

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

Form C-101  
August 1, 2011  
Permit 182353

**HOBBS OCD**

**MAR 04 2014**

**RECEIVED**

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

|                                                                                                                        |  |                                                |
|------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------|
| 1. Operator Name and Address<br>CONOCOPHILLIPS COMPANY<br>600 North Dairy Ashford Rd.<br>P10-4056<br>Houston, TX 77079 |  | 2. OGRID Number<br>217817                      |
| 4. Property Code<br><b>90440</b>                                                                                       |  | 5. Property Name<br>RED HILLS WEST 16 STATE W3 |
|                                                                                                                        |  | 3. API Number<br><b>30-025-41709</b>           |
|                                                                                                                        |  | 6. Well No.<br>9H                              |

| 7. Surface Location |   |         |    |          |     |       |     |         |  |           |     |          |   |           |     |          |   |        |     |
|---------------------|---|---------|----|----------|-----|-------|-----|---------|--|-----------|-----|----------|---|-----------|-----|----------|---|--------|-----|
| UL - Lot            | A | Section | 16 | Township | 26S | Range | 32E | Lot Idn |  | Feet From | 250 | N/S Line | N | Feet From | 330 | E/W Line | E | County | LEA |

| 8. Proposed Bottom Hole Location |   |         |    |          |     |       |     |         |  |           |     |          |   |           |     |          |   |        |     |
|----------------------------------|---|---------|----|----------|-----|-------|-----|---------|--|-----------|-----|----------|---|-----------|-----|----------|---|--------|-----|
| UL - Lot                         | P | Section | 16 | Township | 26S | Range | 32E | Lot Idn |  | Feet From | 330 | N/S Line | S | Feet From | 380 | E/W Line | E | County | Lea |

| 9. Pool Information                                      |  |  |  |  |  |  |  |  |  |
|----------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| WILDCAT WOLF CAMP <b>WC-025 G-09 5263216A; WOLF CAMP</b> |  |  |  |  |  |  |  |  |  |
| <b>98065</b>                                             |  |  |  |  |  |  |  |  |  |

| Additional Well Information    |                             |                                                     |                         |                                                |
|--------------------------------|-----------------------------|-----------------------------------------------------|-------------------------|------------------------------------------------|
| 11. Work Type<br>New Well      | 12. Well Type<br>OIL        | 13. Cable/Rotary                                    | 14. Lease Type<br>State | 15. Ground Level Elevation<br>3226             |
| 16. Multiple<br>N              | 17. Proposed Depth<br>18175 | 18. Formation<br>Wolfcamp                           | 19. Contractor          | 20. Spud Date<br>7/14/2014                     |
| Depth to Ground water<br>405ft |                             | Distance from nearest fresh water well<br>1.8 miles |                         | Distance to nearest surface water<br>1.8 miles |

☒ We will be using a closed-loop system in lieu of lined pits

| 21. Proposed Casing and Cement Program |           |             |                  |               |                 |               |
|----------------------------------------|-----------|-------------|------------------|---------------|-----------------|---------------|
| Type                                   | Hole Size | Casing Size | Casing Weight/ft | Setting Depth | Sacks of Cement | Estimated TOC |
| Surf                                   | 17.5      | 13.375      | 54.5             | 950           | 780             | 0             |
| Int1                                   | 12.25     | 9.625       | 40               | 4625          | 1800            | 0             |
| Int2                                   | 8.75      | 7.625       | 29.7             | 12100         | 640             | 4125          |
| Prod                                   | 6.75      | 5.5         | 23               | 12100         | N/A             | N/A           |
| Prod                                   | 6.75      | 4.5         | 15.1             | 18150         | 420             | 12100         |

**Casing/Cement Program: Additional Comments**

The Production casing is a tapered string of 5-1/2" x 4-1/2" casing with a cross-over at the shoe of the 7-5/8" intermediate string at 12100ft. The string will be cemented from TD to the shoe of that string.

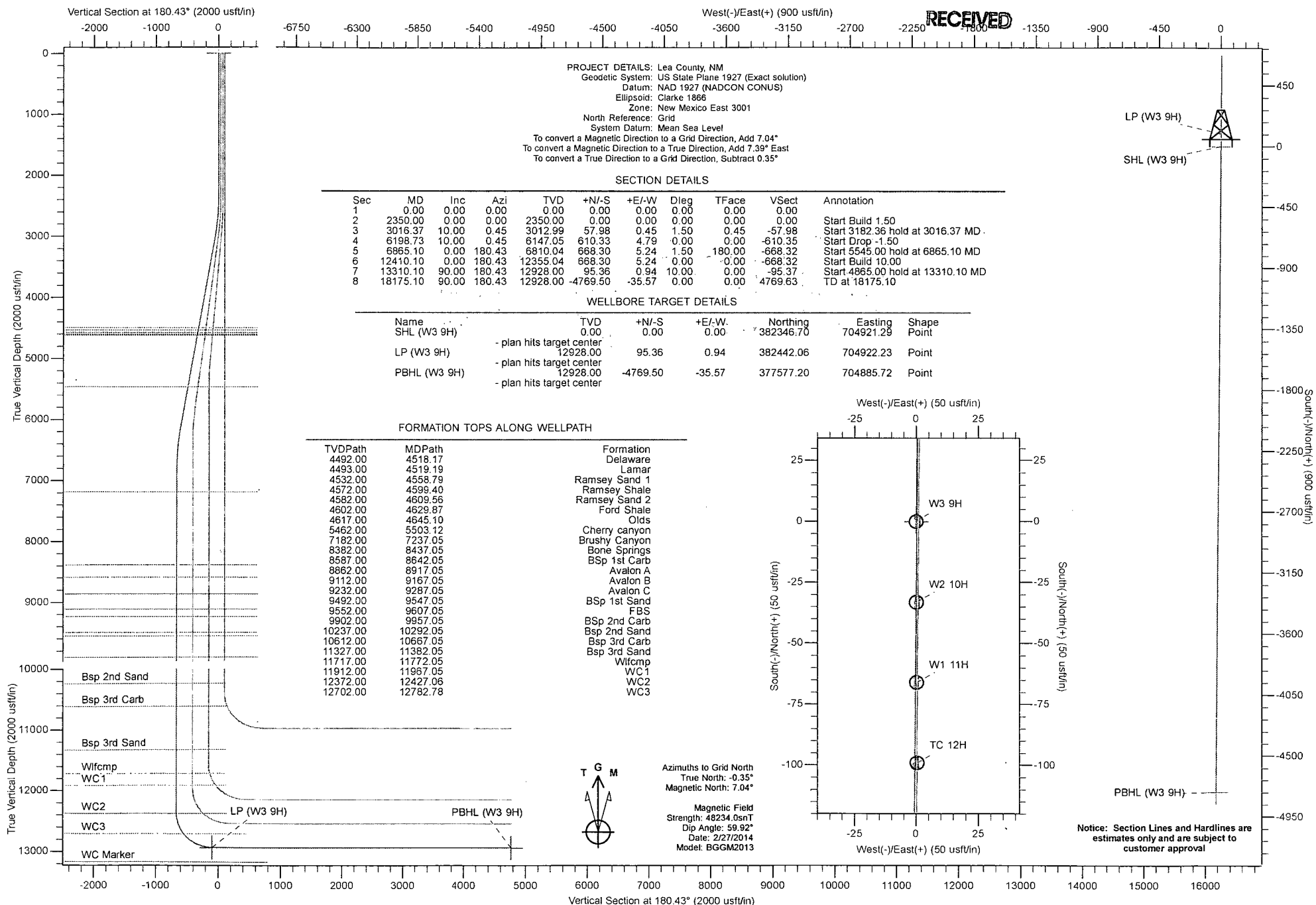
| 22. Proposed Blowout Prevention Program |                  |               |              |
|-----------------------------------------|------------------|---------------|--------------|
| Type                                    | Working Pressure | Test Pressure | Manufacturer |
| Annular                                 | 5000             | 2500          | HYDRIL       |
| Blind                                   | 10000            | 5000          | CAMERON      |
| Pipe                                    | 10000            | 5000          | CAMERON      |

|                                                                                                                                                                                                                                                                                                      |                     |                                                                 |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------------------------------------------------------|--|
| 23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.<br>I further certify I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> , if applicable. |                     | <b>OIL CONSERVATION DIVISION</b>                                |  |
| Signature: <i>Kristina Mickens</i>                                                                                                                                                                                                                                                                   |                     | Approved By: <i>[Signature]</i>                                 |  |
| Printed Name: KRISTINA MICKENS                                                                                                                                                                                                                                                                       |                     | Title:                                                          |  |
| Title: REGULATORY SPECIALIST                                                                                                                                                                                                                                                                         |                     | Approved Date: <b>03/05/14</b> Expiration Date: <b>03/05/16</b> |  |
| Email Address: Kristina.Mickens@conocophillips.com                                                                                                                                                                                                                                                   |                     | Conditions of Approval Attached                                 |  |
| Date: 02/28/2014                                                                                                                                                                                                                                                                                     | Phone: 218-206-5282 |                                                                 |  |

**MAR 06 2014**

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|           |                           |                              |                                           |
|-----------|---------------------------|------------------------------|-------------------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well W3 9H                                |
| Company:  | ConocoPhillips            | TVD Reference:               | Well @ 3251.00usft (RKB: 25' + GL: 3226') |
| Project:  | Lea County, NM            | MD Reference:                | Well @ 3251.00usft (RKB: 25' + GL: 3226') |
| Site:     | Red Hills West 16 State   | North Reference:             | Grid                                      |
| Well:     | W3 9H                     | Survey Calculation Method:   | Minimum Curvature                         |
| Wellbore: | Original Hole             |                              |                                           |
| Design:   | Design #1                 |                              |                                           |

|             |                                      |               |                |
|-------------|--------------------------------------|---------------|----------------|
| Project     | Lea County, NM                       |               |                |
| Map System: | US State Plane 1927 (Exact solution) | System Datum: | Mean Sea Level |
| Geo Datum:  | NAD 1927 (NADCON CONUS)              |               |                |
| Map Zone:   | New Mexico East 3001                 |               |                |

|                       |                         |                   |                  |
|-----------------------|-------------------------|-------------------|------------------|
| Site                  | Red Hills West 16 State |                   |                  |
| Site Position:        |                         | Northing:         | 382,247.67 usft  |
| From:                 | Map                     | Easting:          | 704,921.73 usft  |
| Position Uncertainty: | 0.00 usft               | Slot Radius:      | 13.20 in         |
|                       |                         | Latitude:         | 32° 2' 57.08 N   |
|                       |                         | Longitude:        | 103° 40' 18.97 W |
|                       |                         | Grid Convergence: | 0.35 °           |

|                      |           |                     |                  |
|----------------------|-----------|---------------------|------------------|
| Well                 | W3 9H     |                     |                  |
| Well Position        | +N/-S     | 99.03 usft          | Northing:        |
|                      | +E/-W     | -0.44 usft          | Easting:         |
| Position Uncertainty | 0.00 usft | Wellhead Elevation: | 0.00 usft        |
|                      |           | Latitude:           | 32° 2' 58.06 N   |
|                      |           | Longitude:          | 103° 40' 18.97 W |
|                      |           | Ground Level:       | 3,226.00 usft    |

|           |               |             |                |
|-----------|---------------|-------------|----------------|
| Wellbore  | Original Hole |             |                |
| Magnetics | Model Name    | Sample Date | Declination    |
|           |               |             | (°)            |
|           |               |             | Dip Angle      |
|           |               |             | (°)            |
|           |               |             | Field Strength |
|           |               |             | (nT)           |
|           | User Defined  | 2/27/2014   | 7.39           |
|           |               |             | 59.92          |
|           |               |             | 48,234         |

|                   |                  |        |               |
|-------------------|------------------|--------|---------------|
| Design            | Design #1        |        |               |
| Audit Notes:      |                  |        |               |
| Version:          | Phase:           | PLAN   | Tie On Depth: |
|                   |                  |        | 0.00          |
| Vertical Section: | Depth From (TVD) | +N/-S  | +E/-W         |
|                   | (usft)           | (usft) | (usft)        |
|                   | 0.00             | 0.00   | 0.00          |
|                   |                  |        | Direction     |
|                   |                  |        | (°)           |
|                   |                  |        | 180.43        |

| Plan Sections         |                 |             |                       |              |              |                       |                      |                     |         |              |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-----------------------|----------------------|---------------------|---------|--------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | TFO (°) | Target       |
| 0.00                  | 0.00            | 0.00        | 0.00                  | 0.00         | 0.00         | 0.00                  | 0.00                 | 0.00                | 0.00    |              |
| 2,350.00              | 0.00            | 0.00        | 2,350.00              | 0.00         | 0.00         | 0.00                  | 0.00                 | 0.00                | 0.00    |              |
| 3,016.37              | 10.00           | 0.45        | 3,012.99              | 57.98        | 0.45         | 1.50                  | 1.50                 | 0.00                | 0.45    |              |
| 6,198.73              | 10.00           | 0.45        | 6,147.05              | 610.33       | 4.79         | 0.00                  | 0.00                 | 0.00                | 0.00    |              |
| 6,865.10              | 0.00            | 180.43      | 6,810.04              | 668.30       | 5.24         | 1.50                  | -1.50                | 0.00                | 180.00  |              |
| 12,410.10             | 0.00            | 180.43      | 12,355.04             | 668.30       | 5.24         | 0.00                  | 0.00                 | 0.00                | 0.00    |              |
| 13,310.10             | 90.00           | 180.43      | 12,928.00             | 95.36        | 0.94         | 10.00                 | 10.00                | 0.00                | 0.00    |              |
| 18,175.10             | 90.00           | 180.43      | 12,928.00             | -4,769.50    | -35.57       | 0.00                  | 0.00                 | 0.00                | 0.00    | PBHL (W3 9H) |

Database: EDM 5000.1 Single User Db  
 Company: ConocoPhillips  
 Project: Lea County, NM  
 Site: Red Hills West 16 State  
 Well: W3 9H  
 Wellbore: Original Hole  
 Design: Design #1

Local Co-ordinate Reference: Well W3 9H  
 TVD Reference: Well @ 3251.00usft (RKB: 25' + GL: 3226')  
 MD Reference: Well @ 3251.00usft (RKB: 25' + GL: 3226')  
 North Reference: Grid  
 Survey Calculation Method: Minimum Curvature

### Planned Survey

| Measured Depth (usft)                   | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|-----------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-----------------------|----------------------|---------------------|
| 0.00                                    | 0.00            | 0.00        | 0.00                  | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| <b>SHL (W3 9H)</b>                      |                 |             |                       |              |              |                         |                       |                      |                     |
| 100.00                                  | 0.00            | 0.00        | 100.00                | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 200.00                                  | 0.00            | 0.00        | 200.00                | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 300.00                                  | 0.00            | 0.00        | 300.00                | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 400.00                                  | 0.00            | 0.00        | 400.00                | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 500.00                                  | 0.00            | 0.00        | 500.00                | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 600.00                                  | 0.00            | 0.00        | 600.00                | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 700.00                                  | 0.00            | 0.00        | 700.00                | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 800.00                                  | 0.00            | 0.00        | 800.00                | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 900.00                                  | 0.00            | 0.00        | 900.00                | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 1,000.00                                | 0.00            | 0.00        | 1,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 1,100.00                                | 0.00            | 0.00        | 1,100.00              | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 1,200.00                                | 0.00            | 0.00        | 1,200.00              | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 1,300.00                                | 0.00            | 0.00        | 1,300.00              | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 1,400.00                                | 0.00            | 0.00        | 1,400.00              | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 1,500.00                                | 0.00            | 0.00        | 1,500.00              | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 1,600.00                                | 0.00            | 0.00        | 1,600.00              | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 1,700.00                                | 0.00            | 0.00        | 1,700.00              | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 1,800.00                                | 0.00            | 0.00        | 1,800.00              | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 1,900.00                                | 0.00            | 0.00        | 1,900.00              | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 2,000.00                                | 0.00            | 0.00        | 2,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 2,100.00                                | 0.00            | 0.00        | 2,100.00              | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 2,200.00                                | 0.00            | 0.00        | 2,200.00              | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 2,300.00                                | 0.00            | 0.00        | 2,300.00              | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 2,350.00                                | 0.00            | 0.00        | 2,350.00              | 0.00         | 0.00         | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| <b>Start Build 1.50</b>                 |                 |             |                       |              |              |                         |                       |                      |                     |
| 2,400.00                                | 0.75            | 0.45        | 2,400.00              | 0.33         | 0.00         | -0.33                   | 1.50                  | 1.50                 | 0.00                |
| 2,500.00                                | 2.25            | 0.45        | 2,499.96              | 2.94         | 0.02         | -2.94                   | 1.50                  | 1.50                 | 0.00                |
| 2,600.00                                | 3.75            | 0.45        | 2,599.82              | 8.18         | 0.06         | -8.18                   | 1.50                  | 1.50                 | 0.00                |
| 2,700.00                                | 5.25            | 0.45        | 2,699.51              | 16.02        | 0.13         | -16.02                  | 1.50                  | 1.50                 | 0.00                |
| 2,800.00                                | 6.75            | 0.45        | 2,798.96              | 26.48        | 0.21         | -26.48                  | 1.50                  | 1.50                 | 0.00                |
| 2,900.00                                | 8.25            | 0.45        | 2,898.10              | 39.53        | 0.31         | -39.53                  | 1.50                  | 1.50                 | 0.00                |
| 3,000.00                                | 9.75            | 0.45        | 2,996.87              | 55.17        | 0.43         | -55.17                  | 1.50                  | 1.50                 | 0.00                |
| 3,016.37                                | 10.00           | 0.45        | 3,012.99              | 57.98        | 0.45         | -57.98                  | 1.50                  | 1.50                 | 0.00                |
| <b>Start 3182.36 hold at 3016.37 MD</b> |                 |             |                       |              |              |                         |                       |                      |                     |
| 3,100.00                                | 10.00           | 0.45        | 3,095.36              | 72.49        | 0.57         | -72.49                  | 0.00                  | 0.00                 | 0.00                |
| 3,200.00                                | 10.00           | 0.45        | 3,193.84              | 89.85        | 0.70         | -89.85                  | 0.00                  | 0.00                 | 0.00                |
| 3,300.00                                | 10.00           | 0.45        | 3,292.32              | 107.21       | 0.84         | -107.21                 | 0.00                  | 0.00                 | 0.00                |
| 3,400.00                                | 10.00           | 0.45        | 3,390.80              | 124.56       | 0.98         | -124.57                 | 0.00                  | 0.00                 | 0.00                |
| 3,500.00                                | 10.00           | 0.45        | 3,489.28              | 141.92       | 1.11         | -141.92                 | 0.00                  | 0.00                 | 0.00                |
| 3,600.00                                | 10.00           | 0.45        | 3,587.77              | 159.28       | 1.25         | -159.28                 | 0.00                  | 0.00                 | 0.00                |
| 3,700.00                                | 10.00           | 0.45        | 3,686.25              | 176.63       | 1.39         | -176.64                 | 0.00                  | 0.00                 | 0.00                |
| 3,800.00                                | 10.00           | 0.45        | 3,784.73              | 193.99       | 1.52         | -193.99                 | 0.00                  | 0.00                 | 0.00                |
| 3,900.00                                | 10.00           | 0.45        | 3,883.21              | 211.35       | 1.66         | -211.35                 | 0.00                  | 0.00                 | 0.00                |
| 4,000.00                                | 10.00           | 0.45        | 3,981.69              | 228.70       | 1.79         | -228.71                 | 0.00                  | 0.00                 | 0.00                |
| 4,100.00                                | 10.00           | 0.45        | 4,080.18              | 246.06       | 1.93         | -246.07                 | 0.00                  | 0.00                 | 0.00                |
| 4,200.00                                | 10.00           | 0.45        | 4,178.66              | 263.42       | 2.07         | -263.42                 | 0.00                  | 0.00                 | 0.00                |
| 4,300.00                                | 10.00           | 0.45        | 4,277.14              | 280.77       | 2.20         | -280.78                 | 0.00                  | 0.00                 | 0.00                |
| 4,400.00                                | 10.00           | 0.45        | 4,375.62              | 298.13       | 2.34         | -298.14                 | 0.00                  | 0.00                 | 0.00                |
| 4,500.00                                | 10.00           | 0.45        | 4,474.11              | 315.48       | 2.47         | -315.49                 | 0.00                  | 0.00                 | 0.00                |
| 4,518.17                                | 10.00           | 0.45        | 4,492.00              | 318.64       | 2.50         | -318.65                 | 0.00                  | 0.00                 | 0.00                |
| <b>Delaware</b>                         |                 |             |                       |              |              |                         |                       |                      |                     |
| 4,519.19                                | 10.00           | 0.45        | 4,493.00              | 318.81       | 2.50         | -318.82                 | 0.00                  | 0.00                 | 0.00                |

|                  |                           |                                     |                                           |
|------------------|---------------------------|-------------------------------------|-------------------------------------------|
| <b>Database:</b> | EDM 5000.1 Single User Db | <b>Local Co-ordinate Reference:</b> | Well W3 9H                                |
| <b>Company:</b>  | ConocoPhillips            | <b>TVD Reference:</b>               | Well @ 3251.00usft (RKB: 25' + GL: 3226') |
| <b>Project:</b>  | Lea County, NM            | <b>MD Reference:</b>                | Well @ 3251.00usft (RKB: 25' + GL: 3226') |
| <b>Site:</b>     | Red Hills West 16 State   | <b>North Reference:</b>             | Grid                                      |
| <b>Well:</b>     | W3 9H                     | <b>Survey Calculation Method:</b>   | Minimum Curvature                         |
| <b>Wellbore:</b> | Original Hole             |                                     |                                           |
| <b>Design:</b>   | Design #1                 |                                     |                                           |

# Planned Survey

| Measured Depth (usft)                   | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|-----------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-----------------------|----------------------|---------------------|
| <b>Lamar</b>                            |                 |             |                       |              |              |                         |                       |                      |                     |
| 4,558.79                                | 10.00           | 0.45        | 4,532.00              | 325.69       | 2.55         | -325.70                 | 0.00                  | 0.00                 | 0.00                |
| <b>Ramsey Sand 1</b>                    |                 |             |                       |              |              |                         |                       |                      |                     |
| 4,599.40                                | 10.00           | 0.45        | 4,572.00              | 332.74       | 2.61         | -332.75                 | 0.00                  | 0.00                 | 0.00                |
| <b>Ramsey Shale</b>                     |                 |             |                       |              |              |                         |                       |                      |                     |
| 4,600.00                                | 10.00           | 0.45        | 4,572.59              | 332.84       | 2.61         | -332.85                 | 0.00                  | 0.00                 | 0.00                |
| 4,609.56                                | 10.00           | 0.45        | 4,582.00              | 334.50       | 2.62         | -334.51                 | 0.00                  | 0.00                 | 0.00                |
| <b>Ramsey Sand 2</b>                    |                 |             |                       |              |              |                         |                       |                      |                     |
| 4,629.87                                | 10.00           | 0.45        | 4,602.00              | 338.03       | 2.65         | -338.04                 | 0.00                  | 0.00                 | 0.00                |
| <b>Ford Shale</b>                       |                 |             |                       |              |              |                         |                       |                      |                     |
| 4,645.10                                | 10.00           | 0.45        | 4,617.00              | 340.67       | 2.67         | -340.68                 | 0.00                  | 0.00                 | 0.00                |
| <b>Olds</b>                             |                 |             |                       |              |              |                         |                       |                      |                     |
| 4,700.00                                | 10.00           | 0.45        | 4,671.07              | 350.20       | 2.75         | -350.21                 | 0.00                  | 0.00                 | 0.00                |
| 4,800.00                                | 10.00           | 0.45        | 4,769.55              | 367.55       | 2.88         | -367.57                 | 0.00                  | 0.00                 | 0.00                |
| 4,900.00                                | 10.00           | 0.45        | 4,868.03              | 384.91       | 3.02         | -384.92                 | 0.00                  | 0.00                 | 0.00                |
| 5,000.00                                | 10.00           | 0.45        | 4,966.52              | 402.27       | 3.15         | -402.28                 | 0.00                  | 0.00                 | 0.00                |
| 5,100.00                                | 10.00           | 0.45        | 5,065.00              | 419.62       | 3.29         | -419.64                 | 0.00                  | 0.00                 | 0.00                |
| 5,200.00                                | 10.00           | 0.45        | 5,163.48              | 436.98       | 3.43         | -436.99                 | 0.00                  | 0.00                 | 0.00                |
| 5,300.00                                | 10.00           | 0.45        | 5,261.96              | 454.34       | 3.56         | -454.35                 | 0.00                  | 0.00                 | 0.00                |
| 5,400.00                                | 10.00           | 0.45        | 5,360.44              | 471.69       | 3.70         | -471.71                 | 0.00                  | 0.00                 | 0.00                |
| 5,500.00                                | 10.00           | 0.45        | 5,458.93              | 489.05       | 3.84         | -489.07                 | 0.00                  | 0.00                 | 0.00                |
| 5,503.12                                | 10.00           | 0.45        | 5,462.00              | 489.59       | 3.84         | -489.61                 | 0.00                  | 0.00                 | 0.00                |
| <b>Cherry canyon</b>                    |                 |             |                       |              |              |                         |                       |                      |                     |
| 5,600.00                                | 10.00           | 0.45        | 5,557.41              | 506.41       | 3.97         | -506.42                 | 0.00                  | 0.00                 | 0.00                |
| 5,700.00                                | 10.00           | 0.45        | 5,655.89              | 523.76       | 4.11         | -523.78                 | 0.00                  | 0.00                 | 0.00                |
| 5,800.00                                | 10.00           | 0.45        | 5,754.37              | 541.12       | 4.24         | -541.14                 | 0.00                  | 0.00                 | 0.00                |
| 5,900.00                                | 10.00           | 0.45        | 5,852.86              | 558.48       | 4.38         | -558.49                 | 0.00                  | 0.00                 | 0.00                |
| 6,000.00                                | 10.00           | 0.45        | 5,951.34              | 575.83       | 4.52         | -575.85                 | 0.00                  | 0.00                 | 0.00                |
| 6,100.00                                | 10.00           | 0.45        | 6,049.82              | 593.19       | 4.65         | -593.21                 | 0.00                  | 0.00                 | 0.00                |
| 6,198.73                                | 10.00           | 0.45        | 6,147.05              | 610.33       | 4.79         | -610.35                 | 0.00                  | 0.00                 | 0.00                |
| <b>Start Drop -1.50</b>                 |                 |             |                       |              |              |                         |                       |                      |                     |
| 6,200.00                                | 9.98            | 0.45        | 6,148.30              | 610.55       | 4.79         | -610.57                 | 1.50                  | -1.50                | 0.00                |
| 6,300.00                                | 8.48            | 0.45        | 6,247.01              | 626.58       | 4.91         | -626.60                 | 1.50                  | -1.50                | 0.00                |
| 6,400.00                                | 6.98            | 0.45        | 6,346.09              | 640.02       | 5.02         | -640.04                 | 1.50                  | -1.50                | 0.00                |
| 6,500.00                                | 5.48            | 0.45        | 6,445.50              | 650.87       | 5.10         | -650.89                 | 1.50                  | -1.50                | 0.00                |
| 6,600.00                                | 3.98            | 0.45        | 6,545.16              | 659.11       | 5.17         | -659.13                 | 1.50                  | -1.50                | 0.00                |
| 6,700.00                                | 2.48            | 0.45        | 6,645.00              | 664.74       | 5.21         | -664.76                 | 1.50                  | -1.50                | 0.00                |
| 6,800.00                                | 0.98            | 0.45        | 6,744.95              | 667.75       | 5.24         | -667.77                 | 1.50                  | -1.50                | 0.00                |
| 6,865.10                                | 0.00            | 180.43      | 6,810.04              | 668.30       | 5.24         | -668.32                 | 1.50                  | -1.50                | 0.00                |
| <b>Start 5545.00 hold at 6865.10 MD</b> |                 |             |                       |              |              |                         |                       |                      |                     |
| 6,900.00                                | 0.00            | 0.00        | 6,844.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 7,000.00                                | 0.00            | 0.00        | 6,944.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 7,100.00                                | 0.00            | 0.00        | 7,044.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 7,200.00                                | 0.00            | 0.00        | 7,144.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 7,237.05                                | 0.00            | 0.00        | 7,182.00              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| <b>Brushy Canyon</b>                    |                 |             |                       |              |              |                         |                       |                      |                     |
| 7,300.00                                | 0.00            | 0.00        | 7,244.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 7,400.00                                | 0.00            | 0.00        | 7,344.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 7,500.00                                | 0.00            | 0.00        | 7,444.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 7,600.00                                | 0.00            | 0.00        | 7,544.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 7,700.00                                | 0.00            | 0.00        | 7,644.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 7,800.00                                | 0.00            | 0.00        | 7,744.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |

**Database:** EDM 5000.1 Single User Db  
**Company:** ConocoPhillips  
**Project:** Lea County, NM  
**Site:** Red Hills West 16 State  
**Well:** W3 9H  
**Wellbore:** Original Hole  
**Design:** Design #1

**Local Co-ordinate Reference:** Well W3 9H  
**TVD Reference:** Well @ 3251.00usft (RKB: 25' + GL: 3226')  
**MD Reference:** Well @ 3251.00usft (RKB: 25' + GL: 3226')  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature

### Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-----------------------|----------------------|---------------------|
| 7,900.00              | 0.00            | 0.00        | 7,844.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 8,000.00              | 0.00            | 0.00        | 7,944.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 8,100.00              | 0.00            | 0.00        | 8,044.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 8,200.00              | 0.00            | 0.00        | 8,144.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 8,300.00              | 0.00            | 0.00        | 8,244.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 8,400.00              | 0.00            | 0.00        | 8,344.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 8,437.05              | 0.00            | 0.00        | 8,382.00              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| <b>Bone Springs</b>   |                 |             |                       |              |              |                         |                       |                      |                     |
| 8,500.00              | 0.00            | 0.00        | 8,444.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 8,600.00              | 0.00            | 0.00        | 8,544.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 8,642.05              | 0.00            | 0.00        | 8,587.00              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| <b>BSp 1st Carb</b>   |                 |             |                       |              |              |                         |                       |                      |                     |
| 8,700.00              | 0.00            | 0.00        | 8,644.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 8,800.00              | 0.00            | 0.00        | 8,744.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 8,900.00              | 0.00            | 0.00        | 8,844.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 8,917.05              | 0.00            | 0.00        | 8,862.00              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| <b>Avalon A</b>       |                 |             |                       |              |              |                         |                       |                      |                     |
| 9,000.00              | 0.00            | 0.00        | 8,944.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 9,100.00              | 0.00            | 0.00        | 9,044.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 9,167.05              | 0.00            | 0.00        | 9,112.00              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| <b>Avalon B</b>       |                 |             |                       |              |              |                         |                       |                      |                     |
| 9,200.00              | 0.00            | 0.00        | 9,144.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 9,287.05              | 0.00            | 0.00        | 9,232.00              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| <b>Avalon C</b>       |                 |             |                       |              |              |                         |                       |                      |                     |
| 9,300.00              | 0.00            | 0.00        | 9,244.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 9,400.00              | 0.00            | 0.00        | 9,344.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 9,500.00              | 0.00            | 0.00        | 9,444.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 9,547.05              | 0.00            | 0.00        | 9,492.00              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| <b>BSp 1st Sand</b>   |                 |             |                       |              |              |                         |                       |                      |                     |
| 9,600.00              | 0.00            | 0.00        | 9,544.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 9,607.05              | 0.00            | 0.00        | 9,552.00              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| <b>FBS</b>            |                 |             |                       |              |              |                         |                       |                      |                     |
| 9,700.00              | 0.00            | 0.00        | 9,644.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 9,800.00              | 0.00            | 0.00        | 9,744.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 9,900.00              | 0.00            | 0.00        | 9,844.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 9,957.05              | 0.00            | 0.00        | 9,902.00              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| <b>BSp 2nd Carb</b>   |                 |             |                       |              |              |                         |                       |                      |                     |
| 10,000.00             | 0.00            | 0.00        | 9,944.95              | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 10,100.00             | 0.00            | 0.00        | 10,044.95             | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 10,200.00             | 0.00            | 0.00        | 10,144.95             | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 10,292.05             | 0.00            | 0.00        | 10,237.00             | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| <b>Bsp 2nd Sand</b>   |                 |             |                       |              |              |                         |                       |                      |                     |
| 10,300.00             | 0.00            | 0.00        | 10,244.95             | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 10,400.00             | 0.00            | 0.00        | 10,344.95             | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 10,500.00             | 0.00            | 0.00        | 10,444.95             | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 10,600.00             | 0.00            | 0.00        | 10,544.95             | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 10,667.05             | 0.00            | 0.00        | 10,612.00             | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| <b>Bsp 3rd Carb</b>   |                 |             |                       |              |              |                         |                       |                      |                     |
| 10,700.00             | 0.00            | 0.00        | 10,644.95             | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 10,800.00             | 0.00            | 0.00        | 10,744.95             | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 10,900.00             | 0.00            | 0.00        | 10,844.95             | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 11,000.00             | 0.00            | 0.00        | 10,944.95             | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |
| 11,100.00             | 0.00            | 0.00        | 11,044.95             | 668.30       | 5.24         | -668.32                 | 0.00                  | 0.00                 | 0.00                |

|           |                           |                              |                                           |
|-----------|---------------------------|------------------------------|-------------------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well W3 9H                                |
| Company:  | ConocoPhillips            | TVD Reference:               | Well @ 3251.00usft (RKB: 25' + GL: 3226') |
| Project:  | Lea County, NM            | MD Reference:                | Well @ 3251.00usft (RKB: 25' + GL: 3226') |
| Site:     | Red Hills West 16 State   | North Reference:             | Grid                                      |
| Well:     | W3 9H                     | Survey Calculation Method:   | Minimum Curvature                         |
| Wellbore: | Original Hole             |                              |                                           |
| Design:   | Design #1                 |                              |                                           |

## Planned Survey

| Measured<br>Depth<br>(usft)              | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Vertical<br>Section<br>(usft) | Dogleg<br>Rate<br>(°/100ft) | Build<br>Rate<br>(°/100ft) | Turn<br>Rate<br>(°/100ft) |
|------------------------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|-----------------------------|----------------------------|---------------------------|
| 11,200.00                                | 0.00               | 0.00           | 11,144.95                   | 668.30          | 5.24            | -668.32                       | 0.00                        | 0.00                       | 0.00                      |
| 11,300.00                                | 0.00               | 0.00           | 11,244.95                   | 668.30          | 5.24            | -668.32                       | 0.00                        | 0.00                       | 0.00                      |
| 11,382.05                                | 0.00               | 0.00           | 11,327.00                   | 668.30          | 5.24            | -668.32                       | 0.00                        | 0.00                       | 0.00                      |
| <b>Bsp 3rd Sand</b>                      |                    |                |                             |                 |                 |                               |                             |                            |                           |
| 11,400.00                                | 0.00               | 0.00           | 11,344.95                   | 668.30          | 5.24            | -668.32                       | 0.00                        | 0.00                       | 0.00                      |
| 11,500.00                                | 0.00               | 0.00           | 11,444.95                   | 668.30          | 5.24            | -668.32                       | 0.00                        | 0.00                       | 0.00                      |
| 11,600.00                                | 0.00               | 0.00           | 11,544.95                   | 668.30          | 5.24            | -668.32                       | 0.00                        | 0.00                       | 0.00                      |
| 11,700.00                                | 0.00               | 0.00           | 11,644.95                   | 668.30          | 5.24            | -668.32                       | 0.00                        | 0.00                       | 0.00                      |
| 11,772.05                                | 0.00               | 0.00           | 11,717.00                   | 668.30          | 5.24            | -668.32                       | 0.00                        | 0.00                       | 0.00                      |
| <b>Wlfcmp</b>                            |                    |                |                             |                 |                 |                               |                             |                            |                           |
| 11,800.00                                | 0.00               | 0.00           | 11,744.95                   | 668.30          | 5.24            | -668.32                       | 0.00                        | 0.00                       | 0.00                      |
| 11,900.00                                | 0.00               | 0.00           | 11,844.95                   | 668.30          | 5.24            | -668.32                       | 0.00                        | 0.00                       | 0.00                      |
| 11,967.05                                | 0.00               | 0.00           | 11,912.00                   | 668.30          | 5.24            | -668.32                       | 0.00                        | 0.00                       | 0.00                      |
| <b>WC1</b>                               |                    |                |                             |                 |                 |                               |                             |                            |                           |
| 12,000.00                                | 0.00               | 0.00           | 11,944.95                   | 668.30          | 5.24            | -668.32                       | 0.00                        | 0.00                       | 0.00                      |
| 12,100.00                                | 0.00               | 0.00           | 12,044.95                   | 668.30          | 5.24            | -668.32                       | 0.00                        | 0.00                       | 0.00                      |
| 12,200.00                                | 0.00               | 0.00           | 12,144.95                   | 668.30          | 5.24            | -668.32                       | 0.00                        | 0.00                       | 0.00                      |
| 12,300.00                                | 0.00               | 0.00           | 12,244.95                   | 668.30          | 5.24            | -668.32                       | 0.00                        | 0.00                       | 0.00                      |
| 12,400.00                                | 0.00               | 0.00           | 12,344.95                   | 668.30          | 5.24            | -668.32                       | 0.00                        | 0.00                       | 0.00                      |
| 12,410.10                                | 0.00               | 0.00           | 12,355.04                   | 668.30          | 5.24            | -668.32                       | 0.00                        | 0.00                       | 0.00                      |
| <b>Start Build 10.00</b>                 |                    |                |                             |                 |                 |                               |                             |                            |                           |
| 12,427.06                                | 1.70               | 180.43         | 12,372.00                   | 668.05          | 5.24            | -668.07                       | 10.00                       | 10.00                      | 0.00                      |
| <b>WC2</b>                               |                    |                |                             |                 |                 |                               |                             |                            |                           |
| 12,450.00                                | 3.99               | 180.43         | 12,394.91                   | 666.91          | 5.23            | -666.94                       | 10.00                       | 10.00                      | 0.00                      |
| 12,500.00                                | 8.99               | 180.43         | 12,444.58                   | 661.26          | 5.19            | -661.29                       | 10.00                       | 10.00                      | 0.00                      |
| 12,550.00                                | 13.99              | 180.43         | 12,493.56                   | 651.31          | 5.11            | -651.33                       | 10.00                       | 10.00                      | 0.00                      |
| 12,600.00                                | 18.99              | 180.43         | 12,541.49                   | 637.12          | 5.01            | -637.14                       | 10.00                       | 10.00                      | 0.00                      |
| 12,650.00                                | 23.99              | 180.43         | 12,588.00                   | 618.81          | 4.87            | -618.83                       | 10.00                       | 10.00                      | 0.00                      |
| 12,700.00                                | 28.99              | 180.43         | 12,632.73                   | 596.52          | 4.70            | -596.53                       | 10.00                       | 10.00                      | 0.00                      |
| 12,750.00                                | 33.99              | 180.43         | 12,675.36                   | 570.41          | 4.51            | -570.42                       | 10.00                       | 10.00                      | 0.00                      |
| 12,782.78                                | 37.27              | 180.43         | 12,702.00                   | 551.31          | 4.36            | -551.33                       | 10.00                       | 10.00                      | 0.00                      |
| <b>WC3</b>                               |                    |                |                             |                 |                 |                               |                             |                            |                           |
| 12,800.00                                | 38.99              | 180.43         | 12,715.54                   | 540.68          | 4.28            | -540.70                       | 10.00                       | 10.00                      | 0.00                      |
| 12,850.00                                | 43.99              | 180.43         | 12,752.98                   | 507.57          | 4.03            | -507.59                       | 10.00                       | 10.00                      | 0.00                      |
| 12,900.00                                | 48.99              | 180.43         | 12,787.40                   | 471.32          | 3.76            | -471.33                       | 10.00                       | 10.00                      | 0.00                      |
| 12,950.00                                | 53.99              | 180.43         | 12,818.52                   | 432.21          | 3.47            | -432.22                       | 10.00                       | 10.00                      | 0.00                      |
| 13,000.00                                | 58.99              | 180.43         | 12,846.11                   | 390.53          | 3.16            | -390.54                       | 10.00                       | 10.00                      | 0.00                      |
| 13,050.00                                | 63.99              | 180.43         | 12,869.97                   | 346.61          | 2.83            | -346.62                       | 10.00                       | 10.00                      | 0.00                      |
| 13,100.00                                | 68.99              | 180.43         | 12,889.91                   | 300.78          | 2.48            | -300.79                       | 10.00                       | 10.00                      | 0.00                      |
| 13,150.00                                | 73.99              | 180.43         | 12,905.78                   | 253.38          | 2.13            | -253.39                       | 10.00                       | 10.00                      | 0.00                      |
| 13,200.00                                | 78.99              | 180.43         | 12,917.46                   | 204.78          | 1.76            | -204.79                       | 10.00                       | 10.00                      | 0.00                      |
| 13,250.00                                | 83.99              | 180.43         | 12,924.85                   | 155.35          | 1.39            | -155.35                       | 10.00                       | 10.00                      | 0.00                      |
| 13,300.00                                | 88.99              | 180.43         | 12,927.91                   | 105.46          | 1.02            | -105.46                       | 10.00                       | 10.00                      | 0.00                      |
| 13,310.10                                | 90.00              | 180.43         | 12,928.00                   | 95.36           | 0.94            | -95.37                        | 10.00                       | 10.00                      | 0.00                      |
| <b>Start 4865.00 hold at 13310.10 MD</b> |                    |                |                             |                 |                 |                               |                             |                            |                           |
| 13,400.00                                | 90.00              | 180.43         | 12,928.00                   | 5.46            | 0.27            | -5.46                         | 0.00                        | 0.00                       | 0.00                      |
| 13,500.00                                | 90.00              | 180.43         | 12,928.00                   | -94.54          | -0.48           | 94.54                         | 0.00                        | 0.00                       | 0.00                      |
| 13,600.00                                | 90.00              | 180.43         | 12,928.00                   | -194.53         | -1.23           | 194.54                        | 0.00                        | 0.00                       | 0.00                      |
| 13,700.00                                | 90.00              | 180.43         | 12,928.00                   | -294.53         | -1.99           | 294.54                        | 0.00                        | 0.00                       | 0.00                      |
| 13,800.00                                | 90.00              | 180.43         | 12,928.00                   | -394.53         | -2.74           | 394.54                        | 0.00                        | 0.00                       | 0.00                      |
| 13,900.00                                | 90.00              | 180.43         | 12,928.00                   | -494.52         | -3.49           | 494.54                        | 0.00                        | 0.00                       | 0.00                      |
| 14,000.00                                | 90.00              | 180.43         | 12,928.00                   | -594.52         | -4.24           | 594.54                        | 0.00                        | 0.00                       | 0.00                      |
| 14,100.00                                | 90.00              | 180.43         | 12,928.00                   | -694.52         | -4.99           | 694.54                        | 0.00                        | 0.00                       | 0.00                      |

|           |                           |                              |                                           |
|-----------|---------------------------|------------------------------|-------------------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well W3 9H                                |
| Company:  | ConocoPhillips            | TVD Reference:               | Well @ 3251.00usft (RKB: 25' + GL: 3226') |
| Project:  | Lea County, NM            | MD Reference:                | Well @ 3251.00usft (RKB: 25' + GL: 3226') |
| Site:     | Red Hills West 16 State   | North Reference:             | Grid                                      |
| Well:     | W3 9H                     | Survey Calculation Method:   | Minimum Curvature                         |
| Wellbore: | Original Hole             |                              |                                           |
| Design:   | Design #1                 |                              |                                           |

## Planned Survey

| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Vertical<br>Section<br>(usft) | Dogleg<br>Rate<br>(°/100ft) | Build<br>Rate<br>(°/100ft) | Turn<br>Rate<br>(°/100ft) |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|-----------------------------|----------------------------|---------------------------|
| 14,200.00                   | 90.00              | 180.43         | 12,928.00                   | -794.52         | -5.74           | 794.54                        | 0.00                        | 0.00                       | 0.00                      |
| 14,300.00                   | 90.00              | 180.43         | 12,928.00                   | -894.51         | -6.49           | 894.54                        | 0.00                        | 0.00                       | 0.00                      |
| 14,400.00                   | 90.00              | 180.43         | 12,928.00                   | -994.51         | -7.24           | 994.54                        | 0.00                        | 0.00                       | 0.00                      |
| 14,500.00                   | 90.00              | 180.43         | 12,928.00                   | -1,094.51       | -7.99           | 1,094.54                      | 0.00                        | 0.00                       | 0.00                      |
| 14,600.00                   | 90.00              | 180.43         | 12,928.00                   | -1,194.50       | -8.74           | 1,194.54                      | 0.00                        | 0.00                       | 0.00                      |
| 14,700.00                   | 90.00              | 180.43         | 12,928.00                   | -1,294.50       | -9.49           | 1,294.54                      | 0.00                        | 0.00                       | 0.00                      |
| 14,800.00                   | 90.00              | 180.43         | 12,928.00                   | -1,394.50       | -10.24          | 1,394.54                      | 0.00                        | 0.00                       | 0.00                      |
| 14,900.00                   | 90.00              | 180.43         | 12,928.00                   | -1,494.50       | -10.99          | 1,494.54                      | 0.00                        | 0.00                       | 0.00                      |
| 15,000.00                   | 90.00              | 180.43         | 12,928.00                   | -1,594.49       | -11.74          | 1,594.54                      | 0.00                        | 0.00                       | 0.00                      |
| 15,100.00                   | 90.00              | 180.43         | 12,928.00                   | -1,694.49       | -12.49          | 1,694.54                      | 0.00                        | 0.00                       | 0.00                      |
| 15,200.00                   | 90.00              | 180.43         | 12,928.00                   | -1,794.49       | -13.24          | 1,794.54                      | 0.00                        | 0.00                       | 0.00                      |
| 15,300.00                   | 90.00              | 180.43         | 12,928.00                   | -1,894.49       | -13.99          | 1,894.54                      | 0.00                        | 0.00                       | 0.00                      |
| 15,400.00                   | 90.00              | 180.43         | 12,928.00                   | -1,994.48       | -14.74          | 1,994.54                      | 0.00                        | 0.00                       | 0.00                      |
| 15,500.00                   | 90.00              | 180.43         | 12,928.00                   | -2,094.48       | -15.49          | 2,094.54                      | 0.00                        | 0.00                       | 0.00                      |
| 15,600.00                   | 90.00              | 180.43         | 12,928.00                   | -2,194.48       | -16.24          | 2,194.54                      | 0.00                        | 0.00                       | 0.00                      |
| 15,700.00                   | 90.00              | 180.43         | 12,928.00                   | -2,294.47       | -16.99          | 2,294.54                      | 0.00                        | 0.00                       | 0.00                      |
| 15,800.00                   | 90.00              | 180.43         | 12,928.00                   | -2,394.47       | -17.75          | 2,394.54                      | 0.00                        | 0.00                       | 0.00                      |
| 15,900.00                   | 90.00              | 180.43         | 12,928.00                   | -2,494.47       | -18.50          | 2,494.54                      | 0.00                        | 0.00                       | 0.00                      |
| 16,000.00                   | 90.00              | 180.43         | 12,928.00                   | -2,594.47       | -19.25          | 2,594.54                      | 0.00                        | 0.00                       | 0.00                      |
| 16,100.00                   | 90.00              | 180.43         | 12,928.00                   | -2,694.46       | -20.00          | 2,694.54                      | 0.00                        | 0.00                       | 0.00                      |
| 16,200.00                   | 90.00              | 180.43         | 12,928.00                   | -2,794.46       | -20.75          | 2,794.54                      | 0.00                        | 0.00                       | 0.00                      |
| 16,300.00                   | 90.00              | 180.43         | 12,928.00                   | -2,894.46       | -21.50          | 2,894.54                      | 0.00                        | 0.00                       | 0.00                      |
| 16,400.00                   | 90.00              | 180.43         | 12,928.00                   | -2,994.45       | -22.25          | 2,994.54                      | 0.00                        | 0.00                       | 0.00                      |
| 16,500.00                   | 90.00              | 180.43         | 12,928.00                   | -3,094.45       | -23.00          | 3,094.54                      | 0.00                        | 0.00                       | 0.00                      |
| 16,600.00                   | 90.00              | 180.43         | 12,928.00                   | -3,194.45       | -23.75          | 3,194.54                      | 0.00                        | 0.00                       | 0.00                      |
| 16,700.00                   | 90.00              | 180.43         | 12,928.00                   | -3,294.45       | -24.50          | 3,294.54                      | 0.00                        | 0.00                       | 0.00                      |
| 16,800.00                   | 90.00              | 180.43         | 12,928.00                   | -3,394.44       | -25.25          | 3,394.54                      | 0.00                        | 0.00                       | 0.00                      |
| 16,900.00                   | 90.00              | 180.43         | 12,928.00                   | -3,494.44       | -26.00          | 3,494.54                      | 0.00                        | 0.00                       | 0.00                      |
| 17,000.00                   | 90.00              | 180.43         | 12,928.00                   | -3,594.44       | -26.75          | 3,594.54                      | 0.00                        | 0.00                       | 0.00                      |
| 17,100.00                   | 90.00              | 180.43         | 12,928.00                   | -3,694.43       | -27.50          | 3,694.54                      | 0.00                        | 0.00                       | 0.00                      |
| 17,200.00                   | 90.00              | 180.43         | 12,928.00                   | -3,794.43       | -28.25          | 3,794.54                      | 0.00                        | 0.00                       | 0.00                      |
| 17,300.00                   | 90.00              | 180.43         | 12,928.00                   | -3,894.43       | -29.00          | 3,894.54                      | 0.00                        | 0.00                       | 0.00                      |
| 17,400.00                   | 90.00              | 180.43         | 12,928.00                   | -3,994.43       | -29.75          | 3,994.54                      | 0.00                        | 0.00                       | 0.00                      |
| 17,500.00                   | 90.00              | 180.43         | 12,928.00                   | -4,094.42       | -30.50          | 4,094.54                      | 0.00                        | 0.00                       | 0.00                      |
| 17,600.00                   | 90.00              | 180.43         | 12,928.00                   | -4,194.42       | -31.25          | 4,194.54                      | 0.00                        | 0.00                       | 0.00                      |
| 17,700.00                   | 90.00              | 180.43         | 12,928.00                   | -4,294.42       | -32.00          | 4,294.54                      | 0.00                        | 0.00                       | 0.00                      |
| 17,800.00                   | 90.00              | 180.43         | 12,928.00                   | -4,394.41       | -32.75          | 4,394.54                      | 0.00                        | 0.00                       | 0.00                      |
| 17,900.00                   | 90.00              | 180.43         | 12,928.00                   | -4,494.41       | -33.51          | 4,494.54                      | 0.00                        | 0.00                       | 0.00                      |
| 18,000.00                   | 90.00              | 180.43         | 12,928.00                   | -4,594.41       | -34.26          | 4,594.54                      | 0.00                        | 0.00                       | 0.00                      |
| 18,100.00                   | 90.00              | 180.43         | 12,928.00                   | -4,694.41       | -35.01          | 4,694.54                      | 0.00                        | 0.00                       | 0.00                      |
| 18,175.10                   | 90.00              | 180.43         | 12,928.00                   | -4,769.50       | -35.57          | 4,769.63                      | 0.00                        | 0.00                       | 0.00                      |

TD at 18175.10 - PBHL (W3 9H)

|                  |                           |                                     |                                           |
|------------------|---------------------------|-------------------------------------|-------------------------------------------|
| <b>Database:</b> | EDM 5000.1 Single User Db | <b>Local Co-ordinate Reference:</b> | Well W3 9H                                |
| <b>Company:</b>  | ConocoPhillips            | <b>TVD Reference:</b>               | Well @ 3251.00usft (RKB: 25' + GL: 3226') |
| <b>Project:</b>  | Lea County, NM            | <b>MD Reference:</b>                | Well @ 3251.00usft (RKB: 25' + GL: 3226') |
| <b>Site:</b>     | Red Hills West 16 State   | <b>North Reference:</b>             | Grid                                      |
| <b>Well:</b>     | W3 9H                     | <b>Survey Calculation Method:</b>   | Minimum Curvature                         |
| <b>Wellbore:</b> | Original Hole             |                                     |                                           |
| <b>Design:</b>   | Design #1                 |                                     |                                           |

| Design Targets            |           |          |           |           |        |            |            |                |                  |
|---------------------------|-----------|----------|-----------|-----------|--------|------------|------------|----------------|------------------|
| Target Name               | Dip Angle | Dip Dir. | TVD       | +N/-S     | +E/-W  | Northing   | Easting    | Latitude       | Longitude        |
| - hit/miss target         | (°)       | (°)      | (usft)    | (usft)    | (usft) | (usft)     | (usft)     |                |                  |
| - Shape                   |           |          |           |           |        |            |            |                |                  |
| SHL (W3 9H)               | 0.00      | 0.00     | 0.00      | 0.00      | 0.00   | 382,346.70 | 704,921.29 | 32° 2' 58.06 N | 103° 40' 18.97 W |
| - plan hits target center |           |          |           |           |        |            |            |                |                  |
| - Point                   |           |          |           |           |        |            |            |                |                  |
| PBHL (W3 9H)              | 0.00      | 0.00     | 12,928.00 | -4,769.50 | -35.57 | 377,577.20 | 704,885.72 | 32° 2' 10.86 N | 103° 40' 19.72 W |
| - plan hits target center |           |          |           |           |        |            |            |                |                  |
| - Point                   |           |          |           |           |        |            |            |                |                  |

| Formations     |                |               |           |      |               |  |
|----------------|----------------|---------------|-----------|------|---------------|--|
| Measured Depth | Vertical Depth | Name          | Lithology | Dip  | Dip Direction |  |
| (usft)         | (usft)         |               |           | (°)  | (°)           |  |
| 4,518.17       | 4,492.00       | Delaware      |           | 0.00 | 0.00          |  |
| 4,519.19       | 4,493.00       | Lamar         |           | 0.00 | 0.00          |  |
| 4,558.79       | 4,532.00       | Ramsey Sand 1 |           | 0.00 | 0.00          |  |
| 4,599.40       | 4,572.00       | Ramsey Shale  |           | 0.00 | 0.00          |  |
| 4,609.56       | 4,582.00       | Ramsey Sand 2 |           | 0.00 | 0.00          |  |
| 4,629.87       | 4,602.00       | Ford Shale    |           | 0.00 | 0.00          |  |
| 4,645.10       | 4,617.00       | Olds          |           | 0.00 | 0.00          |  |
| 5,503.12       | 5,462.00       | Cherry canyon |           | 0.00 | 0.00          |  |
| 7,237.05       | 7,182.00       | Brushy Canyon |           | 0.00 | 0.00          |  |
| 8,437.05       | 8,382.00       | Bone Springs  |           | 0.00 | 0.00          |  |
| 8,642.05       | 8,587.00       | BSp 1st Carb  |           | 0.00 | 0.00          |  |
| 8,917.05       | 8,862.00       | Avalon A      |           | 0.00 | 0.00          |  |
| 9,167.05       | 9,112.00       | Avalon B      |           | 0.00 | 0.00          |  |
| 9,287.05       | 9,232.00       | Avalon C      |           | 0.00 | 0.00          |  |
| 9,547.05       | 9,492.00       | BSp 1st Sand  |           | 0.00 | 0.00          |  |
| 9,607.05       | 9,552.00       | FBS           |           | 0.00 | 0.00          |  |
| 9,957.05       | 9,902.00       | BSp 2nd Carb  |           | 0.00 | 0.00          |  |
| 10,292.05      | 10,237.00      | Bsp 2nd Sand  |           | 0.00 | 0.00          |  |
| 10,667.05      | 10,612.00      | Bsp 3rd Carb  |           | 0.00 | 0.00          |  |
| 11,382.05      | 11,327.00      | Bsp 3rd Sand  |           | 0.00 | 0.00          |  |
| 11,772.05      | 11,717.00      | Wfcmp         |           | 0.00 | 0.00          |  |
| 11,967.05      | 11,912.00      | WC1           |           | 0.00 | 0.00          |  |
| 12,427.06      | 12,372.00      | WC2           |           | 0.00 | 0.00          |  |
| 12,782.78      | 12,702.00      | WC3           |           | 0.00 | 0.00          |  |

| Plan Annotations |                |                   |        |                                   |
|------------------|----------------|-------------------|--------|-----------------------------------|
| Measured Depth   | Vertical Depth | Local Coordinates |        | Comment                           |
| (usft)           | (usft)         | +N/-S             | +E/-W  |                                   |
| (usft)           | (usft)         | (usft)            | (usft) |                                   |
| 2,350.00         | 2,350.00       | 0.00              | 0.00   | Start Build 1.50                  |
| 3,016.37         | 3,012.99       | 57.98             | 0.45   | Start 3182.36 hold at 3016.37 MD  |
| 6,198.73         | 6,147.05       | 610.33            | 4.79   | Start Drop -1.50                  |
| 6,865.10         | 6,810.04       | 668.30            | 5.24   | Start 5545.00 hold at 6865.10 MD  |
| 12,410.10        | 12,355.04      | 668.30            | 5.24   | Start Build 10.00                 |
| 13,310.10        | 12,928.00      | 95.36             | 0.94   | Start 4865.00 hold at 13310.10 MD |
| 18,175.10        | 12,928.00      | -4,769.50         | -35.57 | TD at 18175.10                    |

## Closed Loop System Design, Operating and Maintenance, and Closure Plan

ConocoPhillips Company  
Well: Red Hills West 16 State W3 9H  
Location: Sec. 16, T26S, R32E  
Date: 2/28/2014

ConocoPhillips proposes the following plan for design, operating and maintenance, and closure of our proposed closed loop system for the above named well:

1. We propose to use a closed loop system with steel pits, haul-off bins, and frac tanks for containing all cuttings, solids, mud, water, brine, and liquids. We will not dig a pit, nor will we use a drying pad, nor will we build an earth pit above ground level, nor will we dispose of or bury any waste on location.

All drilling waste and all drilling fluids (fresh water, brine, mud, cuttings, drill solids, cement returns, and any other liquid or solid that may be involved) will be contained on location in the rig's steel pits or in haul-off bins or in frac tanks as needed. The intent is as follows:

- We propose to use the rigs' steel pits for containing and maintaining the drilling fluids.
- We propose to remove cuttings and drilled solids from the mud by using solids control equipment and to contain such cuttings and drilled solids on location in haul-off bins.
- We propose that any excess water that may need to be stored on location will be stored in tanks.

**The closed loop system components will be inspected daily by each tour and any needed repairs will be made immediately. Any leak in the system will be repaired immediately, and any spilled liquids and/or solids will be cleaned immediately, and the area where any such spill occurred will be remediated immediately.**

2. Cuttings and solids will be removed from location in haul-off bins by an authorized contractor and disposed of at an authorized facility. For this well, we propose the following disposal facility:

R-360 Inc.  
4507 West Carlsbad Hwy, Hobbs, NM 88240,  
P.O. Box 388; Hobbs, New Mexico 88241  
Toll Free Phone: 877.505.4274, Local Phone Number: 432.638.4076

The physical address for the plant where the disposal facility is located is Highway 62/180 at mile marker 66 (33 miles East of Hobbs, NM and 32 miles West of Carlsbad, NM).

The Permit Number for R-360 is NM-01-0006.

A photograph showing the type of haul-off bins that will be used is attached.

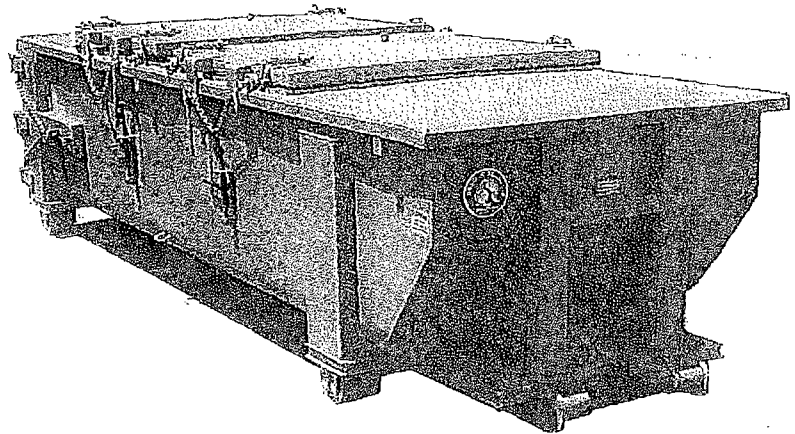
3. Mud will be transported by vacuum truck and disposed of at R-360 Inc. at the facility described above.
4. Fresh Water and Brine will be hauled off by vacuum truck and disposed of at an authorized salt water disposal well. We propose the following for disposal of fresh water and brine as needed:
  - Nabors Well Services Company, 3221 NW County Rd; Hobbs, NM 88240, PO 5208 Hobbs, NM, 88241, Permit SWD 092. (Well Location: **Section 3, T19S R37E**)
  - Basic Energy Services, P.O. Box 1869; Eunice, NM 88231 Phone Number: 575.394.2545, Facility located at Hwy 18, Mile Marker 19; Eunice, NM.

Jason Levinson  
Drilling Engineer  
Office: 281-206-5334  
Cell: 281-682-2783

# SPECIFICATIONS

## Heavy Duty Split Metal Rolling Lid

FLOOR: 3/16" PL one piece  
 CROSS MEMBER: 3 x 4.1 channel 16" on center  
 WALLS: 3/16" PL solid welded with tubing top, inside liner hooks  
 DOOR: 3/16" PL with tubing frame  
 FRONT: 3/16" PL slant formed  
 PICK UP: Standard cable with 2" x 6" x 1/4" rails, gusset at each crossmember  
 WHEELS: 10" DIA x 9" long with grease fittings  
 DOOR LATCH: 3 independent ratchet binders with chains, vertical second latch  
 GASKETS: Extruded rubber seal with metal retainers  
 WELDS: All welds continuous except sub-structure crossmembers  
 FINISH: Coated inside and out with direct to metal, rust inhibiting acrylic enamel color coat  
 HYDROTESTING: Full capacity static test  
 DIMENSIONS: 22'-11" long (21'-8" inside), 99" wide (88" inside), see drawing for height  
 OPTIONS: Steel grit blast and special paint, Ampliroll, Heil and Dino pickup  
 ROOF: 3/16" PL roof panels with tubing and channel support frame  
 LIDS: (2) 68" x 90" metal rolling lids spring loaded, self raising  
 ROLLERS: 4" V-groove rollers with delrin bearings and grease fittings  
 OPENING: (2) 60" x 82" openings with 8" divider centered on container  
 LATCH: (2) independent ratchet binders with chains per lid  
 GASKETS: Extruded rubber seal with metal retainers



| CONT. | A  | B  |
|-------|----|----|
| 20 YD | 41 | 53 |
| 25 YD | 53 | 65 |
| 30 YD | 65 | 77 |

