

Form 3160-5  
(June 2019)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB No. 1004-0137  
Expires: October 31, 2021**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No. NMNM0438001

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator EOG RESOURCES INCORPORATED

3a. Address 1111 BAGBY SKY LOBBY 2, HOUSTON, TX 77030 3b. Phone No. (include area code)  
(713) 651-70004. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
SEC 4/T26S/R31E/NMP

7. If Unit of CA/Agreement, Name and/or No.

8. Well Name and No. DEEP ELEM 4 FED COM/712H

9. API Well No. 3001548258

10. Field and Pool or Exploratory Area  
RED HILLS; BONE SPRING, NORTH/PURPLE SAGE; \11. Country or Parish, State  
EDDY/NM

## 12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

| TYPE OF SUBMISSION                                   | TYPE OF ACTION                                |                                               |                                                    |                                           |  |
|------------------------------------------------------|-----------------------------------------------|-----------------------------------------------|----------------------------------------------------|-------------------------------------------|--|
| <input checked="" type="checkbox"/> Notice of Intent | <input type="checkbox"/> Acidize              | <input type="checkbox"/> Deepen               | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off   |  |
| <input type="checkbox"/> Subsequent Report           | <input type="checkbox"/> Alter Casing         | <input type="checkbox"/> Hydraulic Fracturing | <input type="checkbox"/> Reclamation               | <input type="checkbox"/> Well Integrity   |  |
| <input type="checkbox"/> Final Abandonment Notice    | <input type="checkbox"/> Casing Repair        | <input type="checkbox"/> New Construction     | <input type="checkbox"/> Recomplete                | <input checked="" type="checkbox"/> Other |  |
|                                                      | <input type="checkbox"/> Change Plans         | <input type="checkbox"/> Plug and Abandon     | <input type="checkbox"/> Temporarily Abandon       |                                           |  |
|                                                      | <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back            | <input type="checkbox"/> Water Disposal            |                                           |  |

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

EOG respectfully requests an amendment to our approved APD for this well to reflect the following changes:

Change BHL from T-26-S, R-31-E, Sec 16, 230' FSL, 1310' FWL, Eddy Co., NM,  
to T-26-S, R-31-E, Sec 16, 230' FSL, 1485' FWL, Eddy Co., N.M.

Change target formation to Wolfcamp Clastics Y.

Update casing and cement program to current design.

Operator requested to make changes

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)  
STAR HARRELL / Ph: (432) 848-9161

Title Regulatory Specialist

Signature

Date 04/14/2022

**THE SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved

Title Petroleum Engineer

Date 04/21/2022

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office CARLSBAD

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.

(Instructions on page 2)

## GENERAL INSTRUCTIONS

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

## SPECIFIC INSTRUCTIONS

*Item 4* - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

*Item 13*: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

## NOTICES

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

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

## Additional Information

### Location of Well

0. SHL: SESW / 1278 FSL / 2123 FWL / TWSP: 26S / RANGE: 31E / SECTION: 4 / LAT: 32.068268 / LONG: -103.784939 ( TVD: 0 feet, MD: 0 feet )

PPP: NWNW / 330 FNL / 1310 FWL / TWSP: 26S / RANGE: 31E / SECTION: 9 / LAT: 32.063843 / LONG: -103.787569 ( TVD: 11457 feet, MD: 11681 feet )

BHL: SWSW / 230 FSL / 1310 FWL / TWSP: 26S / RANGE: 31E / SECTION: 16 / LAT: 32.036089 / LONG: -103.78759 ( TVD: 11500 feet, MD: 21784 feet )

CONFIDENTIAL

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) 476-3460 Fax: (505) 476-3462

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

Form C-102

Revised August 1, 2011

Submit one copy to appropriate  
District Office

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                   |                                             |                                                 |
|-----------------------------------|---------------------------------------------|-------------------------------------------------|
| API Number<br><b>30-015-48258</b> | Pool Code<br><b>98220</b>                   | Pool Name<br><b>Purple Sage; Wolfcamp (Gas)</b> |
| Property Code<br><b>329970</b>    | Property Name<br><b>DEEP ELEM 4 FED COM</b> | Well Number<br><b>712H</b>                      |
| OGRID No.<br><b>7377</b>          | Operator Name<br><b>EOG RESOURCES, INC.</b> | Elevation<br><b>3281'</b>                       |

## Surface Location

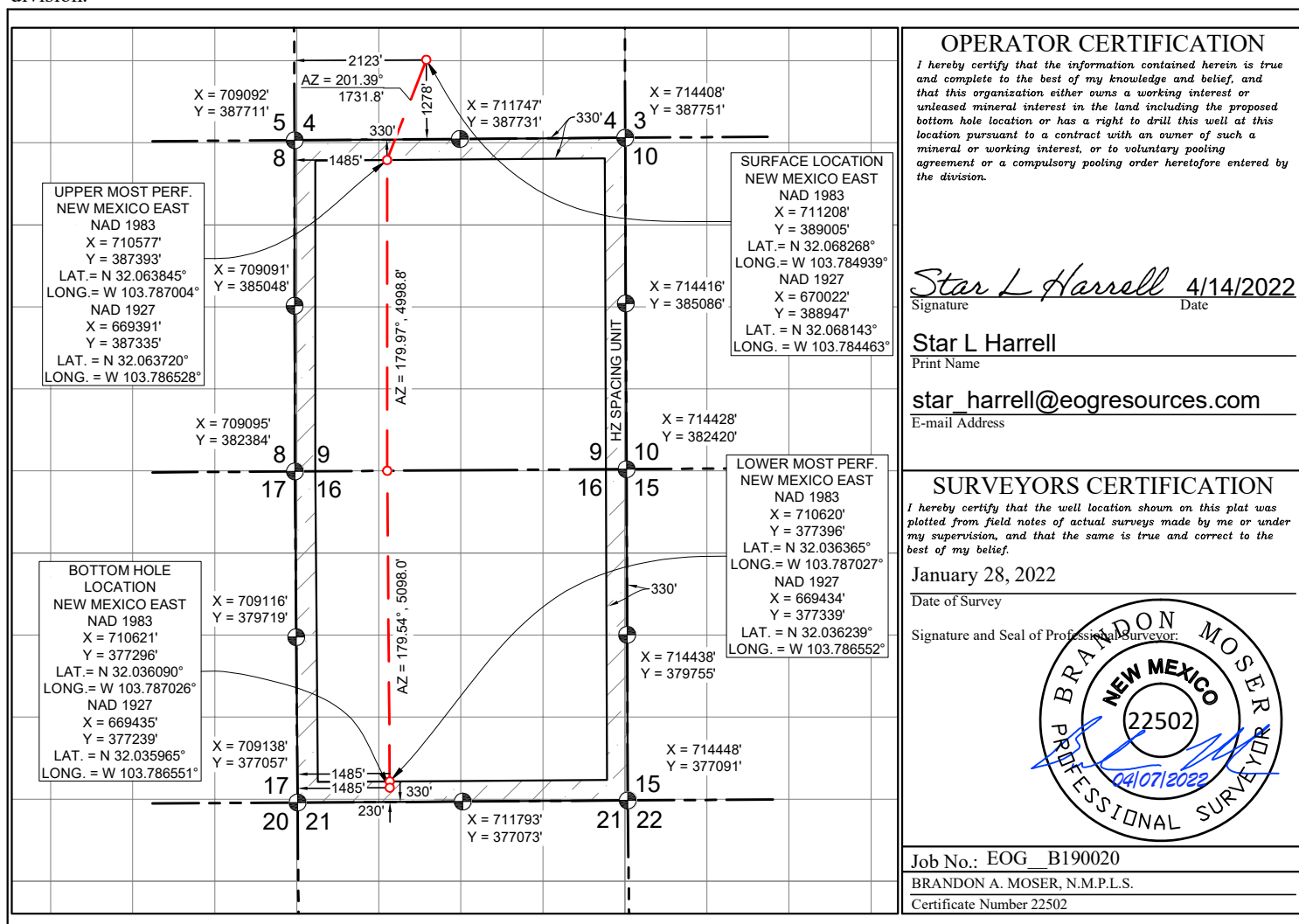
| UL or lot no. | Section  | Township    | Range       | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County      |
|---------------|----------|-------------|-------------|---------|---------------|------------------|---------------|----------------|-------------|
| <b>N</b>      | <b>4</b> | <b>26 S</b> | <b>31 E</b> |         | <b>1278</b>   | <b>SOUTH</b>     | <b>2123</b>   | <b>WEST</b>    | <b>EDDY</b> |

## 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>N</b>      | <b>16</b> | <b>26 S</b> | <b>31 E</b> |         | <b>230</b>    | <b>SOUTH</b>     | <b>1485</b>   | <b>WEST</b>    | <b>EDDY</b> |

| Dedicated Acres | Joint or Infill | Consolidated Code | Order No. |
|-----------------|-----------------|-------------------|-----------|
| <b>1280.00</b>  |                 |                   |           |

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.





### Deep Elem 4 Fed Com 712H

#### Revised Permit Information 04/12/2022:

Well Name: Deep Elem 4 Fed Com 712H

Location: SHL: 1278' FSL & 2123' FWL, Section 4, T-26-S, R-31-E, Eddy Co., N.M.

BHL: 230' FSL & 1485' FWL, Section 16, T-26-S, R-31-E, Eddy Co., N.M.

#### Casing Program:

| Hole Size | Interval MD |         | Interval TVD |         | Csg OD | Weight | Grade   | Conn          |
|-----------|-------------|---------|--------------|---------|--------|--------|---------|---------------|
|           | From (ft)   | To (ft) | From (ft)    | To (ft) |        |        |         |               |
| 12-1/4"   | 0           | 1,430   | 0            | 1,430   | 9-5/8" | 36#    | J-55    | LTC           |
| 8-3/4"    | 0           | 10,370  | 0            | 10,167  | 7-5/8" | 29.7#  | HCP-110 | FXL           |
| 6-3/4"    | 0           | 9,870   | 0            | 9,667   | 5-1/2" | 20#    | P110-EC | DWC/C IS MS   |
| 6-3/4"    | 9,870       | 10,370  | 9,667        | 10,167  | 5-1/2" | 20#    | P110-EC | Vam Sprint SF |
| 6-3/4"    | 10,370      | 21,922  | 10,167       | 11,499  | 5-1/2" | 20#    | P110-EC | DWC/C IS MS   |

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

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

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

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

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

#### Cementing Program:

| Depth             | No. Sacks | Wt. ppg | Yld Ft3/sk | Slurry Description                                                                                   |
|-------------------|-----------|---------|------------|------------------------------------------------------------------------------------------------------|
| 1,430'<br>9-5/8"  | 380       | 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 @ 1,230')        |
| 10,370'<br>7-5/8" | 490       | 14.2    | 1.11       | 1st Stage (Tail): Class C + 0.6% Halad-9 + 0.45% HR-601 + 3% Microbond (TOC @ 6,180')                |
|                   | 1060      | 14.8    | 1.5        | 2nd Stage (Bradenhead squeeze): Class C + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (TOC @ surface)   |
| 21,922'<br>5-1/2" | 1020      | 14.2    | 1.31       | Lead: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 9,870')                          |



### Deep Elem 4 Fed Com 712H

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

EOG requests variance from minimum standards to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon (6,379') and the second stage performed as a 1000 sack bradenhead squeeze with planned cement from the Brushy Canyon to surface. If necessary, a top out consisting of 60 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 will be verified by Echo-meter.

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

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

#### Mud Program:

| Measured Depth               | Type        | Weight (ppg) | Viscosity | Water Loss |
|------------------------------|-------------|--------------|-----------|------------|
| 0 – 1,430'                   | Fresh - Gel | 8.6-8.8      | 28-34     | N/c        |
| 1,430' – 10,370'             | Brine       | 10.0-10.2    | 28-34     | N/c        |
| 10,370' – 11,272'            | Oil Base    | 8.7-9.4      | 58-68     | N/c - 6    |
| 11,272' – 21,922'<br>Lateral | Oil Base    | 10.0-14.0    | 58-68     | 4 - 6      |



## Deep Elem 4 Fed Com 712H

### Wellhead & Offline Cementing:

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

- Full BOPE test at first installation on the pad.
- Full BOPE test every 30 days per Onshore Order No. 2.
- Function test BOP elements per Onshore Order No. 2.
- Break testing BOP and BOPE coupled with batch drilling operations and option to offline cement and/or remediate (if needed) any surface or intermediate sections, according to attached offline cementing support documentation.
- After the well section is secured, the BOP will be disconnected from the wellhead and walked with the rig to another well on the pad.
- TA cap will also be installed per Wellhead vendor procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.
- See attached "EOG BLM Variance 3a -Offline Cement Intermediate Operational Procedure"



## Deep Elem 4 Fed Com 712H

1278' FSL  
2123' FWL  
Section 4  
T-26-S, R-31-E

Revised Wellbore

KB: 3306'  
GL: 3281'

API: 30-025-48258

**Bit Size: 12-1/4"**  
9-5/8", 36#, J-55, LTC,  
@ 0' - 1,430'

**Bit Size: 8-3/4"**  
7-5/8", 29.7#, HCP-110, FXL,  
@ 0' - 10,370'

**Bit Size: 6-3/4"**  
5-1/2", 20#, P110-EC, DWC/C IS MS,  
@ 0' - 9,870'  
5-1/2", 20#, P110-EC, Vam Sprint SF,  
@ 9,870' - 10,370'  
5-1/2", 20#, P110-EC, DWC/C IS MS,  
@ 10,370' - 21,922'

KOP: 11,272' MD, 11,022' TVD  
EOC: 12,022' MD, 11,499' TVD

TOC: 9,870' MD, 9,667' TVD

Lateral: 21,922' MD, 11,499' TVD  
Upper Most Perf:  
330' FNL & 1485' FWL Sec. 9  
Lower Most Perf:  
330' FSL & 1485' FWL Sec. 16  
BH Location: 230' FSL & 1485' FWL  
Sec. 16  
T-26-S R-31-E



## Deep Elem 4 Fed Com 712H

### Design B

### 4. CASING PROGRAM

| Hole Size | Interval MD |         | Interval TVD |         | Csg OD  | Weight | Grade   | Conn          |
|-----------|-------------|---------|--------------|---------|---------|--------|---------|---------------|
|           | From (ft)   | To (ft) | From (ft)    | To (ft) |         |        |         |               |
| 13"       | 0           | 1,430   | 0            | 1,430   | 10-3/4" | 40.5#  | J-55    | STC           |
| 9-7/8"    | 0           | 10,370  | 0            | 10,167  | 8-3/4"  | 38.5#  | P110-EC | Vam Sprint-SF |
| 7-7/8"    | 0           | 21,922  | 0            | 11,499  | 6"      | 24#    | P110-HP | Eagle SFH SC  |

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

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

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

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

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

### Cementing Program:

| Depth             | No. Sacks | Wt. ppg | Yld Ft3/sk | Slurry Description                                                                                   |
|-------------------|-----------|---------|------------|------------------------------------------------------------------------------------------------------|
| 1,430'<br>10-3/4" | 360       | 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) |
|                   | 70        | 14.8    | 1.34       | Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate (TOC @ 1,230')        |
| 10,370'<br>8-3/4" | 560       | 14.2    | 1.11       | 1st Stage (Tail): Class C + 0.6% Halad-9 + 0.45% HR-601 + 3% Microbond (TOC @ 6,180')                |
|                   | 1200      | 14.8    | 1.5        | 2nd Stage (Bradenhead squeeze): Class C + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (TOC @ surface)   |
| 21,922'<br>6"     | 1680      | 14.2    | 1.31       | Lead: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 9,870')                          |



### Deep Elem 4 Fed Com 712H

EOG requests variance from minimum standards to pump a two stage cement job on the 8-3/4" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon (6,379') and the second stage performed as a 1000 sack bradenhead squeeze with planned cement from the Brushy Canyon to surface. If necessary, a top out consisting of 204 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 will be verified by Echo-meter.

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

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

### Wellhead & Offline Cementing:

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

- Full BOPE test at first installation on the pad.
- Full BOPE test every 30 days per Onshore Order No. 2.
- Function test BOP elements per Onshore Order No. 2.
- Break testing BOP and BOPE coupled with batch drilling operations and option to offline cement and/or remediate (if needed) any surface or intermediate sections, according to attached offline cementing support documentation.
- After the well section is secured, the BOP will be disconnected from the wellhead and walked with the rig to another well on the pad.
- TA cap will also be installed per Wellhead vendor procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.
- See attached "EOG BLM Variance 3a -Offline Cement Intermediate Operational Procedure"



## Deep Elem 4 Fed Com 712H

1278' FSL  
2123' FWL  
Section 4  
T-26-S, R-31-E

Proposed Wellbore

KB: 3306'  
GL: 3281'

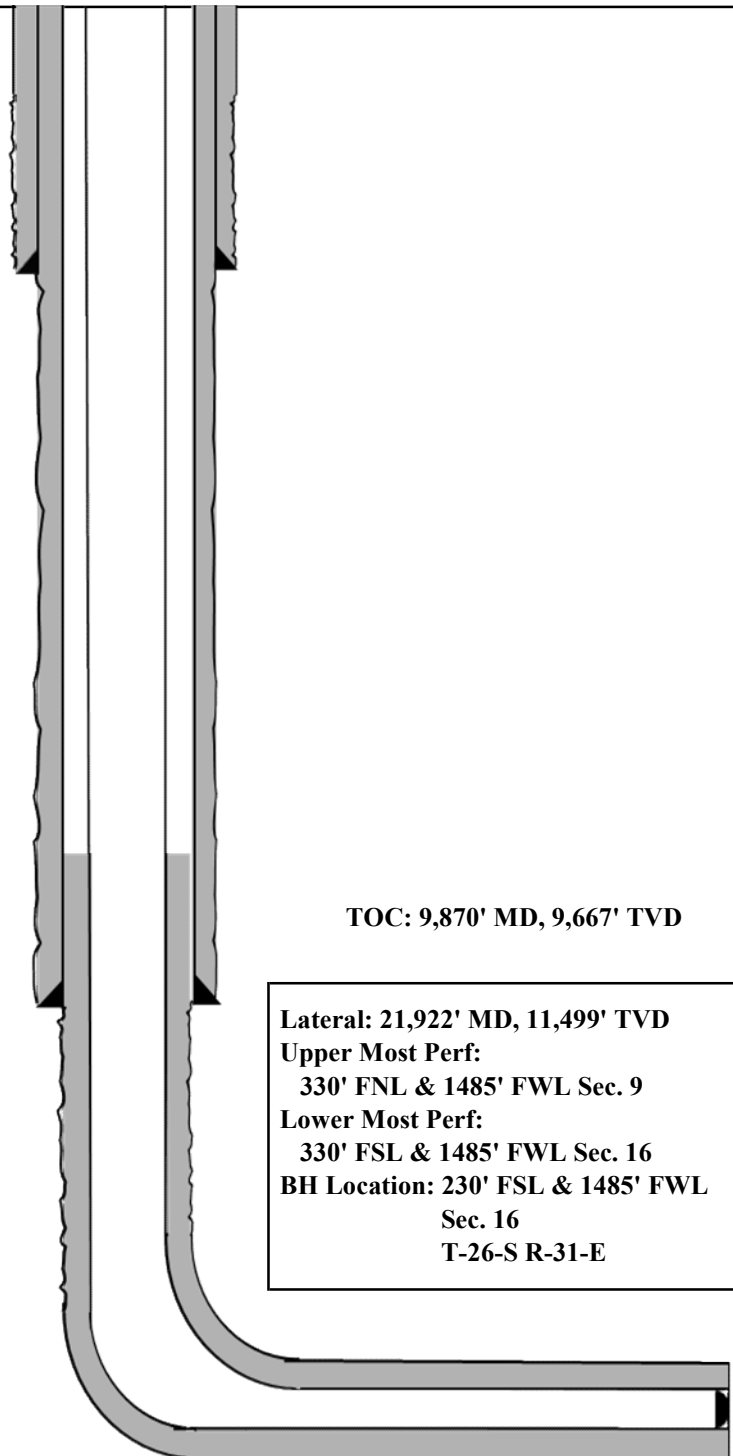
API: 30-025-48258

**Bit Size: 13"**  
10-3/4", 40.5#, J-55, STC,  
@ 0' - 1,430'

**Bit Size: 9-7/8"**  
8-3/4" 38.5#, P110-EC, Vam Sprint-SF,  
@ 0' - 10,370'

**Bit Size: 7-7/8"**  
6", 24#, P110-HP, Eagle SFH SC,  
@ 0' - 21,922'

KOP: 11,272' MD, 11,022' TVD  
EOC: 12,022' MD, 11,499' TVD



TOC: 9,870' MD, 9,667' TVD

Lateral: 21,922' MD, 11,499' TVD  
Upper Most Perf:  
330' FNL & 1485' FWL Sec. 9  
Lower Most Perf:  
330' FSL & 1485' FWL Sec. 16  
BH Location: 230' FSL & 1485' FWL  
Sec. 16  
T-26-S R-31-E



## Midland

Eddy County, NM (NAD 83 NME)

Deep Elem 4 Fed Com

#712H

OH

Plan: Plan #0.6

## Standard Planning Report

10 April, 2022





## Planning Report



|                  |                              |                                     |                       |
|------------------|------------------------------|-------------------------------------|-----------------------|
| <b>Database:</b> | PEDM                         | <b>Local Co-ordinate Reference:</b> | Well #712H            |
| <b>Company:</b>  | Midland                      | <b>TVD Reference:</b>               | KB = 26' @ 3307.0usft |
| <b>Project:</b>  | Eddy County, NM (NAD 83 NME) | <b>MD Reference:</b>                | KB = 26' @ 3307.0usft |
| <b>Site:</b>     | Deep Elem 4 Fed Com          | <b>North Reference:</b>             | Grid                  |
| <b>Well:</b>     | #712H                        | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Wellbore:</b> | OH                           |                                     |                       |
| <b>Design:</b>   | Plan #0.6                    |                                     |                       |

|                    |                              |                      |                |
|--------------------|------------------------------|----------------------|----------------|
| <b>Project</b>     | Eddy 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>                  | Deep Elem 4 Fed Com |                     |                 |
| <b>Site Position:</b>        |                     | <b>Northing:</b>    | 388,239.00 usft |
| <b>From:</b>                 | Map                 | <b>Easting:</b>     | 713,374.00 usft |
| <b>Position Uncertainty:</b> | 0.0 usft            | <b>Slot Radius:</b> | 13-3/16 "       |
|                              |                     | <b>Latitude:</b>    | 32.0661319°N    |
|                              |                     | <b>Longitude:</b>   | 103.7779603°W   |

|                             |              |                            |                                  |
|-----------------------------|--------------|----------------------------|----------------------------------|
| <b>Well</b>                 | #712H        |                            |                                  |
| <b>Well Position</b>        | <b>+N/-S</b> | 0.0 usft                   | <b>Northing:</b> 389,005.00 usft |
|                             | <b>+E/-W</b> | 0.0 usft                   | <b>Easting:</b> 711,208.00 usft  |
| <b>Position Uncertainty</b> | 0.0 usft     | <b>Wellhead Elevation:</b> | usft                             |
| <b>Grid Convergence:</b>    | 0.29 °       | <b>Ground Level:</b>       | 3,281.0 usft                     |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | OH                |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | IGRF2015          | 8/2/2018           | 6.92                   | 59.87                | 47,708.51825666            |

|                          |                                |                     |                     |                      |     |
|--------------------------|--------------------------------|---------------------|---------------------|----------------------|-----|
| <b>Design</b>            | Plan #0.6                      |                     |                     |                      |     |
| <b>Audit Notes:</b>      |                                |                     |                     |                      |     |
| <b>Version:</b>          |                                | <b>Phase:</b>       | PLAN                | <b>Tie On Depth:</b> | 0.0 |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Direction (°)</b> |     |
|                          | 0.0                            | 0.0                 | 0.0                 | 182.87               |     |

|                                 |                        |                          |                  |                |  |
|---------------------------------|------------------------|--------------------------|------------------|----------------|--|
| <b>Plan Survey Tool Program</b> | <b>Date</b>            | 4/10/2022                |                  |                |  |
| <b>Depth From (usft)</b>        | <b>Depth To (usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Remarks</b> |  |
| 1                               | 0.0                    | 21,922.0                 | Plan #0.6 (OH)   | EOG MWD+IFR1   |  |
|                                 |                        |                          |                  | MWD + IFR1     |  |



## Planning Report



|                  |                              |                                     |                       |
|------------------|------------------------------|-------------------------------------|-----------------------|
| <b>Database:</b> | PEDM                         | <b>Local Co-ordinate Reference:</b> | Well #712H            |
| <b>Company:</b>  | Midland                      | <b>TVD Reference:</b>               | KB = 26' @ 3307.0usft |
| <b>Project:</b>  | Eddy County, NM (NAD 83 NME) | <b>MD Reference:</b>                | KB = 26' @ 3307.0usft |
| <b>Site:</b>     | Deep Elem 4 Fed Com          | <b>North Reference:</b>             | Grid                  |
| <b>Well:</b>     | #712H                        | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Wellbore:</b> | OH                           |                                     |                       |
| <b>Design:</b>   | Plan #0.6                    |                                     |                       |

| Plan Sections         |                 |             |                       |              |              |                         |                        |                       |         |                     |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|-----------------------|---------|---------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target              |
| 0.0                   | 0.00            | 0.00        | 0.0                   | 0.0          | 0.0          | 0.00                    | 0.00                   | 0.00                  | 0.00    |                     |
| 1,500.0               | 0.00            | 0.00        | 1,500.0               | 0.0          | 0.0          | 0.00                    | 0.00                   | 0.00                  | 0.00    |                     |
| 2,557.7               | 21.15           | 205.35      | 2,533.8               | -174.4       | -82.6        | 2.00                    | 2.00                   | 0.00                  | 205.35  |                     |
| 5,572.2               | 21.15           | 205.35      | 5,345.2               | -1,157.6     | -548.4       | 0.00                    | 0.00                   | 0.00                  | 0.00    |                     |
| 6,629.9               | 0.00            | 0.00        | 6,379.0               | -1,332.0     | -631.0       | 2.00                    | -2.00                  | 0.00                  | 180.00  |                     |
| 11,272.4              | 0.00            | 0.00        | 11,021.5              | -1,332.0     | -631.0       | 0.00                    | 0.00                   | 0.00                  | 0.00    | KOP (Deep Elem 4 Fe |
| 11,818.8              | 65.57           | 180.00      | 11,456.2              | -1,612.0     | -631.0       | 12.00                   | 12.00                  | 32.94                 | 180.00  | FTP (Deep Elem 4 Fe |
| 12,022.3              | 90.00           | 179.75      | 11,498.9              | -1,809.5     | -630.5       | 12.00                   | 12.00                  | -0.12                 | -0.61   |                     |
| 21,922.0              | 90.00           | 179.75      | 11,499.0              | -11,709.0    | -587.0       | 0.00                    | 0.00                   | 0.00                  | 0.00    | PBHL (Deep Elem 4 F |



## Planning Report



|                  |                              |                                     |                       |
|------------------|------------------------------|-------------------------------------|-----------------------|
| <b>Database:</b> | PEDM                         | <b>Local Co-ordinate Reference:</b> | Well #712H            |
| <b>Company:</b>  | Midland                      | <b>TVD Reference:</b>               | KB = 26' @ 3307.0usft |
| <b>Project:</b>  | Eddy County, NM (NAD 83 NME) | <b>MD Reference:</b>                | KB = 26' @ 3307.0usft |
| <b>Site:</b>     | Deep Elem 4 Fed Com          | <b>North Reference:</b>             | Grid                  |
| <b>Well:</b>     | #712H                        | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Wellbore:</b> | OH                           |                                     |                       |
| <b>Design:</b>   | Plan #0.6                    |                                     |                       |

| Planned Survey        |                 |             |                       |              |              |                         |                         |                        |                       |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 0.0                   | 0.00            | 0.00        | 0.0                   | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 100.0                 | 0.00            | 0.00        | 100.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 200.0                 | 0.00            | 0.00        | 200.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 300.0                 | 0.00            | 0.00        | 300.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 400.0                 | 0.00            | 0.00        | 400.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 500.0                 | 0.00            | 0.00        | 500.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 600.0                 | 0.00            | 0.00        | 600.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 700.0                 | 0.00            | 0.00        | 700.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 800.0                 | 0.00            | 0.00        | 800.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 900.0                 | 0.00            | 0.00        | 900.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,000.0               | 0.00            | 0.00        | 1,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,100.0               | 0.00            | 0.00        | 1,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,200.0               | 0.00            | 0.00        | 1,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,300.0               | 0.00            | 0.00        | 1,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,400.0               | 0.00            | 0.00        | 1,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,500.0               | 0.00            | 0.00        | 1,500.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,600.0               | 2.00            | 205.35      | 1,600.0               | -1.6         | -0.7         | 1.6                     | 2.00                    | 2.00                   | 0.00                  |
| 1,700.0               | 4.00            | 205.35      | 1,699.8               | -6.3         | -3.0         | 6.4                     | 2.00                    | 2.00                   | 0.00                  |
| 1,800.0               | 6.00            | 205.35      | 1,799.5               | -14.2        | -6.7         | 14.5                    | 2.00                    | 2.00                   | 0.00                  |
| 1,900.0               | 8.00            | 205.35      | 1,898.7               | -25.2        | -11.9        | 25.8                    | 2.00                    | 2.00                   | 0.00                  |
| 2,000.0               | 10.00           | 205.35      | 1,997.5               | -39.3        | -18.6        | 40.2                    | 2.00                    | 2.00                   | 0.00                  |
| 2,100.0               | 12.00           | 205.35      | 2,095.6               | -56.6        | -26.8        | 57.8                    | 2.00                    | 2.00                   | 0.00                  |
| 2,200.0               | 14.00           | 205.35      | 2,193.1               | -76.9        | -36.4        | 78.6                    | 2.00                    | 2.00                   | 0.00                  |
| 2,300.0               | 16.00           | 205.35      | 2,289.6               | -100.3       | -47.5        | 102.5                   | 2.00                    | 2.00                   | 0.00                  |
| 2,400.0               | 18.00           | 205.35      | 2,385.3               | -126.7       | -60.0        | 129.6                   | 2.00                    | 2.00                   | 0.00                  |
| 2,500.0               | 20.00           | 205.35      | 2,479.8               | -156.1       | -74.0        | 159.6                   | 2.00                    | 2.00                   | 0.00                  |
| 2,557.7               | 21.15           | 205.35      | 2,533.8               | -174.4       | -82.6        | 178.4                   | 2.00                    | 2.00                   | 0.00                  |
| 2,600.0               | 21.15           | 205.35      | 2,573.3               | -188.3       | -89.2        | 192.5                   | 0.00                    | 0.00                   | 0.00                  |
| 2,700.0               | 21.15           | 205.35      | 2,666.5               | -220.9       | -104.6       | 225.8                   | 0.00                    | 0.00                   | 0.00                  |
| 2,800.0               | 21.15           | 205.35      | 2,759.8               | -253.5       | -120.1       | 259.2                   | 0.00                    | 0.00                   | 0.00                  |
| 2,900.0               | 21.15           | 205.35      | 2,853.1               | -286.1       | -135.5       | 292.5                   | 0.00                    | 0.00                   | 0.00                  |
| 3,000.0               | 21.15           | 205.35      | 2,946.3               | -318.7       | -151.0       | 325.9                   | 0.00                    | 0.00                   | 0.00                  |
| 3,100.0               | 21.15           | 205.35      | 3,039.6               | -351.3       | -166.4       | 359.2                   | 0.00                    | 0.00                   | 0.00                  |
| 3,200.0               | 21.15           | 205.35      | 3,132.9               | -383.9       | -181.9       | 392.6                   | 0.00                    | 0.00                   | 0.00                  |
| 3,300.0               | 21.15           | 205.35      | 3,226.1               | -416.5       | -197.3       | 425.9                   | 0.00                    | 0.00                   | 0.00                  |
| 3,400.0               | 21.15           | 205.35      | 3,319.4               | -449.2       | -212.8       | 459.2                   | 0.00                    | 0.00                   | 0.00                  |
| 3,500.0               | 21.15           | 205.35      | 3,412.6               | -481.8       | -228.2       | 492.6                   | 0.00                    | 0.00                   | 0.00                  |
| 3,600.0               | 21.15           | 205.35      | 3,505.9               | -514.4       | -243.7       | 525.9                   | 0.00                    | 0.00                   | 0.00                  |
| 3,700.0               | 21.15           | 205.35      | 3,599.2               | -547.0       | -259.1       | 559.3                   | 0.00                    | 0.00                   | 0.00                  |
| 3,800.0               | 21.15           | 205.35      | 3,692.4               | -579.6       | -274.6       | 592.6                   | 0.00                    | 0.00                   | 0.00                  |
| 3,900.0               | 21.15           | 205.35      | 3,785.7               | -612.2       | -290.0       | 626.0                   | 0.00                    | 0.00                   | 0.00                  |
| 4,000.0               | 21.15           | 205.35      | 3,878.9               | -644.8       | -305.5       | 659.3                   | 0.00                    | 0.00                   | 0.00                  |
| 4,100.0               | 21.15           | 205.35      | 3,972.2               | -677.4       | -320.9       | 692.7                   | 0.00                    | 0.00                   | 0.00                  |
| 4,200.0               | 21.15           | 205.35      | 4,065.5               | -710.1       | -336.4       | 726.0                   | 0.00                    | 0.00                   | 0.00                  |
| 4,300.0               | 21.15           | 205.35      | 4,158.7               | -742.7       | -351.8       | 759.3                   | 0.00                    | 0.00                   | 0.00                  |
| 4,400.0               | 21.15           | 205.35      | 4,252.0               | -775.3       | -367.3       | 792.7                   | 0.00                    | 0.00                   | 0.00                  |
| 4,500.0               | 21.15           | 205.35      | 4,345.3               | -807.9       | -382.7       | 826.0                   | 0.00                    | 0.00                   | 0.00                  |
| 4,600.0               | 21.15           | 205.35      | 4,438.5               | -840.5       | -398.2       | 859.4                   | 0.00                    | 0.00                   | 0.00                  |
| 4,700.0               | 21.15           | 205.35      | 4,531.8               | -873.1       | -413.6       | 892.7                   | 0.00                    | 0.00                   | 0.00                  |
| 4,800.0               | 21.15           | 205.35      | 4,625.0               | -905.7       | -429.1       | 926.1                   | 0.00                    | 0.00                   | 0.00                  |
| 4,900.0               | 21.15           | 205.35      | 4,718.3               | -938.3       | -444.5       | 959.4                   | 0.00                    | 0.00                   | 0.00                  |
| 5,000.0               | 21.15           | 205.35      | 4,811.6               | -970.9       | -460.0       | 992.8                   | 0.00                    | 0.00                   | 0.00                  |
| 5,100.0               | 21.15           | 205.35      | 4,904.8               | -1,003.6     | -475.4       | 1,026.1                 | 0.00                    | 0.00                   | 0.00                  |
| 5,200.0               | 21.15           | 205.35      | 4,998.1               | -1,036.2     | -490.9       | 1,059.4                 | 0.00                    | 0.00                   | 0.00                  |



## Planning Report



|                  |                              |                                     |                       |
|------------------|------------------------------|-------------------------------------|-----------------------|
| <b>Database:</b> | PEDM                         | <b>Local Co-ordinate Reference:</b> | Well #712H            |
| <b>Company:</b>  | Midland                      | <b>TVD Reference:</b>               | KB = 26' @ 3307.0usft |
| <b>Project:</b>  | Eddy County, NM (NAD 83 NME) | <b>MD Reference:</b>                | KB = 26' @ 3307.0usft |
| <b>Site:</b>     | Deep Elem 4 Fed Com          | <b>North Reference:</b>             | Grid                  |
| <b>Well:</b>     | #712H                        | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Wellbore:</b> | OH                           |                                     |                       |
| <b>Design:</b>   | Plan #0.6                    |                                     |                       |

| Planned Survey        |                 |             |                       |              |              |                         |                         |                        |                       |  |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 5,300.0               | 21.15           | 205.35      | 5,091.4               | -1,068.8     | -506.3       | 1,092.8                 | 0.00                    | 0.00                   | 0.00                  |  |
| 5,400.0               | 21.15           | 205.35      | 5,184.6               | -1,101.4     | -521.8       | 1,126.1                 | 0.00                    | 0.00                   | 0.00                  |  |
| 5,500.0               | 21.15           | 205.35      | 5,277.9               | -1,134.0     | -537.2       | 1,159.5                 | 0.00                    | 0.00                   | 0.00                  |  |
| 5,572.2               | 21.15           | 205.35      | 5,345.2               | -1,157.6     | -548.4       | 1,183.6                 | 0.00                    | 0.00                   | 0.00                  |  |
| 5,600.0               | 20.60           | 205.35      | 5,371.2               | -1,166.5     | -552.6       | 1,192.7                 | 2.00                    | -2.00                  | 0.00                  |  |
| 5,700.0               | 18.60           | 205.35      | 5,465.4               | -1,196.8     | -567.0       | 1,223.7                 | 2.00                    | -2.00                  | 0.00                  |  |
| 5,800.0               | 16.60           | 205.35      | 5,560.7               | -1,224.1     | -579.9       | 1,251.6                 | 2.00                    | -2.00                  | 0.00                  |  |
| 5,900.0               | 14.60           | 205.35      | 5,657.0               | -1,248.4     | -591.4       | 1,276.5                 | 2.00                    | -2.00                  | 0.00                  |  |
| 6,000.0               | 12.60           | 205.35      | 5,754.2               | -1,269.7     | -601.5       | 1,298.2                 | 2.00                    | -2.00                  | 0.00                  |  |
| 6,100.0               | 10.60           | 205.35      | 5,852.2               | -1,287.8     | -610.1       | 1,316.8                 | 2.00                    | -2.00                  | 0.00                  |  |
| 6,200.0               | 8.60            | 205.35      | 5,950.8               | -1,302.9     | -617.2       | 1,332.2                 | 2.00                    | -2.00                  | 0.00                  |  |
| 6,300.0               | 6.60            | 205.35      | 6,049.9               | -1,314.9     | -622.9       | 1,344.4                 | 2.00                    | -2.00                  | 0.00                  |  |
| 6,400.0               | 4.60            | 205.35      | 6,149.4               | -1,323.7     | -627.1       | 1,353.4                 | 2.00                    | -2.00                  | 0.00                  |  |
| 6,500.0               | 2.60            | 205.35      | 6,249.2               | -1,329.3     | -629.7       | 1,359.2                 | 2.00                    | -2.00                  | 0.00                  |  |
| 6,600.0               | 0.60            | 205.35      | 6,349.1               | -1,331.9     | -630.9       | 1,361.8                 | 2.00                    | -2.00                  | 0.00                  |  |
| 6,629.9               | 0.00            | 0.00        | 6,379.0               | -1,332.0     | -631.0       | 1,361.9                 | 2.00                    | -2.00                  | 0.00                  |  |
| 6,700.0               | 0.00            | 0.00        | 6,449.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 6,800.0               | 0.00            | 0.00        | 6,549.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 6,900.0               | 0.00            | 0.00        | 6,649.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 7,000.0               | 0.00            | 0.00        | 6,749.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 7,100.0               | 0.00            | 0.00        | 6,849.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 7,200.0               | 0.00            | 0.00        | 6,949.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 7,300.0               | 0.00            | 0.00        | 7,049.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 7,400.0               | 0.00            | 0.00        | 7,149.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 7,500.0               | 0.00            | 0.00        | 7,249.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 7,600.0               | 0.00            | 0.00        | 7,349.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 7,700.0               | 0.00            | 0.00        | 7,449.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 7,800.0               | 0.00            | 0.00        | 7,549.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 7,900.0               | 0.00            | 0.00        | 7,649.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 8,000.0               | 0.00            | 0.00        | 7,749.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 8,100.0               | 0.00            | 0.00        | 7,849.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 8,200.0               | 0.00            | 0.00        | 7,949.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 8,300.0               | 0.00            | 0.00        | 8,049.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 8,400.0               | 0.00            | 0.00        | 8,149.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 8,500.0               | 0.00            | 0.00        | 8,249.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 8,600.0               | 0.00            | 0.00        | 8,349.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 8,700.0               | 0.00            | 0.00        | 8,449.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 8,800.0               | 0.00            | 0.00        | 8,549.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 8,900.0               | 0.00            | 0.00        | 8,649.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 9,000.0               | 0.00            | 0.00        | 8,749.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 9,100.0               | 0.00            | 0.00        | 8,849.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 9,200.0               | 0.00            | 0.00        | 8,949.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 9,300.0               | 0.00            | 0.00        | 9,049.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 9,400.0               | 0.00            | 0.00        | 9,149.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 9,500.0               | 0.00            | 0.00        | 9,249.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 9,600.0               | 0.00            | 0.00        | 9,349.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 9,700.0               | 0.00            | 0.00        | 9,449.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 9,800.0               | 0.00            | 0.00        | 9,549.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 9,900.0               | 0.00            | 0.00        | 9,649.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 10,000.0              | 0.00            | 0.00        | 9,749.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 10,100.0              | 0.00            | 0.00        | 9,849.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 10,200.0              | 0.00            | 0.00        | 9,949.1               | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 10,300.0              | 0.00            | 0.00        | 10,049.1              | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 10,400.0              | 0.00            | 0.00        | 10,149.1              | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |  |



## Planning Report



|                  |                              |                                     |                       |
|------------------|------------------------------|-------------------------------------|-----------------------|
| <b>Database:</b> | PEDM                         | <b>Local Co-ordinate Reference:</b> | Well #712H            |
| <b>Company:</b>  | Midland                      | <b>TVD Reference:</b>               | KB = 26' @ 3307.0usft |
| <b>Project:</b>  | Eddy County, NM (NAD 83 NME) | <b>MD Reference:</b>                | KB = 26' @ 3307.0usft |
| <b>Site:</b>     | Deep Elem 4 Fed Com          | <b>North Reference:</b>             | Grid                  |
| <b>Well:</b>     | #712H                        | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Wellbore:</b> | OH                           |                                     |                       |
| <b>Design:</b>   | Plan #0.6                    |                                     |                       |

| 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) |
| 10,500.0              | 0.00            | 0.00        | 10,249.1              | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |
| 10,600.0              | 0.00            | 0.00        | 10,349.1              | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |
| 10,700.0              | 0.00            | 0.00        | 10,449.1              | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |
| 10,800.0              | 0.00            | 0.00        | 10,549.1              | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |
| 10,900.0              | 0.00            | 0.00        | 10,649.1              | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |
| 11,000.0              | 0.00            | 0.00        | 10,749.1              | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |
| 11,100.0              | 0.00            | 0.00        | 10,849.1              | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |
| 11,200.0              | 0.00            | 0.00        | 10,949.1              | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |
| 11,272.4              | 0.00            | 0.00        | 11,021.5              | -1,332.0     | -631.0       | 1,361.9                 | 0.00                    | 0.00                   | 0.00                  |
| 11,275.0              | 0.32            | 180.00      | 11,024.1              | -1,332.0     | -631.0       | 1,361.9                 | 12.00                   | 12.00                  | 0.00                  |
| 11,300.0              | 3.32            | 180.00      | 11,049.1              | -1,332.8     | -631.0       | 1,362.7                 | 12.00                   | 12.00                  | 0.00                  |
| 11,325.0              | 6.32            | 180.00      | 11,074.0              | -1,334.9     | -631.0       | 1,364.8                 | 12.00                   | 12.00                  | 0.00                  |
| 11,350.0              | 9.32            | 180.00      | 11,098.8              | -1,338.3     | -631.0       | 1,368.2                 | 12.00                   | 12.00                  | 0.00                  |
| 11,375.0              | 12.32           | 180.00      | 11,123.4              | -1,343.0     | -631.0       | 1,372.9                 | 12.00                   | 12.00                  | 0.00                  |
| 11,400.0              | 15.32           | 180.00      | 11,147.6              | -1,349.0     | -631.0       | 1,378.9                 | 12.00                   | 12.00                  | 0.00                  |
| 11,425.0              | 18.32           | 180.00      | 11,171.6              | -1,356.2     | -631.0       | 1,386.1                 | 12.00                   | 12.00                  | 0.00                  |
| 11,450.0              | 21.32           | 180.00      | 11,195.1              | -1,364.7     | -631.0       | 1,394.6                 | 12.00                   | 12.00                  | 0.00                  |
| 11,475.0              | 24.32           | 180.00      | 11,218.1              | -1,374.4     | -631.0       | 1,404.2                 | 12.00                   | 12.00                  | 0.00                  |
| 11,500.0              | 27.32           | 180.00      | 11,240.6              | -1,385.3     | -631.0       | 1,415.1                 | 12.00                   | 12.00                  | 0.00                  |
| 11,525.0              | 30.32           | 180.00      | 11,262.5              | -1,397.3     | -631.0       | 1,427.1                 | 12.00                   | 12.00                  | 0.00                  |
| 11,550.0              | 33.32           | 180.00      | 11,283.8              | -1,410.5     | -631.0       | 1,440.3                 | 12.00                   | 12.00                  | 0.00                  |
| 11,575.0              | 36.32           | 180.00      | 11,304.3              | -1,424.8     | -631.0       | 1,454.6                 | 12.00                   | 12.00                  | 0.00                  |
| 11,600.0              | 39.32           | 180.00      | 11,324.0              | -1,440.1     | -631.0       | 1,469.9                 | 12.00                   | 12.00                  | 0.00                  |
| 11,625.0              | 42.32           | 180.00      | 11,342.9              | -1,456.4     | -631.0       | 1,486.2                 | 12.00                   | 12.00                  | 0.00                  |
| 11,650.0              | 45.32           | 180.00      | 11,361.0              | -1,473.7     | -631.0       | 1,503.5                 | 12.00                   | 12.00                  | 0.00                  |
| 11,675.0              | 48.32           | 180.00      | 11,378.1              | -1,492.0     | -631.0       | 1,521.7                 | 12.00                   | 12.00                  | 0.00                  |
| 11,700.0              | 51.32           | 180.00      | 11,394.2              | -1,511.1     | -631.0       | 1,540.8                 | 12.00                   | 12.00                  | 0.00                  |
| 11,725.0              | 54.32           | 180.00      | 11,409.3              | -1,531.0     | -631.0       | 1,560.6                 | 12.00                   | 12.00                  | 0.00                  |
| 11,750.0              | 57.32           | 180.00      | 11,423.4              | -1,551.7     | -631.0       | 1,581.3                 | 12.00                   | 12.00                  | 0.00                  |
| 11,775.0              | 60.32           | 180.00      | 11,436.3              | -1,573.0     | -631.0       | 1,602.7                 | 12.00                   | 12.00                  | 0.00                  |
| 11,800.0              | 63.32           | 180.00      | 11,448.1              | -1,595.1     | -631.0       | 1,624.7                 | 12.00                   | 12.00                  | 0.00                  |
| 11,818.8              | 65.57           | 180.00      | 11,456.2              | -1,612.0     | -631.0       | 1,641.6                 | 12.00                   | 12.00                  | 0.00                  |
| 11,825.0              | 66.32           | 179.99      | 11,458.7              | -1,617.7     | -631.0       | 1,647.3                 | 12.00                   | 12.00                  | -0.14                 |
| 11,850.0              | 69.32           | 179.96      | 11,468.2              | -1,640.8     | -631.0       | 1,670.4                 | 12.00                   | 12.00                  | -0.14                 |
| 11,875.0              | 72.32           | 179.92      | 11,476.4              | -1,664.5     | -631.0       | 1,694.0                 | 12.00                   | 12.00                  | -0.13                 |
| 11,900.0              | 75.32           | 179.89      | 11,483.4              | -1,688.5     | -630.9       | 1,717.9                 | 12.00                   | 12.00                  | -0.13                 |
| 11,925.0              | 78.32           | 179.86      | 11,489.1              | -1,712.8     | -630.9       | 1,742.2                 | 12.00                   | 12.00                  | -0.12                 |
| 11,950.0              | 81.32           | 179.83      | 11,493.5              | -1,737.4     | -630.8       | 1,766.8                 | 12.00                   | 12.00                  | -0.12                 |
| 11,975.0              | 84.32           | 179.80      | 11,496.6              | -1,762.2     | -630.7       | 1,791.6                 | 12.00                   | 12.00                  | -0.12                 |
| 12,000.0              | 87.32           | 179.77      | 11,498.4              | -1,787.1     | -630.6       | 1,816.5                 | 12.00                   | 12.00                  | -0.12                 |
| 12,022.3              | 90.00           | 179.75      | 11,498.9              | -1,809.5     | -630.5       | 1,838.8                 | 12.00                   | 12.00                  | -0.12                 |
| 12,100.0              | 90.00           | 179.75      | 11,498.9              | -1,887.1     | -630.2       | 1,916.3                 | 0.00                    | 0.00                   | 0.00                  |
| 12,200.0              | 90.00           | 179.75      | 11,498.9              | -1,987.1     | -629.8       | 2,016.2                 | 0.00                    | 0.00                   | 0.00                  |
| 12,300.0              | 90.00           | 179.75      | 11,498.9              | -2,087.1     | -629.3       | 2,116.0                 | 0.00                    | 0.00                   | 0.00                  |
| 12,400.0              | 90.00           | 179.75      | 11,498.9              | -2,187.1     | -628.9       | 2,215.9                 | 0.00                    | 0.00                   | 0.00                  |
| 12,500.0              | 90.00           | 179.75      | 11,498.9              | -2,287.1     | -628.4       | 2,315.7                 | 0.00                    | 0.00                   | 0.00                  |
| 12,600.0              | 90.00           | 179.75      | 11,498.9              | -2,387.1     | -628.0       | 2,415.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,700.0              | 90.00           | 179.75      | 11,498.9              | -2,487.1     | -627.6       | 2,515.4                 | 0.00                    | 0.00                   | 0.00                  |
| 12,800.0              | 90.00           | 179.75      | 11,498.9              | -2,587.1     | -627.1       | 2,615.3                 | 0.00                    | 0.00                   | 0.00                  |
| 12,900.0              | 90.00           | 179.75      | 11,498.9              | -2,687.1     | -626.7       | 2,715.1                 | 0.00                    | 0.00                   | 0.00                  |
| 13,000.0              | 90.00           | 179.75      | 11,498.9              | -2,787.1     | -626.2       | 2,815.0                 | 0.00                    | 0.00                   | 0.00                  |
| 13,100.0              | 90.00           | 179.75      | 11,498.9              | -2,887.1     | -625.8       | 2,914.8                 | 0.00                    | 0.00                   | 0.00                  |
| 13,200.0              | 90.00           | 179.75      | 11,498.9              | -2,987.1     | -625.4       | 3,014.7                 | 0.00                    | 0.00                   | 0.00                  |
| 13,300.0              | 90.00           | 179.75      | 11,498.9              | -3,087.1     | -624.9       | 3,114.5                 | 0.00                    | 0.00                   | 0.00                  |



## Planning Report



|                  |                              |                                     |                       |
|------------------|------------------------------|-------------------------------------|-----------------------|
| <b>Database:</b> | PEDM                         | <b>Local Co-ordinate Reference:</b> | Well #712H            |
| <b>Company:</b>  | Midland                      | <b>TVD Reference:</b>               | KB = 26' @ 3307.0usft |
| <b>Project:</b>  | Eddy County, NM (NAD 83 NME) | <b>MD Reference:</b>                | KB = 26' @ 3307.0usft |
| <b>Site:</b>     | Deep Elem 4 Fed Com          | <b>North Reference:</b>             | Grid                  |
| <b>Well:</b>     | #712H                        | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Wellbore:</b> | OH                           |                                     |                       |
| <b>Design:</b>   | Plan #0.6                    |                                     |                       |

| Planned Survey        |                 |             |                       |              |              |                         |                         |                        |                       |  |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 13,400.0              | 90.00           | 179.75      | 11,498.9              | -3,187.1     | -624.5       | 3,214.4                 | 0.00                    | 0.00                   | 0.00                  |  |
| 13,500.0              | 90.00           | 179.75      | 11,498.9              | -3,287.1     | -624.0       | 3,314.2                 | 0.00                    | 0.00                   | 0.00                  |  |
| 13,600.0              | 90.00           | 179.75      | 11,498.9              | -3,387.1     | -623.6       | 3,414.1                 | 0.00                    | 0.00                   | 0.00                  |  |
| 13,700.0              | 90.00           | 179.75      | 11,499.0              | -3,487.1     | -623.2       | 3,513.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 13,800.0              | 90.00           | 179.75      | 11,499.0              | -3,587.1     | -622.7       | 3,613.8                 | 0.00                    | 0.00                   | 0.00                  |  |
| 13,900.0              | 90.00           | 179.75      | 11,499.0              | -3,687.1     | -622.3       | 3,713.6                 | 0.00                    | 0.00                   | 0.00                  |  |
| 14,000.0              | 90.00           | 179.75      | 11,499.0              | -3,787.1     | -621.8       | 3,813.5                 | 0.00                    | 0.00                   | 0.00                  |  |
| 14,100.0              | 90.00           | 179.75      | 11,499.0              | -3,887.1     | -621.4       | 3,913.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 14,200.0              | 90.00           | 179.75      | 11,499.0              | -3,987.1     | -621.0       | 4,013.2                 | 0.00                    | 0.00                   | 0.00                  |  |
| 14,300.0              | 90.00           | 179.75      | 11,499.0              | -4,087.1     | -620.5       | 4,113.0                 | 0.00                    | 0.00                   | 0.00                  |  |
| 14,400.0              | 90.00           | 179.75      | 11,499.0              | -4,187.1     | -620.1       | 4,212.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 14,500.0              | 90.00           | 179.75      | 11,499.0              | -4,287.1     | -619.6       | 4,312.8                 | 0.00                    | 0.00                   | 0.00                  |  |
| 14,600.0              | 90.00           | 179.75      | 11,499.0              | -4,387.1     | -619.2       | 4,412.6                 | 0.00                    | 0.00                   | 0.00                  |  |
| 14,700.0              | 90.00           | 179.75      | 11,499.0              | -4,487.1     | -618.8       | 4,512.5                 | 0.00                    | 0.00                   | 0.00                  |  |
| 14,800.0              | 90.00           | 179.75      | 11,499.0              | -4,587.1     | -618.3       | 4,612.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 14,900.0              | 90.00           | 179.75      | 11,499.0              | -4,687.1     | -617.9       | 4,712.2                 | 0.00                    | 0.00                   | 0.00                  |  |
| 15,000.0              | 90.00           | 179.75      | 11,499.0              | -4,787.1     | -617.4       | 4,812.0                 | 0.00                    | 0.00                   | 0.00                  |  |
| 15,100.0              | 90.00           | 179.75      | 11,499.0              | -4,887.1     | -617.0       | 4,911.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 15,200.0              | 90.00           | 179.75      | 11,499.0              | -4,987.1     | -616.6       | 5,011.7                 | 0.00                    | 0.00                   | 0.00                  |  |
| 15,300.0              | 90.00           | 179.75      | 11,499.0              | -5,087.1     | -616.1       | 5,111.6                 | 0.00                    | 0.00                   | 0.00                  |  |
| 15,400.0              | 90.00           | 179.75      | 11,499.0              | -5,187.1     | -615.7       | 5,211.4                 | 0.00                    | 0.00                   | 0.00                  |  |
| 15,500.0              | 90.00           | 179.75      | 11,499.0              | -5,287.1     | -615.2       | 5,311.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 15,600.0              | 90.00           | 179.75      | 11,499.0              | -5,387.1     | -614.8       | 5,411.1                 | 0.00                    | 0.00                   | 0.00                  |  |
| 15,700.0              | 90.00           | 179.75      | 11,499.0              | -5,487.1     | -614.4       | 5,511.0                 | 0.00                    | 0.00                   | 0.00                  |  |
| 15,800.0              | 90.00           | 179.75      | 11,499.0              | -5,587.1     | -613.9       | 5,610.8                 | 0.00                    | 0.00                   | 0.00                  |  |
| 15,900.0              | 90.00           | 179.75      | 11,499.0              | -5,687.1     | -613.5       | 5,710.7                 | 0.00                    | 0.00                   | 0.00                  |  |
| 16,000.0              | 90.00           | 179.75      | 11,499.0              | -5,787.1     | -613.0       | 5,810.5                 | 0.00                    | 0.00                   | 0.00                  |  |
| 16,100.0              | 90.00           | 179.75      | 11,499.0              | -5,887.1     | -612.6       | 5,910.4                 | 0.00                    | 0.00                   | 0.00                  |  |
| 16,200.0              | 90.00           | 179.75      | 11,499.0              | -5,987.1     | -612.2       | 6,010.2                 | 0.00                    | 0.00                   | 0.00                  |  |
| 16,300.0              | 90.00           | 179.75      | 11,499.0              | -6,087.1     | -611.7       | 6,110.1                 | 0.00                    | 0.00                   | 0.00                  |  |
| 16,400.0              | 90.00           | 179.75      | 11,499.0              | -6,187.1     | -611.3       | 6,209.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 16,500.0              | 90.00           | 179.75      | 11,499.0              | -6,287.1     | -610.8       | 6,309.8                 | 0.00                    | 0.00                   | 0.00                  |  |
| 16,600.0              | 90.00           | 179.75      | 11,499.0              | -6,387.1     | -610.4       | 6,409.6                 | 0.00                    | 0.00                   | 0.00                  |  |
| 16,700.0              | 90.00           | 179.75      | 11,499.0              | -6,487.1     | -610.0       | 6,509.5                 | 0.00                    | 0.00                   | 0.00                  |  |
| 16,800.0              | 90.00           | 179.75      | 11,499.0              | -6,587.1     | -609.5       | 6,609.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 16,900.0              | 90.00           | 179.75      | 11,499.0              | -6,687.1     | -609.1       | 6,709.2                 | 0.00                    | 0.00                   | 0.00                  |  |
| 17,000.0              | 90.00           | 179.75      | 11,499.0              | -6,787.1     | -608.7       | 6,809.0                 | 0.00                    | 0.00                   | 0.00                  |  |
| 17,100.0              | 90.00           | 179.75      | 11,499.0              | -6,887.1     | -608.2       | 6,908.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 17,200.0              | 90.00           | 179.75      | 11,499.0              | -6,987.1     | -607.8       | 7,008.7                 | 0.00                    | 0.00                   | 0.00                  |  |
| 17,300.0              | 90.00           | 179.75      | 11,499.0              | -7,087.1     | -607.3       | 7,108.6                 | 0.00                    | 0.00                   | 0.00                  |  |
| 17,400.0              | 90.00           | 179.75      | 11,499.0              | -7,187.1     | -606.9       | 7,208.4                 | 0.00                    | 0.00                   | 0.00                  |  |
| 17,500.0              | 90.00           | 179.75      | 11,499.0              | -7,287.1     | -606.5       | 7,308.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 17,600.0              | 90.00           | 179.75      | 11,499.0              | -7,387.1     | -606.0       | 7,408.2                 | 0.00                    | 0.00                   | 0.00                  |  |
| 17,700.0              | 90.00           | 179.75      | 11,499.0              | -7,487.1     | -605.6       | 7,508.0                 | 0.00                    | 0.00                   | 0.00                  |  |
| 17,800.0              | 90.00           | 179.75      | 11,499.0              | -7,587.1     | -605.1       | 7,607.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 17,900.0              | 90.00           | 179.75      | 11,499.0              | -7,687.1     | -604.7       | 7,707.7                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,000.0              | 90.00           | 179.75      | 11,499.0              | -7,787.1     | -604.3       | 7,807.6                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,100.0              | 90.00           | 179.75      | 11,499.0              | -7,887.1     | -603.8       | 7,907.4                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,200.0              | 90.00           | 179.75      | 11,499.0              | -7,987.1     | -603.4       | 8,007.3                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,300.0              | 90.00           | 179.75      | 11,499.0              | -8,087.1     | -602.9       | 8,107.1                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,400.0              | 90.00           | 179.75      | 11,499.0              | -8,187.1     | -602.5       | 8,207.0                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,500.0              | 90.00           | 179.75      | 11,499.0              | -8,287.1     | -602.1       | 8,306.8                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,600.0              | 90.00           | 179.75      | 11,499.0              | -8,387.1     | -601.6       | 8,406.7                 | 0.00                    | 0.00                   | 0.00                  |  |
| 18,700.0              | 90.00           | 179.75      | 11,499.0              | -8,487.1     | -601.2       | 8,506.5                 | 0.00                    | 0.00                   | 0.00                  |  |



## Planning Report



|                  |                              |                                     |                       |
|------------------|------------------------------|-------------------------------------|-----------------------|
| <b>Database:</b> | PEDM                         | <b>Local Co-ordinate Reference:</b> | Well #712H            |
| <b>Company:</b>  | Midland                      | <b>TVD Reference:</b>               | KB = 26' @ 3307.0usft |
| <b>Project:</b>  | Eddy County, NM (NAD 83 NME) | <b>MD Reference:</b>                | KB = 26' @ 3307.0usft |
| <b>Site:</b>     | Deep Elem 4 Fed Com          | <b>North Reference:</b>             | Grid                  |
| <b>Well:</b>     | #712H                        | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Wellbore:</b> | OH                           |                                     |                       |
| <b>Design:</b>   | Plan #0.6                    |                                     |                       |

| Planned Survey        |                 |             |                       |              |              |                         |                         |                        |                       |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 18,800.0              | 90.00           | 179.75      | 11,499.0              | -8,587.1     | -600.7       | 8,606.4                 | 0.00                    | 0.00                   | 0.00                  |
| 18,900.0              | 90.00           | 179.75      | 11,499.0              | -8,687.1     | -600.3       | 8,706.2                 | 0.00                    | 0.00                   | 0.00                  |
| 19,000.0              | 90.00           | 179.75      | 11,499.0              | -8,787.1     | -599.9       | 8,806.1                 | 0.00                    | 0.00                   | 0.00                  |
| 19,100.0              | 90.00           | 179.75      | 11,499.0              | -8,887.1     | -599.4       | 8,905.9                 | 0.00                    | 0.00                   | 0.00                  |
| 19,200.0              | 90.00           | 179.75      | 11,499.0              | -8,987.1     | -599.0       | 9,005.8                 | 0.00                    | 0.00                   | 0.00                  |
| 19,300.0              | 90.00           | 179.75      | 11,499.0              | -9,087.1     | -598.5       | 9,105.6                 | 0.00                    | 0.00                   | 0.00                  |
| 19,400.0              | 90.00           | 179.75      | 11,499.0              | -9,187.1     | -598.1       | 9,205.5                 | 0.00                    | 0.00                   | 0.00                  |
| 19,500.0              | 90.00           | 179.75      | 11,499.0              | -9,287.1     | -597.7       | 9,305.3                 | 0.00                    | 0.00                   | 0.00                  |
| 19,600.0              | 90.00           | 179.75      | 11,499.0              | -9,387.1     | -597.2       | 9,405.2                 | 0.00                    | 0.00                   | 0.00                  |
| 19,700.0              | 90.00           | 179.75      | 11,499.0              | -9,487.1     | -596.8       | 9,505.0                 | 0.00                    | 0.00                   | 0.00                  |
| 19,800.0              | 90.00           | 179.75      | 11,499.0              | -9,587.1     | -596.3       | 9,604.9                 | 0.00                    | 0.00                   | 0.00                  |
| 19,900.0              | 90.00           | 179.75      | 11,499.0              | -9,687.1     | -595.9       | 9,704.7                 | 0.00                    | 0.00                   | 0.00                  |
| 20,000.0              | 90.00           | 179.75      | 11,499.0              | -9,787.1     | -595.5       | 9,804.6                 | 0.00                    | 0.00                   | 0.00                  |
| 20,100.0              | 90.00           | 179.75      | 11,499.0              | -9,887.1     | -595.0       | 9,904.4                 | 0.00                    | 0.00                   | 0.00                  |
| 20,200.0              | 90.00           | 179.75      | 11,499.0              | -9,987.0     | -594.6       | 10,004.3                | 0.00                    | 0.00                   | 0.00                  |
| 20,300.0              | 90.00           | 179.75      | 11,499.0              | -10,087.0    | -594.1       | 10,104.1                | 0.00                    | 0.00                   | 0.00                  |
| 20,400.0              | 90.00           | 179.75      | 11,499.0              | -10,187.0    | -593.7       | 10,204.0                | 0.00                    | 0.00                   | 0.00                  |
| 20,500.0              | 90.00           | 179.75      | 11,499.0              | -10,287.0    | -593.3       | 10,303.8                | 0.00                    | 0.00                   | 0.00                  |
| 20,600.0              | 90.00           | 179.75      | 11,499.0              | -10,387.0    | -592.8       | 10,403.7                | 0.00                    | 0.00                   | 0.00                  |
| 20,700.0              | 90.00           | 179.75      | 11,499.0              | -10,487.0    | -592.4       | 10,503.6                | 0.00                    | 0.00                   | 0.00                  |
| 20,800.0              | 90.00           | 179.75      | 11,499.0              | -10,587.0    | -591.9       | 10,603.4                | 0.00                    | 0.00                   | 0.00                  |
| 20,900.0              | 90.00           | 179.75      | 11,499.0              | -10,687.0    | -591.5       | 10,703.3                | 0.00                    | 0.00                   | 0.00                  |
| 21,000.0              | 90.00           | 179.75      | 11,499.0              | -10,787.0    | -591.1       | 10,803.1                | 0.00                    | 0.00                   | 0.00                  |
| 21,100.0              | 90.00           | 179.75      | 11,499.0              | -10,887.0    | -590.6       | 10,903.0                | 0.00                    | 0.00                   | 0.00                  |
| 21,200.0              | 90.00           | 179.75      | 11,499.0              | -10,987.0    | -590.2       | 11,002.8                | 0.00                    | 0.00                   | 0.00                  |
| 21,300.0              | 90.00           | 179.75      | 11,499.0              | -11,087.0    | -589.7       | 11,102.7                | 0.00                    | 0.00                   | 0.00                  |
| 21,400.0              | 90.00           | 179.75      | 11,499.0              | -11,187.0    | -589.3       | 11,202.5                | 0.00                    | 0.00                   | 0.00                  |
| 21,500.0              | 90.00           | 179.75      | 11,499.0              | -11,287.0    | -588.9       | 11,302.4                | 0.00                    | 0.00                   | 0.00                  |
| 21,600.0              | 90.00           | 179.75      | 11,499.0              | -11,387.0    | -588.4       | 11,402.2                | 0.00                    | 0.00                   | 0.00                  |
| 21,700.0              | 90.00           | 179.75      | 11,499.0              | -11,487.0    | -588.0       | 11,502.1                | 0.00                    | 0.00                   | 0.00                  |
| 21,800.0              | 90.00           | 179.75      | 11,499.0              | -11,587.0    | -587.5       | 11,601.9                | 0.00                    | 0.00                   | 0.00                  |
| 21,900.0              | 90.00           | 179.75      | 11,499.0              | -11,687.0    | -587.1       | 11,701.8                | 0.00                    | 0.00                   | 0.00                  |
| 21,922.0              | 90.00           | 179.75      | 11,499.0              | -11,709.0    | -587.0       | 11,723.7                | 0.00                    | 0.00                   | 0.00                  |

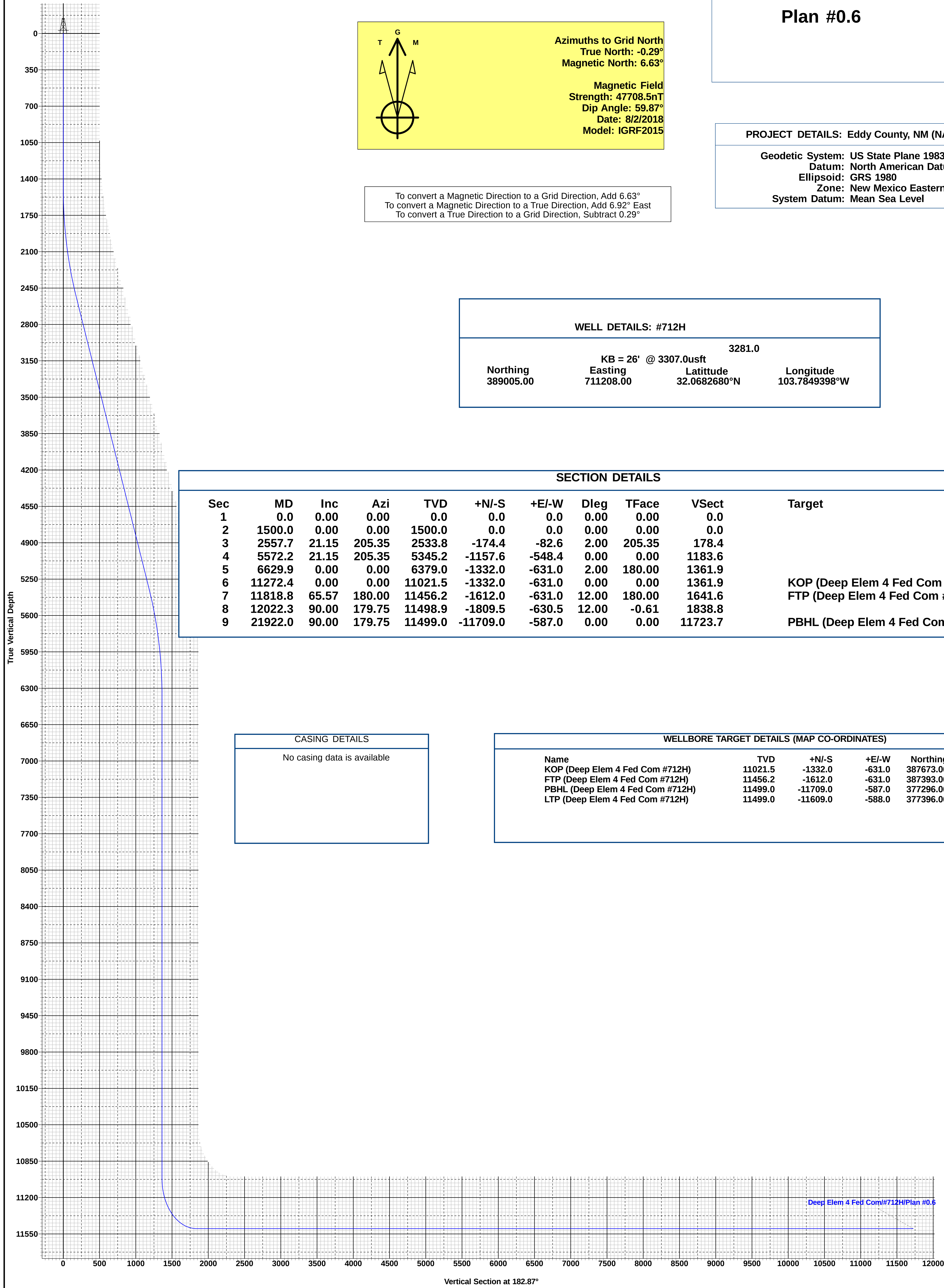
| Design Targets                                                                                          |               |              |            |              |              |                 |                |              |               |
|---------------------------------------------------------------------------------------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|--------------|---------------|
| Target Name                                                                                             | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude     | Longitude     |
| - hit/miss target                                                                                       |               |              |            |              |              |                 |                |              |               |
| - Shape                                                                                                 |               |              |            |              |              |                 |                |              |               |
| KOP (Deep Elem 4 Fed<br>- plan hits target center<br>- Point                                            | 0.00          | 0.00         | 11,021.5   | -1,332.0     | -631.0       | 387,673.00      | 710,577.00     | 32.0646153°N | 103.7869986°W |
| FTP (Deep Elem 4 Fed (                                                                                  | 0.00          | 0.00         | 11,456.2   | -1,612.0     | -631.0       | 387,393.00      | 710,577.00     | 32.0638457°N | 103.7870032°W |
| - plan hits target center<br>- Point                                                                    |               |              |            |              |              |                 |                |              |               |
| LTP (Deep Elem 4 Fed (                                                                                  | 0.00          | 0.00         | 11,499.0   | -11,609.0    | -588.0       | 377,396.00      | 710,620.00     | 32.0363647°N | 103.7870276°W |
| - plan misses target center by 0.6usft at 21822.0usft MD (11499.0 TVD, -11609.0 N, -587.4 E)<br>- Point |               |              |            |              |              |                 |                |              |               |
| PBHL (Deep Elem 4 Fec<br>- plan hits target center<br>- Point                                           | 0.00          | 0.00         | 11,499.0   | -11,709.0    | -587.0       | 377,296.00      | 710,621.00     | 32.0360898°N | 103.7870260°W |



## Planning Report



|           |                              |                              |                       |
|-----------|------------------------------|------------------------------|-----------------------|
| Database: | PEDM                         | Local Co-ordinate Reference: | Well #712H            |
| Company:  | Midland                      | TVD Reference:               | KB = 26' @ 3307.0usft |
| Project:  | Eddy County, NM (NAD 83 NME) | MD Reference:                | KB = 26' @ 3307.0usft |
| Site:     | Deep Elem 4 Fed Com          | North Reference:             | Grid                  |
| Well:     | #712H                        | Survey Calculation Method:   | Minimum Curvature     |
| Wellbore: | OH                           |                              |                       |
| Design:   | Plan #0.6                    |                              |                       |



To convert a Magnetic Direction to a Grid Direction, Add 6.63°  
To convert a Magnetic Direction to a True Direction, Add 6.92° East  
To convert a True Direction to a Grid Direction, Subtract 0.29°

| WELL DETAILS: #712H          |           |              |               |
|------------------------------|-----------|--------------|---------------|
| KB = 26' @ 3307.0usft 3281.0 |           |              |               |
| Northing                     | Easting   | Latitude     | Longitude     |
| 389005.00                    | 711208.00 | 32.0682680°N | 103.7849398°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               | 1500.0  | 0.00  | 0.00   | 1500.0  | 0.0      | 0.0    | 0.00  | 0.00   | 0.0     |                                  |
| 3               | 2557.7  | 21.15 | 205.35 | 2533.8  | -174.4   | -82.6  | 2.00  | 205.35 | 178.4   |                                  |
| 4               | 5572.2  | 21.15 | 205.35 | 5345.2  | -1157.6  | -548.4 | 0.00  | 0.00   | 1183.6  |                                  |
| 5               | 6629.9  | 0.00  | 0.00   | 6379.0  | -1332.0  | -631.0 | 2.00  | 180.00 | 1361.9  |                                  |
| 6               | 11272.4 | 0.00  | 0.00   | 11021.5 | -1332.0  | -631.0 | 0.00  | 0.00   | 1361.9  | KOP (Deep Elem 4 Fed Com #712H)  |
| 7               | 11818.8 | 65.57 | 180.00 | 11456.2 | -1612.0  | -631.0 | 12.00 | 180.00 | 1641.6  | FTP (Deep Elem 4 Fed Com #712H)  |
| 8               | 12022.3 | 90.00 | 179.75 | 11498.9 | -1809.5  | -630.5 | 12.00 | -0.61  | 1838.8  |                                  |
| 9               | 21922.0 | 90.00 | 179.75 | 11499.0 | -11709.0 | -587.0 | 0.00  | 0.00   | 11723.7 | PBHL (Deep Elem 4 Fed Com #712H) |

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

| WELLBORE TARGET DETAILS (MAP CO-ORDINATES) |         |          |        |           |           |
|--------------------------------------------|---------|----------|--------|-----------|-----------|
| Name                                       | TVD     | +N/-S    | +E/-W  | Northing  | Easting   |
| KOP (Deep Elem 4 Fed Com #712H)            | 11021.5 | -1332.0  | -631.0 | 387673.00 | 710577.00 |
| FTP (Deep Elem 4 Fed Com #712H)            | 11456.2 | -1612.0  | -631.0 | 387393.00 | 710577.00 |
| PBHL (Deep Elem 4 Fed Com #712H)           | 11499.0 | -11709.0 | -587.0 | 377296.00 | 710621.00 |
| LTP (Deep Elem 4 Fed Com #712H)            | 11499.0 | -11609.0 | -588.0 | 377396.00 | 710620.00 |

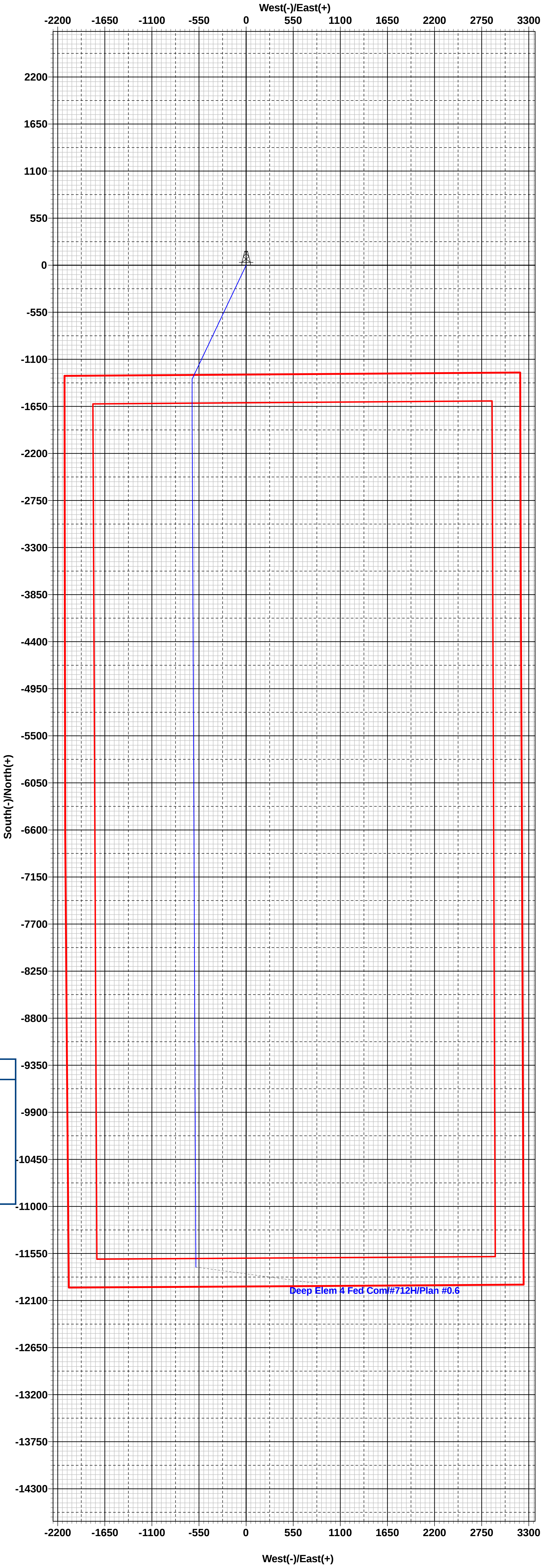
Eddy County, NM (NAD 83 NME)

Deep Elem 4 Fed Com #712H

Plan #0.6

PROJECT DETAILS: Eddy 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



**District I**  
1625 N. French Dr., Hobbs, NM 88240  
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**District II**  
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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 100793

CONDITIONS

|                                                                      |                                                      |
|----------------------------------------------------------------------|------------------------------------------------------|
| Operator:<br>EOG RESOURCES INC<br>P.O. Box 2267<br>Midland, TX 79702 | OGRID:<br>7377                                       |
|                                                                      | Action Number:<br>100793                             |
|                                                                      | Action Type:<br>[C-103] NOI Change of Plans (C-103A) |

CONDITIONS

| Created By | Condition                                       | Condition Date |
|------------|-------------------------------------------------|----------------|
| kpickford  | Adhere to previous NMOCD Conditions of Approval | 4/27/2022      |