Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

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

Form C-103
Revised July 18, 2013

WELL API NO. 30-025-52120

5. Indicate Type of Lease STATE ☑ FEE ☐

6. State Oil & Gas Lease No. 330703

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name: SENILE FELINES 18_7 STATE COM

1. Type of Well: Oil Well ☑ Gas Well ☐ Other

8. Well Number 015H

2. Name of Operator: OXY USA INC.

9. OGRID Number: 16696

3. Address of Operator: 5 GREENWAY PLAZA, STE 110, HOUSTON TEXAS

10. Pool name or Wildcat: RED TANK, BONE SPRING, EAST

4. Well Location
Unit Letter O : 340 feet from the SOUTH line and 1440 feet from the EAST line
Section 18 Township 22S Range 33E NMPM County LEA

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 3631'

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

| NOTICE OF INTENTION TO: | | | | SUBSEQUENT REPORT OF: | | | |
|---|---|---|---|---|---|---|---|
| PERFORM REMEDIAL WORK | ☐ | PLUG AND ABANDON | ☐ | REMEDIAL WORK | ☐ | ALTERING CASING | ☐ |
| TEMPORARILY ABANDON | ☐ | CHANGE PLANS | ☑ | COMMENCE DRILLING OPNS. | ☐ | P AND A | ☐ |
| PULL OR ALTER CASING | ☐ | MULTIPLE COMPL | ☐ | CASING/CEMENT JOB | ☐ | | |
| DOWNHOLE COMMINGLE | ☐ | | | | | | |
| CLOSED-LOOP SYSTEM | ☐ | | | | | | |
| OTHER: | ☐ | | | OTHER: | | | ☐ |

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

OXY USA, Inc. respectfully requests to amend the approved AAPD for Senile Felines 18_7 State Com 15H.

Revision: Update drill plan for 4S Slim + DWC Prod Casing.

Updated drill plan, directional survey, casing specs and wellhead diagram attached.

Spud Date: | Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

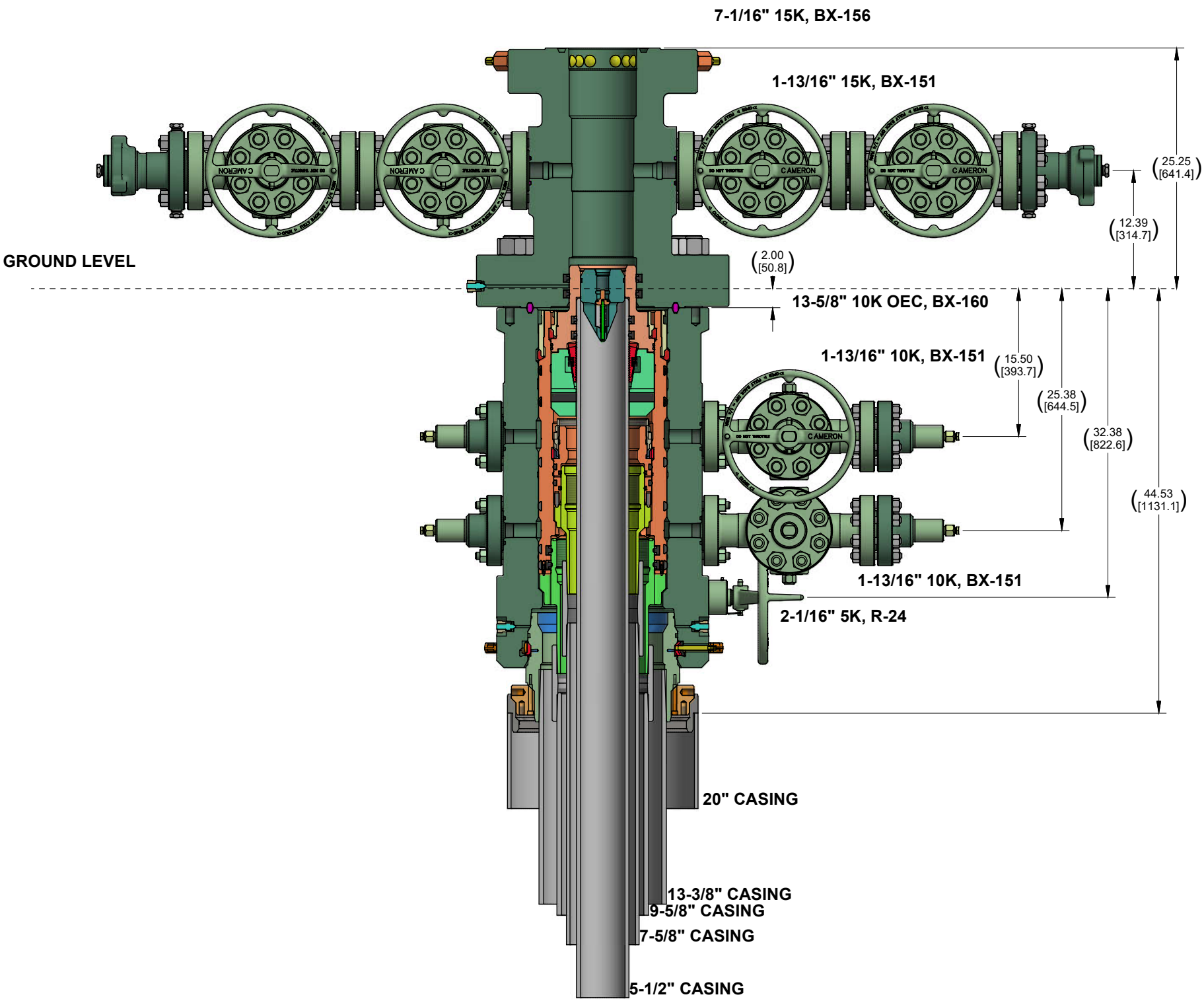
SIGNATURE Melissa Guidry TITLE REGULATORY ADVISOR SR DATE 12/11/24

Type or print name Melissa Guidry E-mail address: melissa_guidry@oxy.com PHONE: 713-497-2481

**For State Use Only**

APPROVED BY: TITLE DATE

Conditions of Approval (if any):




| CONFIDENTIAL | | | | |
|---|---|---|---|---|
| SURFACE TREATMENT | DO NOT SCALE | | CAMERON A Schlumberger Company | SURFACE SYSTEMS |
| | DRAWN BY: A. SKLENKA | DATE 26 Apr 22 | | |
| MATERIAL & HEAT TREAT | CHECKED BY: A. SKLENKA | DATE 26 Apr 22 | OXY ADAPT NST 10K 3 STAGE WELLHEAD STANDARD / EMERGENCY SYSTEM | |
| | APPROVED BY: A. SKLENKA | DATE 26 Apr 22 | | |
| ESTIMATED WEIGHT: 7968.4 LBS 3614.4 KG | INITIAL USE B/M: I T# 7836394 | | SHEET 1 OF 1 | LO-096232-62 REV: 01 |

INVENTOR - D

Tenaris

# API BTC -Special Clearance

| Coupling | Pipe Body |
|---|---|
| Grade: **L80-IC** | Grade: **L80-IC** |
| Body: **Red** | 1st Band: **Red** |
| 1st Band: **Brown** | 2nd Band: **Brown** |
| 2nd Band: **-** | 3rd Band: **Pale Green** |
| 3rd Band: **-** | 4th Band: **-** |

| | | | | | |
|---|---|---|---|---|---|
| **Outside Diameter** | 10.750 in. | **Wall Thickness** | 0.400 in. | **Grade** | L80-IC |
| **Min. Wall Thickness** | 87.50 % | **Pipe Body Drift** | Alternative Drift | **Type** | Casing |
| **Connection OD Option** | Special Clearance | | | | |

## Pipe Body Data

| Geometry | | | | Performance | |
|---|---|---|---|---|---|
| **Nominal OD** | 10.750 in. | **Drift** | 9.875 in. | **SMYS** | 80,000 psi |
| **Wall Thickness** | 0.400 in. | **Plain End Weight** | 44.26 lb/ft | **Min UTS** | 95,000 psi |
| **Nominal Weight** | 45.500 lb/ft | **OD Tolerance** | API | **Body Yield Strength** | 1040 x1000 lb |
| **Nominal ID** | 9.950 in. | | | **Min. Internal Yield Pressure** | 5210 psi |
| | | | | **Collapse Pressure** | 2950 psi |
| | | | | **Max. Allowed Bending** | 34 °/100 ft |

## Connection Data

| Geometry | | Performance | |
|---|---|---|---|
| **Thread per In** | 5 | **Joint Strength** | 1041 x1000 lb |
| **Connection OD** | 11.250 in. | **Coupling Face Load** | 478 x1000 lb |
| **Hand Tight Stand Off** | 1 in. | **Internal Pressure Capacity** | 4150 psi |

## Notes

For products according to API Standards 5CT & 5B; Performance calculated considering API Technical Report 5C3 (Sections 9 & 10) equations.
For geometrical and steel grades combinations not considered in the API Standards 5CT and/or 5B; Performance calculations indirectly derived from API Technical Report 5C3 (Sections 9 & 10) equations.
Couplings OD are shown according to current API 5CT 10th Edition.

# OXY

**PRD NM DIRECTIONAL PLANS (NAD 1983)**
**Senile Felines 18_7**
**Senile Felines 18_7 State Com 15H**

**Wellbore #1**

**Plan: Permitting Plan**

# Standard Planning Report

**04 December, 2024**

# OXY
## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | HOPSPP | **Local Co-ordinate Reference:** | Well Senile Felines 18_7 State Com 15H |
| **Company:** | ENGINEERING DESIGNS | **TVD Reference:** | RKB=25' @ 3656.00ft |
| **Project:** | PRD NM DIRECTIONAL PLANS (NAD 1983) | **MD Reference:** | RKB=25' @ 3656.00ft |
| **Site:** | Senile Felines 18_7 | **North Reference:** | Grid |
| **Well:** | Senile Felines 18_7 State Com 15H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | Wellbore #1 | | |
| **Design:** | Permitting Plan | | |

**Project** PRD NM DIRECTIONAL PLANS (NAD 1983)

| | | | |
|---|---|---|---|
| **Map System:** | US State Plane 1983 | **System Datum:** | Mean Sea Level |
| **Geo Datum:** | North American Datum 1983 | | |
| **Map Zone:** | New Mexico Eastern Zone | | Using geodetic scale factor |

**Site** Senile Felines 18_7

| | | | | | |
|---|---|---|---|---|---|
| **Site Position:** | | **Northing:** | 504,962.34 usft | **Latitude:** | 32.386155 |
| **From:** | Map | **Easting:** | 763,528.05 usft | **Longitude:** | -103.613537 |
| **Position Uncertainty:** | 0.00 ft | **Slot Radius:** | 13.200 in | | |

**Well** Senile Felines 18_7 State Com 15H

| | | | | | | |
|---|---|---|---|---|---|---|
| **Well Position** | **+N/-S** | 0.00 ft | **Northing:** | 504,746.57 usf | **Latitude:** | 32.385527 |
| | **+E/-W** | 0.00 ft | **Easting:** | 765,411.68 usf | **Longitude:** | -103.607440 |
| **Position Uncertainty** | | 2.00 ft | **Wellhead Elevation:** | ft | **Ground Level:** | 3,631.00 ft |
| **Grid Convergence:** | | 0.39 ° | | | | |

**Wellbore** Wellbore #1

| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|---|---|---|---|---|---|
| | HDGM_FILE | 12/4/2024 | 6.15 | 59.93 | 47,447.80000000 |

**Design** Permitting Plan

**Audit Notes:**

| | | | | |
|---|---|---|---|---|
| **Version:** | **Phase:** | PROTOTYPE | **Tie On Depth:** | 0.00 |

| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) |
|---|---|---|---|---|
| | 0.00 | 0.00 | 0.00 | 5.26 |

**Plan Survey Tool Program** **Date** 12/4/2024

| | Depth From (ft) | Depth To (ft) | Survey (Wellbore) | Tool Name | Remarks |
|---|---|---|---|---|---|
| 1 | 0.00 | 19,834.79 | Permitting Plan (Wellbore #1) | B005Mc_MWD+HRGM+SA<br>MWD+HRGM+Sag+MSA | |

**Plan Sections**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | TFO (°) | Target |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 5,065.00 | 0.00 | 0.00 | 5,065.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6,764.58 | 17.00 | 108.38 | 6,739.77 | -78.88 | 237.47 | 1.00 | 1.00 | 0.00 | 108.38 | |
| 8,965.54 | 17.00 | 108.38 | 8,844.60 | -281.69 | 848.01 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 9,919.76 | 90.00 | 359.52 | 9,447.00 | 290.15 | 1,017.42 | 10.00 | 7.65 | -11.41 | -108.09 | |
| 11,934.76 | 90.00 | 359.52 | 9,447.00 | 2,305.08 | 1,000.38 | 0.00 | 0.00 | 0.00 | 0.00 | PI-1 (Senile Felines |
| 11,937.44 | 90.00 | 359.56 | 9,447.00 | 2,307.77 | 1,000.35 | 1.50 | 0.00 | 1.50 | 90.00 | |
| 19,835.44 | 90.00 | 359.56 | 9,447.00 | 10,205.53 | 939.09 | 0.00 | 0.00 | 0.00 | 0.00 | PBHL (Senile |

# OXY
## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | HOPSPP | **Local Co-ordinate Reference:** | Well Senile Felines 18_7 State Com 15H |
| **Company:** | ENGINEERING DESIGNS | **TVD Reference:** | RKB=25' @ 3656.00ft |
| **Project:** | PRD NM DIRECTIONAL PLANS (NAD 1983) | **MD Reference:** | RKB=25' @ 3656.00ft |
| **Site:** | Senile Felines 18_7 | **North Reference:** | Grid |
| **Well:** | Senile Felines 18_7 State Com 15H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | Wellbore #1 | | |
| **Design:** | Permitting Plan | | |

**Planned Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---|---|---|---|---|---|---|---|---|---|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 100.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 200.00 | 0.00 | 0.00 | 200.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 300.00 | 0.00 | 0.00 | 300.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 400.00 | 0.00 | 0.00 | 400.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 500.00 | 0.00 | 0.00 | 500.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 600.00 | 0.00 | 0.00 | 600.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 700.00 | 0.00 | 0.00 | 700.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 800.00 | 0.00 | 0.00 | 800.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 900.00 | 0.00 | 0.00 | 900.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,000.00 | 0.00 | 0.00 | 1,000.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,100.00 | 0.00 | 0.00 | 1,100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,200.00 | 0.00 | 0.00 | 1,200.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,300.00 | 0.00 | 0.00 | 1,300.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,400.00 | 0.00 | 0.00 | 1,400.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,500.00 | 0.00 | 0.00 | 1,500.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,600.00 | 0.00 | 0.00 | 1,600.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,700.00 | 0.00 | 0.00 | 1,700.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,800.00 | 0.00 | 0.00 | 1,800.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1,900.00 | 0.00 | 0.00 | 1,900.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,000.00 | 0.00 | 0.00 | 2,000.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,100.00 | 0.00 | 0.00 | 2,100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,200.00 | 0.00 | 0.00 | 2,200.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,300.00 | 0.00 | 0.00 | 2,300.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,400.00 | 0.00 | 0.00 | 2,400.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,500.00 | 0.00 | 0.00 | 2,500.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,600.00 | 0.00 | 0.00 | 2,600.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,700.00 | 0.00 | 0.00 | 2,700.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,800.00 | 0.00 | 0.00 | 2,800.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2,900.00 | 0.00 | 0.00 | 2,900.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,000.00 | 0.00 | 0.00 | 3,000.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,100.00 | 0.00 | 0.00 | 3,100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,200.00 | 0.00 | 0.00 | 3,200.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,300.00 | 0.00 | 0.00 | 3,300.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,400.00 | 0.00 | 0.00 | 3,400.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,500.00 | 0.00 | 0.00 | 3,500.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,600.00 | 0.00 | 0.00 | 3,600.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,700.00 | 0.00 | 0.00 | 3,700.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,800.00 | 0.00 | 0.00 | 3,800.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3,900.00 | 0.00 | 0.00 | 3,900.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,000.00 | 0.00 | 0.00 | 4,000.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,100.00 | 0.00 | 0.00 | 4,100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,200.00 | 0.00 | 0.00 | 4,200.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,300.00 | 0.00 | 0.00 | 4,300.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,400.00 | 0.00 | 0.00 | 4,400.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,500.00 | 0.00 | 0.00 | 4,500.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,600.00 | 0.00 | 0.00 | 4,600.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,700.00 | 0.00 | 0.00 | 4,700.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,800.00 | 0.00 | 0.00 | 4,800.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4,900.00 | 0.00 | 0.00 | 4,900.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,000.00 | 0.00 | 0.00 | 5,000.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,065.00 | 0.00 | 0.00 | 5,065.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5,100.00 | 0.35 | 108.38 | 5,100.00 | -0.03 | 0.10 | -0.02 | 1.00 | 1.00 | 0.00 |
| 5,200.00 | 1.35 | 108.38 | 5,199.99 | -0.50 | 1.51 | -0.36 | 1.00 | 1.00 | 0.00 |
| 5,300.00 | 2.35 | 108.38 | 5,299.93 | -1.52 | 4.57 | -1.09 | 1.00 | 1.00 | 0.00 |

# OXY

## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | HOPSPP | **Local Co-ordinate Reference:** | Well Senile Felines 18_7 State Com 15H |
| **Company:** | ENGINEERING DESIGNS | **TVD Reference:** | RKB=25' @ 3656.00ft |
| **Project:** | PRD NM DIRECTIONAL PLANS (NAD 1983) | **MD Reference:** | RKB=25' @ 3656.00ft |
| **Site:** | Senile Felines 18_7 | **North Reference:** | Grid |
| **Well:** | Senile Felines 18_7 State Com 15H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | Wellbore #1 | | |
| **Design:** | Permitting Plan | | |

**Planned Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---|---|---|---|---|---|---|---|---|---|
| 5,400.00 | 3.35 | 108.38 | 5,399.81 | -3.09 | 9.29 | -2.22 | 1.00 | 1.00 | 0.00 |
| 5,500.00 | 4.35 | 108.38 | 5,499.58 | -5.20 | 15.66 | -3.75 | 1.00 | 1.00 | 0.00 |
| 5,600.00 | 5.35 | 108.38 | 5,599.22 | -7.87 | 23.69 | -5.66 | 1.00 | 1.00 | 0.00 |
| 5,700.00 | 6.35 | 108.38 | 5,698.70 | -11.08 | 33.36 | -7.98 | 1.00 | 1.00 | 0.00 |
| 5,800.00 | 7.35 | 108.38 | 5,797.99 | -14.84 | 44.68 | -10.68 | 1.00 | 1.00 | 0.00 |
| 5,900.00 | 8.35 | 108.38 | 5,897.05 | -19.15 | 57.64 | -13.78 | 1.00 | 1.00 | 0.00 |
| 6,000.00 | 9.35 | 108.38 | 5,995.86 | -24.00 | 72.24 | -17.28 | 1.00 | 1.00 | 0.00 |
| 6,100.00 | 10.35 | 108.38 | 6,094.38 | -29.39 | 88.47 | -21.16 | 1.00 | 1.00 | 0.00 |
| 6,200.00 | 11.35 | 108.38 | 6,192.59 | -35.32 | 106.34 | -25.43 | 1.00 | 1.00 | 0.00 |
| 6,300.00 | 12.35 | 108.38 | 6,290.46 | -41.80 | 125.83 | -30.09 | 1.00 | 1.00 | 0.00 |
| 6,400.00 | 13.35 | 108.38 | 6,387.95 | -48.81 | 146.93 | -35.14 | 1.00 | 1.00 | 0.00 |
| 6,500.00 | 14.35 | 108.38 | 6,485.04 | -56.35 | 169.65 | -40.57 | 1.00 | 1.00 | 0.00 |
| 6,600.00 | 15.35 | 108.38 | 6,581.70 | -64.43 | 193.97 | -46.39 | 1.00 | 1.00 | 0.00 |
| 6,700.00 | 16.35 | 108.38 | 6,677.90 | -73.04 | 219.89 | -52.59 | 1.00 | 1.00 | 0.00 |
| 6,764.58 | 17.00 | 108.38 | 6,739.77 | -78.88 | 237.47 | -56.79 | 1.00 | 1.00 | 0.00 |
| 6,800.00 | 17.00 | 108.38 | 6,773.64 | -82.15 | 247.30 | -59.14 | 0.00 | 0.00 | 0.00 |
| 6,900.00 | 17.00 | 108.38 | 6,869.27 | -91.36 | 275.04 | -65.78 | 0.00 | 0.00 | 0.00 |
| 7,000.00 | 17.00 | 108.38 | 6,964.90 | -100.58 | 302.78 | -72.41 | 0.00 | 0.00 | 0.00 |
| 7,100.00 | 17.00 | 108.38 | 7,060.54 | -109.79 | 330.52 | -79.04 | 0.00 | 0.00 | 0.00 |
| 7,200.00 | 17.00 | 108.38 | 7,156.17 | -119.01 | 358.26 | -85.68 | 0.00 | 0.00 | 0.00 |
| 7,300.00 | 17.00 | 108.38 | 7,251.80 | -128.22 | 386.00 | -92.31 | 0.00 | 0.00 | 0.00 |
| 7,400.00 | 17.00 | 108.38 | 7,347.43 | -137.44 | 413.74 | -98.95 | 0.00 | 0.00 | 0.00 |
| 7,500.00 | 17.00 | 108.38 | 7,443.07 | -146.65 | 441.48 | -105.58 | 0.00 | 0.00 | 0.00 |
| 7,600.00 | 17.00 | 108.38 | 7,538.70 | -155.87 | 469.22 | -112.21 | 0.00 | 0.00 | 0.00 |
| 7,700.00 | 17.00 | 108.38 | 7,634.33 | -165.08 | 496.96 | -118.85 | 0.00 | 0.00 | 0.00 |
| 7,800.00 | 17.00 | 108.38 | 7,729.96 | -174.29 | 524.70 | -125.48 | 0.00 | 0.00 | 0.00 |
| 7,900.00 | 17.00 | 108.38 | 7,825.60 | -183.51 | 552.44 | -132.12 | 0.00 | 0.00 | 0.00 |
| 8,000.00 | 17.00 | 108.38 | 7,921.23 | -192.72 | 580.18 | -138.75 | 0.00 | 0.00 | 0.00 |
| 8,100.00 | 17.00 | 108.38 | 8,016.86 | -201.94 | 607.92 | -145.38 | 0.00 | 0.00 | 0.00 |
| 8,200.00 | 17.00 | 108.38 | 8,112.49 | -211.15 | 635.66 | -152.02 | 0.00 | 0.00 | 0.00 |
| 8,300.00 | 17.00 | 108.38 | 8,208.13 | -220.37 | 663.40 | -158.65 | 0.00 | 0.00 | 0.00 |
| 8,400.00 | 17.00 | 108.38 | 8,303.76 | -229.58 | 691.14 | -165.29 | 0.00 | 0.00 | 0.00 |
| 8,500.00 | 17.00 | 108.38 | 8,399.39 | -238.80 | 718.88 | -171.92 | 0.00 | 0.00 | 0.00 |
| 8,600.00 | 17.00 | 108.38 | 8,495.02 | -248.01 | 746.61 | -178.56 | 0.00 | 0.00 | 0.00 |
| 8,700.00 | 17.00 | 108.38 | 8,590.66 | -257.23 | 774.35 | -185.19 | 0.00 | 0.00 | 0.00 |
| 8,800.00 | 17.00 | 108.38 | 8,686.29 | -266.44 | 802.09 | -191.82 | 0.00 | 0.00 | 0.00 |
| 8,900.00 | 17.00 | 108.38 | 8,781.92 | -275.66 | 829.83 | -198.46 | 0.00 | 0.00 | 0.00 |
| 8,965.54 | 17.00 | 108.38 | 8,844.60 | -281.69 | 848.01 | -202.80 | 0.00 | 0.00 | 0.00 |
| 9,000.00 | 16.25 | 96.59 | 8,877.63 | -283.84 | 857.59 | -204.06 | 10.00 | -2.17 | -34.19 |
| 9,100.00 | 17.97 | 62.61 | 8,973.44 | -278.33 | 885.25 | -196.04 | 10.00 | 1.72 | -33.98 |
| 9,200.00 | 24.01 | 40.01 | 9,066.91 | -255.60 | 912.10 | -170.94 | 10.00 | 6.04 | -22.60 |
| 9,300.00 | 32.01 | 27.08 | 9,155.21 | -216.32 | 937.30 | -129.52 | 10.00 | 8.00 | -12.93 |
| 9,400.00 | 40.82 | 19.08 | 9,235.65 | -161.69 | 960.11 | -73.04 | 10.00 | 8.82 | -8.00 |
| 9,500.00 | 50.02 | 13.55 | 9,305.79 | -93.38 | 979.82 | -3.21 | 10.00 | 9.20 | -5.53 |
| 9,600.00 | 59.42 | 9.36 | 9,363.49 | -13.45 | 995.84 | 77.85 | 10.00 | 9.40 | -4.19 |
| 9,700.00 | 68.93 | 5.91 | 9,407.01 | 75.66 | 1,007.67 | 167.67 | 10.00 | 9.51 | -3.44 |
| 9,800.00 | 78.50 | 2.89 | 9,435.02 | 171.24 | 1,014.96 | 263.53 | 10.00 | 9.57 | -3.02 |
| 9,900.00 | 88.10 | 0.06 | 9,446.67 | 270.40 | 1,017.49 | 362.50 | 10.00 | 9.60 | -2.82 |
| 9,919.76 | 90.00 | 359.52 | 9,447.00 | 290.15 | 1,017.42 | 382.16 | 10.00 | 9.61 | -2.78 |
| 10,000.00 | 90.00 | 359.52 | 9,447.00 | 370.40 | 1,016.74 | 462.00 | 0.00 | 0.00 | 0.00 |
| 10,100.00 | 90.00 | 359.52 | 9,447.00 | 470.39 | 1,015.90 | 561.50 | 0.00 | 0.00 | 0.00 |
| 10,200.00 | 90.00 | 359.52 | 9,447.00 | 570.39 | 1,015.05 | 661.00 | 0.00 | 0.00 | 0.00 |
| 10,300.00 | 90.00 | 359.52 | 9,447.00 | 670.38 | 1,014.20 | 760.50 | 0.00 | 0.00 | 0.00 |
| 10,400.00 | 90.00 | 359.52 | 9,447.00 | 770.38 | 1,013.36 | 860.00 | 0.00 | 0.00 | 0.00 |
| 10,500.00 | 90.00 | 359.52 | 9,447.00 | 870.38 | 1,012.51 | 959.49 | 0.00 | 0.00 | 0.00 |

# OXY
## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | HOPSPP | **Local Co-ordinate Reference:** | Well Senile Felines 18_7 State Com 15H |
| **Company:** | ENGINEERING DESIGNS | **TVD Reference:** | RKB=25' @ 3656.00ft |
| **Project:** | PRD NM DIRECTIONAL PLANS (NAD 1983) | **MD Reference:** | RKB=25' @ 3656.00ft |
| **Site:** | Senile Felines 18_7 | **North Reference:** | Grid |
| **Well:** | Senile Felines 18_7 State Com 15H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | Wellbore #1 | | |
| **Design:** | Permitting Plan | | |

**Planned Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---|---|---|---|---|---|---|---|---|---|
| 10,600.00 | 90.00 | 359.52 | 9,447.00 | 970.37 | 1,011.67 | 1,058.99 | 0.00 | 0.00 | 0.00 |
| 10,700.00 | 90.00 | 359.52 | 9,447.00 | 1,070.37 | 1,010.82 | 1,158.49 | 0.00 | 0.00 | 0.00 |
| 10,800.00 | 90.00 | 359.52 | 9,447.00 | 1,170.37 | 1,009.98 | 1,257.99 | 0.00 | 0.00 | 0.00 |
| 10,900.00 | 90.00 | 359.52 | 9,447.00 | 1,270.36 | 1,009.13 | 1,357.49 | 0.00 | 0.00 | 0.00 |
| 11,000.00 | 90.00 | 359.52 | 9,447.00 | 1,370.36 | 1,008.28 | 1,456.98 | 0.00 | 0.00 | 0.00 |
| 11,100.00 | 90.00 | 359.52 | 9,447.00 | 1,470.36 | 1,007.44 | 1,556.48 | 0.00 | 0.00 | 0.00 |
| 11,200.00 | 90.00 | 359.52 | 9,447.00 | 1,570.35 | 1,006.59 | 1,655.98 | 0.00 | 0.00 | 0.00 |
| 11,300.00 | 90.00 | 359.52 | 9,447.00 | 1,670.35 | 1,005.75 | 1,755.48 | 0.00 | 0.00 | 0.00 |
| 11,400.00 | 90.00 | 359.52 | 9,447.00 | 1,770.35 | 1,004.90 | 1,854.98 | 0.00 | 0.00 | 0.00 |
| 11,500.00 | 90.00 | 359.52 | 9,447.00 | 1,870.34 | 1,004.05 | 1,954.48 | 0.00 | 0.00 | 0.00 |
| 11,600.00 | 90.00 | 359.52 | 9,447.00 | 1,970.34 | 1,003.21 | 2,053.97 | 0.00 | 0.00 | 0.00 |
| 11,700.00 | 90.00 | 359.52 | 9,447.00 | 2,070.33 | 1,002.36 | 2,153.47 | 0.00 | 0.00 | 0.00 |
| 11,800.00 | 90.00 | 359.52 | 9,447.00 | 2,170.33 | 1,001.52 | 2,252.97 | 0.00 | 0.00 | 0.00 |
| 11,900.00 | 90.00 | 359.52 | 9,447.00 | 2,270.33 | 1,000.67 | 2,352.47 | 0.00 | 0.00 | 0.00 |
| 11,934.76 | 90.00 | 359.52 | 9,447.00 | 2,305.08 | 1,000.38 | 2,387.05 | 0.00 | 0.00 | 0.00 |
| 11,937.44 | 90.00 | 359.56 | 9,447.00 | 2,307.77 | 1,000.35 | 2,389.72 | 1.50 | 0.00 | 1.50 |
| 12,000.00 | 90.00 | 359.56 | 9,447.00 | 2,370.32 | 999.87 | 2,451.97 | 0.00 | 0.00 | 0.00 |
| 12,100.00 | 90.00 | 359.56 | 9,447.00 | 2,470.32 | 999.09 | 2,551.48 | 0.00 | 0.00 | 0.00 |
| 12,200.00 | 90.00 | 359.56 | 9,447.00 | 2,570.32 | 998.32 | 2,650.98 | 0.00 | 0.00 | 0.00 |
| 12,300.00 | 90.00 | 359.56 | 9,447.00 | 2,670.32 | 997.54 | 2,750.49 | 0.00 | 0.00 | 0.00 |
| 12,400.00 | 90.00 | 359.56 | 9,447.00 | 2,770.31 | 996.77 | 2,849.99 | 0.00 | 0.00 | 0.00 |
| 12,500.00 | 90.00 | 359.56 | 9,447.00 | 2,870.31 | 995.99 | 2,949.50 | 0.00 | 0.00 | 0.00 |
| 12,600.00 | 90.00 | 359.56 | 9,447.00 | 2,970.31 | 995.21 | 3,049.00 | 0.00 | 0.00 | 0.00 |
| 12,700.00 | 90.00 | 359.56 | 9,447.00 | 3,070.30 | 994.44 | 3,148.51 | 0.00 | 0.00 | 0.00 |
| 12,800.00 | 90.00 | 359.56 | 9,447.00 | 3,170.30 | 993.66 | 3,248.01 | 0.00 | 0.00 | 0.00 |
| 12,900.00 | 90.00 | 359.56 | 9,447.00 | 3,270.30 | 992.89 | 3,347.52 | 0.00 | 0.00 | 0.00 |
| 13,000.00 | 90.00 | 359.56 | 9,447.00 | 3,370.29 | 992.11 | 3,447.02 | 0.00 | 0.00 | 0.00 |
| 13,100.00 | 90.00 | 359.56 | 9,447.00 | 3,470.29 | 991.34 | 3,546.53 | 0.00 | 0.00 | 0.00 |
| 13,200.00 | 90.00 | 359.56 | 9,447.00 | 3,570.29 | 990.56 | 3,646.03 | 0.00 | 0.00 | 0.00 |
| 13,300.00 | 90.00 | 359.56 | 9,447.00 | 3,670.29 | 989.79 | 3,745.54 | 0.00 | 0.00 | 0.00 |
| 13,400.00 | 90.00 | 359.56 | 9,447.00 | 3,770.28 | 989.01 | 3,845.04 | 0.00 | 0.00 | 0.00 |
| 13,500.00 | 90.00 | 359.56 | 9,447.00 | 3,870.28 | 988.23 | 3,944.55 | 0.00 | 0.00 | 0.00 |
| 13,600.00 | 90.00 | 359.56 | 9,447.00 | 3,970.28 | 987.46 | 4,044.06 | 0.00 | 0.00 | 0.00 |
| 13,700.00 | 90.00 | 359.56 | 9,447.00 | 4,070.27 | 986.68 | 4,143.56 | 0.00 | 0.00 | 0.00 |
| 13,800.00 | 90.00 | 359.56 | 9,447.00 | 4,170.27 | 985.91 | 4,243.07 | 0.00 | 0.00 | 0.00 |
| 13,900.00 | 90.00 | 359.56 | 9,447.00 | 4,270.27 | 985.13 | 4,342.57 | 0.00 | 0.00 | 0.00 |
| 14,000.00 | 90.00 | 359.56 | 9,447.00 | 4,370.26 | 984.36 | 4,442.08 | 0.00 | 0.00 | 0.00 |
| 14,100.00 | 90.00 | 359.56 | 9,447.00 | 4,470.26 | 983.58 | 4,541.58 | 0.00 | 0.00 | 0.00 |
| 14,200.00 | 90.00 | 359.56 | 9,447.00 | 4,570.26 | 982.80 | 4,641.09 | 0.00 | 0.00 | 0.00 |
| 14,300.00 | 90.00 | 359.56 | 9,447.00 | 4,670.26 | 982.03 | 4,740.59 | 0.00 | 0.00 | 0.00 |
| 14,400.00 | 90.00 | 359.56 | 9,447.00 | 4,770.25 | 981.25 | 4,840.10 | 0.00 | 0.00 | 0.00 |
| 14,500.00 | 90.00 | 359.56 | 9,447.00 | 4,870.25 | 980.48 | 4,939.60 | 0.00 | 0.00 | 0.00 |
| 14,600.00 | 90.00 | 359.56 | 9,447.00 | 4,970.25 | 979.70 | 5,039.11 | 0.00 | 0.00 | 0.00 |
| 14,700.00 | 90.00 | 359.56 | 9,447.00 | 5,070.24 | 978.93 | 5,138.61 | 0.00 | 0.00 | 0.00 |
| 14,800.00 | 90.00 | 359.56 | 9,447.00 | 5,170.24 | 978.15 | 5,238.12 | 0.00 | 0.00 | 0.00 |
| 14,900.00 | 90.00 | 359.56 | 9,447.00 | 5,270.24 | 977.37 | 5,337.62 | 0.00 | 0.00 | 0.00 |
| 15,000.00 | 90.00 | 359.56 | 9,447.00 | 5,370.23 | 976.60 | 5,437.13 | 0.00 | 0.00 | 0.00 |
| 15,100.00 | 90.00 | 359.56 | 9,447.00 | 5,470.23 | 975.82 | 5,536.63 | 0.00 | 0.00 | 0.00 |
| 15,200.00 | 90.00 | 359.56 | 9,447.00 | 5,570.23 | 975.05 | 5,636.14 | 0.00 | 0.00 | 0.00 |
| 15,300.00 | 90.00 | 359.56 | 9,447.00 | 5,670.23 | 974.27 | 5,735.64 | 0.00 | 0.00 | 0.00 |
| 15,400.00 | 90.00 | 359.56 | 9,447.00 | 5,770.22 | 973.50 | 5,835.15 | 0.00 | 0.00 | 0.00 |
| 15,500.00 | 90.00 | 359.56 | 9,447.00 | 5,870.22 | 972.72 | 5,934.65 | 0.00 | 0.00 | 0.00 |
| 15,600.00 | 90.00 | 359.56 | 9,447.00 | 5,970.22 | 971.95 | 6,034.16 | 0.00 | 0.00 | 0.00 |
| 15,700.00 | 90.00 | 359.56 | 9,447.00 | 6,070.21 | 971.17 | 6,133.67 | 0.00 | 0.00 | 0.00 |
| 15,800.00 | 90.00 | 359.56 | 9,447.00 | 6,170.21 | 970.39 | 6,233.17 | 0.00 | 0.00 | 0.00 |

# OXY
## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | HOPSPP | **Local Co-ordinate Reference:** | Well Senile Felines 18_7 State Com 15H |
| **Company:** | ENGINEERING DESIGNS | **TVD Reference:** | RKB=25' @ 3656.00ft |
| **Project:** | PRD NM DIRECTIONAL PLANS (NAD 1983) | **MD Reference:** | RKB=25' @ 3656.00ft |
| **Site:** | Senile Felines 18_7 | **North Reference:** | Grid |
| **Well:** | Senile Felines 18_7 State Com 15H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | Wellbore #1 | | |
| **Design:** | Permitting Plan | | |

**Planned Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---|---|---|---|---|---|---|---|---|---|
| 15,900.00 | 90.00 | 359.56 | 9,447.00 | 6,270.21 | 969.62 | 6,332.68 | 0.00 | 0.00 | 0.00 |
| 16,000.00 | 90.00 | 359.56 | 9,447.00 | 6,370.20 | 968.84 | 6,432.18 | 0.00 | 0.00 | 0.00 |
| 16,100.00 | 90.00 | 359.56 | 9,447.00 | 6,470.20 | 968.07 | 6,531.69 | 0.00 | 0.00 | 0.00 |
| 16,200.00 | 90.00 | 359.56 | 9,447.00 | 6,570.20 | 967.29 | 6,631.19 | 0.00 | 0.00 | 0.00 |
| 16,300.00 | 90.00 | 359.56 | 9,447.00 | 6,670.20 | 966.52 | 6,730.70 | 0.00 | 0.00 | 0.00 |
| 16,400.00 | 90.00 | 359.56 | 9,447.00 | 6,770.19 | 965.74 | 6,830.20 | 0.00 | 0.00 | 0.00 |
| 16,500.00 | 90.00 | 359.56 | 9,447.00 | 6,870.19 | 964.96 | 6,929.71 | 0.00 | 0.00 | 0.00 |
| 16,600.00 | 90.00 | 359.56 | 9,447.00 | 6,970.19 | 964.19 | 7,029.21 | 0.00 | 0.00 | 0.00 |
| 16,700.00 | 90.00 | 359.56 | 9,447.00 | 7,070.18 | 963.41 | 7,128.72 | 0.00 | 0.00 | 0.00 |
| 16,800.00 | 90.00 | 359.56 | 9,447.00 | 7,170.18 | 962.64 | 7,228.22 | 0.00 | 0.00 | 0.00 |
| 16,900.00 | 90.00 | 359.56 | 9,447.00 | 7,270.18 | 961.86 | 7,327.73 | 0.00 | 0.00 | 0.00 |
| 17,000.00 | 90.00 | 359.56 | 9,447.00 | 7,370.17 | 961.09 | 7,427.23 | 0.00 | 0.00 | 0.00 |
| 17,100.00 | 90.00 | 359.56 | 9,447.00 | 7,470.17 | 960.31 | 7,526.74 | 0.00 | 0.00 | 0.00 |
| 17,200.00 | 90.00 | 359.56 | 9,447.00 | 7,570.17 | 959.53 | 7,626.24 | 0.00 | 0.00 | 0.00 |
| 17,300.00 | 90.00 | 359.56 | 9,447.00 | 7,670.17 | 958.76 | 7,725.75 | 0.00 | 0.00 | 0.00 |
| 17,400.00 | 90.00 | 359.56 | 9,447.00 | 7,770.16 | 957.98 | 7,825.25 | 0.00 | 0.00 | 0.00 |
| 17,500.00 | 90.00 | 359.56 | 9,447.00 | 7,870.16 | 957.21 | 7,924.76 | 0.00 | 0.00 | 0.00 |
| 17,600.00 | 90.00 | 359.56 | 9,447.00 | 7,970.16 | 956.43 | 8,024.26 | 0.00 | 0.00 | 0.00 |
| 17,700.00 | 90.00 | 359.56 | 9,447.00 | 8,070.15 | 955.66 | 8,123.77 | 0.00 | 0.00 | 0.00 |
| 17,800.00 | 90.00 | 359.56 | 9,447.00 | 8,170.15 | 954.88 | 8,223.28 | 0.00 | 0.00 | 0.00 |
| 17,900.00 | 90.00 | 359.56 | 9,447.00 | 8,270.15 | 954.11 | 8,322.78 | 0.00 | 0.00 | 0.00 |
| 18,000.00 | 90.00 | 359.56 | 9,447.00 | 8,370.14 | 953.33 | 8,422.29 | 0.00 | 0.00 | 0.00 |
| 18,100.00 | 90.00 | 359.56 | 9,447.00 | 8,470.14 | 952.55 | 8,521.79 | 0.00 | 0.00 | 0.00 |
| 18,200.00 | 90.00 | 359.56 | 9,447.00 | 8,570.14 | 951.78 | 8,621.30 | 0.00 | 0.00 | 0.00 |
| 18,300.00 | 90.00 | 359.56 | 9,447.00 | 8,670.14 | 951.00 | 8,720.80 | 0.00 | 0.00 | 0.00 |
| 18,400.00 | 90.00 | 359.56 | 9,447.00 | 8,770.13 | 950.23 | 8,820.31 | 0.00 | 0.00 | 0.00 |
| 18,500.00 | 90.00 | 359.56 | 9,447.00 | 8,870.13 | 949.45 | 8,919.81 | 0.00 | 0.00 | 0.00 |
| 18,600.00 | 90.00 | 359.56 | 9,447.00 | 8,970.13 | 948.68 | 9,019.32 | 0.00 | 0.00 | 0.00 |
| 18,700.00 | 90.00 | 359.56 | 9,447.00 | 9,070.12 | 947.90 | 9,118.82 | 0.00 | 0.00 | 0.00 |
| 18,800.00 | 90.00 | 359.56 | 9,447.00 | 9,170.12 | 947.12 | 9,218.33 | 0.00 | 0.00 | 0.00 |
| 18,900.00 | 90.00 | 359.56 | 9,447.00 | 9,270.12 | 946.35 | 9,317.83 | 0.00 | 0.00 | 0.00 |
| 19,000.00 | 90.00 | 359.56 | 9,447.00 | 9,370.11 | 945.57 | 9,417.34 | 0.00 | 0.00 | 0.00 |
| 19,100.00 | 90.00 | 359.56 | 9,447.00 | 9,470.11 | 944.80 | 9,516.84 | 0.00 | 0.00 | 0.00 |
| 19,200.00 | 90.00 | 359.56 | 9,447.00 | 9,570.11 | 944.02 | 9,616.35 | 0.00 | 0.00 | 0.00 |
| 19,300.00 | 90.00 | 359.56 | 9,447.00 | 9,670.11 | 943.25 | 9,715.85 | 0.00 | 0.00 | 0.00 |
| 19,400.00 | 90.00 | 359.56 | 9,447.00 | 9,770.10 | 942.47 | 9,815.36 | 0.00 | 0.00 | 0.00 |
| 19,500.00 | 90.00 | 359.56 | 9,447.00 | 9,870.10 | 941.70 | 9,914.86 | 0.00 | 0.00 | 0.00 |
| 19,600.00 | 90.00 | 359.56 | 9,447.00 | 9,970.10 | 940.92 | 10,014.37 | 0.00 | 0.00 | 0.00 |
| 19,700.00 | 90.00 | 359.56 | 9,447.00 | 10,070.09 | 940.14 | 10,113.87 | 0.00 | 0.00 | 0.00 |
| 19,800.00 | 90.00 | 359.56 | 9,447.00 | 10,170.09 | 939.37 | 10,213.38 | 0.00 | 0.00 | 0.00 |
| 19,835.44 | 90.00 | 359.56 | 9,447.00 | 10,205.53 | 939.09 | 10,248.65 | 0.00 | 0.00 | 0.00 |

# OXY
## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | HOPSPP | **Local Co-ordinate Reference:** | Well Senile Felines 18_7 State Com 15H |
| **Company:** | ENGINEERING DESIGNS | **TVD Reference:** | RKB=25' @ 3656.00ft |
| **Project:** | PRD NM DIRECTIONAL PLANS (NAD 1983) | **MD Reference:** | RKB=25' @ 3656.00ft |
| **Site:** | Senile Felines 18_7 | **North Reference:** | Grid |
| **Well:** | Senile Felines 18_7 State Com 15H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | Wellbore #1 | | |
| **Design:** | Permitting Plan | | |

**Design Targets**

| Target Name - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
|---|---|---|---|---|---|---|---|---|---|
| KOP (Senile Felines<br>- plan misses target center by 1061.00ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)<br>- Point | 0.00 | 0.00 | 0.00 | -284.03 | 1,022.28 | 504,462.55 | 766,433.92 | 32.384727 | -103.604135 |
| FTP (Senile Felines<br>- plan misses target center by 203.69ft at 9500.00ft MD (9305.78 TVD, -93.38 N, 979.82 E)<br>- Point | 0.00 | 0.00 | 9,447.00 | -234.03 | 1,021.86 | 504,512.55 | 766,433.50 | 32.384865 | -103.604136 |
| PBHL (Senile Felines<br>- plan hits target center<br>- Point | 0.00 | 0.00 | 9,447.00 | 10,205.53 | 939.09 | 514,951.74 | 766,350.74 | 32.413560 | -103.604173 |
| PI-1 (Senile Felines<br>- plan hits target center<br>- Point | 0.00 | 0.00 | 9,447.00 | 2,305.08 | 1,000.38 | 507,051.57 | 766,412.02 | 32.391844 | -103.604149 |

**Formations**

| Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) |
|---|---|---|---|---|---|
| 922.00 | 922.00 | RUSTLER | | | |
| 1,535.00 | 1,535.00 | SALADO | | | |
| 2,742.00 | 2,742.00 | CASTILE | | | |
| 4,862.00 | 4,862.00 | DELAWARE | | | |
| 4,939.00 | 4,939.00 | BELL CANYON | | | |
| 5,803.04 | 5,801.00 | CHERRY CANYON | | | |
| 7,177.87 | 7,135.00 | BRUSHY CANYON | | | |
| 8,848.84 | 8,733.00 | BONE SPRING | | | |

**Plan Annotations**

| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates +N/-S (ft) | Local Coordinates +E/-W (ft) | Comment |
|---|---|---|---|---|
| 5,065.00 | 5,065.00 | 0.00 | 0.00 | Build 1°/100' |
| 6,764.58 | 6,739.77 | -78.88 | 237.47 | Hold 17° Tangent |
| 8,965.54 | 8,844.60 | -281.69 | 848.01 | KOP, Build & Turn 10°/100' |
| 9,919.76 | 9,447.00 | 290.15 | 1,017.42 | Landing Point |
| 11,934.76 | 9,447.00 | 2,305.08 | 1,000.38 | Turn 1.5°/100' |
| 11,937.44 | 9,447.00 | 2,307.77 | 1,000.35 | Hold |
| 19,835.44 | 9,447.00 | 10,205.53 | 939.09 | TD at 19835.44' MD |

# Oxy USA Inc. - Senile Felines 18_7 State Com 15H
## Drill Plan

### 1. Geologic Formations

| | | | |
|---|---|---|---|
| TVD of Target (ft): | 9447 | Pilot Hole Depth (ft): | |
| Total Measured Depth (ft): | 19835 | Deepest Expected Fresh Water (ft): | 922 |

**Delaware Basin**

| Formation | MD-RKB (ft) | TVD-RKB (ft) | Expected Fluids |
|---|---|---|---|
| Rustler | 922 | 922 | |
| Salado | 1535 | 1535 | Salt |
| Castile | 2742 | 2742 | Salt |
| Delaware | 4862 | 4862 | Oil/Gas/Brine |
| Bell Canyon | 4939 | 4939 | Oil/Gas/Brine |
| Cherry Canyon | 5803 | 5801 | Oil/Gas/Brine |
| Brushy Canyon | 7178 | 7135 | Losses |
| Bone Spring | 8849 | 8733 | Oil/Gas |
| Bone Spring 1st | | | Oil/Gas |
| Bone Spring 2nd | | | Oil/Gas |
| Bone Spring 3rd | | | Oil/Gas |
| Wolfcamp | | | Oil/Gas |
| Penn | | | Oil/Gas |
| Strawn | | | Oil/Gas |

*H2S, water flows, loss of circulation, abnormal pressures, etc.

### 2. Casing Program

| | | MD | | TVD | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Section | Hole Size (in) | From (ft) | To (ft) | From (ft) | To (ft) | Csg. OD (in) | Csg Wt. (ppf) | Grade | Conn. |
| Surface | 17.5 | 0 | 982 | 0 | 982 | 13.375 | 54.5 | J-55 | BTC |
| Salt | 12.25 | 0 | 4862 | 0 | 4862 | 10.75 | 45.5 | L-80 HC | BTC-SC |
| Intermediate | 9.875 | 0 | 8866 | 0 | 8745 | 7.625 | 26.4 | L-80 HC | BTC |
| Production | 6.75 | 0 | 19835 | 0 | 9447 | 5.5 | 20 | P-110 | DWC/C-HT-IS |

All casing strings will be tested in accordance with 43 CFR part 3170 Subpart 3172

| *All Casing SF Values will meet or exceed those below* | | | |
|---|---|---|---|
| **SF Collapse** | **SF Burst** | **Body SF Tension** | **Joint SF Tension** |
| 1.00 | 1.100 | 1.4 | 1.4 |

## Annular Clearance Variance Request

As per the agreement reached in the Oxy/BLM face-to-face meeting on Feb 22, 2018, Oxy requests permission to allow deviation from the 0.422" annular clearance requirement. Please see Annular Clearance Variance attachment for further details.

| | Y or N |
|---|---|
| Is casing new? If used, attach certification as required in 43 CFR 3160 | Y |
| Does casing meet API specifications? If no, attach casing specification sheet. | Y |
| Is premium or uncommon casing planned? If yes attach casing specification sheet. | Y |
| Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria). | Y |
| Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing? | Y |
| | |
| Is well located within Capitan Reef? | N |
| If yes, does production casing cement tie back a minimum of 50' above the Reef? | |
| Is well within the designated 4 string boundary. | |
| | |
| Is well located in SOPA but not in R-111-P? | N |
| If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing? | |
| | |
| Is well located in R-111-P and SOPA? | N |
| If yes, are the first three strings cemented to surface? | |
| Is 2nd string set 100' to 600' below the base of salt? | |
| | |
| Is well located in high Cave/Karst? | N |
| If yes, are there two strings cemented to surface? | |
| (For 2 string wells) If yes, is there a contingency casing if lost circulation occurs? | |
| | |
| Is well located in critical Cave/Karst? | N |
| If yes, are there three strings cemented to surface? | |

## 3. Cementing Program

| Section | Stage | Slurry: | Sacks | Yield (ft^3/ft) | Density (lb/gal) | Excess: | TOC | Placement | Description |
|---|---|---|---|---|---|---|---|---|---|
| Surface | 1 | Surface - Tail | 1026 | 1.33 | 14.8 | 100% | - | Circulate | Class C+Accel. |
| Int.1 | 1 | Intermediate - Tail | 85 | 1.33 | 14.8 | 20% | 4,362 | Circulate | Class C+Accel. |
| Int.1 | 1 | Intermediate - Lead | 686 | 1.73 | 12.9 | 50% | - | Circulate | Class Pozz+Ret. |
| Int. 2 | 1 | Intermediate 1S - Tail | 193 | 1.68 | 13.2 | 5% | 7,428 | Circulate | Class C+Ret., Disper. |
| Int. 2 | 2 | Intermediate 2S - Tail BH | 1037 | 1.71 | 13.3 | 25% | - | Bradenhead | Class C+Accel. |
| Prod. | 1 | Production - Tail | 650 | 1.84 | 13.3 | 25% | 8,366 | Circulate | Class C+Ret. |

**Offline Cementing Request**

Oxy requests a variance to cement the 9.625” and/or 7.625” intermediate casing strings offline in accordance to the approved variance, EC Tran 461365. Please see Offline Cementing Variance attachment for further details.

**Bradenhead CBL Request**

Oxy requests permission to adjust the CBL requirement after bradenhead cement jobs, on 7-5/8” intermediate casings, as per the agreement reached in the OXY/BLM meeting on September 5, 2019. Please see Bradenhead CBL Variance attachment for further details.

## 4. Pressure Control Equipment

| BOP installed and tested before drilling which hole? | Size? | Min. Required WP | Type | ✓ | Tested to: | TVD Depth (ft) per Section: |
|---|---|---|---|---|---|---|
| 12.25" Hole | 13-5/8" | 5M | Annular | ✓ | 70% of working pressure | 4862 |
| | | 5M | Blind Ram | ✓ | 250 psi / 5000 psi | |
| | | | Pipe Ram | | | |
| | | | Double Ram | ✓ | | |
| | | | Other* | | | |
| 9.875" Hole | 13-5/8" | 5M | Annular | ✓ | 70% of working pressure | 8745 |
| | | 5M | Blind Ram | ✓ | 250 psi / 5000 psi | |
| | | | Pipe Ram | | | |
| | | | Double Ram | ✓ | | |
| | | | Other* | | | |
| 6.75" Hole | 13-5/8" | 5M | Annular | ✓ | 70% of working pressure | 9447 |
| | | 5M | Blind Ram | ✓ | 250 psi / 5000 psi | |
| | | | Pipe Ram | | | |
| | | | Double Ram | ✓ | | |
| | | | Other* | | | |

*Specify if additional ram is utilized

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per 43 CFR part 3170 Subpart 3172 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold.

| | |
|---|---|
| | Formation integrity test will be performed per 43 CFR part 3170 Subpart 3172. |
| | On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with 43 CFR part 3170 Subpart 3172. |
| | |
| | A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart. |
| | Y — Are anchors required by manufacturer? |
| | A multibowl or a unionized multibowl wellhead system will be employed. The wellhead and connection to the BOPE will meet all API 6A requirements. The BOP will be tested per 43 CFR part 3170 Subpart 3172 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. We will test the flange connection of the wellhead with a test port that is directly in the flange. We are proposing that we will run the wellhead through the rotary prior to cementing surface casing as discussed with the BLM on October 8, 2015.<br><br>See attached schematics. |

**BOP Break Testing Request**

Oxy requests permission to adjust the BOP break testing requirements as per the agreement reached in the OXY/BLM meeting on September 5, 2019. Please see BOP Break Testing Variance attachment for further details.

**Oxy will use Cameron ADAPT wellhead system that uses an OEC top flange connection. This connection has been fully vetted and verified by API to Spec 6A and carries an API monogram.**

## 5. Mud Program

| Section | Depth | | Depth - TVD | | Type | Weight (ppg) | Viscosity | Water Loss |
|---|---|---|---|---|---|---|---|---|
| | From (ft) | To (ft) | From (ft) | To (ft) | | | | |
| Surface | 0 | 982 | 0 | 982 | Water-Based Mud | 8.6 - 8.8 | 40-60 | N/C |
| Intermediate 1 | 982 | 4862 | 982 | 4862 | Saturated Brine-Based or Oil-Based Mud | 8.0 - 10.0 | 35-45 | N/C |
| Intermediate 2 | 4862 | 8866 | 4862 | 8745 | Water-Based or Oil-Based Mud | 8.0 - 10.0 | 38-50 | N/C |
| Production | 8866 | 19835 | 8745 | 9447 | Water-Based or Oil-Based Mud | 8.0 - 9.6 | 38-50 | N/C |

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. The following is a general list of products: Barite, Bentonite, Gypsum, Lime, Soda Ash, Caustic Soda, Nut Plug, Cedar Fiber, Cotton Seed Hulls, Drilling Paper, Salt Water Clay, CACL2. Oxy will use a closed mud system.

| | |
|---|---|
| What will be used to monitor the loss or gain of fluid? | PVT/MD Totco/Visual Monitoring |

## 6. Logging and Testing Procedures

| Logging, Coring and Testing. | |
|---|---|
| Yes | Will run GR from TD to surface (horizontal well – vertical portion of hole). |
| | Stated logs run will be in the Completion Report and submitted to the BLM. |
| No | Logs are planned based on well control or offset log information. |
| No | Drill stem test? If yes, explain |
| No | Coring? If yes, explain |

| Additional logs planned | | Interval |
|---|---|---|
| No | Resistivity | |
| No | Density | |
| Yes | CBL | Production string |
| Yes | Mud log | Bone Spring – TD |
| No | PEX | |

## 7. Drilling Conditions

| Condition | Specify what type and where? |
|---|---|
| BH Pressure at deepest TVD | 4716 psi |
| Abnormal Temperature | No |
| BH Temperature at deepest TVD | 156°F |

Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal

| Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of 43 CFR part 3170 Subpart 3172. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM. | |
|---|---|
| N | H2S is present |
| Y | H2S Plan attached |

## 8. Other facets of operation

| | Yes/No |
|---|---|
| Will the well be drilled with a walking/skidding operation? If yes, describe.<br>We plan to drill the 2 well pad in batch by section: all surface sections, intermediate sections and production sections. The wellhead will be secured with a night cap whenever the rig is not over the well. | Yes |
| Will more than one drilling rig be used for drilling operations? If yes, describe.<br>Oxy requests the option to contract a Surface Rig to drill, set surface casing, and cement for this well. If the timing between rigs is such that Oxy would not be able to preset surface, the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the attached document for information on the spudder rig. | Yes |

**Total Estimated Cuttings Volume:** 1723 bbls

DWC/C-HT-IS

# Connection Data Sheet

| OD (in.) | WEIGHT (lbs./ft.) | WALL (in.) | GRADE | API DRIFT (in.) | RBW% | CONNECTION |
|---|---|---|---|---|---|---|
| 5.500 | Nominal: 20.00<br>Plain End: 19.83 | 0.361 | ‡VST P110MY | 4.653 | 87.5 | DWC/C-HT-IS |

| PIPE PROPERTIES | | |
|---|---|---|
| Nominal OD | 5.500 | in. |
| Nominal ID | 4.778 | in. |
| Nominal Area | 5.828 | sq.in. |
| Grade Type | | API 5CT |
| Min. Yield Strength | 125 | ksi |
| Max. Yield Strength | 140 | ksi |
| Min. Tensile Strength | 135 | ksi |
| Yield Strength | 729 | klb |
| Ultimate Strength | 787 | klb |
| Min. Internal Yield Pressure | 14,360 | psi |
| Collapse Pressure | 12,090 | psi |

| CONNECTION PROPERTIES | | |
|---|---|---|
| Connection Type | Semi-Premium T&C | |
| Connection OD (nom) | 6.050 | in. |
| Connection ID (nom) | 4.778 | in. |
| Make-Up Loss | 4.125 | in. |
| Coupling Length | 9.250 | in. |
| Critical Cross Section | 5.828 | sq.in. |
| Tension Efficiency | 89.1% | of pipe |
| Compression Efficiency | 88.0% | of pipe |
| Internal Pressure Efficiency | 86.1% | of pipe |
| External Pressure Efficiency | 100.0% | of pipe |

| CONNECTION PERFORMANCES | | |
|---|---|---|
| Yield Strength | 649 | klb |
| Parting Load | 729 | klb |
| Compression Rating | 641 | klb |
| Min. Internal Yield Pressure | 12,360 | psi |
| External Pressure Resistance | 12,090 | psi |
| Maximum Uniaxial Bend Rating | 91.7 | °/100 ft |
| Reference String Length w 1.4 Design Factor | 22,890 | ft. |

| FIELD TORQUE VALUES | | |
|---|---|---|
| Min. Make-up torque | 16,600 | ft.lb |
| Opti. Make-up torque | 17,950 | ft.lb |
| Max. Make-up torque | 19,300 | ft.lb |
| Min. Shoulder Torque | 1,660 | ft.lb |
| Max. Shoulder Torque | 13,280 | ft.lb |
| Max. Delta Turn | 0.200 | Turns |
| †Maximum Operational Torque | 23,800 | ft.lb |
| †Maximum Torsional Value (MTV) | 26,180 | ft.lb |

**† Maximum Operational Torque and Maximum Torsional Value only valid with Vallourec P110MY Material.**
**‡ P110MY - Coupling Min Yield Strength is 110ksi and Coupling Max Yield is 125ksi.**

"VST = Vallourec Star as the mill source for the pipe, "P110EC" is the grade name"

**Need Help? Contact: tech.support@vam-usa.com**

**For detailed information on performance properties, refer to DWC Connection Data Notes on following page(s).**

Connection specifications within the control of VAM USA were correct as of the date printed. Specifications are subject to change without notice. Certain connection specifications are dependent on the mechanical properties of the pipe. Mechanical properties of mill proprietary pipe grades were obtained from mill publications and are subject to change. Properties of mill proprietary grades should be confirmed with the mill. Users are advised to obtain current connection specifications and verify pipe mechanical properties for each application.

All information is provided by VAM USA or its affiliates at user's sole risk, without liability for loss, damage or injury resulting from the use thereof; and on an ""AS IS"" basis without warranty or representation of any kind, whether express or implied, including without limitation any warranty of merchantability, fitness for purpose or completeness. This document and its contents are subject to change without notice. In no event shall VAM USA or its affiliates be responsible for any indirect, special, incidental, punitive, exemplary or consequential loss or damage (including without limitation, loss of use, loss of bargain, loss of revenue, profit or anticipated profit) however caused or arising, and whether such losses or damages were foreseeable or VAM USA or its affiliates was advised of the possibility of such damages.

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VAM USA

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**DWC Connection Data Sheet Notes:**

1. DWC connections are available with a seal ring (SR) option.
2. All standard DWC/C connections are interchangeable for a given pipe OD. DWC connections are interchangeable with DWC/C-SR connections of the same OD and wall.
3. Connection performance properties are based on nominal pipe body and connection dimensions.
4. DWC connection internal and external pressure resistance is calculated using the API rating for buttress connections. API Internal pressure resistance is calculated from formulas 31, 32, and 35 in the API Bulletin 5C3.
5. DWC joint strength is the minimum pipe body yield strength multiplied by the connection critical area.
6. API joint strength is for reference only. It is calculated from formulas 42 and 43 in the API Bulletin 5C3.
7. Bending efficiency is equal to the compression efficiency.
8. The torque values listed are recommended. The actual torque required may be affected by field conditions such as temperature, thread compound, speed of make-up, weather conditions, etc.
9. Connection yield torque is not to be exceeded.
10. Reference string length is calculated by dividing the joint strength by both the nominal weight in air and a design factor (DF) of 1.4. These values are offered for reference only and do not include load factors such as bending, buoyancy, temperature, load dynamics, etc.
11. DWC connections will accommodate API standard drift diameters.
12. DWC/C family of connections are compatible with API Buttress BTC connections. Please contact tech.support@vam-usa.com for details on connection ratings and make-up.



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Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Action 410646

## CONDITIONS

| | |
|---|---|
| Operator:<br>OXY USA INC<br>P.O. Box 4294<br>Houston, TX 772104294 | OGRID:<br>16696 |
| | Action Number:<br>410646 |
| | Action Type:<br>[C-103] NOI Change of Plans (C-103A) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| pkautz | BLM VARIANCES DO NOT APPLY TO STATE AND FEE WELLS | 12/18/2024 |
| pkautz | WHEN EVER A BREADENHEAD CEMENT JOB IS PERFORMED MUST RUN A CBL | 12/18/2024 |
| pkautz | If cement is not circulated to surface during cementing operations, a Cement Bond Log (CBL) is required. | 12/18/2024 |
| pkautz | Cement is required to circulate on both surface and intermediate1 strings of casing. | 12/18/2024 |