

|                                                   |                                                                 |                                          |
|---------------------------------------------------|-----------------------------------------------------------------|------------------------------------------|
| <b>Well Name:</b> STACK CATS 25-36<br>FEDERAL COM | <b>Well Location:</b> T22S / R32E / SEC 24 /<br>SWSE /          | <b>County or Parish/State:</b>           |
| <b>Well Number:</b> 25H                           | <b>Type of Well:</b> OIL WELL                                   | <b>Allottee or Tribe Name:</b>           |
| <b>Lease Number:</b> NMNM002379                   | <b>Unit or CA Name:</b>                                         | <b>Unit or CA Number:</b>                |
| <b>US Well Number:</b> 3002551755                 | <b>Well Status:</b> Approved Application for<br>Permit to Drill | <b>Operator:</b> OXY USA<br>INCORPORATED |

Notice of Intent

**Sundry ID:** 2756259

|                                                       |                                     |
|-------------------------------------------------------|-------------------------------------|
| <b>Type of Submission:</b> Notice of Intent           | <b>Type of Action:</b> APD Change   |
| <b>Date Sundry Submitted:</b> 10/12/2023              | <b>Time Sundry Submitted:</b> 12:16 |
| <b>Date proposed operation will begin:</b> 12/01/2023 |                                     |

**Procedure Description:** OXY USA INC. Respectfully requests approval to make changes to our approved APD, see the following change requests below: Update Bottom Hole: from Section 36 T22S, R32E, 20' from the South and 1310' from the East, to the new location of Section 36, T22S, R32E, 20' From the South and 1651' From the East. Update HSU from 640 acres to 320 acres, see updated plat attached. Update the production casing from 5.5" casing, to a tapered casing 7" to 5.5". See the changes on the attached drill plan.

NOI Attachments

Procedure Description

- StackCats25\_36FedCom25H\_TNSWedge461\_7.000in\_32.00ppf\_P110CY\_20231012121559.pdf
- StackCats25\_36FedCom25H\_TNSWedge461\_5.500in\_20.00ppf\_P110CY\_20231012121552.pdf
- StackCats25\_36FedCom25H\_OfflineCementVariance\_20231012121552.pdf
- StackCats25\_36FedCom25H\_CsgCriteria\_20231012121552.pdf
- StackCats25\_36FedCom25H\_DrillPlan\_20231012121552.pdf
- I10859WEL01NM\_C102\_STACK\_CATS\_25\_36\_FED\_COM\_25H\_20230817\_20231012121552.pdf
- StackCats25\_36FedCom25H\_DirectPlan\_20231012121552.pdf

|                                            |                                                          |                                   |
|--------------------------------------------|----------------------------------------------------------|-----------------------------------|
| Well Name: STACK CATS 25-36<br>FEDERAL COM | Well Location: T22S / R32E / SEC 24 /<br>SWSE /          | County or Parish/State:           |
| Well Number: 25H                           | Type of Well: OIL WELL                                   | Allottee or Tribe Name:           |
| Lease Number: NMNM002379                   | Unit or CA Name:                                         | Unit or CA Number:                |
| US Well Number: 3002551755                 | Well Status: Approved Application for<br>Permit to Drill | Operator: OXY USA<br>INCORPORATED |

Conditions of Approval

Additional

STACK\_CATS\_25\_36\_FEDERAL\_COM\_25H\_\_\_SUNDRY\_COA\_20231128150212.pdf

Operator

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

|                                               |                                  |
|-----------------------------------------------|----------------------------------|
| Operator Electronic Signature: SARAH MCKINNEY | Signed on: OCT 12, 2023 12:16 PM |
| Name: OXY USA INCORPORATED                    |                                  |
| Title: Regulatory Analyst Sr                  |                                  |
| Street Address: 5 GREENWAY PLAZA SUITE 110    |                                  |
| City: HOUSTON                                 | State: TX                        |
| Phone: (713) 215-7295                         |                                  |
| Email address: SARAH_MCKINNEY@OXY.COM         |                                  |

Field

|                      |        |      |
|----------------------|--------|------|
| Representative Name: |        |      |
| Street Address:      |        |      |
| City:                | State: | Zip: |
| Phone:               |        |      |
| Email address:       |        |      |

BLM Point of Contact

|                               |                                         |
|-------------------------------|-----------------------------------------|
| BLM POC Name: KEITH P IMMATTY | BLM POC Title: ENGINEER                 |
| BLM POC Phone: 5759884722     | BLM POC Email Address: KIMMATTY@BLM.GOV |
| Disposition: Approved         | Disposition Date: 11/28/2023            |
| Signature: Keith Immatty      |                                         |

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                         |                                                        |                                                 |
|-----------------------------------------|--------------------------------------------------------|-------------------------------------------------|
| <sup>1</sup> API Number<br>30-025-51755 | <sup>2</sup> Pool Code<br>51683                        | <sup>3</sup> Pool Name<br>Red Tank; Bone Spring |
| <sup>4</sup> Property Code<br>333676    | <sup>5</sup> Property Name<br>STACK CATS 25_36 FED COM | <sup>6</sup> Well Number<br>25H                 |
| <sup>7</sup> OGRID No.<br>16696         | <sup>8</sup> Operator Name<br>OXY USA INC.             | <sup>9</sup> Elevation<br>3754'                 |

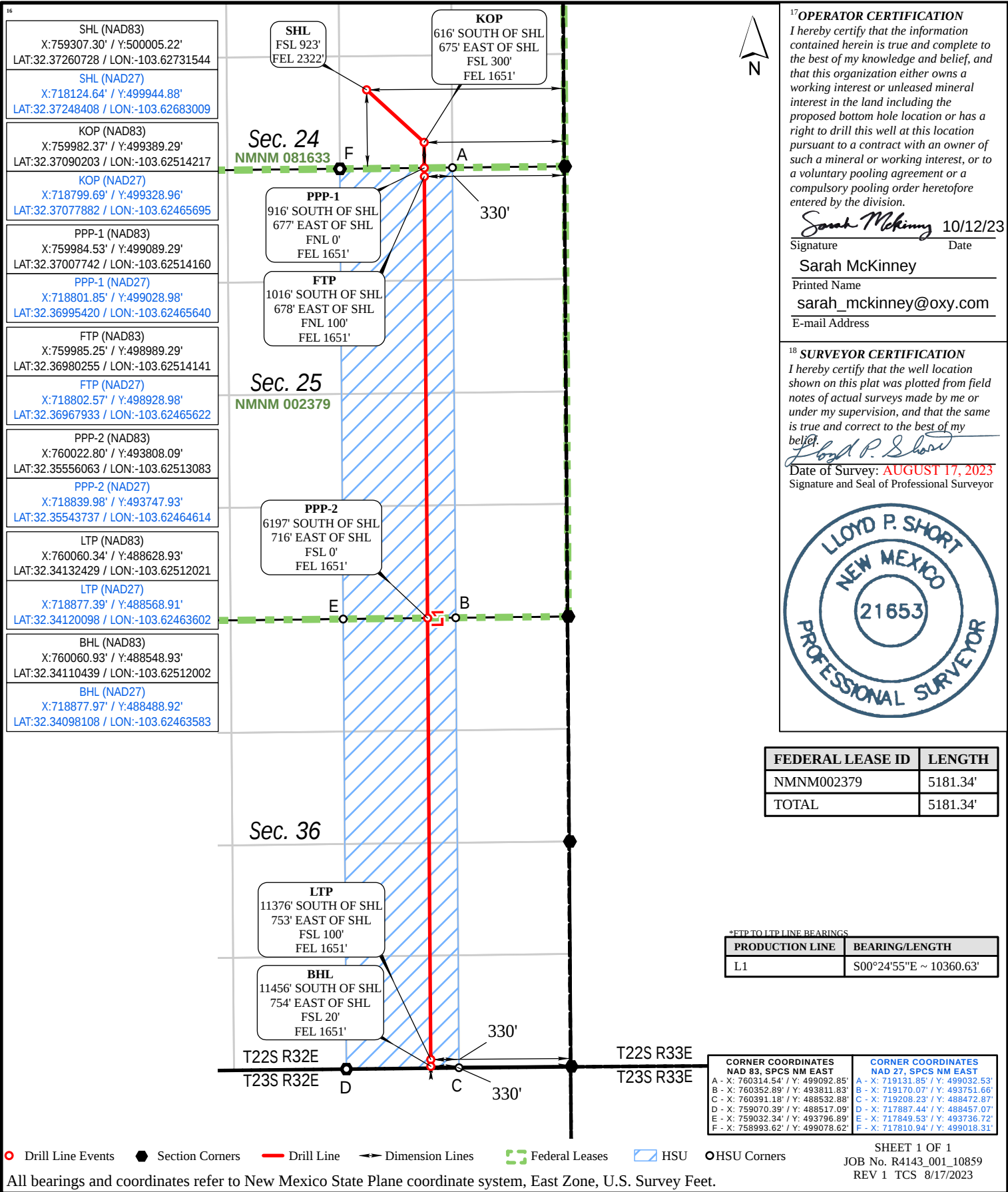
<sup>10</sup> Surface Location

|                    |               |                 |              |         |                       |                           |                        |                        |               |
|--------------------|---------------|-----------------|--------------|---------|-----------------------|---------------------------|------------------------|------------------------|---------------|
| UL or lot no.<br>O | Section<br>24 | Township<br>22S | Range<br>32E | Lot 1dn | Feet from the<br>923' | North/South line<br>SOUTH | Feet from the<br>2322' | East/West line<br>EAST | County<br>LEA |
|--------------------|---------------|-----------------|--------------|---------|-----------------------|---------------------------|------------------------|------------------------|---------------|

<sup>11</sup> Bottom Hole Location If Different From Surface

|                                         |                               |                                  |                         |         |                      |                           |                        |                        |               |
|-----------------------------------------|-------------------------------|----------------------------------|-------------------------|---------|----------------------|---------------------------|------------------------|------------------------|---------------|
| UL or lot no.<br>O                      | Section<br>36                 | Township<br>22S                  | Range<br>32E            | Lot 1dn | Feet from the<br>20' | North/South line<br>SOUTH | Feet from the<br>1651' | East/West line<br>EAST | County<br>LEA |
| <sup>12</sup> Dedicated Acres<br>320.00 | <sup>13</sup> Joint or Infill | <sup>14</sup> Consolidation Code | <sup>15</sup> Order No. |         |                      |                           |                        |                        |               |

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



## OXY's Minimum Design Criteria

Burst, Collapse, and Tensile SF are calculated using Landmark's Stress Check (Casing Design) software. A sundry will be requested if any lesser grade or different size casing is substituted.

### 1) Casing Design Assumptions

#### a) Burst Loads

##### CSG Test (Surface)

- Internal: Displacement fluid + pressure required to comply with regulatory casing test pressures. This will comply with both 43 CFR part 3170 Subpart 3172 and 19.15.16 of the OCD Rules.
- External: Pore pressure in open hole.

##### CSG Test (Intermediate)

- Internal: Displacement fluid + pressure required to comply with regulatory casing test pressures. This will comply with both 43 CFR part 3170 Subpart 3172 and 19.15.16 of the OCD Rules.
- External: Mud Weight to TOC, cement mix water gradient (8.4 ppg) below TOC, and pore pressure in open hole.

##### CSG Test (Production)

- Internal:
  - For Drilling: Displacement fluid + pressure required to comply with regulatory casing test pressures. This will comply with both 43 CFR part 3170 Subpart 3172 and 19.15.16 of the OCD Rules.
  - For Production: The design pressure test should be the greater of (1) the planned test pressure prior to stimulation down the casing. (2) the regulatory test pressure, and (3) the expected gas lift system pressure. The design test fluid should be the fluid associated with pressure test having the greatest pressure.
- External:
  - For Drilling: Mud Weight to TOC, cement mix water gradient (8.4 ppg) below TOC, and pore pressure in open hole.
  - For Production: Mud base-fluid density to TOC, cement mix water gradient (8.4 ppg) below TOC, and pore pressure in open hole.

##### Gas Column (Surface)

- Internal: Assumes a full column of gas in the casing with a Gas/Oil Gradient of 0.1 psi/ft in the absence of better information. It is limited to the controlling pressure based on the fracture pressure at the shoe or the maximum expected pore pressure within the next drilling interval, whichever results in a lower surface pressure.
- External: Fluid gradient below TOC, pore pressure from the TOC to the Intermediate CSG shoe (if applicable), and MW of the drilling mud that was in the hole when the CSG was run from Intermediate CSG shoe to surface.

##### Bullheading (Surface / Intermediate)

- Internal: The string must be designed to withstand a pressure profile based on the fracture pressure at the casing shoe with a column of water above the shoe plus an additional surface pressure (in psi) of  $0.02 \times \text{MD of the shoe}$  to account for pumping friction pressure.
- External: Mud weight to TOC, cement mix water gradient (8.4 ppg) below TOC, and pore pressure in open hole.

**Gas Kick (Intermediate)**

- The string must be designed to at least a gas kick load case unless the rig is unable to detect a kick. For the gas kick load case, the internal pressure profile must be based on a minimum volume of 50 bbl or the minimum kick detection capability of the rig, whichever is greater, and a kick intensity of 2.0 ppg for Class 1, 1.0 ppg of Class 2, and 0.5 ppg for Class 3 and 4 wells.
- Internal: Influx depth of the maximum pore pressure of 0.55 "gas kick gravity" of gas to surface while drilling the next hole section.
- External: Mud weight to the TOC, cement mix water gradient below TOC, and pore pressure in open hole.

**Tubing Leak Near Surface While Producing (Production)**

- Internal: SITP plus a packer fluid gradient to the shoe or top of packer.
- External: Mud base-fluid density to TOC, cement mix water gradient (8.4 ppg) below TOC, and pore pressure in open hole.

**Tubing Leak Near Surface While Stimulating (Production)**

- Internal: Surface pressure or pressure-relief system pressure, whichever is lower plus packer fluid gradient.
- External: Mud base-fluid density to TOC, cement mix water gradient (8.4 ppg) below TOC, and pore pressure in open hole.

**Injection / Stimulation Down Casing (Production)**

- Internal: Surface pressure plus injection fluid gradient.
- External: Mud base-fluid density to TOC, cement mix water gradient (8.4 ppg) below TOC, and pore pressure in open hole.

**b) Collapse Loads****Lost Circulation (Surface / Intermediate)**

- Internal: Lost circulation at the TD of the next hole section, and the fluid level falls to a depth where the hydrostatic of the mud equals pore pressure at the depth of the lost circulation zone.
- External: MW of the drilling mud that was in the hole when the casing was run. Cementing (Surface / Intermediate / Production)

- Internal: Displacement fluid density.
- External: Mud weight from TOC to surface and cement slurry weight from TOC to casing shoe.

**Full Evacuation (Production)**

- Internal: Full void pipe.
- External: MW of drilling mud in the hole when the casing was run.

**c) Tension Loads****Running Casing (Surface / Intermediate / Production)**

- Axial: Buoyant weight of the string plus the lesser of 100,000 lb or the string weight in air.

**Green Cement (Surface / Intermediate / Production)**

- Axial: Buoyant weight of the string plus cement plug bump pressure load.

## **OXY**

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

**Stack Cats 25\_36**

**Stack Cats 25\_36 Fed Com 25H**

**Wellbore #1**

**Plan: Permitting Plan**

## **Standard Planning Report**

**26 September, 2023**

OXY  
Planning Report

|           |                                     |                              |                                   |
|-----------|-------------------------------------|------------------------------|-----------------------------------|
| Database: | HOPSPP                              | Local Co-ordinate Reference: | Well Stack Cats 25_36 Fed Com 25H |
| Company:  | ENGINEERING DESIGNS                 | TVD Reference:               | RKB=25' @ 3779.00ft               |
| Project:  | PRD NM DIRECTIONAL PLANS (NAD 1983) | MD Reference:                | RKB=25' @ 3779.00ft               |
| Site:     | Stack Cats 25_36                    | North Reference:             | Grid                              |
| Well:     | Stack Cats 25_36 Fed Com 25H        | 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                  | Stack Cats 25_36 |              |                 |
| Site Position:        |                  | Northing:    | 499,452.71 usft |
| From:                 | Map              | Easting:     | 757,564.76 usft |
| Position Uncertainty: | 1.00 ft          | Slot Radius: | 13.200 in       |
|                       |                  | Latitude:    | 32.371120       |
|                       |                  | Longitude:   | -103.632971     |

|                      |                              |                     |             |
|----------------------|------------------------------|---------------------|-------------|
| Well                 | Stack Cats 25_36 Fed Com 25H |                     |             |
| Well Position        | +N/-S                        | 0.00 ft             | Northing:   |
|                      | +E/-W                        | 0.00 ft             | Easting:    |
| Position Uncertainty | 2.00 ft                      | Wellhead Elevation: | ft          |
| Grid Convergence:    | 0.38 °                       |                     |             |
|                      |                              | Latitude:           | 32.372607   |
|                      |                              | Longitude:          | -103.627316 |
|                      |                              | Ground Level:       | 3,754.00 ft |

|           |             |             |                 |               |                     |
|-----------|-------------|-------------|-----------------|---------------|---------------------|
| Wellbore  | Wellbore #1 |             |                 |               |                     |
| Magnetics | Model Name  | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|           | HDGM_FILE   | 12/16/2021  | 6.38            | 60.02         | 47,781.90000000     |

|                   |                       |            |               |               |
|-------------------|-----------------------|------------|---------------|---------------|
| 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          | 176.24        |

|                          |               |                   |                               |                 |
|--------------------------|---------------|-------------------|-------------------------------|-----------------|
| Plan Survey Tool Program | Date          | 9/26/2023         |                               |                 |
| Depth From (ft)          | Depth To (ft) | Survey (Wellbore) | Tool Name                     | Remarks         |
| 1                        | 0.00          | 21,543.04         | Permitting Plan (Wellbore #1) | B001Mb_MWD+HRGM |
|                          |               |                   |                               | OWSG MWD + HRGM |

|                     |                 |             |                     |            |            |                       |                      |                     |         |                  |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|----------------------|---------------------|---------|------------------|
| 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    |                  |
| 5,445.00            | 0.00            | 0.00        | 5,445.00            | 0.00       | 0.00       | 0.00                  | 0.00                 | 0.00                | 0.00    |                  |
| 6,444.98            | 10.00           | 126.56      | 6,439.91            | -51.85     | 69.91      | 1.00                  | 1.00                 | 0.00                | 126.56  |                  |
| 10,261.96           | 10.00           | 126.56      | 10,198.90           | -446.68    | 602.28     | 0.00                  | 0.00                 | 0.00                | 0.00    |                  |
| 11,102.00           | 90.00           | 179.58      | 10,707.00           | -1,015.97  | 677.98     | 10.00                 | 9.52                 | 6.31                | 53.44   | FTP (Stack Cats  |
| 21,543.04           | 90.00           | 179.58      | 10,707.00           | -11,456.73 | 753.66     | 0.00                  | 0.00                 | 0.00                | 0.00    | PBHL (Stack Cats |

# OXY

## Planning Report

|                  |                                     |                                     |                                   |
|------------------|-------------------------------------|-------------------------------------|-----------------------------------|
| <b>Database:</b> | HOPSPP                              | <b>Local Co-ordinate Reference:</b> | Well Stack Cats 25_36 Fed Com 25H |
| <b>Company:</b>  | ENGINEERING DESIGNS                 | <b>TVD Reference:</b>               | RKB=25' @ 3779.00ft               |
| <b>Project:</b>  | PRD NM DIRECTIONAL PLANS (NAD 1983) | <b>MD Reference:</b>                | RKB=25' @ 3779.00ft               |
| <b>Site:</b>     | Stack Cats 25_36                    | <b>North Reference:</b>             | Grid                              |
| <b>Well:</b>     | Stack Cats 25_36 Fed Com 25H        | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Wellbore:</b> | Wellbore #1                         |                                     |                                   |
| <b>Design:</b>   | 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                |
| 5,100.00            | 0.00            | 0.00        | 5,100.00            | 0.00       | 0.00       | 0.00                  | 0.00                  | 0.00                 | 0.00                |
| 5,200.00            | 0.00            | 0.00        | 5,200.00            | 0.00       | 0.00       | 0.00                  | 0.00                  | 0.00                 | 0.00                |
| 5,300.00            | 0.00            | 0.00        | 5,300.00            | 0.00       | 0.00       | 0.00                  | 0.00                  | 0.00                 | 0.00                |
| 5,400.00            | 0.00            | 0.00        | 5,400.00            | 0.00       | 0.00       | 0.00                  | 0.00                  | 0.00                 | 0.00                |

# OXY

## Planning Report

|                  |                                     |                                     |                                   |
|------------------|-------------------------------------|-------------------------------------|-----------------------------------|
| <b>Database:</b> | HOPSPP                              | <b>Local Co-ordinate Reference:</b> | Well Stack Cats 25_36 Fed Com 25H |
| <b>Company:</b>  | ENGINEERING DESIGNS                 | <b>TVD Reference:</b>               | RKB=25' @ 3779.00ft               |
| <b>Project:</b>  | PRD NM DIRECTIONAL PLANS (NAD 1983) | <b>MD Reference:</b>                | RKB=25' @ 3779.00ft               |
| <b>Site:</b>     | Stack Cats 25_36                    | <b>North Reference:</b>             | Grid                              |
| <b>Well:</b>     | Stack Cats 25_36 Fed Com 25H        | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Wellbore:</b> | Wellbore #1                         |                                     |                                   |
| <b>Design:</b>   | 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) |
| 5,445.00            | 0.00            | 0.00        | 5,445.00            | 0.00       | 0.00       | 0.00                  | 0.00                  | 0.00                 | 0.00                |
| 5,500.00            | 0.55            | 126.56      | 5,500.00            | -0.16      | 0.21       | 0.17                  | 1.00                  | 1.00                 | 0.00                |
| 5,600.00            | 1.55            | 126.56      | 5,599.98            | -1.25      | 1.68       | 1.36                  | 1.00                  | 1.00                 | 0.00                |
| 5,700.00            | 2.55            | 126.56      | 5,699.92            | -3.38      | 4.56       | 3.67                  | 1.00                  | 1.00                 | 0.00                |
| 5,800.00            | 3.55            | 126.56      | 5,799.77            | -6.55      | 8.83       | 7.11                  | 1.00                  | 1.00                 | 0.00                |
| 5,900.00            | 4.55            | 126.56      | 5,899.52            | -10.76     | 14.50      | 11.69                 | 1.00                  | 1.00                 | 0.00                |
| 6,000.00            | 5.55            | 126.56      | 5,999.13            | -16.00     | 21.57      | 17.38                 | 1.00                  | 1.00                 | 0.00                |
| 6,100.00            | 6.55            | 126.56      | 6,098.57            | -22.28     | 30.04      | 24.20                 | 1.00                  | 1.00                 | 0.00                |
| 6,200.00            | 7.55            | 126.56      | 6,197.82            | -29.59     | 39.90      | 32.14                 | 1.00                  | 1.00                 | 0.00                |
| 6,300.00            | 8.55            | 126.56      | 6,296.83            | -37.93     | 51.14      | 41.21                 | 1.00                  | 1.00                 | 0.00                |
| 6,400.00            | 9.55            | 126.56      | 6,395.58            | -47.30     | 63.78      | 51.39                 | 1.00                  | 1.00                 | 0.00                |
| 6,444.98            | 10.00           | 126.56      | 6,439.91            | -51.85     | 69.91      | 56.33                 | 1.00                  | 1.00                 | 0.00                |
| 6,500.00            | 10.00           | 126.56      | 6,494.10            | -57.54     | 77.59      | 62.51                 | 0.00                  | 0.00                 | 0.00                |
| 6,600.00            | 10.00           | 126.56      | 6,592.58            | -67.89     | 91.53      | 73.75                 | 0.00                  | 0.00                 | 0.00                |
| 6,700.00            | 10.00           | 126.56      | 6,691.06            | -78.23     | 105.48     | 84.99                 | 0.00                  | 0.00                 | 0.00                |
| 6,800.00            | 10.00           | 126.56      | 6,789.54            | -88.57     | 119.43     | 96.22                 | 0.00                  | 0.00                 | 0.00                |
| 6,900.00            | 10.00           | 126.56      | 6,888.02            | -98.92     | 133.38     | 107.46                | 0.00                  | 0.00                 | 0.00                |
| 7,000.00            | 10.00           | 126.56      | 6,986.50            | -109.26    | 147.32     | 118.70                | 0.00                  | 0.00                 | 0.00                |
| 7,100.00            | 10.00           | 126.56      | 7,084.98            | -119.61    | 161.27     | 129.93                | 0.00                  | 0.00                 | 0.00                |
| 7,200.00            | 10.00           | 126.56      | 7,183.46            | -129.95    | 175.22     | 141.17                | 0.00                  | 0.00                 | 0.00                |
| 7,300.00            | 10.00           | 126.56      | 7,281.94            | -140.29    | 189.16     | 152.41                | 0.00                  | 0.00                 | 0.00                |
| 7,400.00            | 10.00           | 126.56      | 7,380.42            | -150.64    | 203.11     | 163.65                | 0.00                  | 0.00                 | 0.00                |
| 7,500.00            | 10.00           | 126.56      | 7,478.90            | -160.98    | 217.06     | 174.88                | 0.00                  | 0.00                 | 0.00                |
| 7,600.00            | 10.00           | 126.56      | 7,577.38            | -171.33    | 231.01     | 186.12                | 0.00                  | 0.00                 | 0.00                |
| 7,700.00            | 10.00           | 126.56      | 7,675.87            | -181.67    | 244.95     | 197.36                | 0.00                  | 0.00                 | 0.00                |
| 7,800.00            | 10.00           | 126.56      | 7,774.35            | -192.01    | 258.90     | 208.59                | 0.00                  | 0.00                 | 0.00                |
| 7,900.00            | 10.00           | 126.56      | 7,872.83            | -202.36    | 272.85     | 219.83                | 0.00                  | 0.00                 | 0.00                |
| 8,000.00            | 10.00           | 126.56      | 7,971.31            | -212.70    | 286.80     | 231.07                | 0.00                  | 0.00                 | 0.00                |
| 8,100.00            | 10.00           | 126.56      | 8,069.79            | -223.05    | 300.74     | 242.31                | 0.00                  | 0.00                 | 0.00                |
| 8,200.00            | 10.00           | 126.56      | 8,168.27            | -233.39    | 314.69     | 253.54                | 0.00                  | 0.00                 | 0.00                |
| 8,300.00            | 10.00           | 126.56      | 8,266.75            | -243.73    | 328.64     | 264.78                | 0.00                  | 0.00                 | 0.00                |
| 8,400.00            | 10.00           | 126.56      | 8,365.23            | -254.08    | 342.58     | 276.02                | 0.00                  | 0.00                 | 0.00                |
| 8,500.00            | 10.00           | 126.56      | 8,463.71            | -264.42    | 356.53     | 287.25                | 0.00                  | 0.00                 | 0.00                |
| 8,600.00            | 10.00           | 126.56      | 8,562.19            | -274.77    | 370.48     | 298.49                | 0.00                  | 0.00                 | 0.00                |
| 8,700.00            | 10.00           | 126.56      | 8,660.67            | -285.11    | 384.43     | 309.73                | 0.00                  | 0.00                 | 0.00                |
| 8,800.00            | 10.00           | 126.56      | 8,759.15            | -295.45    | 398.37     | 320.97                | 0.00                  | 0.00                 | 0.00                |
| 8,900.00            | 10.00           | 126.56      | 8,857.64            | -305.80    | 412.32     | 332.20                | 0.00                  | 0.00                 | 0.00                |
| 9,000.00            | 10.00           | 126.56      | 8,956.12            | -316.14    | 426.27     | 343.44                | 0.00                  | 0.00                 | 0.00                |
| 9,100.00            | 10.00           | 126.56      | 9,054.60            | -326.49    | 440.22     | 354.68                | 0.00                  | 0.00                 | 0.00                |
| 9,200.00            | 10.00           | 126.56      | 9,153.08            | -336.83    | 454.16     | 365.92                | 0.00                  | 0.00                 | 0.00                |
| 9,300.00            | 10.00           | 126.56      | 9,251.56            | -347.17    | 468.11     | 377.15                | 0.00                  | 0.00                 | 0.00                |
| 9,400.00            | 10.00           | 126.56      | 9,350.04            | -357.52    | 482.06     | 388.39                | 0.00                  | 0.00                 | 0.00                |
| 9,500.00            | 10.00           | 126.56      | 9,448.52            | -367.86    | 496.00     | 399.63                | 0.00                  | 0.00                 | 0.00                |
| 9,600.00            | 10.00           | 126.56      | 9,547.00            | -378.21    | 509.95     | 410.86                | 0.00                  | 0.00                 | 0.00                |
| 9,700.00            | 10.00           | 126.56      | 9,645.48            | -388.55    | 523.90     | 422.10                | 0.00                  | 0.00                 | 0.00                |
| 9,800.00            | 10.00           | 126.56      | 9,743.96            | -398.89    | 537.85     | 433.34                | 0.00                  | 0.00                 | 0.00                |
| 9,900.00            | 10.00           | 126.56      | 9,842.44            | -409.24    | 551.79     | 444.58                | 0.00                  | 0.00                 | 0.00                |
| 10,000.00           | 10.00           | 126.56      | 9,940.92            | -419.58    | 565.74     | 455.81                | 0.00                  | 0.00                 | 0.00                |
| 10,100.00           | 10.00           | 126.56      | 10,039.41           | -429.93    | 579.69     | 467.05                | 0.00                  | 0.00                 | 0.00                |
| 10,200.00           | 10.00           | 126.56      | 10,137.89           | -440.27    | 593.64     | 478.29                | 0.00                  | 0.00                 | 0.00                |
| 10,261.96           | 10.00           | 126.56      | 10,198.90           | -446.68    | 602.28     | 485.25                | 0.00                  | 0.00                 | 0.00                |
| 10,300.00           | 12.64           | 140.66      | 10,236.21           | -451.87    | 607.57     | 490.77                | 10.00                 | 6.93                 | 37.06               |
| 10,400.00           | 21.30           | 158.41      | 10,331.83           | -477.28    | 621.22     | 517.03                | 10.00                 | 8.66                 | 17.74               |
| 10,500.00           | 30.76           | 165.90      | 10,421.60           | -519.08    | 634.17     | 559.59                | 10.00                 | 9.46                 | 7.49                |
| 10,600.00           | 40.47           | 170.08      | 10,502.81           | -575.99    | 646.02     | 617.16                | 10.00                 | 9.70                 | 4.18                |

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## Planning Report

|                  |                                     |                                     |                                   |
|------------------|-------------------------------------|-------------------------------------|-----------------------------------|
| <b>Database:</b> | HOPSPP                              | <b>Local Co-ordinate Reference:</b> | Well Stack Cats 25_36 Fed Com 25H |
| <b>Company:</b>  | ENGINEERING DESIGNS                 | <b>TVD Reference:</b>               | RKB=25' @ 3779.00ft               |
| <b>Project:</b>  | PRD NM DIRECTIONAL PLANS (NAD 1983) | <b>MD Reference:</b>                | RKB=25' @ 3779.00ft               |
| <b>Site:</b>     | Stack Cats 25_36                    | <b>North Reference:</b>             | Grid                              |
| <b>Well:</b>     | Stack Cats 25_36 Fed Com 25H        | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Wellbore:</b> | Wellbore #1                         |                                     |                                   |
| <b>Design:</b>   | 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) |
| 10,700.00           | 50.27           | 172.86      | 10,572.99           | -646.29    | 656.42     | 687.99                | 10.00                 | 9.80                 | 2.78                |
| 10,800.00           | 60.13           | 174.94      | 10,629.99           | -727.84    | 665.04     | 769.93                | 10.00                 | 9.85                 | 2.08                |
| 10,900.00           | 70.01           | 176.65      | 10,672.10           | -818.17    | 671.63     | 860.49                | 10.00                 | 9.88                 | 1.70                |
| 11,000.00           | 79.90           | 178.15      | 10,698.03           | -914.52    | 675.98     | 956.91                | 10.00                 | 9.89                 | 1.50                |
| 11,100.00           | 89.80           | 179.56      | 10,707.00           | -1,013.97  | 677.96     | 1,056.28              | 10.00                 | 9.90                 | 1.41                |
| 11,102.00           | 90.00           | 179.58      | 10,707.00           | -1,015.97  | 677.98     | 1,058.28              | 10.00                 | 9.90                 | 1.39                |
| 11,200.00           | 90.00           | 179.58      | 10,707.00           | -1,113.96  | 678.69     | 1,156.11              | 0.00                  | 0.00                 | 0.00                |
| 11,300.00           | 90.00           | 179.58      | 10,707.00           | -1,213.96  | 679.41     | 1,255.94              | 0.00                  | 0.00                 | 0.00                |
| 11,400.00           | 90.00           | 179.58      | 10,707.00           | -1,313.96  | 680.14     | 1,355.77              | 0.00                  | 0.00                 | 0.00                |
| 11,500.00           | 90.00           | 179.58      | 10,707.00           | -1,413.95  | 680.86     | 1,455.60              | 0.00                  | 0.00                 | 0.00                |
| 11,600.00           | 90.00           | 179.58      | 10,707.00           | -1,513.95  | 681.59     | 1,555.43              | 0.00                  | 0.00                 | 0.00                |
| 11,700.00           | 90.00           | 179.58      | 10,707.00           | -1,613.95  | 682.31     | 1,655.26              | 0.00                  | 0.00                 | 0.00                |
| 11,800.00           | 90.00           | 179.58      | 10,707.00           | -1,713.95  | 683.04     | 1,755.09              | 0.00                  | 0.00                 | 0.00                |
| 11,900.00           | 90.00           | 179.58      | 10,707.00           | -1,813.94  | 683.76     | 1,854.92              | 0.00                  | 0.00                 | 0.00                |
| 12,000.00           | 90.00           | 179.58      | 10,707.00           | -1,913.94  | 684.49     | 1,954.74              | 0.00                  | 0.00                 | 0.00                |
| 12,100.00           | 90.00           | 179.58      | 10,707.00           | -2,013.94  | 685.21     | 2,054.57              | 0.00                  | 0.00                 | 0.00                |
| 12,200.00           | 90.00           | 179.58      | 10,707.00           | -2,113.94  | 685.94     | 2,154.40              | 0.00                  | 0.00                 | 0.00                |
| 12,300.00           | 90.00           | 179.58      | 10,707.00           | -2,213.93  | 686.66     | 2,254.23              | 0.00                  | 0.00                 | 0.00                |
| 12,400.00           | 90.00           | 179.58      | 10,707.00           | -2,313.93  | 687.38     | 2,354.06              | 0.00                  | 0.00                 | 0.00                |
| 12,500.00           | 90.00           | 179.58      | 10,707.00           | -2,413.93  | 688.11     | 2,453.89              | 0.00                  | 0.00                 | 0.00                |
| 12,600.00           | 90.00           | 179.58      | 10,707.00           | -2,513.93  | 688.83     | 2,553.72              | 0.00                  | 0.00                 | 0.00                |
| 12,700.00           | 90.00           | 179.58      | 10,707.00           | -2,613.92  | 689.56     | 2,653.55              | 0.00                  | 0.00                 | 0.00                |
| 12,800.00           | 90.00           | 179.58      | 10,707.00           | -2,713.92  | 690.28     | 2,753.38              | 0.00                  | 0.00                 | 0.00                |
| 12,900.00           | 90.00           | 179.58      | 10,707.00           | -2,813.92  | 691.01     | 2,853.21              | 0.00                  | 0.00                 | 0.00                |
| 13,000.00           | 90.00           | 179.58      | 10,707.00           | -2,913.92  | 691.73     | 2,953.04              | 0.00                  | 0.00                 | 0.00                |
| 13,100.00           | 90.00           | 179.58      | 10,707.00           | -3,013.91  | 692.46     | 3,052.87              | 0.00                  | 0.00                 | 0.00                |
| 13,200.00           | 90.00           | 179.58      | 10,707.00           | -3,113.91  | 693.18     | 3,152.70              | 0.00                  | 0.00                 | 0.00                |
| 13,300.00           | 90.00           | 179.58      | 10,707.00           | -3,213.91  | 693.91     | 3,252.53              | 0.00                  | 0.00                 | 0.00                |
| 13,400.00           | 90.00           | 179.58      | 10,707.00           | -3,313.90  | 694.63     | 3,352.35              | 0.00                  | 0.00                 | 0.00                |
| 13,500.00           | 90.00           | 179.58      | 10,707.00           | -3,413.90  | 695.36     | 3,452.18              | 0.00                  | 0.00                 | 0.00                |
| 13,600.00           | 90.00           | 179.58      | 10,707.00           | -3,513.90  | 696.08     | 3,552.01              | 0.00                  | 0.00                 | 0.00                |
| 13,700.00           | 90.00           | 179.58      | 10,707.00           | -3,613.90  | 696.81     | 3,651.84              | 0.00                  | 0.00                 | 0.00                |
| 13,800.00           | 90.00           | 179.58      | 10,707.00           | -3,713.89  | 697.53     | 3,751.67              | 0.00                  | 0.00                 | 0.00                |
| 13,900.00           | 90.00           | 179.58      | 10,707.00           | -3,813.89  | 698.26     | 3,851.50              | 0.00                  | 0.00                 | 0.00                |
| 14,000.00           | 90.00           | 179.58      | 10,707.00           | -3,913.89  | 698.98     | 3,951.33              | 0.00                  | 0.00                 | 0.00                |
| 14,100.00           | 90.00           | 179.58      | 10,707.00           | -4,013.89  | 699.71     | 4,051.16              | 0.00                  | 0.00                 | 0.00                |
| 14,200.00           | 90.00           | 179.58      | 10,707.00           | -4,113.88  | 700.43     | 4,150.99              | 0.00                  | 0.00                 | 0.00                |
| 14,300.00           | 90.00           | 179.58      | 10,707.00           | -4,213.88  | 701.16     | 4,250.82              | 0.00                  | 0.00                 | 0.00                |
| 14,400.00           | 90.00           | 179.58      | 10,707.00           | -4,313.88  | 701.88     | 4,350.65              | 0.00                  | 0.00                 | 0.00                |
| 14,500.00           | 90.00           | 179.58      | 10,707.00           | -4,413.88  | 702.61     | 4,450.48              | 0.00                  | 0.00                 | 0.00                |
| 14,600.00           | 90.00           | 179.58      | 10,707.00           | -4,513.87  | 703.33     | 4,550.31              | 0.00                  | 0.00                 | 0.00                |
| 14,700.00           | 90.00           | 179.58      | 10,707.00           | -4,613.87  | 704.06     | 4,650.14              | 0.00                  | 0.00                 | 0.00                |
| 14,800.00           | 90.00           | 179.58      | 10,707.00           | -4,713.87  | 704.78     | 4,749.96              | 0.00                  | 0.00                 | 0.00                |
| 14,900.00           | 90.00           | 179.58      | 10,707.00           | -4,813.87  | 705.51     | 4,849.79              | 0.00                  | 0.00                 | 0.00                |
| 15,000.00           | 90.00           | 179.58      | 10,707.00           | -4,913.86  | 706.23     | 4,949.62              | 0.00                  | 0.00                 | 0.00                |
| 15,100.00           | 90.00           | 179.58      | 10,707.00           | -5,013.86  | 706.96     | 5,049.45              | 0.00                  | 0.00                 | 0.00                |
| 15,200.00           | 90.00           | 179.58      | 10,707.00           | -5,113.86  | 707.68     | 5,149.28              | 0.00                  | 0.00                 | 0.00                |
| 15,300.00           | 90.00           | 179.58      | 10,707.00           | -5,213.86  | 708.41     | 5,249.11              | 0.00                  | 0.00                 | 0.00                |
| 15,400.00           | 90.00           | 179.58      | 10,707.00           | -5,313.85  | 709.13     | 5,348.94              | 0.00                  | 0.00                 | 0.00                |
| 15,500.00           | 90.00           | 179.58      | 10,707.00           | -5,413.85  | 709.86     | 5,448.77              | 0.00                  | 0.00                 | 0.00                |
| 15,600.00           | 90.00           | 179.58      | 10,707.00           | -5,513.85  | 710.58     | 5,548.60              | 0.00                  | 0.00                 | 0.00                |
| 15,700.00           | 90.00           | 179.58      | 10,707.00           | -5,613.84  | 711.31     | 5,648.43              | 0.00                  | 0.00                 | 0.00                |
| 15,800.00           | 90.00           | 179.58      | 10,707.00           | -5,713.84  | 712.03     | 5,748.26              | 0.00                  | 0.00                 | 0.00                |
| 15,900.00           | 90.00           | 179.58      | 10,707.00           | -5,813.84  | 712.75     | 5,848.09              | 0.00                  | 0.00                 | 0.00                |
| 16,000.00           | 90.00           | 179.58      | 10,707.00           | -5,913.84  | 713.48     | 5,947.92              | 0.00                  | 0.00                 | 0.00                |

# OXY

## Planning Report

|                  |                                     |                                     |                                   |
|------------------|-------------------------------------|-------------------------------------|-----------------------------------|
| <b>Database:</b> | HOPSPP                              | <b>Local Co-ordinate Reference:</b> | Well Stack Cats 25_36 Fed Com 25H |
| <b>Company:</b>  | ENGINEERING DESIGNS                 | <b>TVD Reference:</b>               | RKB=25' @ 3779.00ft               |
| <b>Project:</b>  | PRD NM DIRECTIONAL PLANS (NAD 1983) | <b>MD Reference:</b>                | RKB=25' @ 3779.00ft               |
| <b>Site:</b>     | Stack Cats 25_36                    | <b>North Reference:</b>             | Grid                              |
| <b>Well:</b>     | Stack Cats 25_36 Fed Com 25H        | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Wellbore:</b> | Wellbore #1                         |                                     |                                   |
| <b>Design:</b>   | 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) |
| 16,100.00           | 90.00           | 179.58      | 10,707.00           | -6,013.83  | 714.20     | 6,047.75              | 0.00                  | 0.00                 | 0.00                |
| 16,200.00           | 90.00           | 179.58      | 10,707.00           | -6,113.83  | 714.93     | 6,147.57              | 0.00                  | 0.00                 | 0.00                |
| 16,300.00           | 90.00           | 179.58      | 10,707.00           | -6,213.83  | 715.65     | 6,247.40              | 0.00                  | 0.00                 | 0.00                |
| 16,400.00           | 90.00           | 179.58      | 10,707.00           | -6,313.83  | 716.38     | 6,347.23              | 0.00                  | 0.00                 | 0.00                |
| 16,500.00           | 90.00           | 179.58      | 10,707.00           | -6,413.82  | 717.10     | 6,447.06              | 0.00                  | 0.00                 | 0.00                |
| 16,600.00           | 90.00           | 179.58      | 10,707.00           | -6,513.82  | 717.83     | 6,546.89              | 0.00                  | 0.00                 | 0.00                |
| 16,700.00           | 90.00           | 179.58      | 10,707.00           | -6,613.82  | 718.55     | 6,646.72              | 0.00                  | 0.00                 | 0.00                |
| 16,800.00           | 90.00           | 179.58      | 10,707.00           | -6,713.82  | 719.28     | 6,746.55              | 0.00                  | 0.00                 | 0.00                |
| 16,900.00           | 90.00           | 179.58      | 10,707.00           | -6,813.81  | 720.00     | 6,846.38              | 0.00                  | 0.00                 | 0.00                |
| 17,000.00           | 90.00           | 179.58      | 10,707.00           | -6,913.81  | 720.73     | 6,946.21              | 0.00                  | 0.00                 | 0.00                |
| 17,100.00           | 90.00           | 179.58      | 10,707.00           | -7,013.81  | 721.45     | 7,046.04              | 0.00                  | 0.00                 | 0.00                |
| 17,200.00           | 90.00           | 179.58      | 10,707.00           | -7,113.81  | 722.18     | 7,145.87              | 0.00                  | 0.00                 | 0.00                |
| 17,300.00           | 90.00           | 179.58      | 10,707.00           | -7,213.80  | 722.90     | 7,245.70              | 0.00                  | 0.00                 | 0.00                |
| 17,400.00           | 90.00           | 179.58      | 10,707.00           | -7,313.80  | 723.63     | 7,345.53              | 0.00                  | 0.00                 | 0.00                |
| 17,500.00           | 90.00           | 179.58      | 10,707.00           | -7,413.80  | 724.35     | 7,445.36              | 0.00                  | 0.00                 | 0.00                |
| 17,600.00           | 90.00           | 179.58      | 10,707.00           | -7,513.79  | 725.08     | 7,545.18              | 0.00                  | 0.00                 | 0.00                |
| 17,700.00           | 90.00           | 179.58      | 10,707.00           | -7,613.79  | 725.80     | 7,645.01              | 0.00                  | 0.00                 | 0.00                |
| 17,800.00           | 90.00           | 179.58      | 10,707.00           | -7,713.79  | 726.53     | 7,744.84              | 0.00                  | 0.00                 | 0.00                |
| 17,900.00           | 90.00           | 179.58      | 10,707.00           | -7,813.79  | 727.25     | 7,844.67              | 0.00                  | 0.00                 | 0.00                |
| 18,000.00           | 90.00           | 179.58      | 10,707.00           | -7,913.78  | 727.98     | 7,944.50              | 0.00                  | 0.00                 | 0.00                |
| 18,100.00           | 90.00           | 179.58      | 10,707.00           | -8,013.78  | 728.70     | 8,044.33              | 0.00                  | 0.00                 | 0.00                |
| 18,200.00           | 90.00           | 179.58      | 10,707.00           | -8,113.78  | 729.43     | 8,144.16              | 0.00                  | 0.00                 | 0.00                |
| 18,300.00           | 90.00           | 179.58      | 10,707.00           | -8,213.78  | 730.15     | 8,243.99              | 0.00                  | 0.00                 | 0.00                |
| 18,400.00           | 90.00           | 179.58      | 10,707.00           | -8,313.77  | 730.88     | 8,343.82              | 0.00                  | 0.00                 | 0.00                |
| 18,500.00           | 90.00           | 179.58      | 10,707.00           | -8,413.77  | 731.60     | 8,443.65              | 0.00                  | 0.00                 | 0.00                |
| 18,600.00           | 90.00           | 179.58      | 10,707.00           | -8,513.77  | 732.33     | 8,543.48              | 0.00                  | 0.00                 | 0.00                |
| 18,700.00           | 90.00           | 179.58      | 10,707.00           | -8,613.77  | 733.05     | 8,643.31              | 0.00                  | 0.00                 | 0.00                |
| 18,800.00           | 90.00           | 179.58      | 10,707.00           | -8,713.76  | 733.78     | 8,743.14              | 0.00                  | 0.00                 | 0.00                |
| 18,900.00           | 90.00           | 179.58      | 10,707.00           | -8,813.76  | 734.50     | 8,842.97              | 0.00                  | 0.00                 | 0.00                |
| 19,000.00           | 90.00           | 179.58      | 10,707.00           | -8,913.76  | 735.23     | 8,942.79              | 0.00                  | 0.00                 | 0.00                |
| 19,100.00           | 90.00           | 179.58      | 10,707.00           | -9,013.76  | 735.95     | 9,042.62              | 0.00                  | 0.00                 | 0.00                |
| 19,200.00           | 90.00           | 179.58      | 10,707.00           | -9,113.75  | 736.68     | 9,142.45              | 0.00                  | 0.00                 | 0.00                |
| 19,300.00           | 90.00           | 179.58      | 10,707.00           | -9,213.75  | 737.40     | 9,242.28              | 0.00                  | 0.00                 | 0.00                |
| 19,400.00           | 90.00           | 179.58      | 10,707.00           | -9,313.75  | 738.12     | 9,342.11              | 0.00                  | 0.00                 | 0.00                |
| 19,500.00           | 90.00           | 179.58      | 10,707.00           | -9,413.74  | 738.85     | 9,441.94              | 0.00                  | 0.00                 | 0.00                |
| 19,600.00           | 90.00           | 179.58      | 10,707.00           | -9,513.74  | 739.57     | 9,541.77              | 0.00                  | 0.00                 | 0.00                |
| 19,700.00           | 90.00           | 179.58      | 10,707.00           | -9,613.74  | 740.30     | 9,641.60              | 0.00                  | 0.00                 | 0.00                |
| 19,800.00           | 90.00           | 179.58      | 10,707.00           | -9,713.74  | 741.02     | 9,741.43              | 0.00                  | 0.00                 | 0.00                |
| 19,900.00           | 90.00           | 179.58      | 10,707.00           | -9,813.73  | 741.75     | 9,841.26              | 0.00                  | 0.00                 | 0.00                |
| 20,000.00           | 90.00           | 179.58      | 10,707.00           | -9,913.73  | 742.47     | 9,941.09              | 0.00                  | 0.00                 | 0.00                |
| 20,100.00           | 90.00           | 179.58      | 10,707.00           | -10,013.73 | 743.20     | 10,040.92             | 0.00                  | 0.00                 | 0.00                |
| 20,200.00           | 90.00           | 179.58      | 10,707.00           | -10,113.73 | 743.92     | 10,140.75             | 0.00                  | 0.00                 | 0.00                |
| 20,300.00           | 90.00           | 179.58      | 10,707.00           | -10,213.72 | 744.65     | 10,240.58             | 0.00                  | 0.00                 | 0.00                |
| 20,400.00           | 90.00           | 179.58      | 10,707.00           | -10,313.72 | 745.37     | 10,340.40             | 0.00                  | 0.00                 | 0.00                |
| 20,500.00           | 90.00           | 179.58      | 10,707.00           | -10,413.72 | 746.10     | 10,440.23             | 0.00                  | 0.00                 | 0.00                |
| 20,600.00           | 90.00           | 179.58      | 10,707.00           | -10,513.72 | 746.82     | 10,540.06             | 0.00                  | 0.00                 | 0.00                |
| 20,700.00           | 90.00           | 179.58      | 10,707.00           | -10,613.71 | 747.55     | 10,639.89             | 0.00                  | 0.00                 | 0.00                |
| 20,800.00           | 90.00           | 179.58      | 10,707.00           | -10,713.71 | 748.27     | 10,739.72             | 0.00                  | 0.00                 | 0.00                |
| 20,900.00           | 90.00           | 179.58      | 10,707.00           | -10,813.71 | 749.00     | 10,839.55             | 0.00                  | 0.00                 | 0.00                |
| 21,000.00           | 90.00           | 179.58      | 10,707.00           | -10,913.71 | 749.72     | 10,939.38             | 0.00                  | 0.00                 | 0.00                |
| 21,100.00           | 90.00           | 179.58      | 10,707.00           | -11,013.70 | 750.45     | 11,039.21             | 0.00                  | 0.00                 | 0.00                |
| 21,200.00           | 90.00           | 179.58      | 10,707.00           | -11,113.70 | 751.17     | 11,139.04             | 0.00                  | 0.00                 | 0.00                |
| 21,300.00           | 90.00           | 179.58      | 10,707.00           | -11,213.70 | 751.90     | 11,238.87             | 0.00                  | 0.00                 | 0.00                |
| 21,400.00           | 90.00           | 179.58      | 10,707.00           | -11,313.69 | 752.62     | 11,338.70             | 0.00                  | 0.00                 | 0.00                |
| 21,500.00           | 90.00           | 179.58      | 10,707.00           | -11,413.69 | 753.35     | 11,438.53             | 0.00                  | 0.00                 | 0.00                |

OXY  
Planning Report

|           |                                     |                              |                                   |
|-----------|-------------------------------------|------------------------------|-----------------------------------|
| Database: | HOPSPP                              | Local Co-ordinate Reference: | Well Stack Cats 25_36 Fed Com 25H |
| Company:  | ENGINEERING DESIGNS                 | TVD Reference:               | RKB=25' @ 3779.00ft               |
| Project:  | PRD NM DIRECTIONAL PLANS (NAD 1983) | MD Reference:                | RKB=25' @ 3779.00ft               |
| Site:     | Stack Cats 25_36                    | North Reference:             | Grid                              |
| Well:     | Stack Cats 25_36 Fed Com 25H        | 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) |
| 21,543.04           | 90.00           | 179.58      | 10,707.00           | -11,456.73 | 753.66     | 11,481.49             | 0.00                  | 0.00                 | 0.00                |

| Design Targets                                                                                                             |               |              |           |            |            |                 |                |           |             |
|----------------------------------------------------------------------------------------------------------------------------|---------------|--------------|-----------|------------|------------|-----------------|----------------|-----------|-------------|
| Target Name<br>- hit/miss target<br>- Shape                                                                                | Dip Angle (°) | Dip Dir. (°) | TVD (ft)  | +N/-S (ft) | +E/-W (ft) | Northing (usft) | Easting (usft) | Latitude  | Longitude   |
| KOP (Stack Cats<br>- plan misses target center by 181.71ft at 10315.28ft MD (10251.09 TVD, -454.65 N, 609.69 E)<br>- Point | 0.00          | 0.00         | 10,198.90 | -615.95    | 675.10     | 499,389.29      | 759,982.37     | 32.370902 | -103.625142 |
| PBHL (Stack Cats<br>- plan hits target center<br>- Point                                                                   | 0.00          | 0.00         | 10,707.00 | -11,456.73 | 753.66     | 488,548.93      | 760,060.93     | 32.341104 | -103.625120 |
| FTP (Stack Cats<br>- plan hits target center<br>- Point                                                                    | 0.00          | 0.00         | 10,707.00 | -1,015.97  | 677.98     | 498,989.29      | 759,985.25     | 32.369803 | -103.625142 |

| Formations          |                     |                 |           |         |                   |  |
|---------------------|---------------------|-----------------|-----------|---------|-------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name            | Lithology | Dip (°) | Dip Direction (°) |  |
| 1,021.00            | 1,021.00            | RUSTLER         |           |         |                   |  |
| 1,710.00            | 1,710.00            | SALADO          |           |         |                   |  |
| 3,363.00            | 3,363.00            | CASTILE         |           |         |                   |  |
| 4,983.00            | 4,983.00            | DELAWARE        |           |         |                   |  |
| 5,020.00            | 5,020.00            | BELL CANYON     |           |         |                   |  |
| 5,804.24            | 5,804.00            | CHERRY CANYON   |           |         |                   |  |
| 7,153.84            | 7,138.00            | BRUSHY CANYON   |           |         |                   |  |
| 8,802.89            | 8,762.00            | BONE SPRING     |           |         |                   |  |
| 9,922.90            | 9,865.00            | BONE SPRING 1ST |           |         |                   |  |
| 10,665.26           | 10,550.00           | BONE SPRING 2ND |           |         |                   |  |

| Plan Annotations    |                     |                   |            |                     |
|---------------------|---------------------|-------------------|------------|---------------------|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates |            | Comment             |
|                     |                     | +N/-S (ft)        | +E/-W (ft) |                     |
| 5,445.00            | 5,445.00            | 0.00              | 0.00       | Build 1°/100'       |
| 6,444.98            | 6,439.91            | -51.85            | 69.91      | Hold 10° Tangent    |
| 10,261.96           | 10,198.90           | -446.68           | 602.28     | KOP, Build 10°/100' |
| 11,102.00           | 10,707.00           | -1,015.97         | 677.98     | Landing Point       |
| 21,543.04           | 10,707.00           | -11,456.73        | 753.66     | TD at 21543.04' MD  |

# Oxy USA Inc. - Stack Cats 25\_36 Fed Com 25H

## Drill Plan

### 1. Geologic Formations

|                            |       |                                    |      |
|----------------------------|-------|------------------------------------|------|
| TVD of Target (ft):        | 10707 | Pilot Hole Depth (ft):             |      |
| Total Measured Depth (ft): | 21543 | Deepest Expected Fresh Water (ft): | 1030 |

#### Delaware Basin

| Formation       | MD-RKB (ft) | TVD-RKB (ft) | Expected Fluids |
|-----------------|-------------|--------------|-----------------|
| Rustler         | 1030        | 1030         |                 |
| Salado          | 1714        | 1714         | Salt            |
| Castile         | 3351        | 3351         | Salt            |
| Delaware        | 4965        | 4959         | Oil/Gas/Brine   |
| Bell Canyon     | 5030        | 5022         | Oil/Gas/Brine   |
| Cherry Canyon   | 5833        | 5802         | Oil/Gas/Brine   |
| Brushy Canyon   | 7209        | 7136         | Losses          |
| Bone Spring     | 8890        | 8765         | Oil/Gas         |
| Bone Spring 1st | 10030       | 9870         | Oil/Gas         |
| Bone Spring 2nd | 10742       | 10556        | 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

| Section    | Hole Size (in) | MD        |         | TVD       |         | Csg. OD (in) | Csg Wt. (ppf) | Grade   | Conn.     |
|------------|----------------|-----------|---------|-----------|---------|--------------|---------------|---------|-----------|
|            |                | From (ft) | To (ft) | From (ft) | To (ft) |              |               |         |           |
| Surface    | 17.5           | 0         | 1090    | 0         | 1090    | 13.375       | 54.5          | J-55    | BTC       |
| Salt       | 12.25          | 0         | 6636    | 0         | 6581    | 9.625        | 40            | L-80 HC | BTC       |
| Production | 8.5            | 0         | 10712   | 0         | 10453   | 7            | 32            | P-110   | Wedge 461 |
| Production | 8.5            | 10712     | 21543   | 10453     | 10707   | 5.5          | 20            | P-110   | Wedge 461 |

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?<br>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 3 <sup>rd</sup> 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 2 <sup>nd</sup> 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<br>(ft <sup>3</sup> /ft) | Density<br>(lb/gal) | Excess: | TOC   | Placement  | Description                 |
|---------|-------|-------------------------|-------|--------------------------------|---------------------|---------|-------|------------|-----------------------------|
| Surface | 1     | Surface - Tail          | 1139  | 1.33                           | 14.8                | 100%    | -     | Circulate  | Class C+Accel.              |
| Int.    | 1     | Intermediate - Tail     | 141   | 1.33                           | 14.8                | 20%     | 6,136 | Circulate  | Class C+Accel.              |
| Int.    | 1     | Intermediate - Lead     | 1599  | 1.73                           | 12.9                | 50%     | -     | Circulate  | Class Pozz+Ret.             |
| Prod.   | 1     | Production - Tail       | 2411  | 1.38                           | 13.2                | 15%     | 7,459 | Circulate  | Class H+Ret., Disper., Salt |
| Prod.   | 2     | Production 2S - Tail BH | 707   | 1.71                           | 13.3                | 50%     | -     | Bradenhead | Class C+Accel.              |

**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.

**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 | 6581                        |
|                                                      |         | 5M               | Blind Ram  |  | ✓ | 250 psi / 5000 psi      |                             |
|                                                      |         |                  | Pipe Ram   |  |   |                         |                             |
|                                                      |         |                  | Double Ram |  | ✓ |                         |                             |
|                                                      |         |                  | Other*     |  |   |                         |                             |
| 8.5" Hole                                            | 13-5/8" | 5M               | Annular    |  | ✓ | 70% of working pressure | 10707                       |
|                                                      |         | 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.<br>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         | 1090    | 0           | 1090    | Water-Based Mud                        | 8.6 - 8.8    | 40-60     | N/C        |
| Intermediate | 1090      | 6636    | 1090        | 6581    | Saturated Brine-Based or Oil-Based Mud | 8.0 - 10.0   | 35-45     | N/C        |
| Production   | 6636      | 21543   | 6581        | 10707   | 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    | 5345 psi                     |
| Abnormal Temperature          | No                           |
| BH Temperature at deepest TVD | 166°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 3 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    |
| <b>Total Estimated Cuttings Volume:</b> 2180 bbls                                                                                                                                                                                                                                                                                                                                                                               |        |

## Offline Cementing Variance 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.

### 1. Cement Program

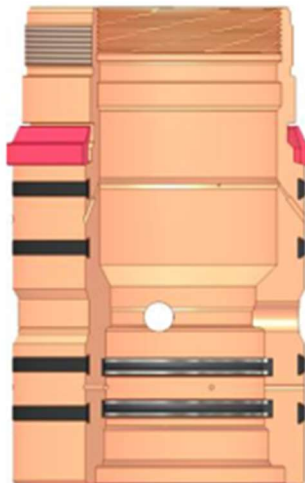
No changes to the cement program will take place for offline cementing.

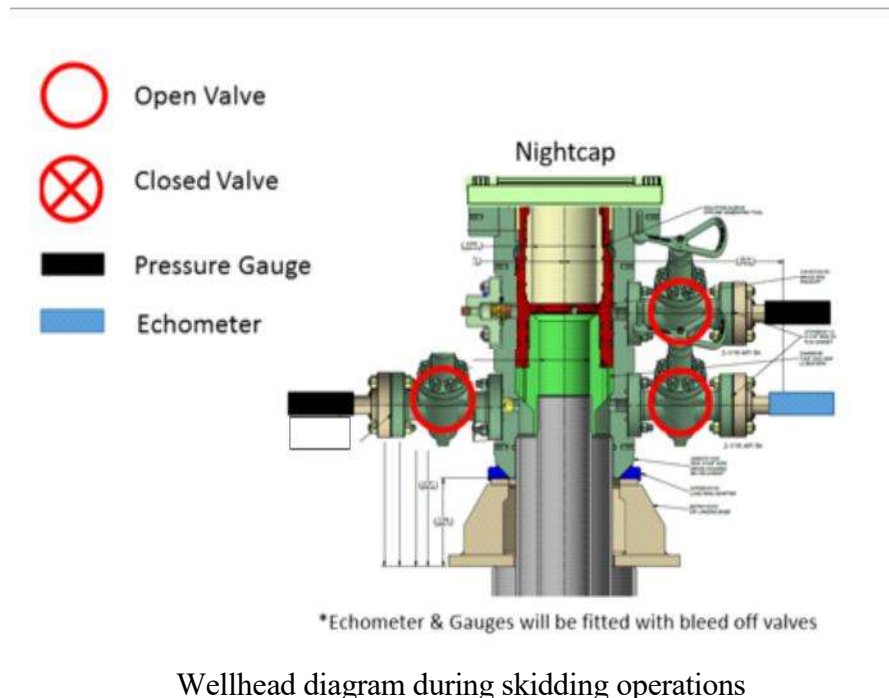
### 2. Offline Cementing Procedure

The operational sequence will be as follows:

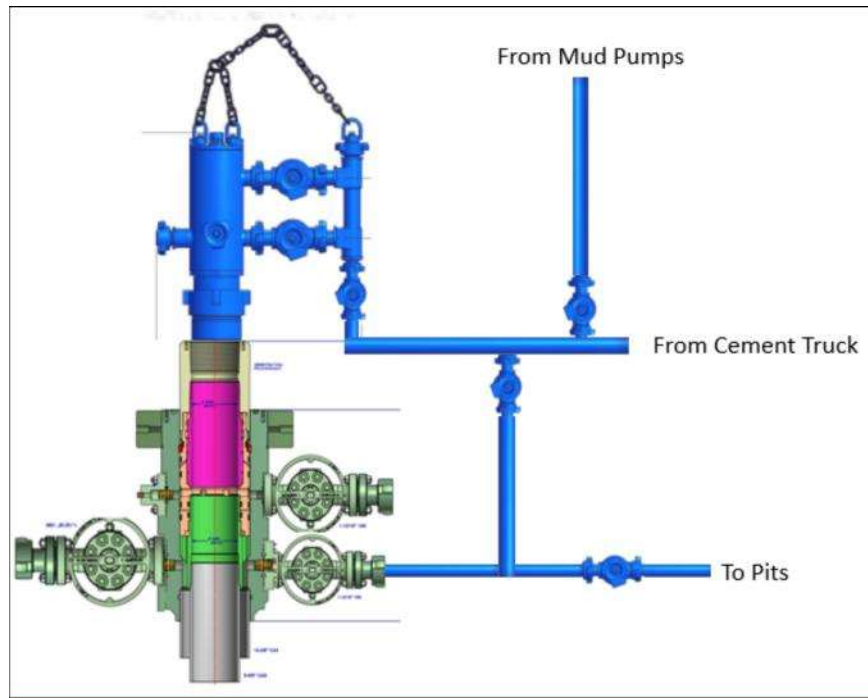
1. Run casing as per normal operations. While running casing, conduct negative pressure test and confirm integrity of the float equipment (float collar and shoe)
2. Land casing with mandrel
3. Fill pipe with kill weight fluid, do not circulate through floats and confirm well is static
4. Set annular packoff shown below and pressure test to confirm integrity of the seal.  
Pressure ratings of wellhead components and valves is 5,000 psi

Annular packoff with both external and internal seals





5. After confirmation of both annular barriers and internal barriers, nipple down BOP and install cap flange.
  - a. If any barrier fails to test, the BOP stack will not be nipped down until after the cement job is completed with cement 500ft above the highest formation capable of flow with kill weight mud above or after it has achieved 50 psi compressive strength if cannot be verified.
6. Skid rig to next well on pad.
7. Confirm well is static before removing cap flange, flange will not be removed and offline cementing operations will not commence until well is under control. If well is not static, casing outlet valves will provide access to both the casing ID and annulus. Rig or third party pump truck will kill well prior to cementing or nipping up for further remediation.
  - a. Well Control Plan
    - i. The Drillers Method will be the primary well control method to regain control of the wellbore prior to cementing, if wellbore conditions do not permit the drillers method other methods of well control may be used
    - ii. Rig pumps or a 3<sup>rd</sup> party pump will be tied into the upper casing valve to pump down the casing ID
    - iii. A high pressure return line will be rigged up to lower casing valve and run to choke manifold to control annular pressure
    - iv. Once influx is circulated out of the hole, kill weight mud will be circulated
    - v. Well will be confirmed static
    - vi. Once confirmed static, cap flange will be removed to allow for offline cementing operations to commence
8. Install offline cement tool
9. Rig up cement equipment



Wellhead diagram during offline cementing operations

10. Circulate bottoms up with cement truck
  - a. If gas is present on bottoms up, well will be shut in and returns rerouted through gas buster to handle entrained gas
  - b. Max anticipated time before circulating with cement truck is 6 hrs
11. Perform cement job taking returns from the annulus wellhead valve
12. Confirm well is static and floats are holding after cement job
13. Remove cement equipment, offline cement tools and install night cap with pressure gauge for monitoring.

## **Production Casing 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 from 43 CFR part 3170 Subpart 3172 under the following conditions:

1. Annular clearance to meet or exceed 0.422" between intermediate casing ID and production casing coupling only on the first 500' overlap between both casings.
2. Annular clearance less than 0.422" is acceptable for the curve and lateral portions of the production open hole section.



5.500" 20.00 lb/ft P110-CY

TenarisHydril Wedge 461™ Matched Strength



Special Data Sheet

TH DS-20.0359

12 August 2020

Rev 00

|                    |           |                |           |                      |                  |
|--------------------|-----------|----------------|-----------|----------------------|------------------|
| Nominal OD         | 5.500 in. | Wall Thickness | 0.361 in. | Grade                | P110-CY          |
| Min Wall Thickness | 87.5%     | Type           | CASING    | Connection OD Option | MATCHED STRENGTH |

Pipe Body Data

| Geometry                |              |                  | Performance  |                     |                |
|-------------------------|--------------|------------------|--------------|---------------------|----------------|
| Nominal OD              | 5.500 in.    | Nominal ID       | 4.778 in.    | Body Yield Strength | 641 x 1000 lbs |
| Nominal Weight          | 20.00 lbs/ft | Wall Thickness   | 0.361 in.    | Internal Yield      | 12640 psi      |
| Standard Drift Diameter | 4.653 in.    | Plain End Weight | 19.83 lbs/ft | SMYS                | 110000 psi     |
| Special Drift Diameter  | N/A          | OD Tolerance     | API          | Collapse Pressure   | 11110 psi      |

Connection Data

| Geometry             |                  | Performance            |                | Make-up Torques           |              |
|----------------------|------------------|------------------------|----------------|---------------------------|--------------|
| Matched Strength OD  | 6.050 in.        | Tension Efficiency     | 100%           | Minimum                   | 17000 ft-lbs |
| Make-up Loss         | 3.775 in.        | Joint Yield Strength   | 641 x 1000 lbs | Optimum                   | 18000 ft-lbs |
| Threads per in.      | 3.40             | Internal Yield         | 12640 psi      | Maximum                   | 21600 ft-lbs |
| Connection OD Option | MATCHED STRENGTH | Compression Efficiency | 100%           | Operational Limit Torques |              |
| Coupling Length      | 7.714 in.        | Compression Strength   | 641 x 1000 lbs | Operating Torque          | 32000 ft-lbs |
|                      |                  | Bending                | 92 °/100 ft    | Yield Torque              | 38000 ft-lbs |
|                      |                  | Collapse               | 11110 psi      | Buck-On Torques           |              |
|                      |                  |                        |                | Minimum                   | 21600 ft-lbs |
|                      |                  |                        |                | Maximum                   | 23100 ft-lbs |

Notes

\*If you need to use torque values that are higher than the maximum indicated, please contact a local Tenaris technical sales representative



# TenarisHydril Wedge 461®



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

|                      |           |                 |              |       |         |
|----------------------|-----------|-----------------|--------------|-------|---------|
| Outside Diameter     | 7.000 in. | Wall Thickness  | 0.453 in.    | Grade | P110-CY |
| Min. Wall Thickness  | 87.50 %   | Pipe Body Drift | API Standard | Type  | Casing  |
| Connection OD Option | REGULAR   |                 |              |       |         |

### Pipe Body Data

| Geometry       |           |                  |             | Performance                  |               |
|----------------|-----------|------------------|-------------|------------------------------|---------------|
| Nominal OD     | 7.000 in. | Wall Thickness   | 0.453 in.   | Body Yield Strength          | 1025 x1000 lb |
| Nominal Weight | 32 lb/ft  | Plain End Weight | 31.70 lb/ft | Min. Internal Yield Pressure | 12,460 psi    |
| Drift          | 5.969 in. | OD Tolerance     | API         | SMYS                         | 110,000 psi   |
| Nominal ID     | 6.094 in. |                  |             | Collapse Pressure            | 10,780 psi    |

### Connection Data

| Geometry             |           | Performance                |               | Make-Up Torques         |              |
|----------------------|-----------|----------------------------|---------------|-------------------------|--------------|
| Connection OD        | 7.750 in. | Tension Efficiency         | 100 %         | Minimum                 | 20,000 ft-lb |
| Coupling Length      | 8.914 in. | Joint Yield Strength       | 1025 x1000 lb | Optimum                 | 21,000 ft-lb |
| Connection ID        | 6.094 in. | Internal Pressure Capacity | 12,460 psi    | Maximum                 | 25,200 ft-lb |
| Make-up Loss         | 4.375 in. | Compression Efficiency     | 100 %         | Operation Limit Torques |              |
| Threads per inch     | 3.40      | Compression Strength       | 1025 x1000 lb | Operating Torque        | 61,000 ft-lb |
| Connection OD Option | Regular   | Max. Allowable Bending     | 72 °/100 ft   | Yield Torque            | 72,000 ft-lb |
|                      |           | External Pressure Capacity | 10,780 psi    | Buck-On                 |              |
|                      |           | Coupling Face Load         | 269,000 lb    | Minimum                 | 25,200 ft-lb |
|                      |           |                            |               | Maximum                 | 26,700 ft-lb |

### Notes

This connection is fully interchangeable with:  
Wedge 461® - 7 in. - 0.317 / 0.362 / 0.408 in.  
Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version  
In October 2019, TenarisHydril Wedge XP® 2.0 was renamed TenarisHydril Wedge 461™. Product dimensions and properties remain identical and both connections are fully interchangeable

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

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

CONDITIONS  
  
Action 289701

CONDITIONS

|                                                                    |                                                      |
|--------------------------------------------------------------------|------------------------------------------------------|
| Operator:<br>OXY USA INC<br>P.O. Box 4294<br>Houston, TX 772104294 | OGRID:<br>16696                                      |
|                                                                    | Action Number:<br>289701                             |
|                                                                    | Action Type:<br>[C-103] NOI Change of Plans (C-103A) |

CONDITIONS

|            |           |                |
|------------|-----------|----------------|
| Created By | Condition | Condition Date |
| pkautz     | None      | 1/17/2024      |