Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs HOBBS OCD

MAY 08 2018

RECEIVED

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

# WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. NMNM0381550C

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
Other

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No. NMNM135151

2. Name of Operator XTO ENERGY INCORPORATED — Contact: TESSA FITZHUGH — E-Mail: tessa_fitzhugh@xtoenergy.com

8. Lease Name and Well No. PERLA NEGRA FEDERAL COM 7H

3. Address 6401 HOLIDAY HILL ROAD BLDG 5, MIDLAND, TX 79707

3a. Phone No. (include area code) Ph: 432-620-4336

9. API Well No. 30-025-43812-00-S1

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

At surface SWSE 200FSL 2050FEL 32.639133 N Lat, 103.511841 W Lon

At top prod interval reported below SWSE 600FSL 2045FEL 32.640511 N Lat, 103.511795 W Lon

At total depth NWNE 204FNL 1894FEL 32.652561 N Lat, 103.511345 W Lon

10. Field and Pool, or Exploratory BONE SPRINGS

11. Sec., T., R., M., or Block and Survey or Area Sec 24 T19S R34E Mer NMP

12. County or Parish LEA

13. State NM

14. Date Spudded 09/09/2017

15. Date T.D. Reached 10/13/2017

16. Date Completed ☐ D & A ☒ Ready to Prod. 02/10/2018

17. Elevations (DF, KB, RT, GL)* 3787 GL

18. Total Depth: MD 15126 TVD 10393

19. Plug Back T.D.: MD 15022 TVD 10393

20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
RCBL GR<CCL

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☐ No ☒ Yes (Submit analysis)

23. Casing and Liner Record *(Report all strings set in well)*

| Hole Size | Size/Grade | Wt. (#/ft.) | Top (MD) | Bottom (MD) | Stage Cementer Depth | No. of Sks. & Type of Cement | Slurry Vol. (BBL) | Cement Top* | Amount Pulled |
|---|---|---|---|---|---|---|---|---|---|
| 17.500 | 13.375 J55 | 54.5 | 0 | 1890 | | 1610 | | 0 | |
| 12.250 | 9.625 J55 | 40.0 | 0 | 4067 | | 1170 | | 0 | |
| 8.500 | 5.500 CYP-110 | 17.0 | 0 | 15106 | | 1976 | | 0 | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

24. Tubing Record

| Size | Depth Set (MD) | Packer Depth (MD) | Size | Depth Set (MD) | Packer Depth (MD) | Size | Depth Set (MD) | Packer Depth (MD) |
|---|---|---|---|---|---|---|---|---|
| 2.875 | 9803 | | | | | | | |

25. Producing Intervals / 26. Perforation Record

| | Formation | Top | Bottom | Perforated Interval | Size | No. Holes | Perf. Status |
|---|---|---|---|---|---|---|---|
| A) | BONE SPRING 2ND | | | 10824 TO 14779 | 0.000 | | ACTIVE, PRODUCING |
| B) | | | | | | | |
| C) | | | | | | | |
| D) | | | | | | | |

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

| Depth Interval | Amount and Type of Material |
|---|---|
| 10824 TO 14779 | FRAC'D IN 23 STAGES USING 24038 GALS HCL ACID, 10839380 LBS PROPPANT, & 9654207 GALS FLUID |
| | |
| | |
| | |

ACCEPTED FOR RECORD
MAY - 4 2018
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

28. Production - Interval A

| Date First Produced | Test Date | Hours Tested | Test Production | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
|---|---|---|---|---|---|---|---|---|---|
| 02/20/2018 | | | → | 1578.0 | 1744.0 | 1272.0 | 47.3 | | ELECTRIC PUMP SUB-SURFACE |

| Choke Size | Tbg. Press. Flwg. SI | Csg. Press. | 24 Hr. Rate | Oil BBL | Gas MCF | Water BBL | Gas:Oil Ratio | Well Status |
|---|---|---|---|---|---|---|---|---|
| | | | → | 1578 | 1744 | 1272 | 1105 | POW |

28a. Production - Interval B

| Date First Produced | Test Date | Hours Tested | Test Production | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
|---|---|---|---|---|---|---|---|---|---|
| | | | → | | | | | | |

| Choke Size | Tbg. Press. Flwg. SI | Csg. Press. | 24 Hr. Rate | Oil BBL | Gas MCF | Water BBL | Gas:Oil Ratio | Well Status |
|---|---|---|---|---|---|---|---|---|
| | | | → | | | | | |

*(See Instructions and spaces for additional data on reverse side)*

**ELECTRONIC SUBMISSION #411778 VERIFIED BY THE BLM WELL INFORMATION SYSTEM**

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Reclamation due: 08/10/2018

28b. Production - Interval C

| Date First Produced | Test Date | Hours Tested | Test Production → | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| Choke Size | Tbg. Press. Flwg. SI | Csg. Press. | 24 Hr. Rate → | Oil BBL | Gas MCF | Water BBL | Gas:Oil Ratio | Well Status |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

28c. Production - Interval D

| Date First Produced | Test Date | Hours Tested | Test Production → | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| Choke Size | Tbg. Press. Flwg. SI | Csg. Press. | 24 Hr. Rate → | Oil BBL | Gas MCF | Water BBL | Gas:Oil Ratio | Well Status |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)*
UNKNOWN

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

| Formation | Top | Bottom | Descriptions, Contents, etc. | Name | Top Meas. Depth |
|---|---|---|---|---|---|
| RUSTLER | 1838 | 2087 | | RUSTLER | 1838 |
| SALADO | 2087 | 3284 | | SALADO | 2087 |
| YATES | 3475 | 4058 | | YATES | 3475 |
| DELAWARE | 6456 | 6697 | | DELAWARE | 6456 |
| BRUSHY CANYON | 6697 | 8219 | | BONE SPRING | 8219 |
| BONE SPRING | 8219 | 9562 | | BRUSHY CANYON | 8219 |
| BONE SPRING 1ST | 9562 | 10086 | | BONE SPRING 1ST | 9562 |
| BONE SPRING 2ND | 10086 | 10393 | | BONE SPRING 2ND | 10086 |

32. Additional remarks (include plugging procedure):

33. Circle enclosed attachments:

1. Electrical/Mechanical Logs (1 full set req'd.)
2. Geologic Report
3. DST Report
4. Directional Survey
5. Sundry Notice for plugging and cement verification
6. Core Analysis
7 Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

**Electronic Submission #411778 Verified by the BLM Well Information System.**
**For XTO ENERGY INCORPORATED, sent to the Hobbs**
**Committed to AFMSS for processing by DUNCAN WHITLOCK on 04/23/2018 (18DW0126SE)**

Name *(please print)* TESSA FITZHUGH Title REG. ANALYST

Signature (Electronic Submission) Date 04/16/2018

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 fradulent statements or representations as to any matter within its jurisdiction.

**** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ****

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

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

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

☐ AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

AS-DRILLED PLAT

| [1] API Number | [2] Pool Code | [3] Pool Name |
|---|---|---|
| 30-025-43812 | 37570 | Lea, Bone Spring |

| [4] Property Code | [5] Property Name | [6] Well Number |
|---|---|---|
| 39834 | PERLA NEGRA FEDERAL COM | 7H |

| [7] OGRID No. | [8] Operator Name | [9] Elevation |
|---|---|---|
| 005380 | XTO ENERGY | 3787' |

## [10] Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| O | 24 | 19 S | 34 E | | 200 | SOUTH | 2,050 | EAST | LEA |

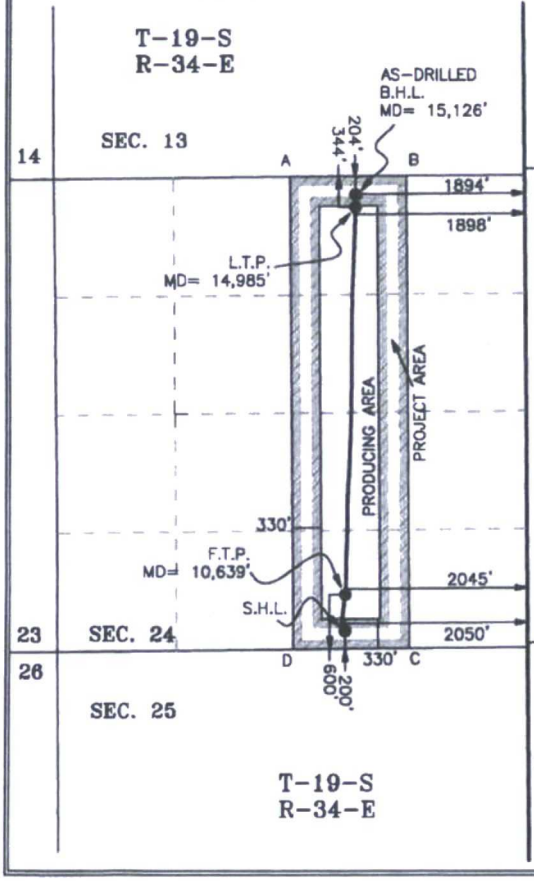
## [11] Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| B | 24 | 19 S | 34 E | | 204 | NORTH | 1,894 | EAST | LEA |

| [12] Dedicated Acres | [13] Joint or Infill | [14] Consolidation Code | [15] Order No. |
|---|---|---|---|
| 160 | | | |

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.

[16] NOTE: AS-DRILLED BOTTOM HOLE PLOTTED FROM DATA FURNISHED BY XTO ENERGY




GEODETIC COORDINATES SURFACE LOCATION NAD 27 NME
Y= 597,162.6
X= 753,030.7
LAT.= 32.639011°N
LONG.= 103.511352°W

GEODETIC COORDINATES SURFACE LOCATION NAD 83 NME
Y= 597,226.1
X= 794,211.1
LAT.= 32.639135°N
LONG.= 103.511843°W

FIRST TAKE POINT NAD 27 NME
Y= 597,563.5
X= 753,031.3
LAT.= 32.640113°N
LONG.= 103.511339°W

FIRST TAKE POINT NAD 83 NME
Y= 597,625.7
X= 794,211.6
LAT.= 32.640234°N
LONG.= 103.511831°W

CORNER COORDINATES TABLE NAD 27 NME
A - Y= 602,242.6 N, X= 752,392.9 E
B - Y= 602,253.6 N, X= 753,713.9 E
C - Y= 596,970.0 N, X= 753,760.8 E
D - Y= 596,956.7 N, X= 752,439.7 E

CORNER COORDINATES TABLE NAD 83 NME
A - Y= 602,306.2 N, X= 793,573.2 E
B - Y= 602,317.3 N, X= 794,894.2 E
C - Y= 597,033.4 N, X= 794,941.3 E
D - Y= 597,020.2 N, X= 793,620.2 E

LAST TAKE POINT NAD 27 NME
Y= 601,905.7
X= 753,139.9
LAT.= 32.652046°N
LONG.= 103.510878°W

LAST TAKE POINT NAD 83 NME
Y= 601,968.0
X= 794,320.0
LAT.= 32.652166°N
LONG.= 103.511370°W

AS-DRILLED BOTTOM HOLE LOCATION NAD 27 NME
Y= 602,046.5
X= 753,142.6
LAT.= 32.652432°N
LONG.= 103.510865°W

AS-DRILLED BOTTOM HOLE LOCATION NAD 83 NME
Y= 602,108.8
X= 794,322.7
LAT.= 32.652553°N
LONG.= 103.511358°W

## [17] OPERATOR CERTIFICATION

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

Signature — Date: 4-16-2018

Printed Name: Tessa Fitzhugh

E-mail Address: tessa_fitzhugh@xtoenergy.com

## [18] SURVEYOR CERTIFICATION

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

12-08-2017
Date of Survey

Signatue and Seal of Professional Surveyor:

MARK DILLON HARP
NEW MEXICO
23786
PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number

AI

2017122084

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-104
Revised August 1, 2011

Submit one copy to appropriate District Office

☐ AMENDED REPORT

# I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

| [1] Operator name and Address | [2] OGRID Number |
|---|---|
| XTO Energy Inc.<br>6401 Holiday Hill Rd. Bldg 5<br>Midland, TX 79707 | 005380 |
| | [3] Reason for Filing Code/Effective Date: NW |

| [4] API Number | [5] Pool Name | [6] Pool Code |
|---|---|---|
| 30-0 25-43812 | Lea; Bone Spring | 37570 |

| [7] Property Code | [8] Property Name | [9] Well Number |
|---|---|---|
| 39834 | Perla Negra Federal Com | 1H |

## II. [10] Surface Location

| UL or lot no. | Section | Township | Range | Lot. Idn | Feet from the | North/South Line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| O | 24 | 19S | 34E | | 200 | South | 2050 | East | Lea |

## [11] Bottom Hole Location

| UL or lot no. | Section | Township | Range | Lot. Idn | Feet from the | North/South Line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| B | 24 | 19S | 34E | | 204 | North | 1894 | East | Lea |

| [12] Lse Code | [13] Producing Method Code | [14] Gas Connection Date | [15] C-129 Permit Number | [16] C-129 Effective Date | [17] C-129 Expiration Date |
|---|---|---|---|---|---|
| | | | | | |

## III. Oil and Gas Transporters

| [18] Transporter OGRID | [19] Transporter Name and Address | [20] O/G/W |
|---|---|---|
| 195739 | Plains Pipeline | O |
| 24650 | Targa Midstream Services Limited Partnership | G |
| | | |
| | | |

## IV. Well Completion Data

| [21] Spud Date | [22] Ready Date | [23] TD | [24] PBTD | [25] Perforations | [26] DHC, MC |
|---|---|---|---|---|---|
| 09/09/2017 | 02/10/2018 | 15126 | 10393 | 10824-14779 | |

| [27] Hole Size | [28] Casing & Tubing Size | [29] Depth Set | [30] Sacks Cement |
|---|---|---|---|
| 17 1/2 | 13 3/8 | 1890 | 1610 |
| 12 1/4 | 9 5/8 | 4067 | 1170 |
| 8 3/4 / 8 1/2 | 5 1/2 | 15106 | 1976 |
| | | | |

## V. Well Test Data

| [31] Date New Oil | [32] Gas Delivery Date | [33] Test Date | [34] Test Length | [35] Tbg. Pressure | [36] Csg. Pressure |
|---|---|---|---|---|---|
| 02/20/2018 | 02/22/2018 | 04/06/2018 | 24 | | |
| **[37] Choke Size** | **[38] Oil** | **[39] Water** | **[40] Gas** | | **[41] Test Method** |
| | 1578 | 1272 | 1744 | | pumping |

| [42] I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. | OIL CONSERVATION DIVISION |
|---|---|
| Signature: Tessa Fitzhugh | Approved by: |
| Printed name: Tessa Fitzhugh | Title: |
| Title: Regulatory Analyst | Approval Date: |
| E-mail Address: tessa_fitzhugh@xtoenergy.com | |
| Date: 04/16/2018 Phone: 432-620-4336 | |

# SURVEY REPORT

Weatherford®

Report Date: 10/13/2017
Customer: XTO Energy
Job Name: MD-12672020
Well Name: Perla Negra Federal Com 7H

Field: Bone Spring
Rig: Frontier 26
Rig Loc: Lea County, NM

Survey Calculation Method: **Minimum Curvature**

| Magnetic Reference | Target Direction | Total Magnetic Field | Magnetic Dip Angle | Magnetic Declination | Grid Convergence | Total Correction |
|---|---|---|---|---|---|---|
| **Grid North** | **1.36 deg** | **48258 nT** | **60.45 deg** | **6.97 deg** | **0.44 deg** | **6.53 deg** |

| | Depth | INC | AZ | TVD | NS | EW |
|---|---|---|---|---|---|---|
| **Survey Tie-On** | **0.00 ft** | **0.00 deg** | **0.00 deg** | **0.00 ft** | **0.00 ft** | **0.00 ft** |

| Depth (ft) | Inc (deg) | Azm (deg) | TVD (ft) | Well Head NS (ft) | Well Head EW (ft) | VSect (ft) | Dogleg (deg/100ft) |
|---|---|---|---|---|---|---|---|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 170.00 | 0.60 | 329.51 | 170.00 | 0.77 | -0.45 | 0.76 | 0.35 |
| 231.00 | 0.58 | 324.59 | 230.99 | 1.29 | -0.79 | 1.27 | 0.09 |
| 330.00 | 0.56 | 319.02 | 329.99 | 2.07 | -1.40 | 2.03 | 0.06 |
| 424.00 | 0.58 | 327.26 | 423.98 | 2.81 | -1.96 | 2.77 | 0.09 |
| 520.00 | 0.63 | 324.98 | 519.98 | 3.66 | -2.52 | 3.59 | 0.06 |
| 618.00 | 0.56 | 325.98 | 617.97 | 4.49 | -3.10 | 4.42 | 0.07 |
| 713.00 | 0.88 | 321.52 | 712.97 | 5.45 | -3.82 | 5.36 | 0.34 |
| 807.00 | 0.77 | 329.34 | 806.96 | 6.56 | -4.59 | 6.45 | 0.17 |
| 907.00 | 0.95 | 322.08 | 906.94 | 7.79 | -5.44 | 7.66 | 0.21 |
| 1003.00 | 0.91 | 319.44 | 1002.93 | 9.00 | -6.42 | 8.84 | 0.06 |
| 1100.00 | 0.80 | 321.46 | 1099.92 | 10.11 | -7.35 | 9.93 | 0.12 |
| 1194.00 | 1.00 | 306.16 | 1193.91 | 11.11 | -8.42 | 10.91 | 0.33 |
| 1289.00 | 1.28 | 261.52 | 1288.89 | 11.44 | -10.14 | 11.20 | 0.95 |
| 1384.00 | 1.35 | 257.51 | 1383.87 | 11.04 | -12.28 | 10.75 | 0.12 |
| 1481.00 | 1.11 | 236.50 | 1480.85 | 10.28 | -14.18 | 9.94 | 0.52 |
| 1576.00 | 0.84 | 237.38 | 1575.83 | 9.39 | -15.53 | 9.02 | 0.28 |
| 1671.00 | 0.64 | 221.15 | 1670.82 | 8.62 | -16.47 | 8.23 | 0.30 |
| 1765.00 | 0.47 | 216.13 | 1764.82 | 7.91 | -17.04 | 7.51 | 0.19 |
| 1825.00 | 0.36 | 250.80 | 1824.82 | 7.65 | -17.36 | 7.24 | 0.45 |
| 1945.00 | 0.66 | 302.39 | 1944.81 | 7.90 | -18.30 | 7.46 | 0.43 |
| 2041.00 | 0.51 | 309.01 | 2040.81 | 8.46 | -19.10 | 8.01 | 0.17 |
| 2135.00 | 0.64 | 315.75 | 2134.80 | 9.10 | -19.79 | 8.63 | 0.16 |
| 2231.00 | 0.38 | 304.09 | 2230.80 | 9.67 | -20.43 | 9.18 | 0.29 |
| 2325.00 | 0.38 | 302.52 | 2324.80 | 10.01 | -20.95 | 9.51 | 0.01 |
| 2419.00 | 0.63 | 300.75 | 2418.79 | 10.44 | -21.66 | 9.92 | 0.27 |
| 2513.00 | 0.35 | 292.50 | 2512.79 | 10.81 | -22.37 | 10.28 | 0.31 |
| 2608.00 | 0.56 | 89.04 | 2607.79 | 10.93 | -22.17 | 10.40 | 0.94 |
| 2702.00 | 0.82 | 109.59 | 2701.78 | 10.71 | -21.08 | 10.21 | 0.38 |
| 2798.00 | 0.77 | 84.41 | 2797.77 | 10.55 | -19.79 | 10.07 | 0.36 |
| 2894.00 | 1.12 | 80.65 | 2893.76 | 10.76 | -18.22 | 10.33 | 0.37 |
| 2989.00 | 1.29 | 81.80 | 2988.74 | 11.07 | -16.25 | 10.68 | 0.18 |
| 3083.00 | 1.22 | 75.50 | 3082.72 | 11.47 | -14.23 | 11.13 | 0.16 |
| 3176.00 | 1.33 | 66.49 | 3175.69 | 12.15 | -12.28 | 11.85 | 0.25 |
| 3271.00 | 1.26 | 71.38 | 3270.67 | 12.92 | -10.28 | 12.67 | 0.14 |

| Depth (ft) | Inc (deg) | Azm (deg) | TVD (ft) | Well Head NS (ft) | Well Head EW (ft) | VSect (ft) | Dogleg (deg/100ft) |
|---|---|---|---|---|---|---|---|
| 3364.00 | 1.25 | 62.03 | 3363.65 | 13.72 | -8.42 | 13.52 | 0.22 |
| 3459.00 | 1.09 | 56.68 | 3458.63 | 14.70 | -6.75 | 14.54 | 0.20 |
| 3554.00 | 1.06 | 53.99 | 3553.61 | 15.72 | -5.28 | 15.59 | 0.06 |
| 3648.00 | 1.13 | 92.77 | 3647.59 | 16.18 | -3.65 | 16.09 | 0.78 |
| 3743.00 | 1.13 | 107.04 | 3742.58 | 15.86 | -1.82 | 15.82 | 0.30 |
| 3839.00 | 1.04 | 94.95 | 3838.56 | 15.51 | -0.05 | 15.50 | 0.26 |
| 3932.00 | 1.04 | 89.51 | 3931.54 | 15.44 | 1.64 | 15.48 | 0.11 |
| 4013.00 | 0.97 | 94.72 | 4012.53 | 15.39 | 3.06 | 15.46 | 0.14 |
| 4148.00 | 0.69 | 88.07 | 4147.52 | 15.33 | 5.01 | 15.44 | 0.22 |
| 4244.00 | 0.64 | 75.82 | 4243.51 | 15.48 | 6.10 | 15.62 | 0.16 |
| 4340.00 | 0.71 | 70.03 | 4339.50 | 15.81 | 7.18 | 15.98 | 0.10 |
| 4436.00 | 0.29 | 188.77 | 4435.50 | 15.78 | 7.71 | 15.95 | 0.92 |
| 4532.00 | 1.46 | 251.54 | 4531.49 | 15.15 | 6.51 | 15.30 | 1.41 |
| 4628.00 | 1.50 | 240.08 | 4627.46 | 14.13 | 4.26 | 14.23 | 0.31 |
| 4725.00 | 1.39 | 252.47 | 4724.43 | 13.15 | 2.04 | 13.19 | 0.34 |
| 4821.00 | 1.61 | 255.68 | 4820.39 | 12.46 | -0.38 | 12.45 | 0.25 |
| 4917.00 | 1.25 | 252.19 | 4916.36 | 11.81 | -2.68 | 11.74 | 0.39 |
| 5013.00 | 1.25 | 249.00 | 5012.34 | 11.11 | -4.66 | 11.00 | 0.07 |
| 5109.00 | 1.60 | 258.30 | 5108.31 | 10.47 | -6.95 | 10.30 | 0.44 |
| 5205.00 | 1.22 | 251.87 | 5204.28 | 9.88 | -9.23 | 9.65 | 0.43 |
| 5302.00 | 1.55 | 254.49 | 5301.25 | 9.20 | -11.48 | 8.93 | 0.35 |
| 5397.00 | 0.66 | 224.82 | 5396.24 | 8.47 | -13.10 | 8.16 | 1.08 |
| 5494.00 | 0.76 | 205.32 | 5493.23 | 7.49 | -13.77 | 7.17 | 0.27 |
| 5590.00 | 1.09 | 205.34 | 5589.22 | 6.09 | -14.43 | 5.75 | 0.34 |
| 5686.00 | 1.05 | 203.94 | 5685.20 | 4.47 | -15.18 | 4.10 | 0.05 |
| 5782.00 | 0.84 | 225.51 | 5781.19 | 3.17 | -16.04 | 2.79 | 0.43 |
| 5878.00 | 0.94 | 196.61 | 5877.18 | 1.92 | -16.77 | 1.52 | 0.47 |
| 5974.00 | 1.38 | 203.96 | 5973.16 | 0.11 | -17.46 | -0.31 | 0.48 |
| 6070.00 | 0.53 | 187.71 | 6069.14 | -1.39 | -17.99 | -1.81 | 0.92 |
| 6166.00 | 0.07 | 51.09 | 6165.14 | -1.79 | -18.00 | -2.22 | 0.61 |
| 6261.00 | 0.28 | 5.09 | 6260.14 | -1.52 | -17.94 | -1.95 | 0.25 |
| 6356.00 | 0.58 | 330.28 | 6355.14 | -0.87 | -18.16 | -1.30 | 0.41 |
| 6449.00 | 0.55 | 210.98 | 6448.13 | -0.85 | -18.62 | -1.29 | 1.05 |
| 6544.00 | 0.22 | 239.51 | 6543.13 | -1.33 | -19.01 | -1.78 | 0.39 |
| 6638.00 | 0.29 | 194.16 | 6637.13 | -1.65 | -19.23 | -2.11 | 0.22 |
| 6735.00 | 0.60 | 297.16 | 6734.13 | -1.66 | -19.74 | -2.13 | 0.75 |
| 6830.00 | 0.55 | 309.04 | 6829.12 | -1.15 | -20.53 | -1.63 | 0.14 |
| 6924.00 | 0.78 | 295.10 | 6923.12 | -0.59 | -21.46 | -1.10 | 0.30 |
| 7020.00 | 0.85 | 272.70 | 7019.11 | -0.28 | -22.77 | -0.82 | 0.34 |
| 7117.00 | 0.80 | 279.77 | 7116.10 | -0.13 | -24.15 | -0.70 | 0.12 |
| 7213.00 | 0.16 | 192.78 | 7212.10 | -0.15 | -24.84 | -0.74 | 0.84 |
| 7309.00 | 0.28 | 237.27 | 7308.09 | -0.40 | -25.07 | -1.00 | 0.21 |
| 7405.00 | 0.70 | 219.00 | 7404.09 | -0.99 | -25.64 | -1.60 | 0.46 |
| 7502.00 | 0.07 | 152.50 | 7501.09 | -1.50 | -25.98 | -2.12 | 0.70 |
| 7598.00 | 0.45 | 252.78 | 7597.09 | -1.66 | -26.31 | -2.29 | 0.49 |
| 7694.00 | 0.20 | 350.90 | 7693.09 | -1.61 | -26.70 | -2.24 | 0.54 |
| 7790.00 | 0.14 | 279.40 | 7789.09 | -1.43 | -26.84 | -2.06 | 0.21 |
| 7887.00 | 0.36 | 350.01 | 7886.09 | -1.11 | -27.01 | -1.75 | 0.35 |
| 7983.00 | 0.00 | 0.00 | 7982.08 | -0.81 | -27.07 | -1.45 | 0.38 |
| 8079.00 | 0.35 | 162.67 | 8078.08 | -1.09 | -26.98 | -1.73 | 0.36 |

| Depth (ft) | Inc (deg) | Azm (deg) | TVD (ft) | Well Head NS (ft) | Well Head EW (ft) | VSect (ft) | Dogleg (deg/100ft) |
|---|---|---|---|---|---|---|---|
| 8174.00 | 0.45 | 176.35 | 8173.08 | -1.74 | -26.87 | -2.38 | 0.14 |
| 8270.00 | 0.55 | 172.59 | 8269.08 | -2.57 | -26.78 | -3.21 | 0.11 |
| 8366.00 | 0.63 | 258.10 | 8365.07 | -3.14 | -27.24 | -3.78 | 0.84 |
| 8462.00 | 0.72 | 287.73 | 8461.07 | -3.06 | -28.33 | -3.73 | 0.37 |
| 8558.00 | 0.60 | 302.59 | 8557.06 | -2.61 | -29.33 | -3.30 | 0.22 |
| 8654.00 | 0.60 | 314.73 | 8653.06 | -1.98 | -30.11 | -2.70 | 0.13 |
| 8750.00 | 0.56 | 340.44 | 8749.05 | -1.19 | -30.63 | -1.91 | 0.27 |
| 8846.00 | 2.17 | 66.04 | 8845.03 | -0.01 | -29.12 | -0.70 | 2.29 |
| 8942.00 | 1.53 | 96.36 | 8940.98 | 0.59 | -26.19 | -0.03 | 1.20 |
| 9036.00 | 0.75 | 155.13 | 9034.96 | -0.11 | -24.68 | -0.69 | 1.39 |
| 9118.00 | 0.84 | 133.75 | 9116.95 | -1.01 | -24.02 | -1.58 | 0.38 |
| 9213.00 | 0.88 | 128.52 | 9211.94 | -1.95 | -22.95 | -2.49 | 0.09 |
| 9309.00 | 0.64 | 285.59 | 9307.94 | -2.26 | -22.89 | -2.80 | 1.55 |
| 9411.00 | 1.88 | 321.60 | 9409.91 | -0.80 | -24.47 | -1.38 | 1.39 |
| 9505.00 | 1.50 | 320.92 | 9503.87 | 1.37 | -26.21 | 0.74 | 0.40 |
| 9599.00 | 1.65 | 304.61 | 9597.84 | 3.09 | -28.10 | 2.42 | 0.50 |
| 9693.00 | 1.48 | 290.62 | 9691.80 | 4.29 | -30.35 | 3.56 | 0.44 |
| 9788.00 | 1.44 | 292.61 | 9786.77 | 5.18 | -32.60 | 4.40 | 0.07 |
| 9883.00 | 1.35 | 279.53 | 9881.74 | 5.82 | -34.80 | 4.99 | 0.35 |
| 9930.00 | 3.14 | 320.86 | 9928.71 | 6.91 | -36.16 | 6.05 | 4.91 |
| 9978.00 | 7.21 | 343.60 | 9976.51 | 10.82 | -37.84 | 9.92 | 9.33 |
| 10025.00 | 10.13 | 355.80 | 10022.97 | 17.78 | -38.98 | 16.85 | 7.31 |
| 10072.00 | 13.78 | 359.59 | 10068.94 | 27.50 | -39.32 | 26.56 | 7.94 |
| 10119.00 | 17.99 | 358.59 | 10114.14 | 40.36 | -39.54 | 39.41 | 8.98 |
| 10166.00 | 21.68 | 1.07 | 10158.34 | 56.30 | -39.56 | 55.34 | 8.05 |
| 10197.00 | 23.45 | 5.91 | 10186.97 | 68.16 | -38.81 | 67.22 | 8.27 |
| 10228.00 | 25.62 | 7.79 | 10215.17 | 80.94 | -37.27 | 80.03 | 7.44 |
| 10260.00 | 28.81 | 7.53 | 10243.62 | 95.44 | -35.32 | 94.58 | 9.98 |
| 10292.00 | 33.92 | 7.65 | 10270.94 | 111.95 | -33.12 | 111.13 | 15.97 |
| 10323.00 | 39.33 | 7.52 | 10295.81 | 130.27 | -30.68 | 129.51 | 17.45 |
| 10355.00 | 44.18 | 7.30 | 10319.67 | 151.40 | -27.94 | 150.69 | 15.16 |
| 10387.00 | 49.04 | 6.99 | 10341.65 | 174.46 | -25.05 | 173.82 | 15.20 |
| 10418.00 | 53.15 | 6.70 | 10361.12 | 198.41 | -22.18 | 197.83 | 13.28 |
| 10450.00 | 57.66 | 6.08 | 10379.28 | 224.58 | -19.25 | 224.06 | 14.18 |
| 10481.00 | 62.98 | 5.88 | 10394.62 | 251.36 | -16.44 | 250.90 | 17.17 |
| 10512.00 | 67.46 | 5.73 | 10407.61 | 279.35 | -13.60 | 278.95 | 14.46 |
| 10544.00 | 71.63 | 6.72 | 10418.79 | 309.15 | -10.35 | 308.82 | 13.35 |
| 10575.00 | 75.07 | 6.99 | 10427.68 | 338.64 | -6.80 | 338.38 | 11.13 |
| 10607.00 | 79.09 | 7.05 | 10434.83 | 369.59 | -2.99 | 369.41 | 12.56 |
| 10639.00 | 82.00 | 6.26 | 10440.09 | 400.93 | 0.67 | 400.84 | 9.41 |
| 10686.00 | 85.59 | 5.72 | 10445.16 | 447.40 | 5.54 | 447.40 | 7.72 |
| 10733.00 | 87.55 | 3.43 | 10447.98 | 494.16 | 9.28 | 494.24 | 6.41 |
| 10780.00 | 88.53 | 1.25 | 10449.58 | 541.09 | 11.20 | 541.20 | 5.08 |
| 10828.00 | 89.16 | 0.71 | 10450.55 | 589.07 | 12.02 | 589.19 | 1.73 |
| 10922.00 | 92.66 | 359.76 | 10449.06 | 683.04 | 12.41 | 683.14 | 3.86 |
| 11016.00 | 93.43 | 0.20 | 10444.07 | 776.91 | 12.37 | 776.98 | 0.94 |
| 11110.00 | 92.38 | 1.32 | 10439.30 | 870.78 | 13.62 | 870.85 | 1.63 |
| 11204.00 | 91.12 | 4.10 | 10436.43 | 964.62 | 18.06 | 964.77 | 3.25 |
| 11299.00 | 89.51 | 1.04 | 10435.91 | 1059.50 | 22.32 | 1059.74 | 3.64 |
| 11394.00 | 89.65 | 0.75 | 10436.60 | 1154.49 | 23.80 | 1154.73 | 0.34 |

| Depth (ft) | Inc (deg) | Azm (deg) | TVD (ft) | Well Head NS (ft) | Well Head EW (ft) | VSect (ft) | Dogleg (deg/100ft) |
|---|---|---|---|---|---|---|---|
| 11488.00 | 90.98 | 0.25 | 10436.09 | 1248.48 | 24.62 | 1248.72 | 1.51 |
| 11583.00 | 90.42 | 1.04 | 10434.93 | 1343.47 | 25.69 | 1343.70 | 1.02 |
| 11676.00 | 91.61 | 1.02 | 10433.28 | 1436.44 | 27.37 | 1436.68 | 1.28 |
| 11771.00 | 91.75 | 1.81 | 10430.49 | 1531.37 | 29.71 | 1531.64 | 0.84 |
| 11865.00 | 90.00 | 3.16 | 10429.06 | 1625.26 | 33.79 | 1625.61 | 2.35 |
| 11960.00 | 91.12 | 3.52 | 10428.13 | 1720.09 | 39.32 | 1720.54 | 1.24 |
| 12054.00 | 90.07 | 3.06 | 10427.15 | 1813.93 | 44.71 | 1814.48 | 1.22 |
| 12148.00 | 90.56 | 3.18 | 10426.64 | 1907.79 | 49.83 | 1908.44 | 0.54 |
| 12242.00 | 89.51 | 2.45 | 10426.58 | 2001.68 | 54.45 | 2002.40 | 1.36 |
| 12336.00 | 89.58 | 1.26 | 10427.33 | 2095.62 | 57.49 | 2096.40 | 1.27 |
| 12430.00 | 90.77 | 0.84 | 10427.04 | 2189.60 | 59.21 | 2190.39 | 1.34 |
| 12524.00 | 92.03 | 0.86 | 10424.74 | 2283.56 | 60.61 | 2284.36 | 1.34 |
| 12618.00 | 90.49 | 0.93 | 10422.68 | 2377.53 | 62.07 | 2378.33 | 1.64 |
| 12711.00 | 90.84 | 1.21 | 10421.60 | 2470.50 | 63.81 | 2471.32 | 0.48 |
| 12806.00 | 92.45 | 1.30 | 10418.87 | 2565.44 | 65.89 | 2566.28 | 1.70 |
| 12900.00 | 91.47 | 0.82 | 10415.65 | 2659.37 | 67.63 | 2660.22 | 1.16 |
| 12994.00 | 90.00 | 0.62 | 10414.45 | 2753.35 | 68.81 | 2754.21 | 1.58 |
| 13088.00 | 91.26 | 0.37 | 10413.42 | 2847.34 | 69.62 | 2848.19 | 1.37 |
| 13205.00 | 90.56 | 359.89 | 10411.56 | 2964.32 | 69.89 | 2965.15 | 0.73 |
| 13300.00 | 89.65 | 0.14 | 10411.38 | 3059.32 | 69.91 | 3060.12 | 0.99 |
| 13394.00 | 87.76 | 0.89 | 10413.51 | 3153.29 | 70.76 | 3154.08 | 2.16 |
| 13488.00 | 88.18 | 0.42 | 10416.84 | 3247.22 | 71.83 | 3248.01 | 0.67 |
| 13583.00 | 88.60 | 359.89 | 10419.51 | 3342.18 | 72.09 | 3342.95 | 0.71 |
| 13677.00 | 89.23 | 359.39 | 10421.29 | 3436.16 | 71.50 | 3436.89 | 0.86 |
| 13771.00 | 90.35 | 358.46 | 10421.63 | 3530.14 | 69.73 | 3530.81 | 1.55 |
| 13866.00 | 90.42 | 0.09 | 10420.99 | 3625.13 | 68.53 | 3625.74 | 1.72 |
| 13960.00 | 91.26 | 2.90 | 10419.61 | 3719.08 | 70.98 | 3719.72 | 3.12 |
| 14054.00 | 91.96 | 2.99 | 10416.97 | 3812.92 | 75.81 | 3813.64 | 0.75 |
| 14149.00 | 90.28 | 3.09 | 10415.12 | 3907.76 | 80.85 | 3908.58 | 1.77 |
| 14242.00 | 91.05 | 2.65 | 10414.04 | 4000.64 | 85.50 | 4001.54 | 0.95 |
| 14336.00 | 91.61 | 2.14 | 10411.86 | 4094.53 | 89.43 | 4095.50 | 0.81 |
| 14430.00 | 90.07 | 1.99 | 10410.48 | 4188.46 | 92.82 | 4189.48 | 1.65 |
| 14524.00 | 90.70 | 1.50 | 10409.85 | 4282.41 | 95.68 | 4283.47 | 0.85 |
| 14618.00 | 91.33 | 1.15 | 10408.18 | 4376.37 | 97.85 | 4377.46 | 0.77 |
| 14711.00 | 90.56 | 1.92 | 10406.65 | 4469.32 | 100.34 | 4470.44 | 1.17 |
| 14806.00 | 90.77 | 2.01 | 10405.54 | 4564.26 | 103.60 | 4565.43 | 0.24 |
| 14901.00 | 91.54 | 1.84 | 10403.63 | 4659.19 | 106.79 | 4660.41 | 0.83 |
| 14995.00 | 92.52 | 1.41 | 10400.30 | 4753.09 | 109.45 | 4754.35 | 1.14 |
| 15061.00 | 92.87 | 0.92 | 10397.20 | 4819.00 | 110.80 | 4820.27 | 0.91 |
| Projected to Total Depth: | | | | | | | |
| 15126.00 | 92.87 | 0.92 | 10393.94 | 4883.91 | 111.84 | 4885.19 | 0.00 |

* Weatherford surveys from 170.00 ft MD to 15061.00 ft MD.*

* TD at 15126.00 ft MD.*

* The total correction is 6.53 deg relative to Grid North.*