

Submit 1 Copy To Appropriate District  
Office  
District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Ave., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM  
87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
October 13, 2009

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

|                                                                                                                                                                                                               |  |                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------|
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br>(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) |  | WELL API NO.<br>30-015-37375                                                                        |
| 1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>                                                                                |  | 5. Indicate Type of Lease<br>STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/> |
| 2. Name of Operator<br>Chesapeake Operating, Inc. ✓                                                                                                                                                           |  | 6. State Oil & Gas Lease No.                                                                        |
| 3. Address of Operator<br>P.O. Box 18496<br>Oklahoma City, OK 73154                                                                                                                                           |  | 7. Lease Name or Unit Agreement Name<br>PLU PIERCE CANYON 16 STATE ✓                                |
| 4. Well Location<br>Unit Letter P : 330' feet from the <del>North</del> <sup>South</sup> line and 330' feet from the East line<br>Section 16 Township 25S Range 30E NMPM County Eddy                          |  | 8. Well Number<br>1H ✓                                                                              |
| 11. Elevation (Show whether DR, RKB, RT, GR, etc.)<br>3289' GR                                                                                                                                                |  | 9. OGRID Number<br>147179 ✓                                                                         |
|                                                                                                                                                                                                               |  | 10. Pool name or Wildcat<br>Wilcat; Bone Spring                                                     |

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☒  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐  
DOWNHOLE COMMINGLE ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☐  
CASING/CEMENT JOB ☐

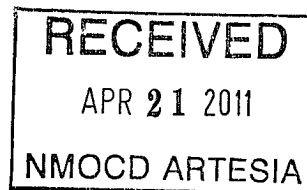
OTHER: Change BHL ☒

OTHER: ☐

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

Please find an amended directional planning report and an amended C-102 for this well.

In order to ensure that we stay within the producing area, the projected bottom hole location has been moved.



Spud Date:

Rig Release Date:

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

SIGNATURE

TITLE Sr. Regulatory Compl. Sp.

DATE 04/19/2011

Type or print name Bryan Arrant

E-mail address: bryan.arrant@chk.com

PHONE: (405)935-3782

For State Use Only

APPROVED BY:

TITLE

Geology

DATE 4/20/2011

Conditions of Approval (if any):

# **Permian District**

**Poker Lake**

**PLU Pierce Canyon 16 State 1H**

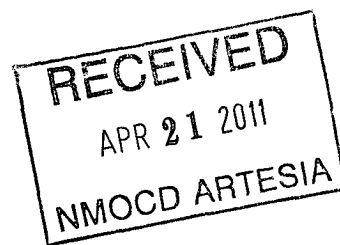
**PLU Piece Canyon 16 State 1H**

**PC16-New BHL**

**Plan: PC16-New BHL**

## **Standard Planning Report**

**19 April, 2011**



# Chesapeake Operating

## Planning Report

|                  |                              |                                     |                                    |
|------------------|------------------------------|-------------------------------------|------------------------------------|
| <b>Database:</b> | Drilling Database            | <b>Local Co-ordinate Reference:</b> | Well: PLU Piece Canyon 16 State 1H |
| <b>Company:</b>  | Permian District             | <b>TVD Reference:</b>               | WELL @ 0.0ft (Original Well Elev)  |
| <b>Project:</b>  | Poker Lake                   | <b>MD Reference:</b>                | WELL @ 0.0ft (Original Well Elev)  |
| <b>Site:</b>     | PLU Piece Canyon 16 State 1H | <b>North Reference:</b>             | Grid                               |
| <b>Well:</b>     | PLU Piece Canyon 16 State 1H | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Wellbore:</b> | PC16-New BHL                 |                                     |                                    |
| <b>Design:</b>   | PC16-New BHL                 |                                     |                                    |

|                    |                             |                      |              |
|--------------------|-----------------------------|----------------------|--------------|
| <b>Project</b>     | Poker Lake, Eddy County, NM |                      |              |
| <b>Map System:</b> | US State Plane 1983         | <b>System Datum:</b> | Ground Level |
| <b>Geo Datum:</b>  | North American Datum 1983   |                      |              |
| <b>Map Zone:</b>   | New Mexico Eastern Zone     |                      |              |

|                              |                              |                     |                 |                          |               |
|------------------------------|------------------------------|---------------------|-----------------|--------------------------|---------------|
| <b>Site</b>                  | PLU Piece Canyon 16 State 1H |                     |                 |                          |               |
| <b>Site Position:</b>        |                              | <b>Northing:</b>    | 409,125.00 usft | <b>Latitude:</b>         | 32.12394722   |
| <b>From:</b>                 | Map                          | <b>Easting:</b>     | 682,093.00 usft | <b>Longitude:</b>        | -103.87865522 |
| <b>Position Uncertainty:</b> | 0.0 ft                       | <b>Slot Radius:</b> | 0.000 in        | <b>Grid Convergence:</b> | 0.2417992 °   |

|                             |                              |        |                            |                 |                                 |
|-----------------------------|------------------------------|--------|----------------------------|-----------------|---------------------------------|
| <b>Well</b>                 | PLU Piece Canyon 16 State 1H |        |                            |                 |                                 |
| <b>Well Position</b>        | +N/-S                        | 0.0 ft | <b>Northing:</b>           | 409,125.00 usft | <b>Latitude:</b> 32.12394722    |
|                             | +E/-W                        | 0.0 ft | <b>Easting:</b>            | 682,093.00 usft | <b>Longitude:</b> -103.87865522 |
| <b>Position Uncertainty</b> |                              | 0.0 ft | <b>Wellhead Elevation:</b> |                 | <b>Ground Level:</b> 0.0 ft     |

|                 |              |  |  |  |  |
|-----------------|--------------|--|--|--|--|
| <b>Wellbore</b> | PC16-New BHL |  |  |  |  |
|-----------------|--------------|--|--|--|--|

| Magnetics | Model Name | Sample Date | Declination<br>(°) | Dip Angle<br>(°) | Field Strength<br>(nT) |
|-----------|------------|-------------|--------------------|------------------|------------------------|
|           | IGRF200510 | 4/15/2011   | 7.7283438          | 60.0667955       | 48,577                 |

|               |              |  |  |  |  |
|---------------|--------------|--|--|--|--|
| <b>Design</b> | PC16-New BHL |  |  |  |  |
|---------------|--------------|--|--|--|--|

|                          |                         |              |                      |                  |
|--------------------------|-------------------------|--------------|----------------------|------------------|
| <b>Audit Notes:</b>      |                         |              |                      |                  |
| <b>Version:</b>          | <b>Phase:</b>           | PROTOTYPE    | <b>Tie On Depth:</b> | 0.0              |
| <b>Vertical Section:</b> | <b>Depth From (TVD)</b> | <b>+N/-S</b> | <b>+E/-W</b>         | <b>Direction</b> |
|                          | (ft)                    | (ft)         | (ft)                 | (°)              |
|                          | 0.0                     | 0.0          | 0.0                  | 352.87           |

| Plan Sections             |                    |                |                           |               |               |                             |                            |                           |             |                  |
|---------------------------|--------------------|----------------|---------------------------|---------------|---------------|-----------------------------|----------------------------|---------------------------|-------------|------------------|
| Measured<br>Depth<br>(ft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(ft) | +N/-S<br>(ft) | +E/-W<br>(ft) | Dogleg<br>Rate<br>(°/100ft) | Build<br>Rate<br>(°/100ft) | Turn<br>Rate<br>(°/100ft) | TFO<br>(°)  | Target           |
| 0.0                       | 0.00               | 0.00           | 0.0                       | 0.0           | 0.0           | 0.00                        | 0.00                       | 0.00                      | 0.0000000   |                  |
| 8,205.2                   | 0.00               | 0.00           | 8,205.2                   | 0.0           | 0.0           | 0.00                        | 0.00                       | 0.00                      | 0.0000000   |                  |
| 8,956.9                   | 90.20              | 352.87         | 8,682.6                   | 475.4         | -59.4         | 12.00                       | 12.00                      | 0.00                      | 352.8734635 |                  |
| 13,152.9                  | 90.20              | 352.87         | 8,668.0                   | 4,639.0       | -580.0        | 0.00                        | 0.00                       | 0.00                      | 0.0000000   | PC16S1H- New BHL |

# Chesapeake Operating

## Planning Report

|           |                              |                              |                                   |
|-----------|------------------------------|------------------------------|-----------------------------------|
| Database: | Drilling Database            | Local Co-ordinate Reference: | Well PLU Piece Canyon 16 State 1H |
| Company:  | Permian District             | TVD Reference:               | WELL @ 0.0ft (Original Well Elev) |
| Project:  | Poker Lake                   | MD Reference:                | WELL @ 0.0ft (Original Well Elev) |
| Site:     | PLU Piece Canyon 16 State 1H | North Reference:             | Grid                              |
| Well:     | PLU Piece Canyon 16 State 1H | Survey Calculation Method:   | Minimum Curvature                 |
| Wellbore: | PC16-New BHL                 |                              |                                   |
| Design:   | PC16-New BHL                 |                              |                                   |

### 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) |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 0.0                 | 0.00            | 0.00        | 0.0                 | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 100.0               | 0.00            | 0.00        | 100.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 200.0               | 0.00            | 0.00        | 200.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 300.0               | 0.00            | 0.00        | 300.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 400.0               | 0.00            | 0.00        | 400.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 500.0               | 0.00            | 0.00        | 500.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 600.0               | 0.00            | 0.00        | 600.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 700.0               | 0.00            | 0.00        | 700.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 800.0               | 0.00            | 0.00        | 800.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 900.0               | 0.00            | 0.00        | 900.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,000.0             | 0.00            | 0.00        | 1,000.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,100.0             | 0.00            | 0.00        | 1,100.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,200.0             | 0.00            | 0.00        | 1,200.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,300.0             | 0.00            | 0.00        | 1,300.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,400.0             | 0.00            | 0.00        | 1,400.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,500.0             | 0.00            | 0.00        | 1,500.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,600.0             | 0.00            | 0.00        | 1,600.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,700.0             | 0.00            | 0.00        | 1,700.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,800.0             | 0.00            | 0.00        | 1,800.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 1,900.0             | 0.00            | 0.00        | 1,900.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 2,000.0             | 0.00            | 0.00        | 2,000.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 2,100.0             | 0.00            | 0.00        | 2,100.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 2,200.0             | 0.00            | 0.00        | 2,200.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 2,300.0             | 0.00            | 0.00        | 2,300.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 2,400.0             | 0.00            | 0.00        | 2,400.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 2,500.0             | 0.00            | 0.00        | 2,500.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 2,600.0             | 0.00            | 0.00        | 2,600.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 2,700.0             | 0.00            | 0.00        | 2,700.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 2,800.0             | 0.00            | 0.00        | 2,800.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 2,900.0             | 0.00            | 0.00        | 2,900.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 3,000.0             | 0.00            | 0.00        | 3,000.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 3,100.0             | 0.00            | 0.00        | 3,100.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 3,200.0             | 0.00            | 0.00        | 3,200.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 3,300.0             | 0.00            | 0.00        | 3,300.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 3,400.0             | 0.00            | 0.00        | 3,400.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 3,500.0             | 0.00            | 0.00        | 3,500.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 3,600.0             | 0.00            | 0.00        | 3,600.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 3,700.0             | 0.00            | 0.00        | 3,700.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 3,800.0             | 0.00            | 0.00        | 3,800.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 3,900.0             | 0.00            | 0.00        | 3,900.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 4,000.0             | 0.00            | 0.00        | 4,000.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 4,100.0             | 0.00            | 0.00        | 4,100.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 4,200.0             | 0.00            | 0.00        | 4,200.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 4,300.0             | 0.00            | 0.00        | 4,300.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 4,400.0             | 0.00            | 0.00        | 4,400.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 4,500.0             | 0.00            | 0.00        | 4,500.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 4,600.0             | 0.00            | 0.00        | 4,600.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 4,700.0             | 0.00            | 0.00        | 4,700.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 4,800.0             | 0.00            | 0.00        | 4,800.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 4,900.0             | 0.00            | 0.00        | 4,900.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 5,000.0             | 0.00            | 0.00        | 5,000.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 5,100.0             | 0.00            | 0.00        | 5,100.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 5,200.0             | 0.00            | 0.00        | 5,200.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 5,300.0             | 0.00            | 0.00        | 5,300.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |

# Chesapeake Operating

## Planning Report

|           |                              |                              |                                    |
|-----------|------------------------------|------------------------------|------------------------------------|
| Database: | Drilling Database            | Local Co-ordinate Reference: | Well: PLU Piece Canyon 16 State 1H |
| Company:  | Permian District             | TVD Reference:               | WELL @ 0.0ft (Original Well Elev)  |
| Project:  | Poker Lake                   | MD Reference:                | WELL @ 0.0ft (Original Well Elev)  |
| Site:     | PLU Piece Canyon 16 State 1H | North Reference:             | Grid                               |
| Well:     | PLU Piece Canyon 16 State 1H | Survey Calculation Method:   | Minimum Curvature                  |
| Wellbore: | PC16-New BHL                 |                              |                                    |
| Design:   | PC16-New BHL                 |                              |                                    |

| Planned Survey      |                 |             |                     |            |            |                       |                       |                      |                     |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 5,400.0             | 0.00            | 0.00        | 5,400.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 5,500.0             | 0.00            | 0.00        | 5,500.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 5,600.0             | 0.00            | 0.00        | 5,600.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 5,700.0             | 0.00            | 0.00        | 5,700.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 5,800.0             | 0.00            | 0.00        | 5,800.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 5,900.0             | 0.00            | 0.00        | 5,900.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 6,000.0             | 0.00            | 0.00        | 6,000.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 6,100.0             | 0.00            | 0.00        | 6,100.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 6,200.0             | 0.00            | 0.00        | 6,200.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 6,300.0             | 0.00            | 0.00        | 6,300.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 6,400.0             | 0.00            | 0.00        | 6,400.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 6,500.0             | 0.00            | 0.00        | 6,500.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 6,600.0             | 0.00            | 0.00        | 6,600.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 6,700.0             | 0.00            | 0.00        | 6,700.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 6,800.0             | 0.00            | 0.00        | 6,800.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 6,900.0             | 0.00            | 0.00        | 6,900.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 7,000.0             | 0.00            | 0.00        | 7,000.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 7,100.0             | 0.00            | 0.00        | 7,100.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 7,200.0             | 0.00            | 0.00        | 7,200.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 7,300.0             | 0.00            | 0.00        | 7,300.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 7,400.0             | 0.00            | 0.00        | 7,400.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 7,500.0             | 0.00            | 0.00        | 7,500.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 7,600.0             | 0.00            | 0.00        | 7,600.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 7,700.0             | 0.00            | 0.00        | 7,700.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 7,800.0             | 0.00            | 0.00        | 7,800.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 7,900.0             | 0.00            | 0.00        | 7,900.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 8,000.0             | 0.00            | 0.00        | 8,000.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 8,100.0             | 0.00            | 0.00        | 8,100.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 8,200.0             | 0.00            | 0.00        | 8,200.0             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 8,205.2             | 0.00            | 0.00        | 8,205.2             | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 8,300.0             | 11.38           | 352.87      | 8,299.4             | 9.3        | -1.2       | 9.4                   | 12.00                 | 12.00                | 0.00                |
| 8,400.0             | 23.38           | 352.87      | 8,394.6             | 38.9       | -4.9       | 39.2                  | 12.00                 | 12.00                | 0.00                |
| 8,500.0             | 35.38           | 352.87      | 8,481.6             | 87.5       | -10.9      | 88.2                  | 12.00                 | 12.00                | 0.00                |
| 8,600.0             | 47.38           | 352.87      | 8,556.5             | 153.0      | -19.1      | 154.1                 | 12.00                 | 12.00                | 0.00                |
| 8,700.0             | 59.38           | 352.87      | 8,616.1             | 232.4      | -29.1      | 234.3                 | 12.00                 | 12.00                | 0.00                |
| 8,800.0             | 71.38           | 352.87      | 8,657.7             | 322.5      | -40.3      | 325.0                 | 12.00                 | 12.00                | 0.00                |
| 8,900.0             | 83.38           | 352.87      | 8,679.5             | 419.1      | -52.4      | 422.4                 | 12.00                 | 12.00                | 0.00                |
| 8,956.9             | 90.20           | 352.87      | 8,682.6             | 475.4      | -59.4      | 479.1                 | 12.00                 | 12.00                | 0.00                |
| 9,000.0             | 90.20           | 352.87      | 8,682.5             | 518.2      | -64.8      | 522.3                 | 0.00                  | 0.00                 | 0.00                |
| 9,100.0             | 90.20           | 352.87      | 8,682.1             | 617.5      | -77.2      | 622.3                 | 0.00                  | 0.00                 | 0.00                |
| 9,200.0             | 90.20           | 352.87      | 8,681.8             | 716.7      | -89.6      | 722.3                 | 0.00                  | 0.00                 | 0.00                |
| 9,300.0             | 90.20           | 352.87      | 8,681.4             | 815.9      | -102.0     | 822.3                 | 0.00                  | 0.00                 | 0.00                |
| 9,400.0             | 90.20           | 352.87      | 8,681.1             | 915.2      | -114.4     | 922.3                 | 0.00                  | 0.00                 | 0.00                |
| 9,500.0             | 90.20           | 352.87      | 8,680.8             | 1,014.4    | -126.8     | 1,022.3               | 0.00                  | 0.00                 | 0.00                |
| 9,600.0             | 90.20           | 352.87      | 8,680.4             | 1,113.6    | -139.2     | 1,122.3               | 0.00                  | 0.00                 | 0.00                |
| 9,700.0             | 90.20           | 352.87      | 8,680.1             | 1,212.8    | -151.6     | 1,222.3               | 0.00                  | 0.00                 | 0.00                |
| 9,800.0             | 90.20           | 352.87      | 8,679.7             | 1,312.1    | -164.0     | 1,322.3               | 0.00                  | 0.00                 | 0.00                |
| 9,900.0             | 90.20           | 352.87      | 8,679.4             | 1,411.3    | -176.4     | 1,422.3               | 0.00                  | 0.00                 | 0.00                |
| 10,000.0            | 90.20           | 352.87      | 8,679.0             | 1,510.5    | -188.9     | 1,522.3               | 0.00                  | 0.00                 | 0.00                |
| 10,100.0            | 90.20           | 352.87      | 8,678.7             | 1,609.7    | -201.3     | 1,622.3               | 0.00                  | 0.00                 | 0.00                |
| 10,200.0            | 90.20           | 352.87      | 8,678.3             | 1,709.0    | -213.7     | 1,722.3               | 0.00                  | 0.00                 | 0.00                |
| 10,300.0            | 90.20           | 352.87      | 8,678.0             | 1,808.2    | -226.1     | 1,822.3               | 0.00                  | 0.00                 | 0.00                |
| 10,400.0            | 90.20           | 352.87      | 8,677.6             | 1,907.4    | -238.5     | 1,922.3               | 0.00                  | 0.00                 | 0.00                |
| 10,500.0            | 90.20           | 352.87      | 8,677.3             | 2,006.6    | -250.9     | 2,022.3               | 0.00                  | 0.00                 | 0.00                |

# Chesapeake Operating Planning Report

|           |                              |                              |                                   |
|-----------|------------------------------|------------------------------|-----------------------------------|
| Database: | Drilling Database            | Local Co-ordinate Reference: | Well PLU Piece Canyon 16 State 1H |
| Company:  | Permian District             | TVD Reference:               | WELL @ 0.0ft (Original Well Elev) |
| Project:  | Poker Lake                   | MD Reference:                | WELL @ 0.0ft (Original Well Elev) |
| Site:     | PLU Piece Canyon 16 State 1H | North Reference:             | Grid                              |
| Well:     | PLU Piece Canyon 16 State 1H | Survey Calculation Method:   | Minimum Curvature                 |
| Wellbore: | PC16-New BHL                 |                              |                                   |
| Design:   | PC16-New BHL                 |                              |                                   |

| Planned Survey         |                    |                |                        |               |               |                          |                          |                         |                        |  |
|------------------------|--------------------|----------------|------------------------|---------------|---------------|--------------------------|--------------------------|-------------------------|------------------------|--|
| Measured Depth<br>(ft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical Depth<br>(ft) | +N/-S<br>(ft) | +E/-W<br>(ft) | Vertical Section<br>(ft) | Dogleg Rate<br>(°/100ft) | Build Rate<br>(°/100ft) | Turn Rate<br>(°/100ft) |  |
| 10,600.0               | 90.20              | 352.87         | 8,676.9                | 2,105.9       | -263.3        | 2,122.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 10,700.0               | 90.20              | 352.87         | 8,676.6                | 2,205.1       | -275.7        | 2,222.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 10,800.0               | 90.20              | 352.87         | 8,676.2                | 2,304.3       | -288.1        | 2,322.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 10,900.0               | 90.20              | 352.87         | 8,675.9                | 2,403.6       | -300.5        | 2,422.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 11,000.0               | 90.20              | 352.87         | 8,675.5                | 2,502.8       | -312.9        | 2,522.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 11,100.0               | 90.20              | 352.87         | 8,675.2                | 2,602.0       | -325.3        | 2,622.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 11,200.0               | 90.20              | 352.87         | 8,674.8                | 2,701.2       | -337.7        | 2,722.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 11,300.0               | 90.20              | 352.87         | 8,674.5                | 2,800.5       | -350.1        | 2,822.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 11,400.0               | 90.20              | 352.87         | 8,674.1                | 2,899.7       | -362.5        | 2,922.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 11,500.0               | 90.20              | 352.87         | 8,673.8                | 2,998.9       | -374.9        | 3,022.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 11,600.0               | 90.20              | 352.87         | 8,673.4                | 3,098.1       | -387.4        | 3,122.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 11,700.0               | 90.20              | 352.87         | 8,673.1                | 3,197.4       | -399.8        | 3,222.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 11,800.0               | 90.20              | 352.87         | 8,672.7                | 3,296.6       | -412.2        | 3,322.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 11,900.0               | 90.20              | 352.87         | 8,672.4                | 3,395.8       | -424.6        | 3,422.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 12,000.0               | 90.20              | 352.87         | 8,672.0                | 3,495.1       | -437.0        | 3,522.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 12,100.0               | 90.20              | 352.87         | 8,671.7                | 3,594.3       | -449.4        | 3,622.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 12,200.0               | 90.20              | 352.87         | 8,671.3                | 3,693.5       | -461.8        | 3,722.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 12,300.0               | 90.20              | 352.87         | 8,671.0                | 3,792.7       | -474.2        | 3,822.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 12,400.0               | 90.20              | 352.87         | 8,670.6                | 3,892.0       | -486.6        | 3,922.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 12,500.0               | 90.20              | 352.87         | 8,670.3                | 3,991.2       | -499.0        | 4,022.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 12,600.0               | 90.20              | 352.87         | 8,669.9                | 4,090.4       | -511.4        | 4,122.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 12,700.0               | 90.20              | 352.87         | 8,669.6                | 4,189.6       | -523.8        | 4,222.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 12,800.0               | 90.20              | 352.87         | 8,669.2                | 4,288.9       | -536.2        | 4,322.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 12,900.0               | 90.20              | 352.87         | 8,668.9                | 4,388.1       | -548.6        | 4,422.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 13,000.0               | 90.20              | 352.87         | 8,668.5                | 4,487.3       | -561.0        | 4,522.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 13,100.0               | 90.20              | 352.87         | 8,668.2                | 4,586.5       | -573.4        | 4,622.3                  | 0.00                     | 0.00                    | 0.00                   |  |
| 13,152.9               | 90.20              | 352.87         | 8,668.0                | 4,639.0       | -580.0        | 4,675.1                  | 0.00                     | 0.00                    | 0.00                   |  |

| Design Targets                                                                       |           |          |         |         |        |            |            |             |               |
|--------------------------------------------------------------------------------------|-----------|----------|---------|---------|--------|------------|------------|-------------|---------------|
| Target Name                                                                          | Dip Angle | Dip Dir. | TVD     | +N/-S   | +E/-W  | Northing   | Easting    | Latitude    | Longitude     |
| - hit/miss target                                                                    | (°)       | (°)      | (ft)    | (ft)    | (ft)   | (usft)     | (usft)     |             |               |
| - Shape                                                                              |           |          |         |         |        |            |            |             |               |
| PC16S1H- New BHL - 8'                                                                | 0.00      | 0.00     | 8,668.0 | 4,639.0 | -580.0 | 413,764.00 | 681,513.00 | 32.13670591 | -103.88046573 |
| - plan hits target center                                                            |           |          |         |         |        |            |            |             |               |
| - Point                                                                              |           |          |         |         |        |            |            |             |               |
| PC16S1H- SHL                                                                         | 0.00      | 0.00     | 8,684.0 | 0.0     | 0.0    | 409,125.00 | 682,093.00 | 32.12394722 | -103.87865522 |
| - plan misses target center by 199.3ft at 8593.8ft MD (8552.3 TVD, 148.4 N, -18.6 E) |           |          |         |         |        |            |            |             |               |
| - Point                                                                              |           |          |         |         |        |            |            |             |               |