br>8-3/4" | 460       | 14.2    | 1.11                    | 1 <sup>st</sup> Stage (Tail): Class C + 0.6% Halad-9 + 0.45% HR-601 + 3% Microbond (TOC @ 7,360')              |
|                   | 1,240     | 12.7    | 2.30                    | 2 <sup>nd</sup> Stage (Bradenhead squeeze): Class C + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (TOC @ surface) |
| 20,488'<br>6"     | 840       | 14.2    | 1.31                    | Lead: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 10,760')                                   |

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

EOG requests variance from minimum standards to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated TOC at the Brushy Canyon and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If necessary, a top out consisting of 1,000 sacks of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. Top of cement will be verified by Echo-meter.

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

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

#### Mud Program:

| Depth                        | Type        | Weight (ppg) | Viscosity | Water Loss |
|------------------------------|-------------|--------------|-----------|------------|
| 0 – 1,200'                   | Fresh - Gel | 8.6-8.8      | 28-34     | N/c        |
| 1,200' – 11,260'             | Brine       | 10.0-10.2    | 28-34     | N/c        |
| 11,260' – 12,447'            | Oil Base    | 8.7-9.4      | 58-68     | N/c - 6    |
| 12,447' – 20,488'<br>Lateral | Oil Base    | 10.0-14.0    | 58-68     | 3 - 6      |

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

771' FNL  
1067' FWL  
Section 9  
T-25-S, R-33-E

Revised Wellbore

KB: 3,454'  
GL: 3,429'

API: 30-025-47358

Bit Size: 12-1/4"

9-5/8", 36#, J-55, LTC 0' - 1,200'

Bit Size: 8-3/4"

7-5/8", 29.7#, HCP-110, FXL @ 0' - 11,260'

TOC: 10,760'

5-1/2", 20#, P-110 EC, DWC/C-IS MS @ 0' - 10,760'  
5-1/2", 20#, P-110 EC, VAM SFC @ 10,760' - 11,260'  
5-1/2", 20#, P-110 EC, DWC/C-IS MS @ 12,700' - 20,488'

KOP: 12,447'

Lateral: 20,488' MD, 12,867' TVD  
Upper Most Perf:  
100' FNL & 1530' FWL Sec. 9  
Lower Most Perf:  
2540' FNL & 1530' FWL Sec. 16  
BH Location: 2540' FNL & 1530' FWL  
Section 16  
T-25-S, R-33-E

Bit Size: 6-3/4"



**GENERIC MILL**  
**U.S. Steel Tubular Products**  
**9.625" 36.00lbs/ft (0.352" Wall) J55**

2/9/2021 7:39:08 AM



| MECHANICAL PROPERTIES            | Pipe   | BTC    | LTC    | STC    |           |
|----------------------------------|--------|--------|--------|--------|-----------|
| Minimum Yield Strength           | 55,000 | --     | --     | --     | psi       |
| Maximum Yield Strength           | 80,000 | --     | --     | --     | psi       |
| Minimum Tensile Strength         | 75,000 | --     | --     | --     | psi       |
| DIMENSIONS                       | Pipe   | BTC    | LTC    | STC    |           |
| Outside Diameter                 | 9.625  | 10.625 | 10.625 | 10.625 | in.       |
| Wall Thickness                   | 0.352  | --     | --     | --     | in.       |
| Inside Diameter                  | 8.921  | 8.921  | 8.921  | 8.921  | in.       |
| Standard Drift                   | 8.765  | 8.765  | 8.765  | 8.765  | in.       |
| Alternate Drift                  | --     | --     | 0.000  | --     | in.       |
| Nominal Linear Weight, T&C       | 36.00  | --     | --     | --     | lbs/ft    |
| Plain End Weight                 | 34.89  | --     | --     | --     | lbs/ft    |
| PERFORMANCE                      | Pipe   | BTC    | LTC    | STC    |           |
| Minimum Collapse Pressure        | 2,020  | 2,020  | 2,020  | 2,020  | psi       |
| Minimum Internal Yield Pressure  | 3,520  | 3,520  | 3,520  | 3,520  | psi       |
| Minimum Pipe Body Yield Strength | 564    | --     | --     | --     | 1,000 lbs |
| Joint Strength                   | --     | 639    | 453    | 394    | 1,000 lbs |
| Reference Length                 | --     | 11,833 | 8,389  | 7,288  | ft        |
| MAKE-UP DATA                     | Pipe   | BTC    | LTC    | STC    |           |
| Make-Up Loss                     | --     | 4.81   | 4.75   | 3.38   | in.       |
| Minimum Make-Up Torque           | --     | --     | 3,400  | 2,960  | ft-lbs    |
| Maximum Make-Up Torque           | --     | --     | 5,660  | 4,930  | ft-lbs    |

**Legal Notice**

All material contained in this publication is for general information only. This material should not therefore be used or relied upon for any specific application without independent competent professional examination and verification of accuracy, suitability and applicability. Anyone making use of this material does so at their own risk and assumes any and all liability resulting from such use. U. S. Steel disclaims any and all expressed or implied warranties of fitness for any general or particular application.

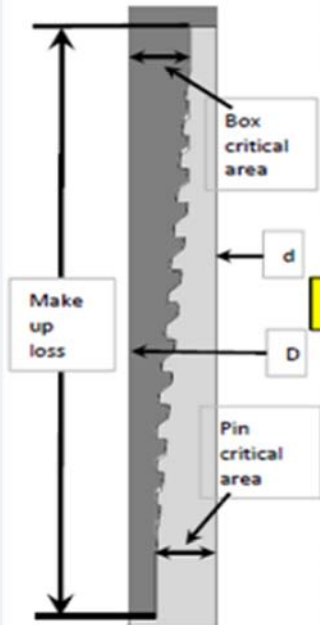
U. S. Steel Tubular Products  
 460 Wildwood Forest Drive, Suite 300S  
 Spring, Texas 77380

1-877-893-9461  
 connections@uss.com  
 www.usstubular.com

|                                                |                                                   |  |                      |                       |
|------------------------------------------------|---------------------------------------------------|--|----------------------|-----------------------|
| <b>Metal One Corp.</b><br><br><b>Metal One</b> | <b>MO-FXL</b><br><br><b>Connection Data Sheet</b> |  | Page<br>Date<br>Rev. | MCTP<br>3-Nov-16<br>0 |
|------------------------------------------------|---------------------------------------------------|--|----------------------|-----------------------|

**MO-FXL**



| Geometry                                                                                                                                                          | Imperial                      |                 | S.I.      |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------|-----------|-----------------|
| <b>Pipe Body</b>                                                                                                                                                  |                               |                 |           |                 |
| Grade                                                                                                                                                             | P110HC *1                     |                 | P110HC *1 |                 |
| Pipe OD ( D )                                                                                                                                                     | 7 5/8                         | in              | 193.68    | mm              |
| Weight                                                                                                                                                            | 29.70                         | lb/ft           | 44.25     | kg/m            |
| Actual weight                                                                                                                                                     | 29.04                         |                 | 43.26     | kg/m            |
| Wall Thickness ( t )                                                                                                                                              | 0.375                         | in              | 9.53      | mm              |
| Pipe ID ( d )                                                                                                                                                     | 6.875                         | in              | 174.63    | mm              |
| Pipe body cross section                                                                                                                                           | 8.537                         | in <sup>2</sup> | 5,508     | mm <sup>2</sup> |
| Drift Dia.                                                                                                                                                        | 6.750                         | in              | 171.45    | mm              |
| <b>Connection</b>                                                                                                                                                 |                               |                 |           |                 |
| Box OD ( W )                                                                                                                                                      | 7.625                         | in              | 193.68    | mm              |
| PIN ID                                                                                                                                                            | 6.875                         | in              | 174.63    | mm              |
| Make up Loss                                                                                                                                                      | 4.219                         | in              | 107.16    | mm              |
| Box Critical Area                                                                                                                                                 | 5.714                         | in <sup>2</sup> | 3686      | mm <sup>2</sup> |
| Joint load efficiency                                                                                                                                             | 70                            | %               | 70        | %               |
| Thread Taper                                                                                                                                                      | 1 / 10 ( 1.2" per ft )        |                 |           |                 |
| Number of Threads                                                                                                                                                 | 5 TPI                         |                 |           |                 |
| <b>Performance</b>                                                                                                                                                |                               |                 |           |                 |
| <b>Performance Properties for Pipe Body</b>                                                                                                                       |                               |                 |           |                 |
| S.M.Y.S. *1                                                                                                                                                       | 1,067                         | kips            | 4,747     | kN              |
| M.I.Y.P. *1                                                                                                                                                       | 10,760                        | psi             | 74.21     | MPa             |
| Collapse Strength *1                                                                                                                                              | 7,360                         | psi             | 50.76     | MPa             |
| Note S.M.Y.S.= Specified Minimum YIELD Strength of Pipe body<br>M.I.Y.P. = Minimum Internal Yield Pressure of Pipe body<br>*1 Based on VSB P110HC (YS=125~140ksi) |                               |                 |           |                 |
| <b>Performance Properties for Connection</b>                                                                                                                      |                               |                 |           |                 |
| Tensile Yield load                                                                                                                                                | 747 kips ( 70% of S.M.Y.S. )  |                 |           |                 |
| Min. Compression Yield                                                                                                                                            | 747 kips ( 70% of S.M.Y.S. )  |                 |           |                 |
| Internal Pressure                                                                                                                                                 | 8,610 psi ( 80% of M.I.Y.P. ) |                 |           |                 |
| External Pressure                                                                                                                                                 | 100% of Collapse Strength     |                 |           |                 |
| Max. DLS ( deg. /100ft)                                                                                                                                           | 40                            |                 |           |                 |
| <b>Recommended Torque</b>                                                                                                                                         |                               |                 |           |                 |
| Min.                                                                                                                                                              | 15,500                        | ft-lb           | 21,000    | N-m             |
| Opti.                                                                                                                                                             | 17,200                        | ft-lb           | 23,300    | N-m             |
| Max.                                                                                                                                                              | 18,900                        | ft-lb           | 25,600    | N-m             |
| Operational Max.                                                                                                                                                  | 23,600                        | ft-lb           | 32,000    | N-m             |
| Note : Operational Max. torque can be applied for high torque application                                                                                         |                               |                 |           |                 |



# TXP® BTC -REGULAR API



| Coupling             | Pipe Body            |
|----------------------|----------------------|
| Grade: P110-ICV      | Grade: P110-ICV      |
| Body: White          | 1st Band: White      |
| 1st Band: Pale Green | 2nd Band: Pale Green |
| 2nd Band: -          | 3rd Band: Pale Green |
| 3rd Band: -          | 4th Band: -          |
|                      | 5th Band: -          |
|                      | 6th Band: -          |

|                      |             |                |              |       |          |
|----------------------|-------------|----------------|--------------|-------|----------|
| Outside Diameter     | 5.500 in.   | Wall Thickness | 0.361 in.    | Grade | P110-ICV |
| Min. Wall Thickness  | 87.50 %     | Drift          | API Standard | Type  | Casing   |
| Connection OD Option | REGULAR API |                |              |       |          |

## Pipe Body Data

| Geometry       |           |                  |             | Performance                  |              |
|----------------|-----------|------------------|-------------|------------------------------|--------------|
| Nominal OD     | 5.500 in. | Nominal ID       | 4.778 in.   | Body Yield Strength          | 729 x1000 lb |
| Nominal Weight | 20 lb/ft  | Plain End Weight | 19.83 lb/ft | Min. Internal Yield Pressure | 14,360 psi   |
| Drift          | 4.653 in. | OD Tolerance     | API         | SMYS                         | 125,000 psi  |
| Wall Thickness | 0.361 in. |                  |             | Collapse Pressure            | 12,300 psi   |
|                |           |                  |             | Max. Allowable Bending       | 104 °/100 ft |

## Connection Data

| Geometry             |             | Performance                  |              | Make-Up Torques         |              |
|----------------------|-------------|------------------------------|--------------|-------------------------|--------------|
| Connection OD        | 6.300 in.   | Tension Efficiency           | 100 %        | Minimum                 | 11,540 ft-lb |
| Connection ID        | 4.766 in.   | Joint Yield Strength         | 729 x1000 lb | Optimum                 | 12,820 ft-lb |
| Coupling Length      | 9.450 in.   | Internal Pressure Capacity   | 14,360 psi   | Maximum                 | 14,100 ft-lb |
| Make-up Loss         | 4.204 in.   | Compression Efficiency       | 100 %        | Operation Limit Torques |              |
| Threads per inch     | 5           | Internal Pressure Efficiency | 100 %        |                         |              |
| Connection OD Option | REGULAR API | Compression Strength         | 729 x1000 lb |                         |              |
|                      |             | Max. Allowable Bending       | 104 °/100 ft |                         |              |
|                      |             | Bending - Efficiency         | 100 %        | Operating Torque        | 22,700 ft-lb |
|                      |             | External Pressure Efficiency | 100 %        | Yield Torque            | 25,250 ft-lb |

## Notes

This connection is fully interchangeable with:  
TXP® BTC - 5.5 in. - 0.275 / 0.304 / 0.415 / 0.476 in.  
Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version  
Standard coupling design comes with optimized 20° bevel.  
Datasheet is also valid for Special Bevel option when applicable - except for Coupling Face Load, which will be reduced. Please contact a local Tenaris technical sales representative.

For the latest performance data, always visit our website: [www.tenaris.com](http://www.tenaris.com)

Tenaris has issued this document for general information only, and the information in this document, including, without limitation, any pictures, drawings or designs ("Information") is not intended to constitute professional or any other type of advice or recommendation and is provided on an "as is" basis. No warranty is given. Tenaris has not independently verified any information—if any—provided by the user in connection with, or for the purpose of, the Information contained hereunder. The use of the Information is at user's own risk and Tenaris does not assume any responsibility or liability of any kind for any loss, damage or injury resulting from, or in connection with any Information contained hereunder or any use thereof. The Information in this document is subject to change or modification without notice. Tenaris's products and services are subject to Tenaris's standard terms and conditions or otherwise to the terms resulting from the respective contracts of sale or services, as the case may be, between petitioner and Tenaris. For more complete information please contact a Tenaris's representative or visit our website at [www.tenaris.com](http://www.tenaris.com). ©Tenaris 2021. All rights reserved.

For the latest performance data, always visit our website: [www.tenaris.com](http://www.tenaris.com)

March 10 2017



**Connection:** TenarisXP® BTC  
**Casing/Tubing:** CAS  
**Coupling Option:** REGULAR

**Size:** 5.500 in.  
**Wall:** 0.361 in.  
**Weight:** 20.00 lbs/ft  
**Grade:** P110-ICY  
**Min. Wall Thickness:** 87.5 %



## PIPE BODY DATA

| GEOMETRY            |                |                         |              |
|---------------------|----------------|-------------------------|--------------|
| Nominal OD          | 5.500 in.      | Nominal Weight          | 20.00 lbs/ft |
| Nominal ID          | 4.778 in.      | Wall Thickness          | 0.361 in.    |
| Plain End Weight    | 19.83 lbs/ft   | Standard Drift Diameter | 4.653 in.    |
|                     |                | Special Drift Diameter  | N/A          |
| PERFORMANCE         |                |                         |              |
| Body Yield Strength | 729 x 1000 lbs | Internal Yield          | 14360 psi    |
| Collapse            | 12100 psi      | SMYS                    | 125000 psi   |

## TENARISXP® BTC CONNECTION DATA

| GEOMETRY                                 |               |                                           |                |
|------------------------------------------|---------------|-------------------------------------------|----------------|
| Connection OD                            | 6.100 in.     | Coupling Length                           | 9.450 in.      |
| Critical Section Area                    | 5.828 sq. in. | Threads per in.                           | 5.00           |
|                                          |               | Connection ID                             | 4.766 in.      |
|                                          |               | Make-Up Loss                              | 4.204 in.      |
| PERFORMANCE                              |               |                                           |                |
| Tension Efficiency                       | 100 %         | Joint Yield Strength                      | 729 x 1000 lbs |
| Structural Compression Efficiency        | 100 %         | Structural Compression Strength           | 729 x 1000 lbs |
| External Pressure Capacity               | 12100 psi     | Internal Pressure Capacity <sup>(1)</sup> | 14360 psi      |
|                                          |               | Structural Bending <sup>(2)</sup>         | 104 °/100 ft   |
| ESTIMATED MAKE-UP TORQUES <sup>(3)</sup> |               |                                           |                |
| Minimum                                  | 11540 ft-lbs  | Optimum                                   | 12820 ft-lbs   |
|                                          |               | Maximum                                   | 14100 ft-lbs   |
| OPERATIONAL LIMIT TORQUES                |               |                                           |                |
| Operating Torque                         | 22700 ft-lbs  | Yield Torque                              | 25250 ft-lbs   |

## BLANKING DIMENSIONS

Blanking Dimensions

(1) Internal Pressure Capacity related to structural resistance only. Internal pressure leak resistance as per



## **EOG Resources - Midland**

**Lea County, NM (NAD 83 NME)**

**Antietam 9 Fed Com**

**#753H**

**OH**

**Plan: Plan #0.2**

## **Standard Planning Report**

**13 April, 2021**

## EOG Resources

## Planning Report



|                  |                             |                                    |                       |
|------------------|-----------------------------|------------------------------------|-----------------------|
| <b>Database:</b> | EDM 5000.14                 | <b>Local Co-ordinate Reference</b> | Well #753H            |
| <b>Company:</b>  | EOG Resources - Midland     | <b>TVD Reference:</b>              | KB = 25' @ 3454.0usft |
| <b>Project:</b>  | Lea County, NM (NAD 83 NME) | <b>MD Reference:</b>               | KB = 25' @ 3454.0usft |
| <b>Site:</b>     | Antietam 9 Fed Com          | <b>North Reference:</b>            | Grid                  |
| <b>Well:</b>     | #753H                       | <b>Survey Calculation Method:</b>  | Minimum Curvature     |
| <b>Wellbore:</b> | OH                          |                                    |                       |
| <b>Design:</b>   | Plan #0.2                   |                                    |                       |

|                    |                             |                      |                |
|--------------------|-----------------------------|----------------------|----------------|
| <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     |                      |                |

|                              |                    |                          |                   |
|------------------------------|--------------------|--------------------------|-------------------|
| <b>Site</b>                  | Antietam 9 Fed Com |                          |                   |
| <b>Site Position:</b>        |                    | <b>Northing:</b>         | 419,815.00 usft   |
| <b>From:</b>                 | Map                | <b>Easting:</b>          | 774,698.00 usft   |
| <b>Position Uncertainty:</b> | 0.0 usft           | <b>Slot Radius:</b>      | 13-3/16 "         |
|                              |                    | <b>Latitude:</b>         | 32° 9' 6.852 N    |
|                              |                    | <b>Longitude:</b>        | 103° 34' 45.452 W |
|                              |                    | <b>Grid Convergence:</b> | 0.40 °            |

|                      |       |             |                     |                 |               |                   |
|----------------------|-------|-------------|---------------------|-----------------|---------------|-------------------|
| Well                 | #753H |             |                     |                 |               |                   |
| Well Position        | +N/-S | -612.0 usft | Northing:           | 419,203.00 usft | Latitude:     | 32° 9' 0.860 N    |
|                      | +E/-W | -926.0 usft | Easting:            | 773,772.00 usft | Longitude:    | 103° 34' 56.273 W |
| Position Uncertainty |       | 0.0 usft    | Wellhead Elevation: |                 | Ground Level: | 3,429.0 usft      |

|                  |                   |                    |                            |                          |                                |
|------------------|-------------------|--------------------|----------------------------|--------------------------|--------------------------------|
| <b>Wellbore</b>  | OH                |                    |                            |                          |                                |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination<br/>(°)</b> | <b>Dip Angle<br/>(°)</b> | <b>Field Strength<br/>(nT)</b> |
|                  | IGRF2015          | 11/20/2019         | 6.69                       | 59.96                    | 47,643.81340680                |

|                          |                                    |                         |                         |                          |
|--------------------------|------------------------------------|-------------------------|-------------------------|--------------------------|
| <b>Design</b>            | Plan #0.2                          |                         |                         |                          |
| <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)<br/>(usft)</b> | <b>+N/-S<br/>(usft)</b> | <b>+E/-W<br/>(usft)</b> | <b>Direction<br/>(°)</b> |
|                          | 0.0                                | 0.0                     | 0.0                     | 175.87                   |

|                                 |                            |                          |                  |                     |
|---------------------------------|----------------------------|--------------------------|------------------|---------------------|
| <b>Plan Survey Tool Program</b> | <b>Date</b>                | 4/13/2021                |                  |                     |
| <b>Depth From<br/>(usft)</b>    | <b>Depth To<br/>(usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Remarks</b>      |
| 1                               | 0.0                        | 20,488.4                 | Plan #0.2 (OH)   | MWD                 |
|                                 |                            |                          |                  | OWSG MWD - Standard |

## EOG Resources

## Planning Report



|                  |                             |                                    |                       |
|------------------|-----------------------------|------------------------------------|-----------------------|
| <b>Database:</b> | EDM 5000.14                 | <b>Local Co-ordinate Reference</b> | Well #753H            |
| <b>Company:</b>  | EOG Resources - Midland     | <b>TVD Reference:</b>              | KB = 25' @ 3454.0usft |
| <b>Project:</b>  | Lea County, NM (NAD 83 NME) | <b>MD Reference:</b>               | KB = 25' @ 3454.0usft |
| <b>Site:</b>     | Antietam 9 Fed Com          | <b>North Reference:</b>            | Grid                  |
| <b>Well:</b>     | #753H                       | <b>Survey Calculation Method:</b>  | Minimum Curvature     |
| <b>Wellbore:</b> | OH                          |                                    |                       |
| <b>Design:</b>   | Plan #0.2                   |                                    |                       |

| Plan Sections               |                    |                |                             |                 |                 |                               |                              |                             |            |                      |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|------------------------------|-----------------------------|------------|----------------------|
| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Dogleg<br>Rate<br>(°/100usft) | Build<br>Rate<br>(°/100usft) | Turn<br>Rate<br>(°/100usft) | TFO<br>(°) | Target               |
| 0.0                         | 0.00               | 0.00           | 0.0                         | 0.0             | 0.0             | 0.00                          | 0.00                         | 0.00                        | 0.00       |                      |
| 1,000.0                     | 0.00               | 0.00           | 1,000.0                     | 0.0             | 0.0             | 0.00                          | 0.00                         | 0.00                        | 0.00       |                      |
| 1,390.6                     | 7.81               | 32.41          | 1,389.4                     | 22.4            | 14.3            | 2.00                          | 2.00                         | 0.00                        | 32.41      |                      |
| 7,299.6                     | 7.81               | 32.41          | 7,243.6                     | 700.6           | 444.7           | 0.00                          | 0.00                         | 0.00                        | 0.00       |                      |
| 7,690.3                     | 0.00               | 0.00           | 7,633.0                     | 723.0           | 459.0           | 2.00                          | -2.00                        | 0.00                        | 180.00     |                      |
| 12,446.8                    | 0.00               | 0.00           | 12,389.5                    | 723.0           | 459.0           | 0.00                          | 0.00                         | 0.00                        | 0.00       | KOP (Antietam 9 Fed  |
| 12,667.2                    | 26.46              | 180.00         | 12,602.2                    | 673.0           | 459.0           | 12.00                         | 12.00                        | 81.65                       | 180.00     | FTP (Antietam 9 Fed  |
| 13,196.7                    | 90.00              | 179.62         | 12,866.9                    | 245.5           | 460.9           | 12.00                         | 12.00                        | -0.07                       | -0.42      |                      |
| 20,488.4                    | 90.00              | 179.62         | 12,867.0                    | -7,046.0        | 509.0           | 0.00                          | 0.00                         | 0.00                        | 0.00       | PBHL (Antietam 9 Fed |



## EOG Resources

## Planning Report

|                  |                             |                                    |                       |
|------------------|-----------------------------|------------------------------------|-----------------------|
| <b>Database:</b> | EDM 5000.14                 | <b>Local Co-ordinate Reference</b> | Well #753H            |
| <b>Company:</b>  | EOG Resources - Midland     | <b>TVD Reference:</b>              | KB = 25' @ 3454.0usft |
| <b>Project:</b>  | Lea County, NM (NAD 83 NME) | <b>MD Reference:</b>               | KB = 25' @ 3454.0usft |
| <b>Site:</b>     | Antietam 9 Fed Com          | <b>North Reference:</b>            | Grid                  |
| <b>Well:</b>     | #753H                       | <b>Survey Calculation Method:</b>  | Minimum Curvature     |
| <b>Wellbore:</b> | OH                          |                                    |                       |
| <b>Design:</b>   | Plan #0.2                   |                                    |                       |

| 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               | 2.00            | 32.41       | 1,100.0               | 1.5          | 0.9          | -1.4                    | 2.00                    | 2.00                   | 0.00                  |  |
| 1,200.0               | 4.00            | 32.41       | 1,199.8               | 5.9          | 3.7          | -5.6                    | 2.00                    | 2.00                   | 0.00                  |  |
| 1,300.0               | 6.00            | 32.41       | 1,299.5               | 13.2         | 8.4          | -12.6                   | 2.00                    | 2.00                   | 0.00                  |  |
| 1,390.6               | 7.81            | 32.41       | 1,389.4               | 22.4         | 14.3         | -21.4                   | 2.00                    | 2.00                   | 0.00                  |  |
| 1,400.0               | 7.81            | 32.41       | 1,398.7               | 23.5         | 14.9         | -22.4                   | 0.00                    | 0.00                   | 0.00                  |  |
| 1,500.0               | 7.81            | 32.41       | 1,497.8               | 35.0         | 22.2         | -33.3                   | 0.00                    | 0.00                   | 0.00                  |  |
| 1,600.0               | 7.81            | 32.41       | 1,596.8               | 46.5         | 29.5         | -44.2                   | 0.00                    | 0.00                   | 0.00                  |  |
| 1,700.0               | 7.81            | 32.41       | 1,695.9               | 58.0         | 36.8         | -55.2                   | 0.00                    | 0.00                   | 0.00                  |  |
| 1,800.0               | 7.81            | 32.41       | 1,795.0               | 69.4         | 44.1         | -66.1                   | 0.00                    | 0.00                   | 0.00                  |  |
| 1,900.0               | 7.81            | 32.41       | 1,894.1               | 80.9         | 51.4         | -77.0                   | 0.00                    | 0.00                   | 0.00                  |  |
| 2,000.0               | 7.81            | 32.41       | 1,993.1               | 92.4         | 58.6         | -87.9                   | 0.00                    | 0.00                   | 0.00                  |  |
| 2,100.0               | 7.81            | 32.41       | 2,092.2               | 103.9        | 65.9         | -98.8                   | 0.00                    | 0.00                   | 0.00                  |  |
| 2,200.0               | 7.81            | 32.41       | 2,191.3               | 115.3        | 73.2         | -109.8                  | 0.00                    | 0.00                   | 0.00                  |  |
| 2,300.0               | 7.81            | 32.41       | 2,290.4               | 126.8        | 80.5         | -120.7                  | 0.00                    | 0.00                   | 0.00                  |  |
| 2,400.0               | 7.81            | 32.41       | 2,389.4               | 138.3        | 87.8         | -131.6                  | 0.00                    | 0.00                   | 0.00                  |  |
| 2,500.0               | 7.81            | 32.41       | 2,488.5               | 149.8        | 95.1         | -142.5                  | 0.00                    | 0.00                   | 0.00                  |  |
| 2,600.0               | 7.81            | 32.41       | 2,587.6               | 161.2        | 102.4        | -153.4                  | 0.00                    | 0.00                   | 0.00                  |  |
| 2,700.0               | 7.81            | 32.41       | 2,686.6               | 172.7        | 109.6        | -164.4                  | 0.00                    | 0.00                   | 0.00                  |  |
| 2,800.0               | 7.81            | 32.41       | 2,785.7               | 184.2        | 116.9        | -175.3                  | 0.00                    | 0.00                   | 0.00                  |  |
| 2,900.0               | 7.81            | 32.41       | 2,884.8               | 195.7        | 124.2        | -186.2                  | 0.00                    | 0.00                   | 0.00                  |  |
| 3,000.0               | 7.81            | 32.41       | 2,983.9               | 207.1        | 131.5        | -197.1                  | 0.00                    | 0.00                   | 0.00                  |  |
| 3,100.0               | 7.81            | 32.41       | 3,082.9               | 218.6        | 138.8        | -208.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 3,200.0               | 7.81            | 32.41       | 3,182.0               | 230.1        | 146.1        | -219.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 3,300.0               | 7.81            | 32.41       | 3,281.1               | 241.6        | 153.4        | -229.9                  | 0.00                    | 0.00                   | 0.00                  |  |
| 3,400.0               | 7.81            | 32.41       | 3,380.1               | 253.0        | 160.6        | -240.8                  | 0.00                    | 0.00                   | 0.00                  |  |
| 3,500.0               | 7.81            | 32.41       | 3,479.2               | 264.5        | 167.9        | -251.7                  | 0.00                    | 0.00                   | 0.00                  |  |
| 3,600.0               | 7.81            | 32.41       | 3,578.3               | 276.0        | 175.2        | -262.6                  | 0.00                    | 0.00                   | 0.00                  |  |
| 3,700.0               | 7.81            | 32.41       | 3,677.4               | 287.5        | 182.5        | -273.6                  | 0.00                    | 0.00                   | 0.00                  |  |
| 3,800.0               | 7.81            | 32.41       | 3,776.4               | 298.9        | 189.8        | -284.5                  | 0.00                    | 0.00                   | 0.00                  |  |
| 3,900.0               | 7.81            | 32.41       | 3,875.5               | 310.4        | 197.1        | -295.4                  | 0.00                    | 0.00                   | 0.00                  |  |
| 4,000.0               | 7.81            | 32.41       | 3,974.6               | 321.9        | 204.4        | -306.3                  | 0.00                    | 0.00                   | 0.00                  |  |
| 4,100.0               | 7.81            | 32.41       | 4,073.6               | 333.4        | 211.6        | -317.3                  | 0.00                    | 0.00                   | 0.00                  |  |
| 4,200.0               | 7.81            | 32.41       | 4,172.7               | 344.8        | 218.9        | -328.2                  | 0.00                    | 0.00                   | 0.00                  |  |
| 4,300.0               | 7.81            | 32.41       | 4,271.8               | 356.3        | 226.2        | -339.1                  | 0.00                    | 0.00                   | 0.00                  |  |
| 4,400.0               | 7.81            | 32.41       | 4,370.9               | 367.8        | 233.5        | -350.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 4,500.0               | 7.81            | 32.41       | 4,469.9               | 379.3        | 240.8        | -360.9                  | 0.00                    | 0.00                   | 0.00                  |  |
| 4,600.0               | 7.81            | 32.41       | 4,569.0               | 390.7        | 248.1        | -371.9                  | 0.00                    | 0.00                   | 0.00                  |  |
| 4,700.0               | 7.81            | 32.41       | 4,668.1               | 402.2        | 255.4        | -382.8                  | 0.00                    | 0.00                   | 0.00                  |  |
| 4,800.0               | 7.81            | 32.41       | 4,767.1               | 413.7        | 262.6        | -393.7                  | 0.00                    | 0.00                   | 0.00                  |  |
| 4,900.0               | 7.81            | 32.41       | 4,866.2               | 425.2        | 269.9        | -404.6                  | 0.00                    | 0.00                   | 0.00                  |  |
| 5,000.0               | 7.81            | 32.41       | 4,965.3               | 436.7        | 277.2        | -415.5                  | 0.00                    | 0.00                   | 0.00                  |  |
| 5,100.0               | 7.81            | 32.41       | 5,064.4               | 448.1        | 284.5        | -426.5                  | 0.00                    | 0.00                   | 0.00                  |  |

## EOG Resources

## Planning Report



|                  |                             |                                    |                       |
|------------------|-----------------------------|------------------------------------|-----------------------|
| <b>Database:</b> | EDM 5000.14                 | <b>Local Co-ordinate Reference</b> | Well #753H            |
| <b>Company:</b>  | EOG Resources - Midland     | <b>TVD Reference:</b>              | KB = 25' @ 3454.0usft |
| <b>Project:</b>  | Lea County, NM (NAD 83 NME) | <b>MD Reference:</b>               | KB = 25' @ 3454.0usft |
| <b>Site:</b>     | Antietam 9 Fed Com          | <b>North Reference:</b>            | Grid                  |
| <b>Well:</b>     | #753H                       | <b>Survey Calculation Method:</b>  | Minimum Curvature     |
| <b>Wellbore:</b> | OH                          |                                    |                       |
| <b>Design:</b>   | Plan #0.2                   |                                    |                       |

| Planned Survey              |                    |                |                             |                 |                 |                               |                               |                              |                             |  |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|--|
| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Vertical<br>Section<br>(usft) | Dogleg<br>Rate<br>(°/100usft) | Build<br>Rate<br>(°/100usft) | Turn<br>Rate<br>(°/100usft) |  |
| 5,200.0                     | 7.81               | 32.41          | 5,163.4                     | 459.6           | 291.8           | -437.4                        | 0.00                          | 0.00                         | 0.00                        |  |
| 5,300.0                     | 7.81               | 32.41          | 5,262.5                     | 471.1           | 299.1           | -448.3                        | 0.00                          | 0.00                         | 0.00                        |  |
| 5,400.0                     | 7.81               | 32.41          | 5,361.6                     | 482.6           | 306.4           | -459.2                        | 0.00                          | 0.00                         | 0.00                        |  |
| 5,500.0                     | 7.81               | 32.41          | 5,460.6                     | 494.0           | 313.6           | -470.1                        | 0.00                          | 0.00                         | 0.00                        |  |
| 5,600.0                     | 7.81               | 32.41          | 5,559.7                     | 505.5           | 320.9           | -481.1                        | 0.00                          | 0.00                         | 0.00                        |  |
| 5,700.0                     | 7.81               | 32.41          | 5,658.8                     | 517.0           | 328.2           | -492.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 5,800.0                     | 7.81               | 32.41          | 5,757.9                     | 528.5           | 335.5           | -502.9                        | 0.00                          | 0.00                         | 0.00                        |  |
| 5,900.0                     | 7.81               | 32.41          | 5,856.9                     | 539.9           | 342.8           | -513.8                        | 0.00                          | 0.00                         | 0.00                        |  |
| 6,000.0                     | 7.81               | 32.41          | 5,956.0                     | 551.4           | 350.1           | -524.8                        | 0.00                          | 0.00                         | 0.00                        |  |
| 6,100.0                     | 7.81               | 32.41          | 6,055.1                     | 562.9           | 357.3           | -535.7                        | 0.00                          | 0.00                         | 0.00                        |  |
| 6,200.0                     | 7.81               | 32.41          | 6,154.2                     | 574.4           | 364.6           | -546.6                        | 0.00                          | 0.00                         | 0.00                        |  |
| 6,300.0                     | 7.81               | 32.41          | 6,253.2                     | 585.8           | 371.9           | -557.5                        | 0.00                          | 0.00                         | 0.00                        |  |
| 6,400.0                     | 7.81               | 32.41          | 6,352.3                     | 597.3           | 379.2           | -568.4                        | 0.00                          | 0.00                         | 0.00                        |  |
| 6,500.0                     | 7.81               | 32.41          | 6,451.4                     | 608.8           | 386.5           | -579.4                        | 0.00                          | 0.00                         | 0.00                        |  |
| 6,600.0                     | 7.81               | 32.41          | 6,550.4                     | 620.3           | 393.8           | -590.3                        | 0.00                          | 0.00                         | 0.00                        |  |
| 6,700.0                     | 7.81               | 32.41          | 6,649.5                     | 631.7           | 401.1           | -601.2                        | 0.00                          | 0.00                         | 0.00                        |  |
| 6,800.0                     | 7.81               | 32.41          | 6,748.6                     | 643.2           | 408.3           | -612.1                        | 0.00                          | 0.00                         | 0.00                        |  |
| 6,900.0                     | 7.81               | 32.41          | 6,847.7                     | 654.7           | 415.6           | -623.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 7,000.0                     | 7.81               | 32.41          | 6,946.7                     | 666.2           | 422.9           | -634.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 7,100.0                     | 7.81               | 32.41          | 7,045.8                     | 677.6           | 430.2           | -644.9                        | 0.00                          | 0.00                         | 0.00                        |  |
| 7,200.0                     | 7.81               | 32.41          | 7,144.9                     | 689.1           | 437.5           | -655.8                        | 0.00                          | 0.00                         | 0.00                        |  |
| 7,299.6                     | 7.81               | 32.41          | 7,243.6                     | 700.6           | 444.7           | -666.7                        | 0.00                          | 0.00                         | 0.00                        |  |
| 7,400.0                     | 5.81               | 32.41          | 7,343.2                     | 710.6           | 451.1           | -676.2                        | 2.00                          | -2.00                        | 0.00                        |  |
| 7,500.0                     | 3.81               | 32.41          | 7,442.9                     | 717.7           | 455.6           | -683.0                        | 2.00                          | -2.00                        | 0.00                        |  |
| 7,600.0                     | 1.81               | 32.41          | 7,542.8                     | 721.8           | 458.2           | -686.9                        | 2.00                          | -2.00                        | 0.00                        |  |
| 7,690.3                     | 0.00               | 0.00           | 7,633.0                     | 723.0           | 459.0           | -688.0                        | 2.00                          | -2.00                        | 0.00                        |  |
| 7,700.0                     | 0.00               | 0.00           | 7,642.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 7,800.0                     | 0.00               | 0.00           | 7,742.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 7,900.0                     | 0.00               | 0.00           | 7,842.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 8,000.0                     | 0.00               | 0.00           | 7,942.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 8,100.0                     | 0.00               | 0.00           | 8,042.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 8,200.0                     | 0.00               | 0.00           | 8,142.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 8,300.0                     | 0.00               | 0.00           | 8,242.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 8,400.0                     | 0.00               | 0.00           | 8,342.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 8,500.0                     | 0.00               | 0.00           | 8,442.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 8,600.0                     | 0.00               | 0.00           | 8,542.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 8,700.0                     | 0.00               | 0.00           | 8,642.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 8,800.0                     | 0.00               | 0.00           | 8,742.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 8,900.0                     | 0.00               | 0.00           | 8,842.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 9,000.0                     | 0.00               | 0.00           | 8,942.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 9,100.0                     | 0.00               | 0.00           | 9,042.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 9,200.0                     | 0.00               | 0.00           | 9,142.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 9,300.0                     | 0.00               | 0.00           | 9,242.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 9,400.0                     | 0.00               | 0.00           | 9,342.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 9,500.0                     | 0.00               | 0.00           | 9,442.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 9,600.0                     | 0.00               | 0.00           | 9,542.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 9,700.0                     | 0.00               | 0.00           | 9,642.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 9,800.0                     | 0.00               | 0.00           | 9,742.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 9,900.0                     | 0.00               | 0.00           | 9,842.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 10,000.0                    | 0.00               | 0.00           | 9,942.7                     | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 10,100.0                    | 0.00               | 0.00           | 10,042.7                    | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 10,200.0                    | 0.00               | 0.00           | 10,142.7                    | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |
| 10,300.0                    | 0.00               | 0.00           | 10,242.7                    | 723.0           | 459.0           | -688.0                        | 0.00                          | 0.00                         | 0.00                        |  |

## EOG Resources

## Planning Report



|                  |                             |                                    |                       |
|------------------|-----------------------------|------------------------------------|-----------------------|
| <b>Database:</b> | EDM 5000.14                 | <b>Local Co-ordinate Reference</b> | Well #753H            |
| <b>Company:</b>  | EOG Resources - Midland     | <b>TVD Reference:</b>              | KB = 25' @ 3454.0usft |
| <b>Project:</b>  | Lea County, NM (NAD 83 NME) | <b>MD Reference:</b>               | KB = 25' @ 3454.0usft |
| <b>Site:</b>     | Antietam 9 Fed Com          | <b>North Reference:</b>            | Grid                  |
| <b>Well:</b>     | #753H                       | <b>Survey Calculation Method:</b>  | Minimum Curvature     |
| <b>Wellbore:</b> | OH                          |                                    |                       |
| <b>Design:</b>   | Plan #0.2                   |                                    |                       |

| Planned Survey                        |                 |             |                       |              |              |                         |                         |                        |                       |  |
|---------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft)                 | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 10,400.0                              | 0.00            | 0.00        | 10,342.7              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 10,500.0                              | 0.00            | 0.00        | 10,442.7              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 10,600.0                              | 0.00            | 0.00        | 10,542.7              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 10,700.0                              | 0.00            | 0.00        | 10,642.7              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 10,800.0                              | 0.00            | 0.00        | 10,742.7              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 10,900.0                              | 0.00            | 0.00        | 10,842.7              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 11,000.0                              | 0.00            | 0.00        | 10,942.7              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 11,100.0                              | 0.00            | 0.00        | 11,042.7              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 11,200.0                              | 0.00            | 0.00        | 11,142.7              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 11,300.0                              | 0.00            | 0.00        | 11,242.7              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 11,400.0                              | 0.00            | 0.00        | 11,342.7              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 11,500.0                              | 0.00            | 0.00        | 11,442.7              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 11,600.0                              | 0.00            | 0.00        | 11,542.7              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 11,700.0                              | 0.00            | 0.00        | 11,642.7              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 11,800.0                              | 0.00            | 0.00        | 11,742.7              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 11,900.0                              | 0.00            | 0.00        | 11,842.7              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 12,000.0                              | 0.00            | 0.00        | 11,942.7              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 12,100.0                              | 0.00            | 0.00        | 12,042.7              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 12,200.0                              | 0.00            | 0.00        | 12,142.7              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 12,300.0                              | 0.00            | 0.00        | 12,242.7              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 12,400.0                              | 0.00            | 0.00        | 12,342.7              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| 12,446.8                              | 0.00            | 0.00        | 12,389.5              | 723.0        | 459.0        | -688.0                  | 0.00                    | 0.00                   | 0.00                  |  |
| <b>KOP (Antietam 9 Fed Com #753H)</b> |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 12,450.0                              | 0.39            | 180.00      | 12,392.7              | 723.0        | 459.0        | -688.0                  | 12.00                   | 12.00                  | 0.00                  |  |
| 12,475.0                              | 3.39            | 180.00      | 12,417.7              | 722.2        | 459.0        | -687.2                  | 12.00                   | 12.00                  | 0.00                  |  |
| 12,500.0                              | 6.39            | 180.00      | 12,442.6              | 720.0        | 459.0        | -685.1                  | 12.00                   | 12.00                  | 0.00                  |  |
| 12,525.0                              | 9.39            | 180.00      | 12,467.4              | 716.6        | 459.0        | -681.7                  | 12.00                   | 12.00                  | 0.00                  |  |
| 12,550.0                              | 12.39           | 180.00      | 12,491.9              | 711.9        | 459.0        | -677.0                  | 12.00                   | 12.00                  | 0.00                  |  |
| 12,575.0                              | 15.39           | 180.00      | 12,516.2              | 705.9        | 459.0        | -671.0                  | 12.00                   | 12.00                  | 0.00                  |  |
| 12,600.0                              | 18.39           | 180.00      | 12,540.1              | 698.6        | 459.0        | -663.7                  | 12.00                   | 12.00                  | 0.00                  |  |
| 12,625.0                              | 21.39           | 180.00      | 12,563.6              | 690.1        | 459.0        | -655.2                  | 12.00                   | 12.00                  | 0.00                  |  |
| 12,650.0                              | 24.39           | 180.00      | 12,586.7              | 680.4        | 459.0        | -645.5                  | 12.00                   | 12.00                  | 0.00                  |  |
| 12,667.2                              | 26.46           | 180.00      | 12,602.2              | 673.0        | 459.0        | -638.2                  | 12.00                   | 12.00                  | 0.00                  |  |
| <b>FTP (Antietam 9 Fed Com #753H)</b> |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 12,675.0                              | 27.39           | 179.99      | 12,609.1              | 669.5        | 459.0        | -634.7                  | 12.00                   | 12.00                  | -0.19                 |  |
| 12,700.0                              | 30.39           | 179.94      | 12,631.0              | 657.4        | 459.0        | -622.6                  | 12.00                   | 12.00                  | -0.17                 |  |
| 12,725.0                              | 33.39           | 179.91      | 12,652.3              | 644.2        | 459.0        | -609.4                  | 12.00                   | 12.00                  | -0.14                 |  |
| 12,750.0                              | 36.39           | 179.88      | 12,672.8              | 629.9        | 459.1        | -595.2                  | 12.00                   | 12.00                  | -0.12                 |  |
| 12,775.0                              | 39.39           | 179.85      | 12,692.5              | 614.5        | 459.1        | -579.9                  | 12.00                   | 12.00                  | -0.10                 |  |
| 12,800.0                              | 42.39           | 179.83      | 12,711.4              | 598.2        | 459.1        | -563.5                  | 12.00                   | 12.00                  | -0.09                 |  |
| 12,825.0                              | 45.39           | 179.81      | 12,729.4              | 580.8        | 459.2        | -546.3                  | 12.00                   | 12.00                  | -0.08                 |  |
| 12,850.0                              | 48.39           | 179.79      | 12,746.5              | 562.6        | 459.3        | -528.0                  | 12.00                   | 12.00                  | -0.07                 |  |
| 12,875.0                              | 51.39           | 179.77      | 12,762.6              | 543.5        | 459.3        | -509.0                  | 12.00                   | 12.00                  | -0.07                 |  |
| 12,900.0                              | 54.39           | 179.76      | 12,777.7              | 523.5        | 459.4        | -489.1                  | 12.00                   | 12.00                  | -0.06                 |  |
| 12,925.0                              | 57.39           | 179.74      | 12,791.7              | 502.8        | 459.5        | -468.4                  | 12.00                   | 12.00                  | -0.06                 |  |
| 12,950.0                              | 60.39           | 179.73      | 12,804.6              | 481.4        | 459.6        | -447.1                  | 12.00                   | 12.00                  | -0.05                 |  |
| 12,975.0                              | 63.39           | 179.72      | 12,816.4              | 459.4        | 459.7        | -425.1                  | 12.00                   | 12.00                  | -0.05                 |  |
| 13,000.0                              | 66.39           | 179.70      | 12,827.0              | 436.8        | 459.8        | -402.5                  | 12.00                   | 12.00                  | -0.05                 |  |
| 13,025.0                              | 69.39           | 179.69      | 12,836.4              | 413.6        | 459.9        | -379.4                  | 12.00                   | 12.00                  | -0.05                 |  |
| 13,050.0                              | 72.39           | 179.68      | 12,844.6              | 390.0        | 460.1        | -355.8                  | 12.00                   | 12.00                  | -0.04                 |  |
| 13,075.0                              | 75.39           | 179.67      | 12,851.5              | 366.0        | 460.2        | -331.9                  | 12.00                   | 12.00                  | -0.04                 |  |
| 13,100.0                              | 78.39           | 179.66      | 12,857.2              | 341.6        | 460.3        | -307.6                  | 12.00                   | 12.00                  | -0.04                 |  |
| 13,125.0                              | 81.39           | 179.65      | 12,861.6              | 317.0        | 460.5        | -283.0                  | 12.00                   | 12.00                  | -0.04                 |  |

## EOG Resources

## Planning Report



|                  |                             |                                    |                       |
|------------------|-----------------------------|------------------------------------|-----------------------|
| <b>Database:</b> | EDM 5000.14                 | <b>Local Co-ordinate Reference</b> | Well #753H            |
| <b>Company:</b>  | EOG Resources - Midland     | <b>TVD Reference:</b>              | KB = 25' @ 3454.0usft |
| <b>Project:</b>  | Lea County, NM (NAD 83 NME) | <b>MD Reference:</b>               | KB = 25' @ 3454.0usft |
| <b>Site:</b>     | Antietam 9 Fed Com          | <b>North Reference:</b>            | Grid                  |
| <b>Well:</b>     | #753H                       | <b>Survey Calculation Method:</b>  | Minimum Curvature     |
| <b>Wellbore:</b> | OH                          |                                    |                       |
| <b>Design:</b>   | Plan #0.2                   |                                    |                       |

| Planned Survey              |                    |                |                             |                 |                 |                               |                               |                              |                             |  |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|--|
| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Vertical<br>Section<br>(usft) | Dogleg<br>Rate<br>(°/100usft) | Build<br>Rate<br>(°/100usft) | Turn<br>Rate<br>(°/100usft) |  |
| 13,150.0                    | 84.39              | 179.64         | 12,864.7                    | 292.2           | 460.6           | -258.3                        | 12.00                         | 12.00                        | -0.04                       |  |
| 13,175.0                    | 87.39              | 179.63         | 12,866.4                    | 267.3           | 460.8           | -233.4                        | 12.00                         | 12.00                        | -0.04                       |  |
| 13,196.7                    | 90.00              | 179.62         | 12,866.9                    | 245.5           | 460.9           | -211.7                        | 12.00                         | 12.00                        | -0.04                       |  |
| 13,200.0                    | 90.00              | 179.62         | 12,866.9                    | 242.3           | 461.0           | -208.4                        | 0.00                          | 0.00                         | 0.00                        |  |
| 13,300.0                    | 90.00              | 179.62         | 12,866.9                    | 142.3           | 461.6           | -108.7                        | 0.00                          | 0.00                         | 0.00                        |  |
| 13,400.0                    | 90.00              | 179.62         | 12,866.9                    | 42.3            | 462.3           | -8.9                          | 0.00                          | 0.00                         | 0.00                        |  |
| 13,500.0                    | 90.00              | 179.62         | 12,866.9                    | -57.7           | 462.9           | 90.9                          | 0.00                          | 0.00                         | 0.00                        |  |
| 13,600.0                    | 90.00              | 179.62         | 12,866.9                    | -157.7          | 463.6           | 190.7                         | 0.00                          | 0.00                         | 0.00                        |  |
| 13,700.0                    | 90.00              | 179.62         | 12,866.9                    | -257.7          | 464.3           | 290.5                         | 0.00                          | 0.00                         | 0.00                        |  |
| 13,800.0                    | 90.00              | 179.62         | 12,866.9                    | -357.7          | 464.9           | 390.3                         | 0.00                          | 0.00                         | 0.00                        |  |
| 13,900.0                    | 90.00              | 179.62         | 12,867.0                    | -457.7          | 465.6           | 490.1                         | 0.00                          | 0.00                         | 0.00                        |  |
| 14,000.0                    | 90.00              | 179.62         | 12,867.0                    | -557.7          | 466.2           | 589.8                         | 0.00                          | 0.00                         | 0.00                        |  |
| 14,100.0                    | 90.00              | 179.62         | 12,867.0                    | -657.7          | 466.9           | 689.6                         | 0.00                          | 0.00                         | 0.00                        |  |
| 14,200.0                    | 90.00              | 179.62         | 12,867.0                    | -757.7          | 467.6           | 789.4                         | 0.00                          | 0.00                         | 0.00                        |  |
| 14,300.0                    | 90.00              | 179.62         | 12,867.0                    | -857.7          | 468.2           | 889.2                         | 0.00                          | 0.00                         | 0.00                        |  |
| 14,400.0                    | 90.00              | 179.62         | 12,867.0                    | -957.7          | 468.9           | 989.0                         | 0.00                          | 0.00                         | 0.00                        |  |
| 14,500.0                    | 90.00              | 179.62         | 12,867.0                    | -1,057.7        | 469.5           | 1,088.8                       | 0.00                          | 0.00                         | 0.00                        |  |
| 14,600.0                    | 90.00              | 179.62         | 12,867.0                    | -1,157.7        | 470.2           | 1,188.6                       | 0.00                          | 0.00                         | 0.00                        |  |
| 14,700.0                    | 90.00              | 179.62         | 12,867.0                    | -1,257.7        | 470.9           | 1,288.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 14,800.0                    | 90.00              | 179.62         | 12,867.0                    | -1,357.7        | 471.5           | 1,388.1                       | 0.00                          | 0.00                         | 0.00                        |  |
| 14,900.0                    | 90.00              | 179.62         | 12,867.0                    | -1,457.7        | 472.2           | 1,487.9                       | 0.00                          | 0.00                         | 0.00                        |  |
| 15,000.0                    | 90.00              | 179.62         | 12,867.0                    | -1,557.7        | 472.8           | 1,587.7                       | 0.00                          | 0.00                         | 0.00                        |  |
| 15,100.0                    | 90.00              | 179.62         | 12,867.0                    | -1,657.7        | 473.5           | 1,687.5                       | 0.00                          | 0.00                         | 0.00                        |  |
| 15,200.0                    | 90.00              | 179.62         | 12,867.0                    | -1,757.7        | 474.1           | 1,787.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 15,300.0                    | 90.00              | 179.62         | 12,867.0                    | -1,857.7        | 474.8           | 1,887.1                       | 0.00                          | 0.00                         | 0.00                        |  |
| 15,400.0                    | 90.00              | 179.62         | 12,867.0                    | -1,957.7        | 475.5           | 1,986.8                       | 0.00                          | 0.00                         | 0.00                        |  |
| 15,500.0                    | 90.00              | 179.62         | 12,867.0                    | -2,057.7        | 476.1           | 2,086.6                       | 0.00                          | 0.00                         | 0.00                        |  |
| 15,600.0                    | 90.00              | 179.62         | 12,867.0                    | -2,157.7        | 476.8           | 2,186.4                       | 0.00                          | 0.00                         | 0.00                        |  |
| 15,700.0                    | 90.00              | 179.62         | 12,867.0                    | -2,257.7        | 477.4           | 2,286.2                       | 0.00                          | 0.00                         | 0.00                        |  |
| 15,800.0                    | 90.00              | 179.62         | 12,867.0                    | -2,357.7        | 478.1           | 2,386.0                       | 0.00                          | 0.00                         | 0.00                        |  |
| 15,900.0                    | 90.00              | 179.62         | 12,867.0                    | -2,457.7        | 478.8           | 2,485.8                       | 0.00                          | 0.00                         | 0.00                        |  |
| 16,000.0                    | 90.00              | 179.62         | 12,867.0                    | -2,557.7        | 479.4           | 2,585.5                       | 0.00                          | 0.00                         | 0.00                        |  |
| 16,100.0                    | 90.00              | 179.62         | 12,867.0                    | -2,657.7        | 480.1           | 2,685.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 16,200.0                    | 90.00              | 179.62         | 12,867.0                    | -2,757.6        | 480.7           | 2,785.1                       | 0.00                          | 0.00                         | 0.00                        |  |
| 16,300.0                    | 90.00              | 179.62         | 12,867.0                    | -2,857.6        | 481.4           | 2,884.9                       | 0.00                          | 0.00                         | 0.00                        |  |
| 16,400.0                    | 90.00              | 179.62         | 12,867.0                    | -2,957.6        | 482.1           | 2,984.7                       | 0.00                          | 0.00                         | 0.00                        |  |
| 16,500.0                    | 90.00              | 179.62         | 12,867.0                    | -3,057.6        | 482.7           | 3,084.5                       | 0.00                          | 0.00                         | 0.00                        |  |
| 16,600.0                    | 90.00              | 179.62         | 12,867.0                    | -3,157.6        | 483.4           | 3,184.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 16,700.0                    | 90.00              | 179.62         | 12,867.0                    | -3,257.6        | 484.0           | 3,284.0                       | 0.00                          | 0.00                         | 0.00                        |  |
| 16,800.0                    | 90.00              | 179.62         | 12,867.0                    | -3,357.6        | 484.7           | 3,383.8                       | 0.00                          | 0.00                         | 0.00                        |  |
| 16,900.0                    | 90.00              | 179.62         | 12,867.0                    | -3,457.6        | 485.4           | 3,483.6                       | 0.00                          | 0.00                         | 0.00                        |  |
| 17,000.0                    | 90.00              | 179.62         | 12,867.0                    | -3,557.6        | 486.0           | 3,583.4                       | 0.00                          | 0.00                         | 0.00                        |  |
| 17,100.0                    | 90.00              | 179.62         | 12,867.0                    | -3,657.6        | 486.7           | 3,683.2                       | 0.00                          | 0.00                         | 0.00                        |  |
| 17,200.0                    | 90.00              | 179.62         | 12,867.0                    | -3,757.6        | 487.3           | 3,783.0                       | 0.00                          | 0.00                         | 0.00                        |  |
| 17,300.0                    | 90.00              | 179.62         | 12,867.0                    | -3,857.6        | 488.0           | 3,882.8                       | 0.00                          | 0.00                         | 0.00                        |  |
| 17,400.0                    | 90.00              | 179.62         | 12,867.0                    | -3,957.6        | 488.6           | 3,982.5                       | 0.00                          | 0.00                         | 0.00                        |  |
| 17,500.0                    | 90.00              | 179.62         | 12,867.0                    | -4,057.6        | 489.3           | 4,082.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 17,600.0                    | 90.00              | 179.62         | 12,867.0                    | -4,157.6        | 490.0           | 4,182.1                       | 0.00                          | 0.00                         | 0.00                        |  |
| 17,700.0                    | 90.00              | 179.62         | 12,867.0                    | -4,257.6        | 490.6           | 4,281.9                       | 0.00                          | 0.00                         | 0.00                        |  |
| 17,800.0                    | 90.00              | 179.62         | 12,867.0                    | -4,357.6        | 491.3           | 4,381.7                       | 0.00                          | 0.00                         | 0.00                        |  |
| 17,900.0                    | 90.00              | 179.62         | 12,867.0                    | -4,457.6        | 491.9           | 4,481.5                       | 0.00                          | 0.00                         | 0.00                        |  |
| 18,000.0                    | 90.00              | 179.62         | 12,867.0                    | -4,557.6        | 492.6           | 4,581.3                       | 0.00                          | 0.00                         | 0.00                        |  |
| 18,100.0                    | 90.00              | 179.62         | 12,867.0                    | -4,657.6        | 493.3           | 4,681.0                       | 0.00                          | 0.00                         | 0.00                        |  |

## EOG Resources

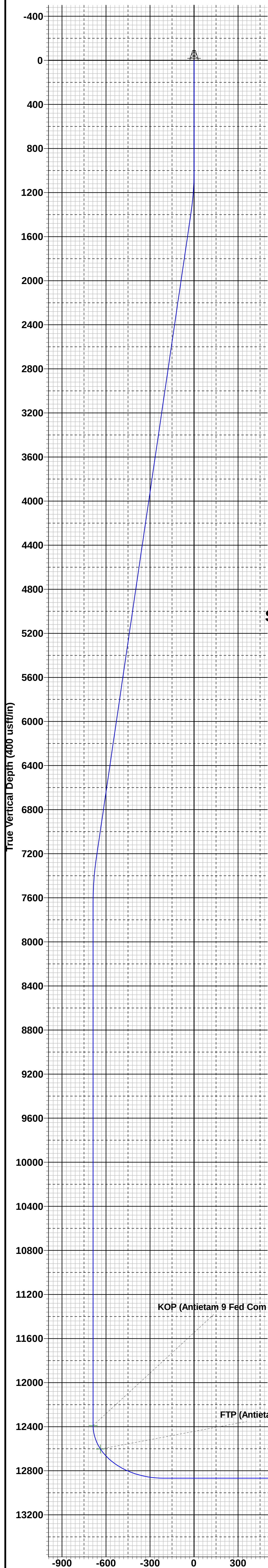
## Planning Report



|                  |                             |                                    |                       |
|------------------|-----------------------------|------------------------------------|-----------------------|
| <b>Database:</b> | EDM 5000.14                 | <b>Local Co-ordinate Reference</b> | Well #753H            |
| <b>Company:</b>  | EOG Resources - Midland     | <b>TVD Reference:</b>              | KB = 25' @ 3454.0usft |
| <b>Project:</b>  | Lea County, NM (NAD 83 NME) | <b>MD Reference:</b>               | KB = 25' @ 3454.0usft |
| <b>Site:</b>     | Antietam 9 Fed Com          | <b>North Reference:</b>            | Grid                  |
| <b>Well:</b>     | #753H                       | <b>Survey Calculation Method:</b>  | Minimum Curvature     |
| <b>Wellbore:</b> | OH                          |                                    |                       |
| <b>Design:</b>   | Plan #0.2                   |                                    |                       |

| 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) |  |
| 18,200.0                        | 90.00           | 179.62      | 12,867.0              | -4,757.6     | 493.9        | 4,780.8                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,300.0                        | 90.00           | 179.62      | 12,867.0              | -4,857.6     | 494.6        | 4,880.6                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,400.0                        | 90.00           | 179.62      | 12,867.0              | -4,957.6     | 495.2        | 4,980.4                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,500.0                        | 90.00           | 179.62      | 12,867.0              | -5,057.6     | 495.9        | 5,080.2                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,600.0                        | 90.00           | 179.62      | 12,867.0              | -5,157.6     | 496.6        | 5,180.0                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,700.0                        | 90.00           | 179.62      | 12,867.0              | -5,257.6     | 497.2        | 5,279.8                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,800.0                        | 90.00           | 179.62      | 12,867.0              | -5,357.6     | 497.9        | 5,379.5                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,900.0                        | 90.00           | 179.62      | 12,867.0              | -5,457.6     | 498.5        | 5,479.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 19,000.0                        | 90.00           | 179.62      | 12,867.0              | -5,557.6     | 499.2        | 5,579.1                 | 0.00                    | 0.00                   | 0.00                  |  |
| 19,100.0                        | 90.00           | 179.62      | 12,867.0              | -5,657.6     | 499.9        | 5,678.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 19,200.0                        | 90.00           | 179.62      | 12,867.0              | -5,757.6     | 500.5        | 5,778.7                 | 0.00                    | 0.00                   | 0.00                  |  |
| 19,300.0                        | 90.00           | 179.62      | 12,867.0              | -5,857.6     | 501.2        | 5,878.5                 | 0.00                    | 0.00                   | 0.00                  |  |
| 19,400.0                        | 90.00           | 179.62      | 12,867.0              | -5,957.6     | 501.8        | 5,978.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 19,500.0                        | 90.00           | 179.62      | 12,867.0              | -6,057.6     | 502.5        | 6,078.0                 | 0.00                    | 0.00                   | 0.00                  |  |
| 19,600.0                        | 90.00           | 179.62      | 12,867.0              | -6,157.6     | 503.1        | 6,177.8                 | 0.00                    | 0.00                   | 0.00                  |  |
| 19,700.0                        | 90.00           | 179.62      | 12,867.0              | -6,257.6     | 503.8        | 6,277.6                 | 0.00                    | 0.00                   | 0.00                  |  |
| 19,800.0                        | 90.00           | 179.62      | 12,867.0              | -6,357.6     | 504.5        | 6,377.4                 | 0.00                    | 0.00                   | 0.00                  |  |
| 19,900.0                        | 90.00           | 179.62      | 12,867.0              | -6,457.6     | 505.1        | 6,477.2                 | 0.00                    | 0.00                   | 0.00                  |  |
| 20,000.0                        | 90.00           | 179.62      | 12,867.0              | -6,557.6     | 505.8        | 6,577.0                 | 0.00                    | 0.00                   | 0.00                  |  |
| 20,100.0                        | 90.00           | 179.62      | 12,867.0              | -6,657.6     | 506.4        | 6,676.7                 | 0.00                    | 0.00                   | 0.00                  |  |
| 20,200.0                        | 90.00           | 179.62      | 12,867.0              | -6,757.6     | 507.1        | 6,776.5                 | 0.00                    | 0.00                   | 0.00                  |  |
| 20,300.0                        | 90.00           | 179.62      | 12,867.0              | -6,857.6     | 507.8        | 6,876.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 20,400.0                        | 90.00           | 179.62      | 12,867.0              | -6,957.6     | 508.4        | 6,976.1                 | 0.00                    | 0.00                   | 0.00                  |  |
| 20,488.4                        | 90.00           | 179.62      | 12,867.0              | -7,046.0     | 509.0        | 7,064.4                 | 0.00                    | 0.00                   | 0.00                  |  |
| PBHL (Antietam 9 Fed Com #753H) |                 |             |                       |              |              |                         |                         |                        |                       |  |

| Design Targets                                                    |               |              |            |              |              |                 |                |                 |                   |  |
|-------------------------------------------------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|-----------------|-------------------|--|
| Target Name                                                       | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude        | Longitude         |  |
| KOP (Antietam 9 Fed Co<br>- hit/miss target<br>- Shape<br>- Point | 0.00          | 0.00         | 12,389.5   | 723.0        | 459.0        | 419,926.00      | 774,231.00     | 32° 9' 7.983 N  | 103° 34' 50.875 W |  |
| FTP (Antietam 9 Fed Co<br>- plan hits target center<br>- Point    | 0.00          | 0.00         | 12,602.2   | 673.0        | 459.0        | 419,876.00      | 774,231.00     | 32° 9' 7.488 N  | 103° 34' 50.879 W |  |
| PBHL (Antietam 9 Fed C<br>- plan hits target center<br>- Point    | 0.00          | 0.00         | 12,867.0   | -7,046.0     | 509.0        | 412,157.00      | 774,281.00     | 32° 7' 51.103 N | 103° 34' 50.925 W |  |



To convert a Magnetic Direction to a Grid Direction, Add 6.29°  
To convert a Magnetic Direction to a True Direction, Add 6.69° East  
To convert a True Direction to a Grid Direction, Subtract 0.40°

Lea County, NM (NAD 83 NME)

Antietam 9 Fed Com #753H

Plan #0.2

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

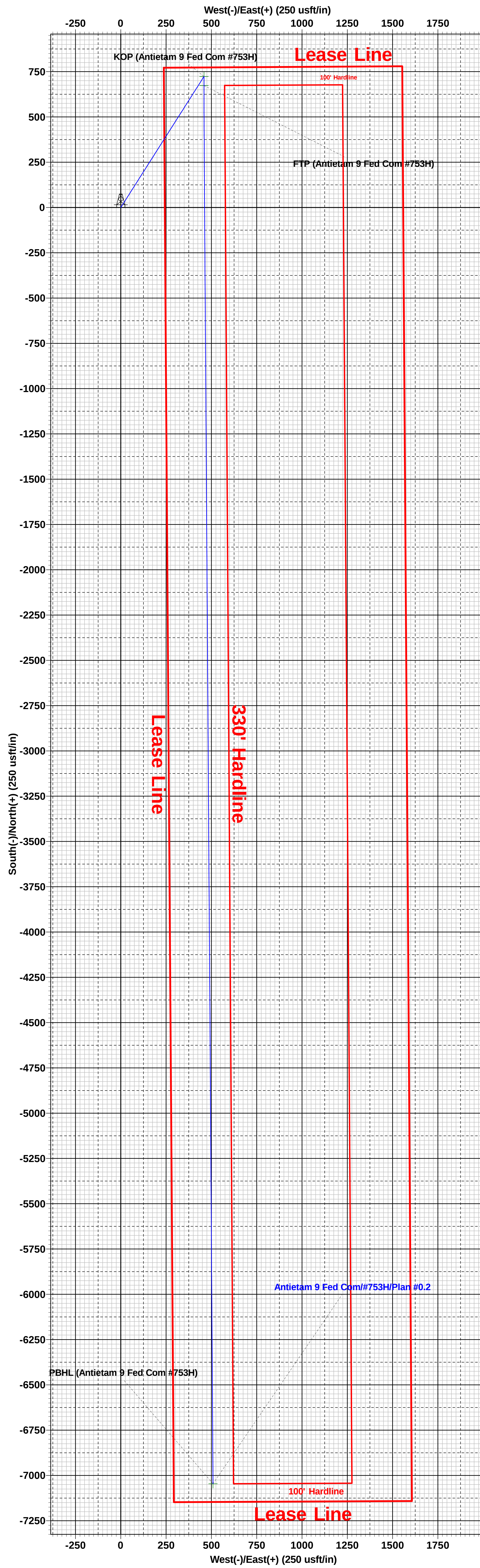
Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: New Mexico Eastern Zone  
System Datum: Mean Sea Level

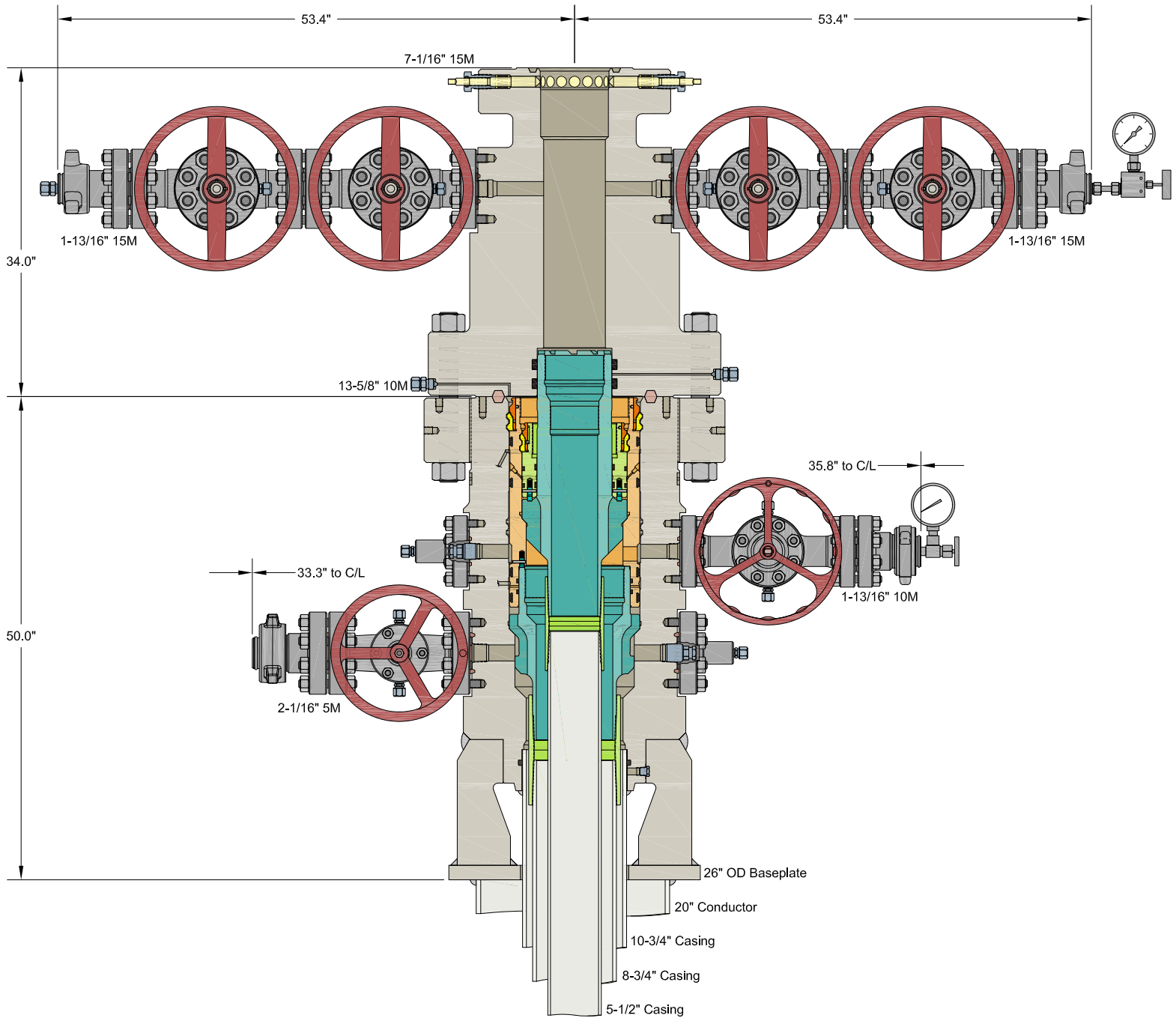
| WELL DETAILS: #753H   |           |                |                   |        |
|-----------------------|-----------|----------------|-------------------|--------|
| KB = 25' @ 3454.0usft |           |                |                   | 3429.0 |
| Northing              | Easting   | Latitude       | Longitude         |        |
| 419203.00             | 773772.00 | 32° 9' 0.860 N | 103° 34' 56.273 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               | 1000.0  | 0.00  | 0.00   | 1000.0  | 0.0     | 0.0   | 0.00  | 0.00   | 0.0    |                                 |
| 3               | 1390.6  | 7.81  | 32.41  | 1389.4  | 22.4    | 14.3  | 2.00  | 32.41  | -21.4  |                                 |
| 4               | 7299.6  | 7.81  | 32.41  | 7243.6  | 700.6   | 444.7 | 0.00  | 0.00   | -666.7 |                                 |
| 5               | 7690.3  | 0.00  | 0.00   | 7633.0  | 723.0   | 459.0 | 2.00  | 180.00 | -688.0 |                                 |
| 6               | 12446.8 | 0.00  | 0.00   | 12389.5 | 723.0   | 459.0 | 0.00  | 0.00   | -688.0 | KOP (Antietam 9 Fed Com #753H)  |
| 7               | 12667.2 | 26.46 | 180.00 | 12602.2 | 673.0   | 459.0 | 12.00 | 180.00 | -638.2 | FTP (Antietam 9 Fed Com #753H)  |
| 8               | 13196.7 | 90.00 | 179.62 | 12866.9 | 245.5   | 460.9 | 12.00 | -0.42  | -211.7 |                                 |
| 9               | 20488.4 | 90.00 | 179.62 | 12867.0 | -7046.0 | 509.0 | 0.00  | 0.00   | 7064.4 | PBHL (Antietam 9 Fed Com #753H) |

| CASING DETAILS              |
|-----------------------------|
| No casing data is available |

| WELLBORE TARGET DETAILS (MAP CO-ORDINATES) |         |         |       |           |           |
|--------------------------------------------|---------|---------|-------|-----------|-----------|
| Name                                       | TVD     | +N/-S   | +E/-W | Northing  | Easting   |
| KOP (Antietam 9 Fed Com #753H)             | 12389.5 | 723.0   | 459.0 | 419926.00 | 774231.00 |
| FTP (Antietam 9 Fed Com #753H)             | 12602.2 | 673.0   | 459.0 | 419876.00 | 774231.00 |
| PBHL (Antietam 9 Fed Com #753H)            | 12867.0 | -7046.0 | 509.0 | 412157.00 | 774281.00 |





INFORMATION CONTAINED HEREIN IS THE PROPERTY OF CACTUS WELLHEAD, LLC. REPRODUCTION, DISCLOSURE, OR USE THEREOF IS PERMISSIBLE ONLY AS PROVIDED BY CONTRACT OR AS EXPRESSLY AUTHORIZED BY CACTUS WELLHEAD, LLC.

ALL DIMENSIONS APPROXIMATE

# CACTUS WELLHEAD LLC

## EOG RESOURCES

10-3/4" x 8-3/4" x 5-1/2" MBU-3T-SF-SOW Wellhead System  
With 8-5/8" & 5-1/2" Pin Bottom Mandrel Casing Hangers  
And 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head

|             |          |         |
|-------------|----------|---------|
| DRAWN       | DLE      | 14APR21 |
| APPRV       |          |         |
| DRAWING NO. | SDT-3141 |         |

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

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

CONDITIONS  
  
Action 26779

CONDITIONS

|                                                                      |                                                      |
|----------------------------------------------------------------------|------------------------------------------------------|
| Operator:<br>EOG RESOURCES INC<br>P.O. Box 2267<br>Midland, TX 79702 | OGRID:<br>7377                                       |
|                                                                      | Action Number:<br>26779                              |
|                                                                      | Action Type:<br>[C-103] NOI Change of Plans (C-103A) |

CONDITIONS

|            |           |                |
|------------|-----------|----------------|
| Created By | Condition | Condition Date |
| pkautz     | None      | 8/2/2021       |