

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
OCD ArtesiaFORM APPROVED  
OMB NO. 1004-0135  
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.****SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

|                                                                                                                                  |                                                       |                                                           |
|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------------------------------------|
| 1. Type of Well<br><input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other |                                                       | 5. Lease Serial No.<br>NMNM030452                         |
| 2. Name of Operator<br>CHESAPEAKE OPERATING INC<br>Contact: LYNDEE SONGER<br>E-Mail: lyndee.songer@chk.com                       |                                                       | 6. If Indian, Allottee or Tribe Name                      |
| 3a. Address<br>OKLAHOMA CITY, OK 73154-0496                                                                                      | 3b. Phone No. (include area code)<br>Ph: 405-935-2411 | 7. If Unit or CA/Agreement, Name and/or No.<br>NMNM71016X |
| 4. Location of Well (Footage, Sec., T., R., M., or Survey Description)<br>Sec 23 T24S R30E NWNE Lot B 100FNL 1980FEL             |                                                       | 8. Well Name and No.<br>PLU BIG SINKS 23-24-30 USA 1H     |
|                                                                                                                                  |                                                       | 9. API Well No.<br>30-015-39633-00-X1                     |
|                                                                                                                                  |                                                       | 10. Field and Pool, or Exploratory<br>WILDCAT             |
|                                                                                                                                  |                                                       | 11. County or Parish, and State<br>EDDY COUNTY, NM        |

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

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

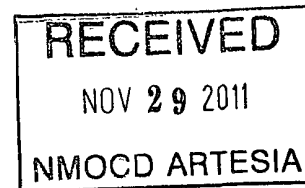
13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths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

Chesapeake is requesting to adjust the casing setting depths based on new formation tops.

Attached is the revised standard plan, wallplot, and well bore schematic.

(CHK PN 640120)

Accepted for record  
NMOCD  
DEC 05 2011



|                                                                                                                                                                                                                                                                                 |                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 14. I hereby certify that the foregoing is true and correct<br>Electronic Submission #123552 verified by the BLM Well Information System<br>For CHESAPEAKE OPERATING INC, sent to the Carlsbad<br>Committed to AFMSS for processing by KURT SIMMONS on 11/21/2011 (12KMS0366SE) |                                     |
| Name (Printed/Typed) LYNDEE SONGER                                                                                                                                                                                                                                              | Title REGULATORY COMPLIANCE ANALYST |
| Signature (Electronic Submission)                                                                                                                                                                                                                                               | Date 11/17/2011                     |

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

|                                                                                                                                                                                                                                                           |                          |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------|
| Approved By WESLEY INGRAM                                                                                                                                                                                                                                 | Title PETROLEUM ENGINEER | Date 11/22/2011 |
| Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. |                          | Office Carlsbad |

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***

## Well #1

## Plan: Plat

**17 November, 2011**

# Chesapeake Operating

## Planning Report

|           |                               |                              |                                     |
|-----------|-------------------------------|------------------------------|-------------------------------------|
| Database: | Drilling Database             | Local Co-ordinate Reference: | Well Well #1                        |
| Company:  | Permian District              | TVD Reference:               | WELL @ 0.0usft (Original Well Elev) |
| Project:  | Poker Lake                    | MD Reference:                | WELL @ 0.0usft (Original Well Elev) |
| Site:     | PLU Big Sinks 23-24-30 USA 1H | North Reference:             | Grid                                |
| Well:     | Well #1                       | Survey Calculation Method:   | Minimum Curvature                   |
| Wellbore: | Wellbore #1                   |                              |                                     |
| Design:   | Plat                          |                              |                                     |

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

|                       |                               |                   |                 |
|-----------------------|-------------------------------|-------------------|-----------------|
| Site                  | PLU Big Sinks 23-24-30 USA 1H |                   |                 |
| Site Position:        | Map                           | Northings:        | 440,598.00 usft |
| From:                 |                               | Easting:          | 691,017.00 usft |
| Position Uncertainty: | 0.0 usft                      | Slot Radius:      | 13.200 in       |
|                       |                               | Latitude:         | 32.2103544653   |
|                       |                               | Longitude:        | -103.8493719698 |
|                       |                               | Grid Convergence: | 0.2579905 °     |

|                      |          |                     |               |
|----------------------|----------|---------------------|---------------|
| Well                 | Well #1  |                     |               |
| Well Position        | +N-S     | 0.0 usft            | Northings:    |
|                      | +E-W     | 0.0 usft            | Easting:      |
| Position Uncertainty | 0.0 usft | Wellhead Elevation: | Ground Level: |
|                      |          |                     | 0.0 usft      |

|           |             |             |                |
|-----------|-------------|-------------|----------------|
| Wellbore  | Wellbore #1 |             |                |
| Magnetics | Model Name  | Sample Date | Declination    |
|           |             |             | (°)            |
|           | IGRF200510  | 6/17/2011   | 7.7009555      |
|           |             |             | Dip Angle      |
|           |             |             | (°)            |
|           |             |             | Field Strength |
|           |             |             | (nT)           |
|           |             |             | 60.1488495     |
|           |             |             | 48,616         |

|                   |                  |           |               |
|-------------------|------------------|-----------|---------------|
| Design            | Plat             |           |               |
| Audit Notes:      |                  |           |               |
| Version:          | Phase:           | PROTOTYPE | Tie On Depth: |
|                   |                  |           | 0.0           |
| Vertical Section: | Depth From (TVD) | +N-S      | +E-W          |
|                   | (usft)           | (usft)    | (usft)        |
|                   | 0.0              | 0.0       | 0.0           |
|                   |                  |           | Direction     |
|                   |                  |           | (°)           |
|                   |                  |           | 179.95        |

| Plan Sections         |                 |             |                       |             |             |                         |                        |                       |             |                    |
|-----------------------|-----------------|-------------|-----------------------|-------------|-------------|-------------------------|------------------------|-----------------------|-------------|--------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N-S (usft) | +E-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°)     | Target             |
| 0.0                   | 0.00            | 0.00        | 0.0                   | 0.0         | 0.0         | 0.00                    | 0.00                   | 0.00                  | 0.0000000   |                    |
| 7,747.5               | 0.00            | 0.00        | 7,747.5               | 0.0         | 0.0         | 0.00                    | 0.00                   | 0.00                  | 0.0000000   |                    |
| 8,497.5               | 90.00           | 179.95      | 8,225.0               | -477.5      | 0.4         | 12.00                   | 12.00                  | 0.00                  | 179.9524516 |                    |
| 12,840.1              | 90.00           | 179.95      | 8,225.0               | -4,820.0    | 4.0         | 0.00                    | 0.00                   | 0.00                  | 0.0000000   | BS 23-24-30 USA 1H |

# Chesapeake Operating

## Planning Report

|           |                               |                              |                                     |
|-----------|-------------------------------|------------------------------|-------------------------------------|
| Database: | Drilling Database             | Local Co-ordinate Reference: | Well: Well #1                       |
| Company:  | Permian District              | TVD Reference:               | WELL @ 0.0usft (Original Well Elev) |
| Project:  | Poker Lake                    | MD Reference:                | WELL @ 0.0usft (Original Well Elev) |
| Site:     | PLU Big Sinks 23-24-30 USA 1H | North Reference:             | Grid                                |
| Well:     | Well #1                       | Survey Calculation Method:   | Minimum Curvature                   |
| Wellbore: | Wellbore #1                   |                              |                                     |
| Design:   | Plat                          |                              |                                     |

| Planned Survey        |                 |             |                       |              |              |                         |                         |                        |                       |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 0.0                   | 0.00            | 0.00        | 0.0                   | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 100.0                 | 0.00            | 0.00        | 100.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 200.0                 | 0.00            | 0.00        | 200.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 300.0                 | 0.00            | 0.00        | 300.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 400.0                 | 0.00            | 0.00        | 400.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 500.0                 | 0.00            | 0.00        | 500.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 600.0                 | 0.00            | 0.00        | 600.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 700.0                 | 0.00            | 0.00        | 700.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 800.0                 | 0.00            | 0.00        | 800.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 900.0                 | 0.00            | 0.00        | 900.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,000.0               | 0.00            | 0.00        | 1,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,100.0               | 0.00            | 0.00        | 1,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,200.0               | 0.00            | 0.00        | 1,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,300.0               | 0.00            | 0.00        | 1,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,400.0               | 0.00            | 0.00        | 1,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,500.0               | 0.00            | 0.00        | 1,500.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,600.0               | 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 Well #1                        |
| Company:  | Permian District              | TVD Reference:               | WELL @ 0.0usft (Original Well Elev) |
| Project:  | Poker Lake                    | MD Reference:                | WELL @ 0.0usft (Original Well Elev) |
| Site:     | PLU Big Sinks 23-24-30 USA 1H | North Reference:             | Grid                                |
| Well:     | Well #1                       | Survey Calculation Method:   | Minimum Curvature                   |
| Wellbore: | Wellbore #1                   |                              |                                     |
| Design:   | Plat                          |                              |                                     |

| Planned Survey        |                 |             |                       |             |             |                         |                         |                        |                       |
|-----------------------|-----------------|-------------|-----------------------|-------------|-------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N-S (usft) | +E-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 5,400.0               | 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                  |
| 7,747.5               | 0.00            | 0.00        | 7,747.5               | 0.0         | 0.0         | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,800.0               | 6.30            | 179.95      | 7,799.9               | -2.9        | 0.0         | 2.9                     | 12.00                   | 12.00                  | 0.00                  |
| 7,900.0               | 18.30           | 179.95      | 7,897.4               | -24.1       | 0.0         | 24.1                    | 12.00                   | 12.00                  | 0.00                  |
| 8,000.0               | 30.30           | 179.95      | 7,988.4               | -65.2       | 0.1         | 65.2                    | 12.00                   | 12.00                  | 0.00                  |
| 8,100.0               | 42.30           | 179.95      | 8,068.8               | -124.3      | 0.1         | 124.3                   | 12.00                   | 12.00                  | 0.00                  |
| 8,200.0               | 54.30           | 179.95      | 8,135.3               | -198.8      | 0.2         | 198.8                   | 12.00                   | 12.00                  | 0.00                  |
| 8,300.0               | 66.30           | 179.95      | 8,184.7               | -285.5      | 0.2         | 285.5                   | 12.00                   | 12.00                  | 0.00                  |
| 8,400.0               | 78.30           | 179.95      | 8,215.1               | -380.6      | 0.3         | 380.6                   | 12.00                   | 12.00                  | 0.00                  |
| 8,497.5               | 90.00           | 179.95      | 8,225.0               | -477.5      | 0.4         | 477.5                   | 12.00                   | 12.00                  | 0.00                  |
| 8,500.0               | 90.00           | 179.95      | 8,225.0               | -479.9      | 0.4         | 479.9                   | 0.00                    | 0.00                   | 0.00                  |
| 8,600.0               | 90.00           | 179.95      | 8,225.0               | -579.9      | 0.5         | 579.9                   | 0.00                    | 0.00                   | 0.00                  |
| 8,700.0               | 90.00           | 179.95      | 8,225.0               | -679.9      | 0.6         | 679.9                   | 0.00                    | 0.00                   | 0.00                  |
| 8,800.0               | 90.00           | 179.95      | 8,225.0               | -779.9      | 0.6         | 779.9                   | 0.00                    | 0.00                   | 0.00                  |
| 8,900.0               | 90.00           | 179.95      | 8,225.0               | -879.9      | 0.7         | 879.9                   | 0.00                    | 0.00                   | 0.00                  |
| 9,000.0               | 90.00           | 179.95      | 8,225.0               | -979.9      | 0.8         | 979.9                   | 0.00                    | 0.00                   | 0.00                  |
| 9,100.0               | 90.00           | 179.95      | 8,225.0               | -1,079.9    | 0.9         | 1,079.9                 | 0.00                    | 0.00                   | 0.00                  |
| 9,200.0               | 90.00           | 179.95      | 8,225.0               | -1,179.9    | 1.0         | 1,179.9                 | 0.00                    | 0.00                   | 0.00                  |
| 9,300.0               | 90.00           | 179.95      | 8,225.0               | -1,279.9    | 1.1         | 1,279.9                 | 0.00                    | 0.00                   | 0.00                  |
| 9,400.0               | 90.00           | 179.95      | 8,225.0               | -1,379.9    | 1.1         | 1,379.9                 | 0.00                    | 0.00                   | 0.00                  |
| 9,500.0               | 90.00           | 179.95      | 8,225.0               | -1,479.9    | 1.2         | 1,479.9                 | 0.00                    | 0.00                   | 0.00                  |
| 9,600.0               | 90.00           | 179.95      | 8,225.0               | -1,579.9    | 1.3         | 1,579.9                 | 0.00                    | 0.00                   | 0.00                  |
| 9,700.0               | 90.00           | 179.95      | 8,225.0               | -1,679.9    | 1.4         | 1,679.9                 | 0.00                    | 0.00                   | 0.00                  |
| 9,800.0               | 90.00           | 179.95      | 8,225.0               | -1,779.9    | 1.5         | 1,779.9                 | 0.00                    | 0.00                   | 0.00                  |
| 9,900.0               | 90.00           | 179.95      | 8,225.0               | -1,879.9    | 1.6         | 1,879.9                 | 0.00                    | 0.00                   | 0.00                  |
| 10,000.0              | 90.00           | 179.95      | 8,225.0               | -1,979.9    | 1.6         | 1,979.9                 | 0.00                    | 0.00                   | 0.00                  |
| 10,100.0              | 90.00           | 179.95      | 8,225.0               | -2,079.9    | 1.7         | 2,079.9                 | 0.00                    | 0.00                   | 0.00                  |
| 10,200.0              | 90.00           | 179.95      | 8,225.0               | -2,179.9    | 1.8         | 2,179.9                 | 0.00                    | 0.00                   | 0.00                  |
| 10,300.0              | 90.00           | 179.95      | 8,225.0               | -2,279.9    | 1.9         | 2,279.9                 | 0.00                    | 0.00                   | 0.00                  |
| 10,400.0              | 90.00           | 179.95      | 8,225.0               | -2,379.9    | 2.0         | 2,379.9                 | 0.00                    | 0.00                   | 0.00                  |
| 10,500.0              | 90.00           | 179.95      | 8,225.0               | -2,479.9    | 2.1         | 2,479.9                 | 0.00                    | 0.00                   | 0.00                  |

# Chesapeake Operating

## Planning Report

|           |                               |                              |                                     |
|-----------|-------------------------------|------------------------------|-------------------------------------|
| Database: | Drilling Database             | Local Co-ordinate Reference: | Well Well #1                        |
| Company:  | Permian District              | TVD Reference:               | WELL @ 0'0usft (Original Well Elev) |
| Project:  | Poker Lake                    | MD Reference:                | WELL @ 0'0usft (Original Well Elev) |
| Site:     | PLU Big Sinks 23-24-30 USA 1H | North Reference:             | Grid                                |
| Well:     | Well #1                       | Survey Calculation Method:   | Minimum Curvature                   |
| Wellbore: | Wellbore #1                   |                              |                                     |
| Design:   | Plan                          |                              |                                     |

| Planned Survey        |                 |             |                       |             |             |                         |                         |                        |                       |  |
|-----------------------|-----------------|-------------|-----------------------|-------------|-------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N-S (usft) | +E-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 10,600.0              | 90.00           | 179.95      | 8,225.0               | -2,579.9    | 2.1         | 2,579.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 10,700.0              | 90.00           | 179.95      | 8,225.0               | -2,679.9    | 2.2         | 2,679.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 10,800.0              | 90.00           | 179.95      | 8,225.0               | -2,779.9    | 2.3         | 2,779.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 10,900.0              | 90.00           | 179.95      | 8,225.0               | -2,879.9    | 2.4         | 2,879.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 11,000.0              | 90.00           | 179.95      | 8,225.0               | -2,979.9    | 2.5         | 2,979.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 11,100.0              | 90.00           | 179.95      | 8,225.0               | -3,079.9    | 2.6         | 3,079.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 11,200.0              | 90.00           | 179.95      | 8,225.0               | -3,179.9    | 2.6         | 3,179.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 11,300.0              | 90.00           | 179.95      | 8,225.0               | -3,279.9    | 2.7         | 3,279.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 11,400.0              | 90.00           | 179.95      | 8,225.0               | -3,379.9    | 2.8         | 3,379.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 11,500.0              | 90.00           | 179.95      | 8,225.0               | -3,479.9    | 2.9         | 3,479.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 11,600.0              | 90.00           | 179.95      | 8,225.0               | -3,579.9    | 3.0         | 3,579.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 11,700.0              | 90.00           | 179.95      | 8,225.0               | -3,679.9    | 3.1         | 3,679.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 11,800.0              | 90.00           | 179.95      | 8,225.0               | -3,779.9    | 3.1         | 3,779.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 11,900.0              | 90.00           | 179.95      | 8,225.0               | -3,879.9    | 3.2         | 3,879.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 12,000.0              | 90.00           | 179.95      | 8,225.0               | -3,979.9    | 3.3         | 3,979.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 12,100.0              | 90.00           | 179.95      | 8,225.0               | -4,079.9    | 3.4         | 4,079.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 12,200.0              | 90.00           | 179.95      | 8,225.0               | -4,179.9    | 3.5         | 4,179.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 12,300.0              | 90.00           | 179.95      | 8,225.0               | -4,279.9    | 3.6         | 4,279.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 12,400.0              | 90.00           | 179.95      | 8,225.0               | -4,379.9    | 3.6         | 4,379.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 12,500.0              | 90.00           | 179.95      | 8,225.0               | -4,479.9    | 3.7         | 4,479.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 12,600.0              | 90.00           | 179.95      | 8,225.0               | -4,579.9    | 3.8         | 4,579.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 12,700.0              | 90.00           | 179.95      | 8,225.0               | -4,679.9    | 3.9         | 4,679.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 12,800.0              | 90.00           | 179.95      | 8,225.0               | -4,779.9    | 4.0         | 4,779.9                 | 0.00                    | 0.00                   | 0.00                  |  |
| 12,840.1              | 90.00           | 179.95      | 8,225.0               | -4,820.0    | 4.0         | 4,820.0                 | 0.00                    | 0.00                   | 0.00                  |  |

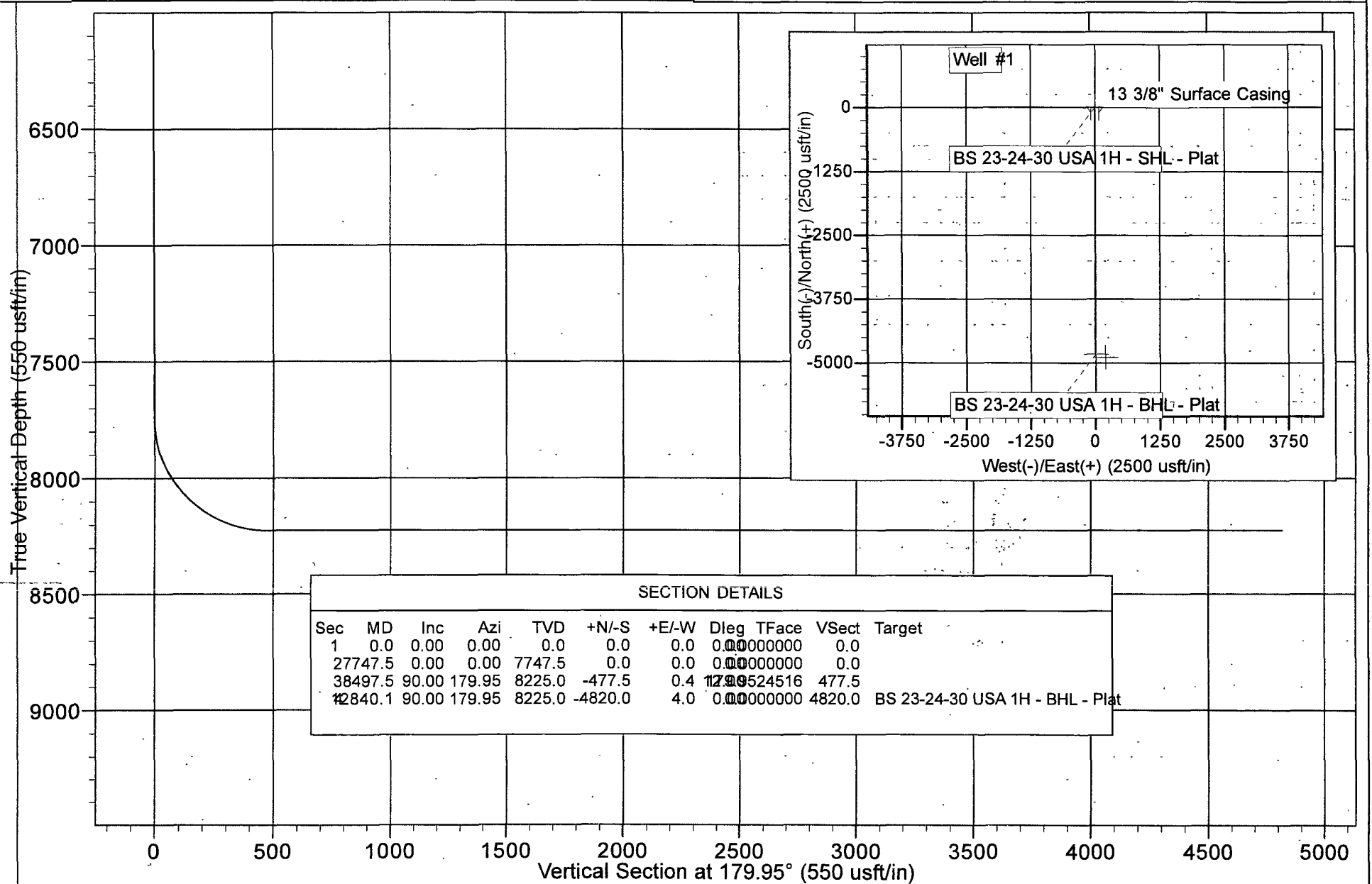
| Design Targets                                                                          |               |              |            |             |             |                 |                |               |                 |  |
|-----------------------------------------------------------------------------------------|---------------|--------------|------------|-------------|-------------|-----------------|----------------|---------------|-----------------|--|
| Target Name                                                                             | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N-S (usft) | +E-W (usft) | Northing (usft) | Easting (usft) | Latitude      | Longitude       |  |
| - hit/miss target                                                                       |               |              |            |             |             |                 |                |               |                 |  |
| - Shape                                                                                 |               |              |            |             |             |                 |                |               |                 |  |
| BS 23-24-30 USA 1H - E                                                                  | 0.00          | 0.00         | 8,225.0    | -4,820.0    | 4.0         | 435,778.00      | 691,021.00     | 32.1971051158 | -103.8494291825 |  |
| - plan hits target center                                                               |               |              |            |             |             |                 |                |               |                 |  |
| - Point                                                                                 |               |              |            |             |             |                 |                |               |                 |  |
| BS 23-24-30 USA 1H - S                                                                  | 0.00          | 0.00         | 8,225.0    | 0.0         | 0.0         | 440,598.00      | 691,017.00     | 32.2103544653 | -103.8493719698 |  |
| - plan misses target center by 198.2usft at 8111.1usft MD (8077.0 TVD, -131.9 N, 0.1 E) |               |              |            |             |             |                 |                |               |                 |  |
| - Point                                                                                 |               |              |            |             |             |                 |                |               |                 |  |

| Casing Points         |                       |                            |                      |                    |  |
|-----------------------|-----------------------|----------------------------|----------------------|--------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name                       | Casing Diameter (in) | Hole Diameter (in) |  |
| 550.0                 | 550.0                 | 13 3/8" Surface Casing     | 13.375               | 17.500             |  |
| 4,000.0               | 4,000.0               | 8 5/8" Intermediate Casing | 8.625                | 11.000             |  |
| 12,902.0              |                       | 5 1/2" Production Casing   | 5.500                | 7.875              |  |

Project: Poker Lake  
 Site: PLU Big Sinks 23-24-30 USA 1H  
 Well: Well #1  
 Wellbore: Wellbore #1  
 Design: Plat

# PROJECT DETAILS: Poker Lake

Geodetic System: US State Plane 1983  
 Datum: North American Datum 1983  
 Ellipsoid: GRS 1980  
 Zone: New Mexico Eastern Zone

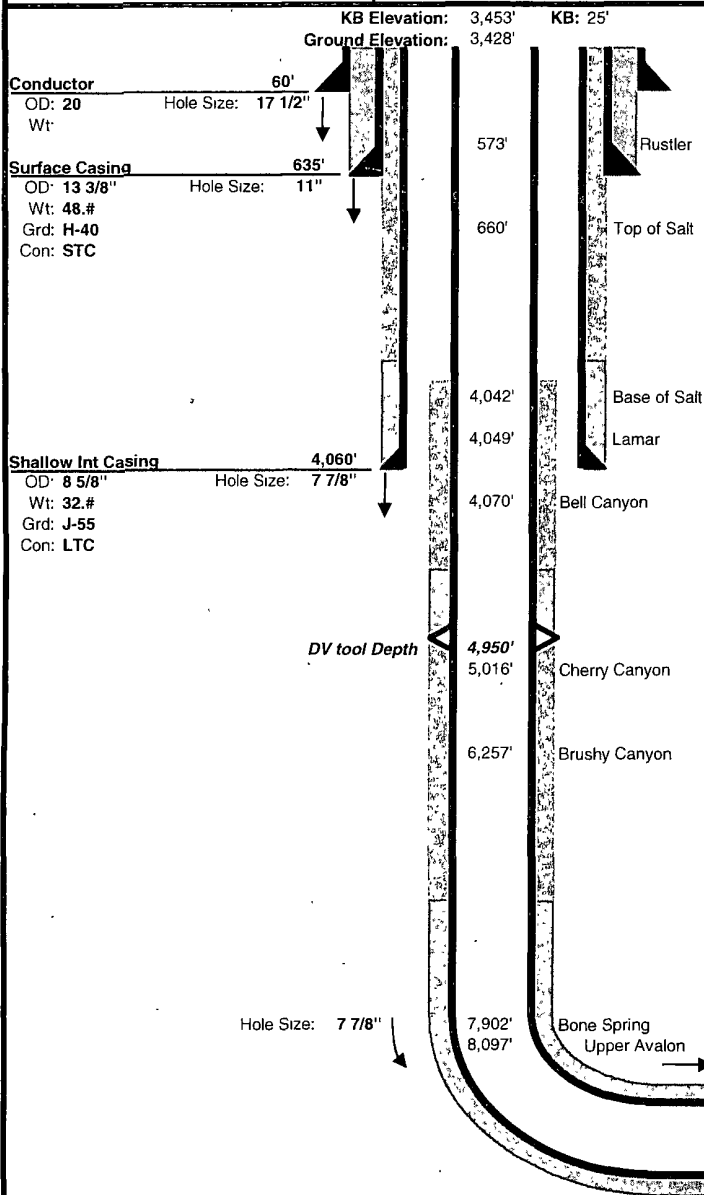




Drilling Engineer: Chris Gray  
Superintendent: Rolando Davila  
Geologist: Chris Persellin

Well Name: PLU Big Sinks 23-24-30 USA 1H  
Target: Upper Avalon  
County, State: Eddy, NM  
Surface Location: 100' FNL 1980' FEL, Section 23, Township 24S, Range 30E  
BH Location: 350' FSL 1980' FEL, Section 23, Township 24S, Range 30E  
SHL Latitude: 32.210354 SHL North: 440598  
SHL Longitude: -103.849373 SHL East: 691017  
BHL Latitude: 32.19710474 BHL North: 435778  
BHL Longitude: -103.8494285 BHL East: 691021  
Coordinates: NAD 83 Coordinates: NMSPCE

Drilling Rig: Patterson 62  
Directional-Surface: Ryan  
Directional-Curve: Ryan  
Directional-Lateral: Ryan  
Drilling Mud: Nova  
Cement: Schlumberger  
Wellhead: Sunbelt  
Property Number: 640120  
AFE Number: 157209



| Wellhead Equipment |                                                      |
|--------------------|------------------------------------------------------|
| A Section          | 13-3/8" x 13-5/8" 5K SOW w/5K gate valve             |
| B Section          | 13-5 8" 5K X 11" 5K w/5k gate valve                  |
| C Section          | 11" 5K X 7-1/16" 10K w/10k gate valve                |
| D Section          | N/A                                                  |
| Required BOP Stack | 13-5/8" 10K- Triple, Annular, Rot Head w/orbit valve |

| Mud              |           |            |         |         |  |
|------------------|-----------|------------|---------|---------|--|
| Depth            | Type      | Weight     | F. Vis  | FL      |  |
| 60' - 635'       | Spud Mud  | 8.4 - 8.7  | 32 - 34 | NC - NC |  |
| 635' - 4,060'    | Brine     | 9.5 - 10.1 | 28 - 29 | NC - NC |  |
| 4,060' - 7,748'  | Cut Brine | 8.4 - 9.5  | 28 - 29 | NC - NC |  |
| 7,748' - 8,498'  | Cut Brine | 8.4 - 9.5  | 28 - 29 | NC - NC |  |
| 8,498' - 12,840' | Cut Brine | 8.4 - 9.5  | 28 - 29 | NC - NC |  |

| Cement        |        |         |      |      |      |     |      |
|---------------|--------|---------|------|------|------|-----|------|
| Slurry        | Top    | Btm     | Wt   | Yld  | %Exc | Bbl | Sx   |
| Surface       |        |         |      |      |      |     |      |
| Single Slurry | 17'    | 635'    | 13.5 | 1.73 | 150  | 192 | 625  |
| Shallow Int   |        |         |      |      |      |     |      |
| Lead          | 25'    | 3,560'  | 12.0 | 1.8  | 150  | 383 | 1194 |
| Tail          | 3,560' | 4,060'  | 14.2 | 1.37 | 150  | 59  | 243  |
| Production    |        |         |      |      |      |     |      |
| 1st Lead      | 4,950' | 7,900'  | 12.4 | 2.11 | 75   | 159 | 424  |
| 1st Tail      | 7,900' | 12,840' | 14.5 | 1.27 | 75   | 269 | 1188 |
| 2nd Lead      | 3,560' | 4,700'  | 12.4 | 2.19 | 200  | 75  | 192  |
| 2nd Tail      | 4,700' | 4,950'  | 14.8 | 1.33 | 200  | 23  | 98   |

| Directional Plan |                                                                     |       |        |        |        |       |
|------------------|---------------------------------------------------------------------|-------|--------|--------|--------|-------|
| Target Line:     | 8225' TVD w/90 0 deg inclination                                    |       |        |        |        |       |
| Target Window:   | 20' above and 20' below                                             |       |        |        |        |       |
|                  | MD                                                                  | INC   | AZM    | TVD    | VS     | DLS   |
| KOP              | 7,748'                                                              | 0.00  | 0.00   | 7,748' | 0'     | 0.00  |
| EOB              | 8,498'                                                              | 90.00 | 179.95 | 8,225' | 478'   | 12.00 |
| TD               | 12,840'                                                             | 90.00 | 179.95 | 8,225' | 4,820' | 0.00  |
| Hardlines:       | Lateral- 330' from all lease lines.<br>Vertical- Actual Lease Lines |       |        |        |        |       |
| Notes:           | Please note SHL and BHL distance from lease lines                   |       |        |        |        |       |

| Type    | Logs         | Interval          | Vendor  |
|---------|--------------|-------------------|---------|
| Mud Log | 2 man Mudlog | Int Cas to TD     | Suttles |
| OH      | Triple Combo | Curve to Int Csg  | TBD     |
| OH      | GR/Neutron   | Int Cas to Surf   | TBD     |
| LWD     | MWD Gamma    | Curve and Lateral | Ryan    |