



## **Legacy Reserves**

**Lea County, NM**

**Lea Unit**

**#40H**

**OH**

**Plan: Plan #1**

## **Standard Planning Report**

**02 September, 2015**

**HOBBS OCD**

**FEB 29 2016**

**RECEIVED**



|           |                           |                              |                           |
|-----------|---------------------------|------------------------------|---------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well #40H                 |
| Company:  | Legacy Reserves           | TVD Reference:               | KB @ 3693.0usft (McVay 4) |
| Project:  | Lea County, NM            | MD Reference:                | KB @ 3693.0usft (McVay 4) |
| Site:     | Lea Unit                  | North Reference:             | Grid                      |
| Well:     | #40H                      | Survey Calculation Method:   | Minimum Curvature         |
| Wellbore: | OH                        |                              |                           |
| Design:   | Plan #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:                 | Lea Unit |                   |                   |
| Site Position:        |          | Northing:         | 567,504.40 usft   |
| From:                 | Map      | Easting:          | 753,784.90 usft   |
| Position Uncertainty: | 0.0 usft | Slot Radius:      | 13-3/16 "         |
|                       |          | Latitude:         | 32° 33' 26.922 N  |
|                       |          | Longitude:        | 103° 30' 34.732 W |
|                       |          | Grid Convergence: | 0.44 °            |

|                      |       |            |                     |                 |               |                   |
|----------------------|-------|------------|---------------------|-----------------|---------------|-------------------|
| Well                 | #40H  |            |                     |                 |               |                   |
| Well Position        | +N/-S | 8.0 usft   | Northing:           | 567,512.40 usft | Latitude:     | 32° 33' 26.931 N  |
|                      | +E/-W | 919.9 usft | Easting:            | 754,704.80 usft | Longitude:    | 103° 30' 23.984 W |
| Position Uncertainty |       | 0.0 usft   | Wellhead Elevation: | 3,677.0 usft    | Ground Level: | 3,675.0 usft      |

|           |            |             |                 |               |                     |
|-----------|------------|-------------|-----------------|---------------|---------------------|
| Wellbore  | OH         |             |                 |               |                     |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|           | IGRF2015   | 9/2/2015    | 7.14            | 60.40         | 48,327              |

|                   |                  |         |        |                   |
|-------------------|------------------|---------|--------|-------------------|
| Design            |                  | Plan #1 |        |                   |
| Audit Notes:      |                  |         |        |                   |
| Version:          |                  | Phase:  | PLAN   | Tie On Depth: 0.0 |
| Vertical Section: | Depth From (TVD) | +N/-S   | +E/-W  | Direction         |
|                   | (usft)           | (usft)  | (usft) | (°)               |
|                   | 0.0              | 0.0     | 0.0    | 357.55            |

| Plan Sections  |             |         |                |         |        |             |             |             |        |                  |
|----------------|-------------|---------|----------------|---------|--------|-------------|-------------|-------------|--------|------------------|
| Measured Depth | Inclination | Azimuth | Vertical Depth | +N/-S   | +E/-W  | Dogleg Rate | Build Rate  | Turn Rate   | TFO    | Target           |
| (usft)         | (°)         | (°)     | (usft)         | (usft)  | (usft) | (°/100usft) | (°/100usft) | (°/100usft) | (°)    |                  |
| 0.0            | 0.00        | 0.00    | 0.0            | 0.0     | 0.0    | 0.00        | 0.00        | 0.00        | 0.00   |                  |
| 10,027.0       | 0.00        | 0.00    | 10,027.0       | 0.0     | 0.0    | 0.00        | 0.00        | 0.00        | 0.00   |                  |
| 10,927.0       | 90.00       | 357.55  | 10,600.0       | 572.4   | -24.5  | 10.00       | 10.00       | -0.27       | 357.55 |                  |
| 18,310.1       | 90.00       | 357.55  | 10,600.0       | 7,948.8 | -339.6 | 0.00        | 0.00        | 0.00        | 0.00   | BHL (LU #40H/OH) |



TDS  
Planning Report



|           |                           |                              |                           |
|-----------|---------------------------|------------------------------|---------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well #40H                 |
| Company:  | Legacy Reserves           | TVD Reference:               | KB @ 3693.0usft (McVay 4) |
| Project:  | Lea County NM             | MD Reference:                | KB @ 3693.0usft (McVay 4) |
| Site:     | Lea Unit                  | North Reference:             | Grid                      |
| Well:     | #40H                      | Survey Calculation Method:   | Minimum Curvature         |
| Wellbore: | OH                        |                              |                           |
| Design:   | Plan #1                   |                              |                           |

| Planned Survey        |                 |             |                       |              |              |                         |                         |                        |                       |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 0.0                   | 0.00            | 0.00        | 0.0                   | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 100.0                 | 0.00            | 0.00        | 100.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 200.0                 | 0.00            | 0.00        | 200.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 300.0                 | 0.00            | 0.00        | 300.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 400.0                 | 0.00            | 0.00        | 400.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 500.0                 | 0.00            | 0.00        | 500.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 600.0                 | 0.00            | 0.00        | 600.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 700.0                 | 0.00            | 0.00        | 700.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 800.0                 | 0.00            | 0.00        | 800.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 900.0                 | 0.00            | 0.00        | 900.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,000.0               | 0.00            | 0.00        | 1,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,100.0               | 0.00            | 0.00        | 1,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,200.0               | 0.00            | 0.00        | 1,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,300.0               | 0.00            | 0.00        | 1,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,400.0               | 0.00            | 0.00        | 1,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,500.0               | 0.00            | 0.00        | 1,500.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,600.0               | 0.00            | 0.00        | 1,600.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,700.0               | 0.00            | 0.00        | 1,700.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,800.0               | 0.00            | 0.00        | 1,800.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,900.0               | 0.00            | 0.00        | 1,900.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,000.0               | 0.00            | 0.00        | 2,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,100.0               | 0.00            | 0.00        | 2,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,200.0               | 0.00            | 0.00        | 2,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,300.0               | 0.00            | 0.00        | 2,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,400.0               | 0.00            | 0.00        | 2,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,500.0               | 0.00            | 0.00        | 2,500.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,600.0               | 0.00            | 0.00        | 2,600.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,700.0               | 0.00            | 0.00        | 2,700.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,800.0               | 0.00            | 0.00        | 2,800.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,900.0               | 0.00            | 0.00        | 2,900.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,000.0               | 0.00            | 0.00        | 3,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,100.0               | 0.00            | 0.00        | 3,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,200.0               | 0.00            | 0.00        | 3,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,300.0               | 0.00            | 0.00        | 3,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,400.0               | 0.00            | 0.00        | 3,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,500.0               | 0.00            | 0.00        | 3,500.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,600.0               | 0.00            | 0.00        | 3,600.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,700.0               | 0.00            | 0.00        | 3,700.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,800.0               | 0.00            | 0.00        | 3,800.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,900.0               | 0.00            | 0.00        | 3,900.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,000.0               | 0.00            | 0.00        | 4,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,100.0               | 0.00            | 0.00        | 4,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,200.0               | 0.00            | 0.00        | 4,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,300.0               | 0.00            | 0.00        | 4,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,400.0               | 0.00            | 0.00        | 4,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,500.0               | 0.00            | 0.00        | 4,500.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,600.0               | 0.00            | 0.00        | 4,600.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,700.0               | 0.00            | 0.00        | 4,700.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,800.0               | 0.00            | 0.00        | 4,800.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,900.0               | 0.00            | 0.00        | 4,900.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,000.0               | 0.00            | 0.00        | 5,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,100.0               | 0.00            | 0.00        | 5,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,200.0               | 0.00            | 0.00        | 5,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,300.0               | 0.00            | 0.00        | 5,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |

|           |                           |                              |                           |
|-----------|---------------------------|------------------------------|---------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well #40H                 |
| Company:  | Legacy Reserves           | TVD Reference:               | KB @ 3693.0usft (McVay 4) |
| Project:  | Lea County, NM            | MD Reference:                | KB @ 3693.0usft (McVay 4) |
| Site:     | Lea Unit                  | North Reference:             | Grid                      |
| Well:     | #40H                      | Survey Calculation Method:   | Minimum Curvature         |
| Wellbore: | OH                        |                              |                           |
| Design:   | Plan #1                   |                              |                           |

| Planned Survey                   |                 |             |                       |              |              |                         |                         |                        |                       |
|----------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)            | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 5,400.0                          | 0.00            | 0.00        | 5,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,500.0                          | 0.00            | 0.00        | 5,500.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,600.0                          | 0.00            | 0.00        | 5,600.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,700.0                          | 0.00            | 0.00        | 5,700.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,800.0                          | 0.00            | 0.00        | 5,800.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,900.0                          | 0.00            | 0.00        | 5,900.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 6,000.0                          | 0.00            | 0.00        | 6,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 6,100.0                          | 0.00            | 0.00        | 6,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 6,200.0                          | 0.00            | 0.00        | 6,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 6,300.0                          | 0.00            | 0.00        | 6,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 6,400.0                          | 0.00            | 0.00        | 6,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 6,500.0                          | 0.00            | 0.00        | 6,500.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 6,600.0                          | 0.00            | 0.00        | 6,600.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 6,700.0                          | 0.00            | 0.00        | 6,700.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 6,800.0                          | 0.00            | 0.00        | 6,800.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 6,900.0                          | 0.00            | 0.00        | 6,900.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,000.0                          | 0.00            | 0.00        | 7,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,100.0                          | 0.00            | 0.00        | 7,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,200.0                          | 0.00            | 0.00        | 7,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,300.0                          | 0.00            | 0.00        | 7,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,400.0                          | 0.00            | 0.00        | 7,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,500.0                          | 0.00            | 0.00        | 7,500.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,600.0                          | 0.00            | 0.00        | 7,600.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,700.0                          | 0.00            | 0.00        | 7,700.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,800.0                          | 0.00            | 0.00        | 7,800.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 7,900.0                          | 0.00            | 0.00        | 7,900.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 8,000.0                          | 0.00            | 0.00        | 8,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 8,100.0                          | 0.00            | 0.00        | 8,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 8,200.0                          | 0.00            | 0.00        | 8,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 8,300.0                          | 0.00            | 0.00        | 8,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 8,400.0                          | 0.00            | 0.00        | 8,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 8,500.0                          | 0.00            | 0.00        | 8,500.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 8,600.0                          | 0.00            | 0.00        | 8,600.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 8,700.0                          | 0.00            | 0.00        | 8,700.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 8,800.0                          | 0.00            | 0.00        | 8,800.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 8,900.0                          | 0.00            | 0.00        | 8,900.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,000.0                          | 0.00            | 0.00        | 9,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,100.0                          | 0.00            | 0.00        | 9,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,200.0                          | 0.00            | 0.00        | 9,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,300.0                          | 0.00            | 0.00        | 9,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,400.0                          | 0.00            | 0.00        | 9,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,500.0                          | 0.00            | 0.00        | 9,500.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,600.0                          | 0.00            | 0.00        | 9,600.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,700.0                          | 0.00            | 0.00        | 9,700.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,800.0                          | 0.00            | 0.00        | 9,800.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 9,900.0                          | 0.00            | 0.00        | 9,900.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 10,000.0                         | 0.00            | 0.00        | 10,000.0              | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 10,027.0                         | 0.00            | 0.00        | 10,027.0              | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| KOP - Start DLS 10.00 TFO 357.55 |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,050.0                         | 2.30            | 357.55      | 10,050.0              | 0.5          | 0.0          | 0.5                     | 10.00                   | 10.00                  | 0.00                  |
| 10,100.0                         | 7.30            | 357.55      | 10,099.8              | 4.6          | -0.2         | 4.6                     | 10.00                   | 10.00                  | 0.00                  |
| 10,150.0                         | 12.30           | 357.55      | 10,149.1              | 13.1         | -0.6         | 13.2                    | 10.00                   | 10.00                  | 0.00                  |
| 10,200.0                         | 17.30           | 357.55      | 10,197.4              | 25.9         | -1.1         | 25.9                    | 10.00                   | 10.00                  | 0.00                  |

|           |                           |                              |                           |
|-----------|---------------------------|------------------------------|---------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well #40H                 |
| Company:  | Legacy Reserves           | TVD Reference:               | KB @ 3693.0usft (McVay 4) |
| Project:  | Lea County NM             | MD Reference:                | KB @ 3693.0usft (McVay 4) |
| Site:     | Lea Unit                  | North Reference:             | Grid                      |
| Well:     | #40H                      | Survey Calculation Method:   | Minimum Curvature         |
| Wellbore: | OH                        |                              |                           |
| Design:   | Plan #1                   |                              |                           |

| Planned Survey                        |                 |             |                       |              |              |                         |                         |                        |                       |
|---------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)                 | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 10,250.0                              | 22.30           | 357.55      | 10,244.4              | 42.8         | -1.8         | 42.9                    | 10.00                   | 10.00                  | 0.00                  |
| 10,300.0                              | 27.30           | 357.55      | 10,289.8              | 63.8         | -2.7         | 63.8                    | 10.00                   | 10.00                  | 0.00                  |
| 10,350.0                              | 32.30           | 357.55      | 10,333.2              | 88.6         | -3.8         | 88.7                    | 10.00                   | 10.00                  | 0.00                  |
| 10,400.0                              | 37.30           | 357.55      | 10,374.2              | 117.1        | -5.0         | 117.2                   | 10.00                   | 10.00                  | 0.00                  |
| 10,450.0                              | 42.30           | 357.55      | 10,412.6              | 149.0        | -6.4         | 149.2                   | 10.00                   | 10.00                  | 0.00                  |
| 10,500.0                              | 47.30           | 357.55      | 10,448.1              | 184.2        | -7.9         | 184.4                   | 10.00                   | 10.00                  | 0.00                  |
| 10,550.0                              | 52.30           | 357.55      | 10,480.3              | 222.4        | -9.5         | 222.6                   | 10.00                   | 10.00                  | 0.00                  |
| 10,600.0                              | 57.30           | 357.55      | 10,509.2              | 263.2        | -11.2        | 263.4                   | 10.00                   | 10.00                  | 0.00                  |
| 10,650.0                              | 62.30           | 357.55      | 10,534.3              | 306.3        | -13.1        | 306.6                   | 10.00                   | 10.00                  | 0.00                  |
| 10,700.0                              | 67.30           | 357.55      | 10,555.6              | 351.5        | -15.0        | 351.8                   | 10.00                   | 10.00                  | 0.00                  |
| 10,750.0                              | 72.30           | 357.55      | 10,572.8              | 398.4        | -17.0        | 398.8                   | 10.00                   | 10.00                  | 0.00                  |
| 10,800.0                              | 77.30           | 357.55      | 10,585.9              | 446.6        | -19.1        | 447.0                   | 10.00                   | 10.00                  | 0.00                  |
| 10,850.0                              | 82.30           | 357.55      | 10,594.8              | 495.7        | -21.2        | 496.2                   | 10.00                   | 10.00                  | 0.00                  |
| 10,900.0                              | 87.30           | 357.55      | 10,599.3              | 545.5        | -23.3        | 546.0                   | 10.00                   | 10.00                  | 0.00                  |
| 10,927.0                              | 90.00           | 357.55      | 10,600.0              | 572.4        | -24.5        | 573.0                   | 10.00                   | 10.00                  | 0.00                  |
| EOC - Start 7383.1 hold at 10927.0 MD |                 |             |                       |              |              |                         |                         |                        |                       |
| 11,000.0                              | 90.00           | 357.55      | 10,600.0              | 645.4        | -27.6        | 646.0                   | 0.00                    | 0.00                   | 0.00                  |
| 11,100.0                              | 90.00           | 357.55      | 10,600.0              | 745.3        | -31.8        | 746.0                   | 0.00                    | 0.00                   | 0.00                  |
| 11,200.0                              | 90.00           | 357.55      | 10,600.0              | 845.2        | -36.1        | 846.0                   | 0.00                    | 0.00                   | 0.00                  |
| 11,300.0                              | 90.00           | 357.55      | 10,600.0              | 945.1        | -40.4        | 946.0                   | 0.00                    | 0.00                   | 0.00                  |
| 11,400.0                              | 90.00           | 357.55      | 10,600.0              | 1,045.0      | -44.6        | 1,046.0                 | 0.00                    | 0.00                   | 0.00                  |
| 11,500.0                              | 90.00           | 357.55      | 10,600.0              | 1,144.9      | -48.9        | 1,146.0                 | 0.00                    | 0.00                   | 0.00                  |
| 11,600.0                              | 90.00           | 357.55      | 10,600.0              | 1,244.8      | -53.2        | 1,246.0                 | 0.00                    | 0.00                   | 0.00                  |
| 11,700.0                              | 90.00           | 357.55      | 10,600.0              | 1,344.7      | -57.5        | 1,346.0                 | 0.00                    | 0.00                   | 0.00                  |
| 11,800.0                              | 90.00           | 357.55      | 10,600.0              | 1,444.6      | -61.7        | 1,446.0                 | 0.00                    | 0.00                   | 0.00                  |
| 11,900.0                              | 90.00           | 357.55      | 10,600.0              | 1,544.5      | -66.0        | 1,546.0                 | 0.00                    | 0.00                   | 0.00                  |
| 12,000.0                              | 90.00           | 357.55      | 10,600.0              | 1,644.5      | -70.3        | 1,646.0                 | 0.00                    | 0.00                   | 0.00                  |
| 12,100.0                              | 90.00           | 357.55      | 10,600.0              | 1,744.4      | -74.5        | 1,746.0                 | 0.00                    | 0.00                   | 0.00                  |
| 12,200.0                              | 90.00           | 357.55      | 10,600.0              | 1,844.3      | -78.8        | 1,846.0                 | 0.00                    | 0.00                   | 0.00                  |
| 12,300.0                              | 90.00           | 357.55      | 10,600.0              | 1,944.2      | -83.1        | 1,946.0                 | 0.00                    | 0.00                   | 0.00                  |
| 12,400.0                              | 90.00           | 357.55      | 10,600.0              | 2,044.1      | -87.3        | 2,046.0                 | 0.00                    | 0.00                   | 0.00                  |
| 12,500.0                              | 90.00           | 357.55      | 10,600.0              | 2,144.0      | -91.6        | 2,146.0                 | 0.00                    | 0.00                   | 0.00                  |
| 12,600.0                              | 90.00           | 357.55      | 10,600.0              | 2,243.9      | -95.9        | 2,246.0                 | 0.00                    | 0.00                   | 0.00                  |
| 12,700.0                              | 90.00           | 357.55      | 10,600.0              | 2,343.8      | -100.1       | 2,346.0                 | 0.00                    | 0.00                   | 0.00                  |
| 12,800.0                              | 90.00           | 357.55      | 10,600.0              | 2,443.7      | -104.4       | 2,446.0                 | 0.00                    | 0.00                   | 0.00                  |
| 12,900.0                              | 90.00           | 357.55      | 10,600.0              | 2,543.6      | -108.7       | 2,546.0                 | 0.00                    | 0.00                   | 0.00                  |
| 13,000.0                              | 90.00           | 357.55      | 10,600.0              | 2,643.5      | -112.9       | 2,646.0                 | 0.00                    | 0.00                   | 0.00                  |
| 13,100.0                              | 90.00           | 357.55      | 10,600.0              | 2,743.5      | -117.2       | 2,746.0                 | 0.00                    | 0.00                   | 0.00                  |
| 13,200.0                              | 90.00           | 357.55      | 10,600.0              | 2,843.4      | -121.5       | 2,846.0                 | 0.00                    | 0.00                   | 0.00                  |
| 13,300.0                              | 90.00           | 357.55      | 10,600.0              | 2,943.3      | -125.7       | 2,946.0                 | 0.00                    | 0.00                   | 0.00                  |
| 13,400.0                              | 90.00           | 357.55      | 10,600.0              | 3,043.2      | -130.0       | 3,046.0                 | 0.00                    | 0.00                   | 0.00                  |
| 13,500.0                              | 90.00           | 357.55      | 10,600.0              | 3,143.1      | -134.3       | 3,146.0                 | 0.00                    | 0.00                   | 0.00                  |
| 13,600.0                              | 90.00           | 357.55      | 10,600.0              | 3,243.0      | -138.6       | 3,246.0                 | 0.00                    | 0.00                   | 0.00                  |
| 13,700.0                              | 90.00           | 357.55      | 10,600.0              | 3,342.9      | -142.8       | 3,346.0                 | 0.00                    | 0.00                   | 0.00                  |
| 13,800.0                              | 90.00           | 357.55      | 10,600.0              | 3,442.8      | -147.1       | 3,446.0                 | 0.00                    | 0.00                   | 0.00                  |
| 13,900.0                              | 90.00           | 357.55      | 10,600.0              | 3,542.7      | -151.4       | 3,546.0                 | 0.00                    | 0.00                   | 0.00                  |
| 14,000.0                              | 90.00           | 357.55      | 10,600.0              | 3,642.6      | -155.6       | 3,646.0                 | 0.00                    | 0.00                   | 0.00                  |
| 14,100.0                              | 90.00           | 357.55      | 10,600.0              | 3,742.5      | -159.9       | 3,746.0                 | 0.00                    | 0.00                   | 0.00                  |
| 14,200.0                              | 90.00           | 357.55      | 10,600.0              | 3,842.5      | -164.2       | 3,846.0                 | 0.00                    | 0.00                   | 0.00                  |
| 14,300.0                              | 90.00           | 357.55      | 10,600.0              | 3,942.4      | -168.4       | 3,946.0                 | 0.00                    | 0.00                   | 0.00                  |
| 14,400.0                              | 90.00           | 357.55      | 10,600.0              | 4,042.3      | -172.7       | 4,046.0                 | 0.00                    | 0.00                   | 0.00                  |
| 14,500.0                              | 90.00           | 357.55      | 10,600.0              | 4,142.2      | -177.0       | 4,146.0                 | 0.00                    | 0.00                   | 0.00                  |
| 14,600.0                              | 90.00           | 357.55      | 10,600.0              | 4,242.1      | -181.2       | 4,246.0                 | 0.00                    | 0.00                   | 0.00                  |
| 14,700.0                              | 90.00           | 357.55      | 10,600.0              | 4,342.0      | -185.5       | 4,346.0                 | 0.00                    | 0.00                   | 0.00                  |



TDS  
Planning Report



Database: EDM 5000.1 Single User Db  
Company: Legacy Reserves  
Project: Lea County, NM  
Site: Lea Unit  
Well: #40H  
Wellbore: OH  
Design: Plan #1

Local Co-ordinate Reference: Well #40H  
TVD Reference: KB @ 3693.0usft (McVay 4)  
MD Reference: KB @ 3693.0usft (McVay 4)  
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 (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 14,800.0              | 90.00           | 357.55      | 10,600.0              | 4,441.9      | -189.8       | 4,446.0                 | 0.00                    | 0.00                   | 0.00                  |
| 14,900.0              | 90.00           | 357.55      | 10,600.0              | 4,541.8      | -194.0       | 4,546.0                 | 0.00                    | 0.00                   | 0.00                  |
| 15,000.0              | 90.00           | 357.55      | 10,600.0              | 4,641.7      | -198.3       | 4,646.0                 | 0.00                    | 0.00                   | 0.00                  |
| 15,100.0              | 90.00           | 357.55      | 10,600.0              | 4,741.6      | -202.6       | 4,746.0                 | 0.00                    | 0.00                   | 0.00                  |
| 15,200.0              | 90.00           | 357.55      | 10,600.0              | 4,841.5      | -206.8       | 4,846.0                 | 0.00                    | 0.00                   | 0.00                  |
| 15,300.0              | 90.00           | 357.55      | 10,600.0              | 4,941.4      | -211.1       | 4,946.0                 | 0.00                    | 0.00                   | 0.00                  |
| 15,400.0              | 90.00           | 357.55      | 10,600.0              | 5,041.4      | -215.4       | 5,046.0                 | 0.00                    | 0.00                   | 0.00                  |
| 15,500.0              | 90.00           | 357.55      | 10,600.0              | 5,141.3      | -219.7       | 5,146.0                 | 0.00                    | 0.00                   | 0.00                  |
| 15,600.0              | 90.00           | 357.55      | 10,600.0              | 5,241.2      | -223.9       | 5,246.0                 | 0.00                    | 0.00                   | 0.00                  |
| 15,700.0              | 90.00           | 357.55      | 10,600.0              | 5,341.1      | -228.2       | 5,346.0                 | 0.00                    | 0.00                   | 0.00                  |
| 15,800.0              | 90.00           | 357.55      | 10,600.0              | 5,441.0      | -232.5       | 5,446.0                 | 0.00                    | 0.00                   | 0.00                  |
| 15,900.0              | 90.00           | 357.55      | 10,600.0              | 5,540.9      | -236.7       | 5,546.0                 | 0.00                    | 0.00                   | 0.00                  |
| 16,000.0              | 90.00           | 357.55      | 10,600.0              | 5,640.8      | -241.0       | 5,646.0                 | 0.00                    | 0.00                   | 0.00                  |
| 16,100.0              | 90.00           | 357.55      | 10,600.0              | 5,740.7      | -245.3       | 5,746.0                 | 0.00                    | 0.00                   | 0.00                  |
| 16,200.0              | 90.00           | 357.55      | 10,600.0              | 5,840.6      | -249.5       | 5,846.0                 | 0.00                    | 0.00                   | 0.00                  |
| 16,300.0              | 90.00           | 357.55      | 10,600.0              | 5,940.5      | -253.8       | 5,946.0                 | 0.00                    | 0.00                   | 0.00                  |
| 16,400.0              | 90.00           | 357.55      | 10,600.0              | 6,040.4      | -258.1       | 6,046.0                 | 0.00                    | 0.00                   | 0.00                  |
| 16,500.0              | 90.00           | 357.55      | 10,600.0              | 6,140.4      | -262.3       | 6,146.0                 | 0.00                    | 0.00                   | 0.00                  |
| 16,600.0              | 90.00           | 357.55      | 10,600.0              | 6,240.3      | -266.6       | 6,246.0                 | 0.00                    | 0.00                   | 0.00                  |
| 16,700.0              | 90.00           | 357.55      | 10,600.0              | 6,340.2      | -270.9       | 6,346.0                 | 0.00                    | 0.00                   | 0.00                  |
| 16,800.0              | 90.00           | 357.55      | 10,600.0              | 6,440.1      | -275.1       | 6,446.0                 | 0.00                    | 0.00                   | 0.00                  |
| 16,900.0              | 90.00           | 357.55      | 10,600.0              | 6,540.0      | -279.4       | 6,546.0                 | 0.00                    | 0.00                   | 0.00                  |
| 17,000.0              | 90.00           | 357.55      | 10,600.0              | 6,639.9      | -283.7       | 6,646.0                 | 0.00                    | 0.00                   | 0.00                  |
| 17,100.0              | 90.00           | 357.55      | 10,600.0              | 6,739.8      | -287.9       | 6,746.0                 | 0.00                    | 0.00                   | 0.00                  |
| 17,200.0              | 90.00           | 357.55      | 10,600.0              | 6,839.7      | -292.2       | 6,846.0                 | 0.00                    | 0.00                   | 0.00                  |
| 17,300.0              | 90.00           | 357.55      | 10,600.0              | 6,939.6      | -296.5       | 6,946.0                 | 0.00                    | 0.00                   | 0.00                  |
| 17,400.0              | 90.00           | 357.55      | 10,600.0              | 7,039.5      | -300.8       | 7,046.0                 | 0.00                    | 0.00                   | 0.00                  |
| 17,500.0              | 90.00           | 357.55      | 10,600.0              | 7,139.4      | -305.0       | 7,146.0                 | 0.00                    | 0.00                   | 0.00                  |
| 17,600.0              | 90.00           | 357.55      | 10,600.0              | 7,239.4      | -309.3       | 7,246.0                 | 0.00                    | 0.00                   | 0.00                  |
| 17,700.0              | 90.00           | 357.55      | 10,600.0              | 7,339.3      | -313.6       | 7,346.0                 | 0.00                    | 0.00                   | 0.00                  |
| 17,800.0              | 90.00           | 357.55      | 10,600.0              | 7,439.2      | -317.8       | 7,446.0                 | 0.00                    | 0.00                   | 0.00                  |
| 17,900.0              | 90.00           | 357.55      | 10,600.0              | 7,539.1      | -322.1       | 7,546.0                 | 0.00                    | 0.00                   | 0.00                  |
| 18,000.0              | 90.00           | 357.55      | 10,600.0              | 7,639.0      | -326.4       | 7,646.0                 | 0.00                    | 0.00                   | 0.00                  |
| 18,100.0              | 90.00           | 357.55      | 10,600.0              | 7,738.9      | -330.6       | 7,746.0                 | 0.00                    | 0.00                   | 0.00                  |
| 18,200.0              | 90.00           | 357.55      | 10,600.0              | 7,838.8      | -334.9       | 7,846.0                 | 0.00                    | 0.00                   | 0.00                  |
| 18,300.0              | 90.00           | 357.55      | 10,600.0              | 7,938.7      | -339.2       | 7,946.0                 | 0.00                    | 0.00                   | 0.00                  |
| 18,310.1              | 90.00           | 357.55      | 10,600.0              | 7,948.8      | -339.6       | 7,956.1                 | 0.00                    | 0.00                   | 0.00                  |

TD at 18310.1

Design Targets

| Target Name                                                  | hit/miss target | Dip Angle (°) | Dip Dir (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude         | Longitude         |
|--------------------------------------------------------------|-----------------|---------------|-------------|------------|--------------|--------------|-----------------|----------------|------------------|-------------------|
| EOC (LU#40/OH Plan #<br>- plan hits target center<br>- Point |                 | 0.00          | 0.00        | 10,600.0   | 572.4        | -24.5        | 568,084.84      | 754,680.34     | 32° 33' 32.597 N | 103° 30' 24.218 W |
| BHL (LU #40H/OH)<br>- plan hits target center<br>- Point     |                 | 0.00          | 0.00        | 10,600.0   | 7,948.8      | -339.6       | 575,461.20      | 754,365.20     | 32° 34' 45.609 N | 103° 30' 27.231 W |



TDS  
Planning Report



|           |                           |                              |                           |
|-----------|---------------------------|------------------------------|---------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well #40H                 |
| Company:  | Legacy Reserves           | TVD Reference:               | KB @ 3693.0usft (McVay 4) |
| Project:  | Lea County, NM            | MD Reference:                | KB @ 3693.0usft (McVay 4) |
| Site:     | Lea Unit                  | North Reference:             | Grid                      |
| Well:     | #40H                      | Survey Calculation Method:   | Minimum Curvature         |
| Wellbore: | OH                        |                              |                           |
| Design:   | Plan #1                   |                              |                           |

| Plan Annotations            |                             |                   |                 |                                       |
|-----------------------------|-----------------------------|-------------------|-----------------|---------------------------------------|
| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates |                 | Comment                               |
|                             |                             | +N/-S<br>(usft)   | +E/-W<br>(usft) |                                       |
| 10,027.0                    | 10,027.0                    | 0.0               | 0.0             | KOP - Start DLS 10.00 TFO 357.55      |
| 10,927.0                    | 10,600.0                    | 572.4             | -24.5           | EOC - Start 7383.1 hold at 10927.0 MD |
| 18,310.1                    | 10,600.0                    | 7,948.8           | -339.6          | TD at 18310.1                         |

Legacy Reserves  
#40H - Plan #1

Lea County, NM  
Lea Unit  
Your Ref:

| Measured<br>Depth<br>(ft) | Incl. | Azim. | Vertical<br>Depth<br>(ft) | Northings<br>(ft) | Eastings<br>(ft) | Vertical<br>Section<br>(ft) | Dogleg<br>Rate<br>(°/100ft) |
|---------------------------|-------|-------|---------------------------|-------------------|------------------|-----------------------------|-----------------------------|
| 0                         |       | 0     | 0                         | 0                 | 0                | 0                           | 0                           |
| 100                       |       | 0     | 0                         | 100               | 0                | 0                           | 0                           |
| 200                       |       | 0     | 0                         | 200               | 0                | 0                           | 0                           |
| 300                       |       | 0     | 0                         | 300               | 0                | 0                           | 0                           |
| 400                       |       | 0     | 0                         | 400               | 0                | 0                           | 0                           |
| 500                       |       | 0     | 0                         | 500               | 0                | 0                           | 0                           |
| 600                       |       | 0     | 0                         | 600               | 0                | 0                           | 0                           |
| 700                       |       | 0     | 0                         | 700               | 0                | 0                           | 0                           |
| 800                       |       | 0     | 0                         | 800               | 0                | 0                           | 0                           |
| 900                       |       | 0     | 0                         | 900               | 0                | 0                           | 0                           |
| 1000                      |       | 0     | 0                         | 1000              | 0                | 0                           | 0                           |
| 1100                      |       | 0     | 0                         | 1100              | 0                | 0                           | 0                           |
| 1200                      |       | 0     | 0                         | 1200              | 0                | 0                           | 0                           |
| 1300                      |       | 0     | 0                         | 1300              | 0                | 0                           | 0                           |
| 1400                      |       | 0     | 0                         | 1400              | 0                | 0                           | 0                           |
| 1500                      |       | 0     | 0                         | 1500              | 0                | 0                           | 0                           |
| 1600                      |       | 0     | 0                         | 1600              | 0                | 0                           | 0                           |
| 1700                      |       | 0     | 0                         | 1700              | 0                | 0                           | 0                           |
| 1800                      |       | 0     | 0                         | 1800              | 0                | 0                           | 0                           |
| 1900                      |       | 0     | 0                         | 1900              | 0                | 0                           | 0                           |
| 2000                      |       | 0     | 0                         | 2000              | 0                | 0                           | 0                           |
| 2100                      |       | 0     | 0                         | 2100              | 0                | 0                           | 0                           |
| 2200                      |       | 0     | 0                         | 2200              | 0                | 0                           | 0                           |
| 2300                      |       | 0     | 0                         | 2300              | 0                | 0                           | 0                           |
| 2400                      |       | 0     | 0                         | 2400              | 0                | 0                           | 0                           |
| 2500                      |       | 0     | 0                         | 2500              | 0                | 0                           | 0                           |
| 2600                      |       | 0     | 0                         | 2600              | 0                | 0                           | 0                           |
| 2700                      |       | 0     | 0                         | 2700              | 0                | 0                           | 0                           |
| 2800                      |       | 0     | 0                         | 2800              | 0                | 0                           | 0                           |
| 2900                      |       | 0     | 0                         | 2900              | 0                | 0                           | 0                           |
| 3000                      |       | 0     | 0                         | 3000              | 0                | 0                           | 0                           |
| 3100                      |       | 0     | 0                         | 3100              | 0                | 0                           | 0                           |

|      |   |   |      |   |   |   |   |
|------|---|---|------|---|---|---|---|
| 3200 | 0 | 0 | 3200 | 0 | 0 | 0 | 0 |
| 3300 | 0 | 0 | 3300 | 0 | 0 | 0 | 0 |
| 3400 | 0 | 0 | 3400 | 0 | 0 | 0 | 0 |
| 3500 | 0 | 0 | 3500 | 0 | 0 | 0 | 0 |
| 3600 | 0 | 0 | 3600 | 0 | 0 | 0 | 0 |
| 3700 | 0 | 0 | 3700 | 0 | 0 | 0 | 0 |
| 3800 | 0 | 0 | 3800 | 0 | 0 | 0 | 0 |
| 3900 | 0 | 0 | 3900 | 0 | 0 | 0 | 0 |
| 4000 | 0 | 0 | 4000 | 0 | 0 | 0 | 0 |
| 4100 | 0 | 0 | 4100 | 0 | 0 | 0 | 0 |
| 4200 | 0 | 0 | 4200 | 0 | 0 | 0 | 0 |
| 4300 | 0 | 0 | 4300 | 0 | 0 | 0 | 0 |
| 4400 | 0 | 0 | 4400 | 0 | 0 | 0 | 0 |
| 4500 | 0 | 0 | 4500 | 0 | 0 | 0 | 0 |
| 4600 | 0 | 0 | 4600 | 0 | 0 | 0 | 0 |
| 4700 | 0 | 0 | 4700 | 0 | 0 | 0 | 0 |
| 4800 | 0 | 0 | 4800 | 0 | 0 | 0 | 0 |
| 4900 | 0 | 0 | 4900 | 0 | 0 | 0 | 0 |
| 5000 | 0 | 0 | 5000 | 0 | 0 | 0 | 0 |
| 5100 | 0 | 0 | 5100 | 0 | 0 | 0 | 0 |
| 5200 | 0 | 0 | 5200 | 0 | 0 | 0 | 0 |
| 5300 | 0 | 0 | 5300 | 0 | 0 | 0 | 0 |
| 5400 | 0 | 0 | 5400 | 0 | 0 | 0 | 0 |
| 5500 | 0 | 0 | 5500 | 0 | 0 | 0 | 0 |
| 5600 | 0 | 0 | 5600 | 0 | 0 | 0 | 0 |
| 5700 | 0 | 0 | 5700 | 0 | 0 | 0 | 0 |
| 5800 | 0 | 0 | 5800 | 0 | 0 | 0 | 0 |
| 5900 | 0 | 0 | 5900 | 0 | 0 | 0 | 0 |
| 6000 | 0 | 0 | 6000 | 0 | 0 | 0 | 0 |
| 6100 | 0 | 0 | 6100 | 0 | 0 | 0 | 0 |
| 6200 | 0 | 0 | 6200 | 0 | 0 | 0 | 0 |
| 6300 | 0 | 0 | 6300 | 0 | 0 | 0 | 0 |
| 6400 | 0 | 0 | 6400 | 0 | 0 | 0 | 0 |
| 6500 | 0 | 0 | 6500 | 0 | 0 | 0 | 0 |
| 6600 | 0 | 0 | 6600 | 0 | 0 | 0 | 0 |
| 6700 | 0 | 0 | 6700 | 0 | 0 | 0 | 0 |
| 6800 | 0 | 0 | 6800 | 0 | 0 | 0 | 0 |
| 6900 | 0 | 0 | 6900 | 0 | 0 | 0 | 0 |
| 7000 | 0 | 0 | 7000 | 0 | 0 | 0 | 0 |
| 7100 | 0 | 0 | 7100 | 0 | 0 | 0 | 0 |
| 7200 | 0 | 0 | 7200 | 0 | 0 | 0 | 0 |
| 7300 | 0 | 0 | 7300 | 0 | 0 | 0 | 0 |
| 7400 | 0 | 0 | 7400 | 0 | 0 | 0 | 0 |
| 7500 | 0 | 0 | 7500 | 0 | 0 | 0 | 0 |
| 7600 | 0 | 0 | 7600 | 0 | 0 | 0 | 0 |
| 7700 | 0 | 0 | 7700 | 0 | 0 | 0 | 0 |
| 7800 | 0 | 0 | 7800 | 0 | 0 | 0 | 0 |

|       |      |         |          |        |        |         |    |
|-------|------|---------|----------|--------|--------|---------|----|
| 7900  | 0    | 0       | 7900     | 0      | 0      | 0       | 0  |
| 8000  | 0    | 0       | 8000     | 0      | 0      | 0       | 0  |
| 8100  | 0    | 0       | 8100     | 0      | 0      | 0       | 0  |
| 8200  | 0    | 0       | 8200     | 0      | 0      | 0       | 0  |
| 8300  | 0    | 0       | 8300     | 0      | 0      | 0       | 0  |
| 8400  | 0    | 0       | 8400     | 0      | 0      | 0       | 0  |
| 8500  | 0    | 0       | 8500     | 0      | 0      | 0       | 0  |
| 8600  | 0    | 0       | 8600     | 0      | 0      | 0       | 0  |
| 8700  | 0    | 0       | 8700     | 0      | 0      | 0       | 0  |
| 8800  | 0    | 0       | 8800     | 0      | 0      | 0       | 0  |
| 8900  | 0    | 0       | 8900     | 0      | 0      | 0       | 0  |
| 9000  | 0    | 0       | 9000     | 0      | 0      | 0       | 0  |
| 9100  | 0    | 0       | 9100     | 0      | 0      | 0       | 0  |
| 9200  | 0    | 0       | 9200     | 0      | 0      | 0       | 0  |
| 9300  | 0    | 0       | 9300     | 0      | 0      | 0       | 0  |
| 9400  | 0    | 0       | 9400     | 0      | 0      | 0       | 0  |
| 9500  | 0    | 0       | 9500     | 0      | 0      | 0       | 0  |
| 9600  | 0    | 0       | 9600     | 0      | 0      | 0       | 0  |
| 9700  | 0    | 0       | 9700     | 0      | 0      | 0       | 0  |
| 9800  | 0    | 0       | 9800     | 0      | 0      | 0       | 0  |
| 9900  | 0    | 0       | 9900     | 0      | 0      | 0       | 0  |
| 10000 | 0    | 0       | 10000    | 0      | 0      | 0       | 0  |
| 10027 | 0    | 0       | 10027    | 0      | 0      | 0       | 0  |
| 10050 | 2.3  | 357.554 | 10049.99 | 0.46   | -0.02  | 0.46    | 10 |
| 10100 | 7.3  | 357.554 | 10099.8  | 4.64   | -0.2   | 4.64    | 10 |
| 10150 | 12.3 | 357.554 | 10149.06 | 13.14  | -0.56  | 13.15   | 10 |
| 10200 | 17.3 | 357.554 | 10197.38 | 25.9   | -1.11  | 25.92   | 10 |
| 10250 | 22.3 | 357.554 | 10244.41 | 42.81  | -1.83  | 42.85   | 10 |
| 10300 | 27.3 | 357.554 | 10289.79 | 63.76  | -2.72  | 63.82   | 10 |
| 10350 | 32.3 | 357.554 | 10333.16 | 88.58  | -3.78  | 88.66   | 10 |
| 10400 | 37.3 | 357.554 | 10374.21 | 117.08 | -5     | 117.19  | 10 |
| 10450 | 42.3 | 357.554 | 10412.61 | 149.04 | -6.37  | 149.18  | 10 |
| 10500 | 47.3 | 357.554 | 10448.08 | 184.23 | -7.87  | 184.4   | 10 |
| 10550 | 52.3 | 357.554 | 10480.34 | 222.38 | -9.5   | 222.58  | 10 |
| 10600 | 57.3 | 357.554 | 10509.15 | 263.18 | -11.24 | 263.42  | 10 |
| 10650 | 62.3 | 357.554 | 10534.29 | 306.34 | -13.09 | 306.62  | 10 |
| 10700 | 67.3 | 357.554 | 10555.58 | 351.53 | -15.02 | 351.85  | 10 |
| 10750 | 72.3 | 357.554 | 10572.83 | 398.4  | -17.02 | 398.76  | 10 |
| 10800 | 77.3 | 357.554 | 10585.94 | 446.59 | -19.08 | 447     | 10 |
| 10850 | 82.3 | 357.554 | 10594.79 | 495.74 | -21.18 | 496.19  | 10 |
| 10900 | 87.3 | 357.554 | 10599.32 | 545.47 | -23.3  | 545.97  | 10 |
| 10927 | 90   | 357.554 | 10599.96 | 572.43 | -24.46 | 572.95  | 10 |
| 11000 | 90   | 357.554 | 10599.96 | 645.37 | -27.57 | 645.96  | 0  |
| 11100 | 90   | 357.554 | 10599.96 | 745.28 | -31.84 | 745.96  | 0  |
| 11200 | 90   | 357.554 | 10599.96 | 845.19 | -36.11 | 845.96  | 0  |
| 11300 | 90   | 357.554 | 10599.96 | 945.1  | -40.38 | 945.96  | 0  |
| 11400 | 90   | 357.554 | 10599.96 | 1045   | -44.65 | 1045.96 | 0  |

|       |    |         |          |         |         |         |   |
|-------|----|---------|----------|---------|---------|---------|---|
| 11500 | 90 | 357.554 | 10599.96 | 1144.91 | -48.91  | 1145.96 | 0 |
| 11600 | 90 | 357.554 | 10599.96 | 1244.82 | -53.18  | 1245.96 | 0 |
| 11700 | 90 | 357.554 | 10599.96 | 1344.73 | -57.45  | 1345.96 | 0 |
| 11800 | 90 | 357.554 | 10599.96 | 1444.64 | -61.72  | 1445.96 | 0 |
| 11900 | 90 | 357.554 | 10599.96 | 1544.55 | -65.99  | 1545.96 | 0 |
| 12000 | 90 | 357.554 | 10599.96 | 1644.46 | -70.26  | 1645.96 | 0 |
| 12100 | 90 | 357.554 | 10599.96 | 1744.37 | -74.53  | 1745.96 | 0 |
| 12200 | 90 | 357.554 | 10599.97 | 1844.28 | -78.79  | 1845.96 | 0 |
| 12300 | 90 | 357.554 | 10599.97 | 1944.18 | -83.06  | 1945.96 | 0 |
| 12400 | 90 | 357.554 | 10599.97 | 2044.09 | -87.33  | 2045.96 | 0 |
| 12500 | 90 | 357.554 | 10599.97 | 2144    | -91.6   | 2145.96 | 0 |
| 12600 | 90 | 357.554 | 10599.97 | 2243.91 | -95.87  | 2245.96 | 0 |
| 12700 | 90 | 357.554 | 10599.97 | 2343.82 | -100.14 | 2345.96 | 0 |
| 12800 | 90 | 357.554 | 10599.97 | 2443.73 | -104.4  | 2445.96 | 0 |
| 12900 | 90 | 357.554 | 10599.97 | 2543.64 | -108.67 | 2545.96 | 0 |
| 13000 | 90 | 357.554 | 10599.97 | 2643.55 | -112.94 | 2645.96 | 0 |
| 13100 | 90 | 357.554 | 10599.97 | 2743.46 | -117.21 | 2745.96 | 0 |
| 13200 | 90 | 357.554 | 10599.97 | 2843.36 | -121.48 | 2845.96 | 0 |
| 13300 | 90 | 357.554 | 10599.97 | 2943.27 | -125.75 | 2945.96 | 0 |
| 13400 | 90 | 357.554 | 10599.97 | 3043.18 | -130.02 | 3045.96 | 0 |
| 13500 | 90 | 357.554 | 10599.97 | 3143.09 | -134.28 | 3145.96 | 0 |
| 13600 | 90 | 357.554 | 10599.97 | 3243    | -138.55 | 3245.96 | 0 |
| 13700 | 90 | 357.554 | 10599.97 | 3342.91 | -142.82 | 3345.96 | 0 |
| 13800 | 90 | 357.554 | 10599.97 | 3442.82 | -147.09 | 3445.96 | 0 |
| 13900 | 90 | 357.554 | 10599.97 | 3542.73 | -151.36 | 3545.96 | 0 |
| 14000 | 90 | 357.554 | 10599.98 | 3642.63 | -155.63 | 3645.96 | 0 |
| 14100 | 90 | 357.554 | 10599.98 | 3742.54 | -159.89 | 3745.96 | 0 |
| 14200 | 90 | 357.554 | 10599.98 | 3842.45 | -164.16 | 3845.96 | 0 |
| 14300 | 90 | 357.554 | 10599.98 | 3942.36 | -168.43 | 3945.96 | 0 |
| 14400 | 90 | 357.554 | 10599.98 | 4042.27 | -172.7  | 4045.96 | 0 |
| 14500 | 90 | 357.554 | 10599.98 | 4142.18 | -176.97 | 4145.96 | 0 |
| 14600 | 90 | 357.554 | 10599.98 | 4242.09 | -181.24 | 4245.96 | 0 |
| 14700 | 90 | 357.554 | 10599.98 | 4342    | -185.51 | 4345.96 | 0 |
| 14800 | 90 | 357.554 | 10599.98 | 4441.91 | -189.77 | 4445.96 | 0 |
| 14900 | 90 | 357.554 | 10599.98 | 4541.81 | -194.04 | 4545.96 | 0 |
| 15000 | 90 | 357.554 | 10599.98 | 4641.72 | -198.31 | 4645.96 | 0 |
| 15100 | 90 | 357.554 | 10599.98 | 4741.63 | -202.58 | 4745.96 | 0 |
| 15200 | 90 | 357.554 | 10599.98 | 4841.54 | -206.85 | 4845.96 | 0 |
| 15300 | 90 | 357.554 | 10599.98 | 4941.45 | -211.12 | 4945.96 | 0 |
| 15400 | 90 | 357.554 | 10599.98 | 5041.36 | -215.38 | 5045.96 | 0 |
| 15500 | 90 | 357.554 | 10599.98 | 5141.27 | -219.65 | 5145.96 | 0 |
| 15600 | 90 | 357.554 | 10599.98 | 5241.18 | -223.92 | 5245.96 | 0 |
| 15700 | 90 | 357.554 | 10599.99 | 5341.09 | -228.19 | 5345.96 | 0 |
| 15800 | 90 | 357.554 | 10599.99 | 5440.99 | -232.46 | 5445.96 | 0 |
| 15900 | 90 | 357.554 | 10599.99 | 5540.9  | -236.73 | 5545.96 | 0 |
| 16000 | 90 | 357.554 | 10599.99 | 5640.81 | -240.99 | 5645.96 | 0 |
| 16100 | 90 | 357.554 | 10599.99 | 5740.72 | -245.26 | 5745.96 | 0 |

|          |    |         |          |         |         |         |   |
|----------|----|---------|----------|---------|---------|---------|---|
| 16200    | 90 | 357.554 | 10599.99 | 5840.63 | -249.53 | 5845.96 | 0 |
| 16300    | 90 | 357.554 | 10599.99 | 5940.54 | -253.8  | 5945.96 | 0 |
| 16400    | 90 | 357.554 | 10599.99 | 6040.45 | -258.07 | 6045.96 | 0 |
| 16500    | 90 | 357.554 | 10599.99 | 6140.36 | -262.34 | 6145.96 | 0 |
| 16600    | 90 | 357.554 | 10599.99 | 6240.27 | -266.61 | 6245.96 | 0 |
| 16700    | 90 | 357.554 | 10599.99 | 6340.17 | -270.87 | 6345.96 | 0 |
| 16800    | 90 | 357.554 | 10599.99 | 6440.08 | -275.14 | 6445.96 | 0 |
| 16900    | 90 | 357.554 | 10599.99 | 6539.99 | -279.41 | 6545.96 | 0 |
| 17000    | 90 | 357.554 | 10599.99 | 6639.9  | -283.68 | 6645.96 | 0 |
| 17100    | 90 | 357.554 | 10599.99 | 6739.81 | -287.95 | 6745.96 | 0 |
| 17200    | 90 | 357.554 | 10599.99 | 6839.72 | -292.22 | 6845.96 | 0 |
| 17300    | 90 | 357.554 | 10599.99 | 6939.63 | -296.48 | 6945.96 | 0 |
| 17400    | 90 | 357.554 | 10599.99 | 7039.54 | -300.75 | 7045.96 | 0 |
| 17500    | 90 | 357.554 | 10600    | 7139.44 | -305.02 | 7145.96 | 0 |
| 17600    | 90 | 357.554 | 10600    | 7239.35 | -309.29 | 7245.96 | 0 |
| 17700    | 90 | 357.554 | 10600    | 7339.26 | -313.56 | 7345.96 | 0 |
| 17800    | 90 | 357.554 | 10600    | 7439.17 | -317.83 | 7445.96 | 0 |
| 17900    | 90 | 357.554 | 10600    | 7539.08 | -322.1  | 7545.96 | 0 |
| 18000    | 90 | 357.554 | 10600    | 7638.99 | -326.36 | 7645.96 | 0 |
| 18100    | 90 | 357.554 | 10600    | 7738.9  | -330.63 | 7745.96 | 0 |
| 18200    | 90 | 357.554 | 10600    | 7838.81 | -334.9  | 7845.96 | 0 |
| 18300    | 90 | 357.554 | 10600    | 7938.72 | -339.17 | 7945.96 | 0 |
| 18310.09 | 90 | 357.554 | 10600    | 7948.8  | -339.6  | 7956.05 | 0 |

All data are in feet unless otherwise stated. Directions and coordinates are relative to Grid North.  
Vertical depths are relative to KB. Northings and Eastings are relative to Well.

The Dogleg Severity is in Degrees per 100 feet.

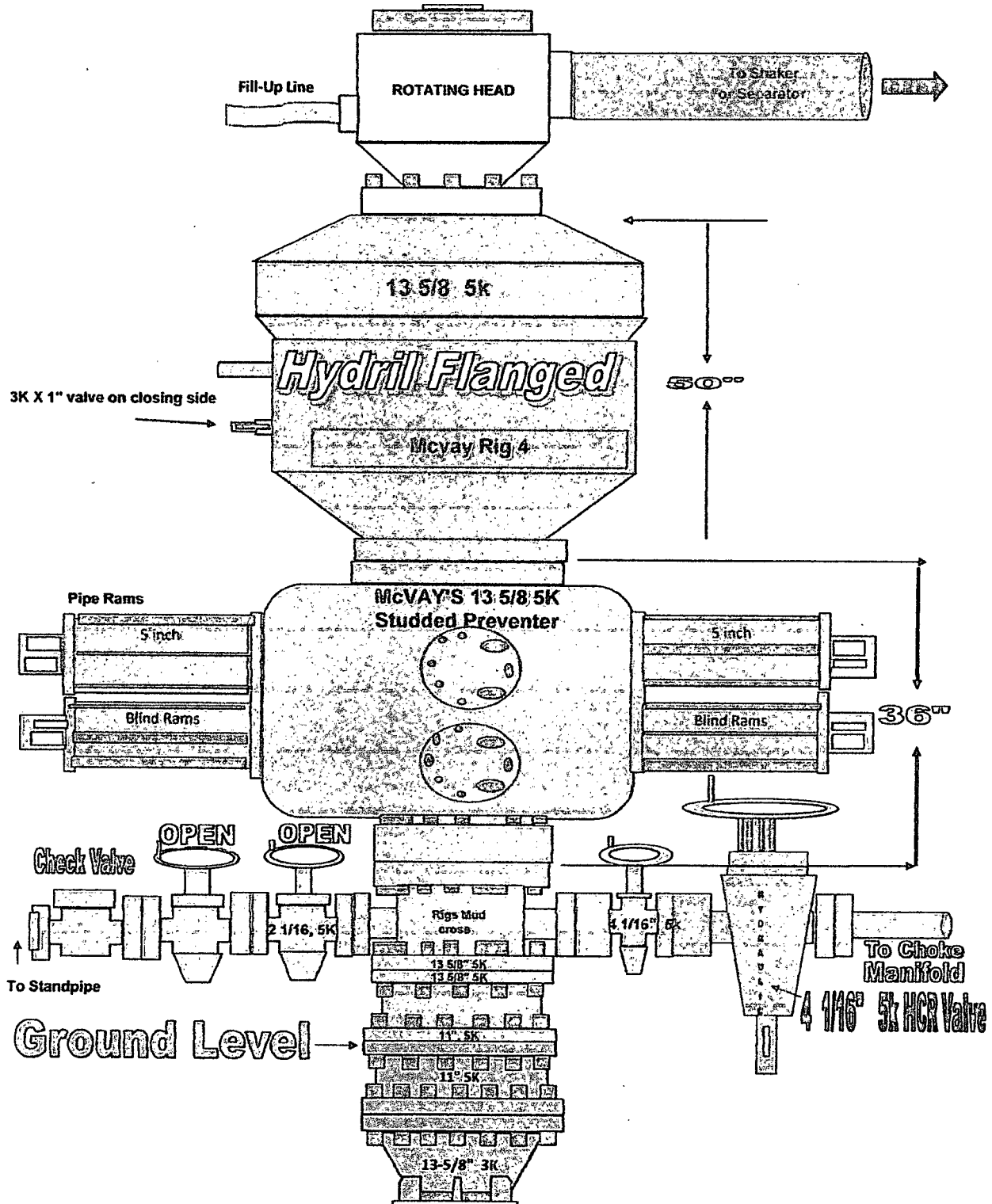
Vertical Section is from Slot and calculated along an Azimuth of 357.554° (Grid).

Coordinate System is NAD 1927 (NADCON CONUS) US State Plane 1927 (Exact solution), New Mexico East 3001.  
Central meridian is -104.333°.

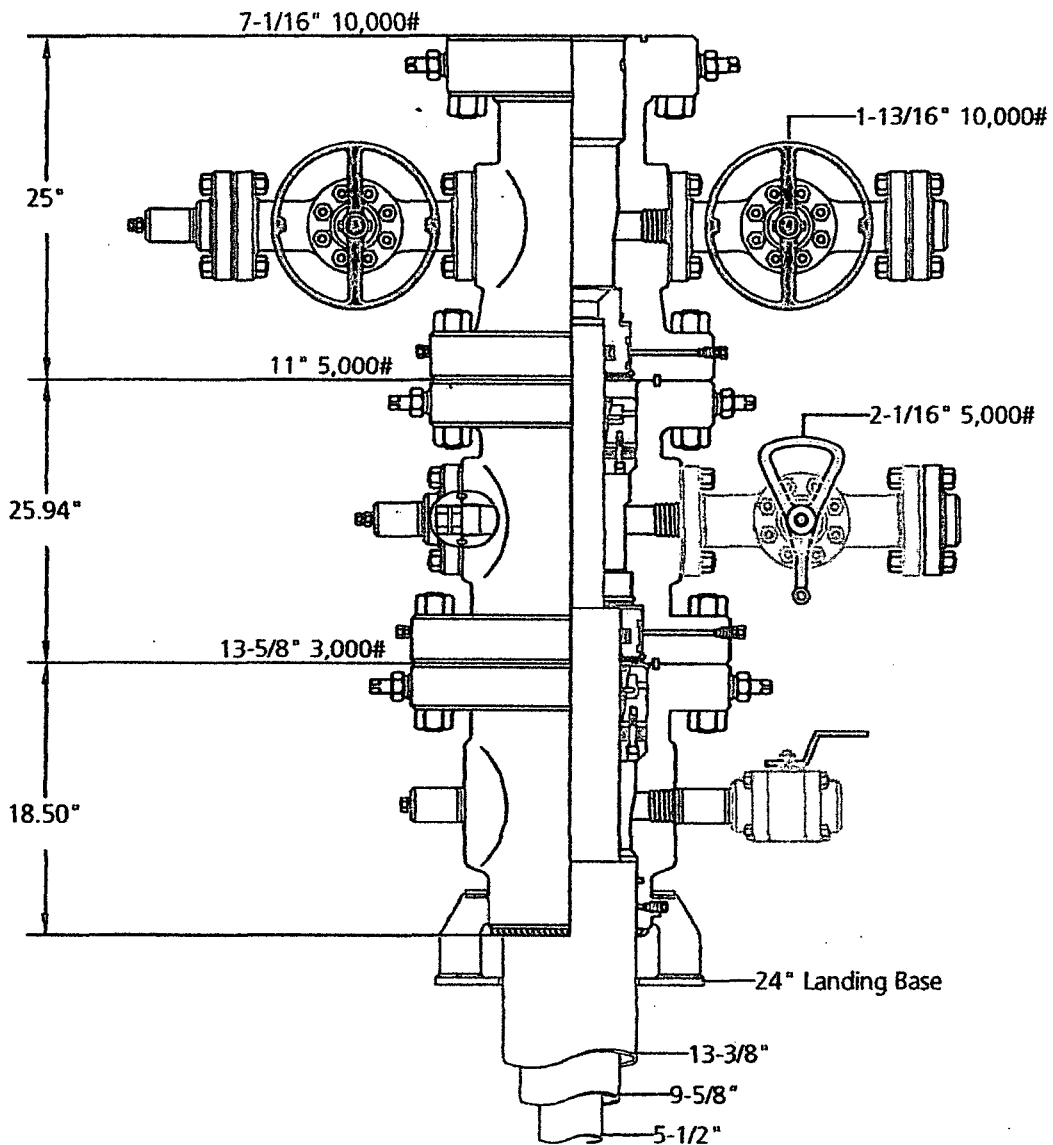
Grid Convergence at Surface is 0.445°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 18310.09ft.,  
the Bottom Hole Displacement is 7956.05ft., in the Direction of 357.554° (Grid).

# McVay Rig 4



Note: Dimensional information reflected on this drawing are estimated measurements only.

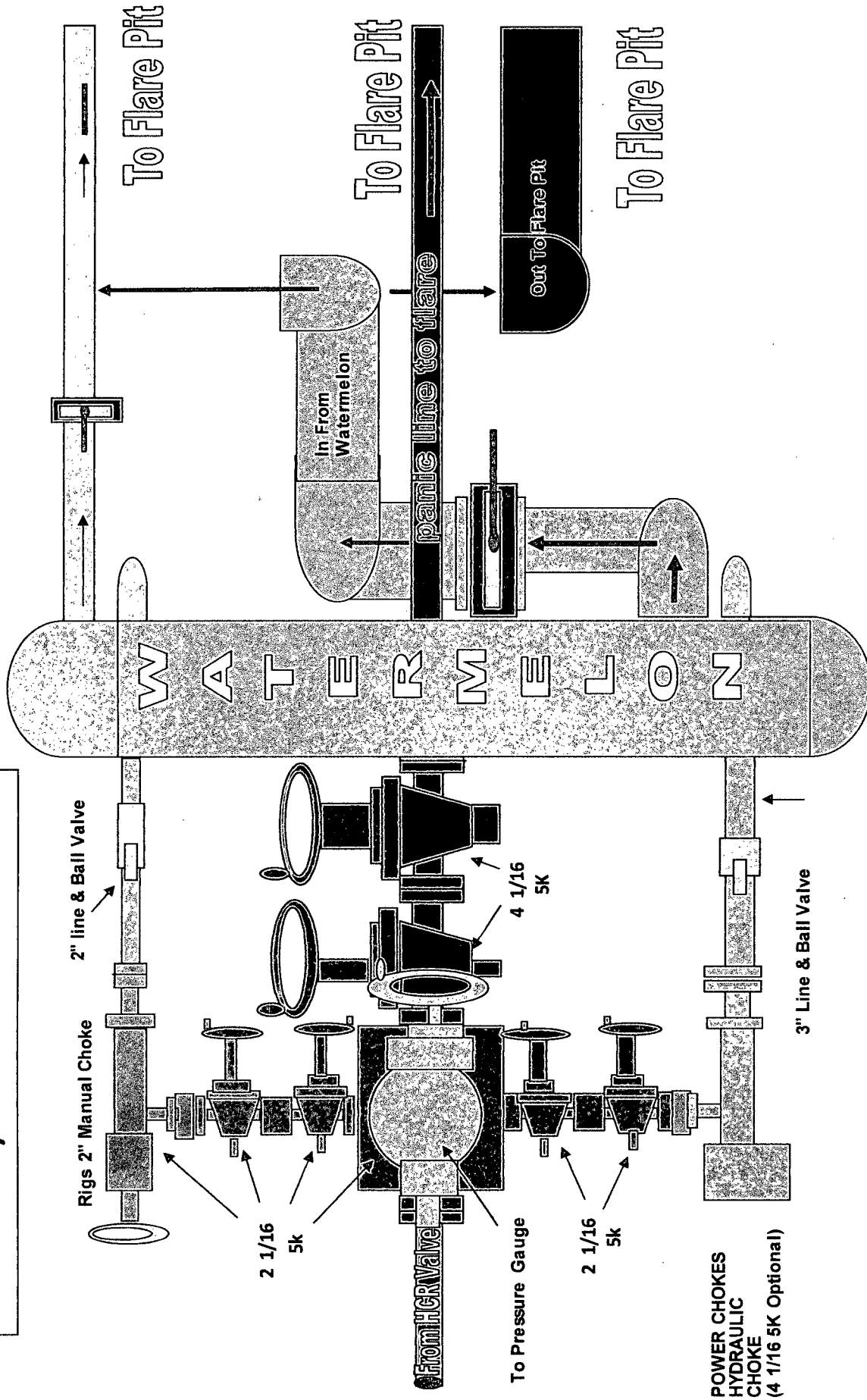


Legacy Reserves  
Conventional 3-String

 CAMERON

|                |               |                   |           |
|----------------|---------------|-------------------|-----------|
| NAME: Jeanette | DATE: 7-15-15 | WORKING PRESSURE: | # 1274616 |
|----------------|---------------|-------------------|-----------|

# McVay 4 Choke Manifold



\*We use the same choke manifolds for all aspects of our operations & all are rated to 10K;

\* All connections downstream from BOP thru chokes Are Flanged, All connections downstream from chokes are Flanged .

**Design Plan, Operating & Maintenance Plan & Closure Plan for the OCD Form C-144**

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**DESIGN PLAN:**

Fluid & cuttings coming from drilling operations will pass over the Shale Shaker with the cuttings going to the CRI haul off bin and the cleaned fluid returning to the working steel pits.

**Equipment includes:**

2-500 bbl steel tanks (fresh water for drilling)  
2-700 bbl steel working pits (1400 bbls total)  
2-20 cu yards steel haul off bins  
2-pumps (CE FB1300)  
2-shale shakers  
1-mud cleaner (if needed)  
1-centrifuge (if needed)

**OPERATING AND MAINTENANCE PLAN:**

Inspection to occur every tour for proper operation of system and individual components. If any problems are found they will be repaired and/or corrected immediately.

**CLOSURE PLAN:**

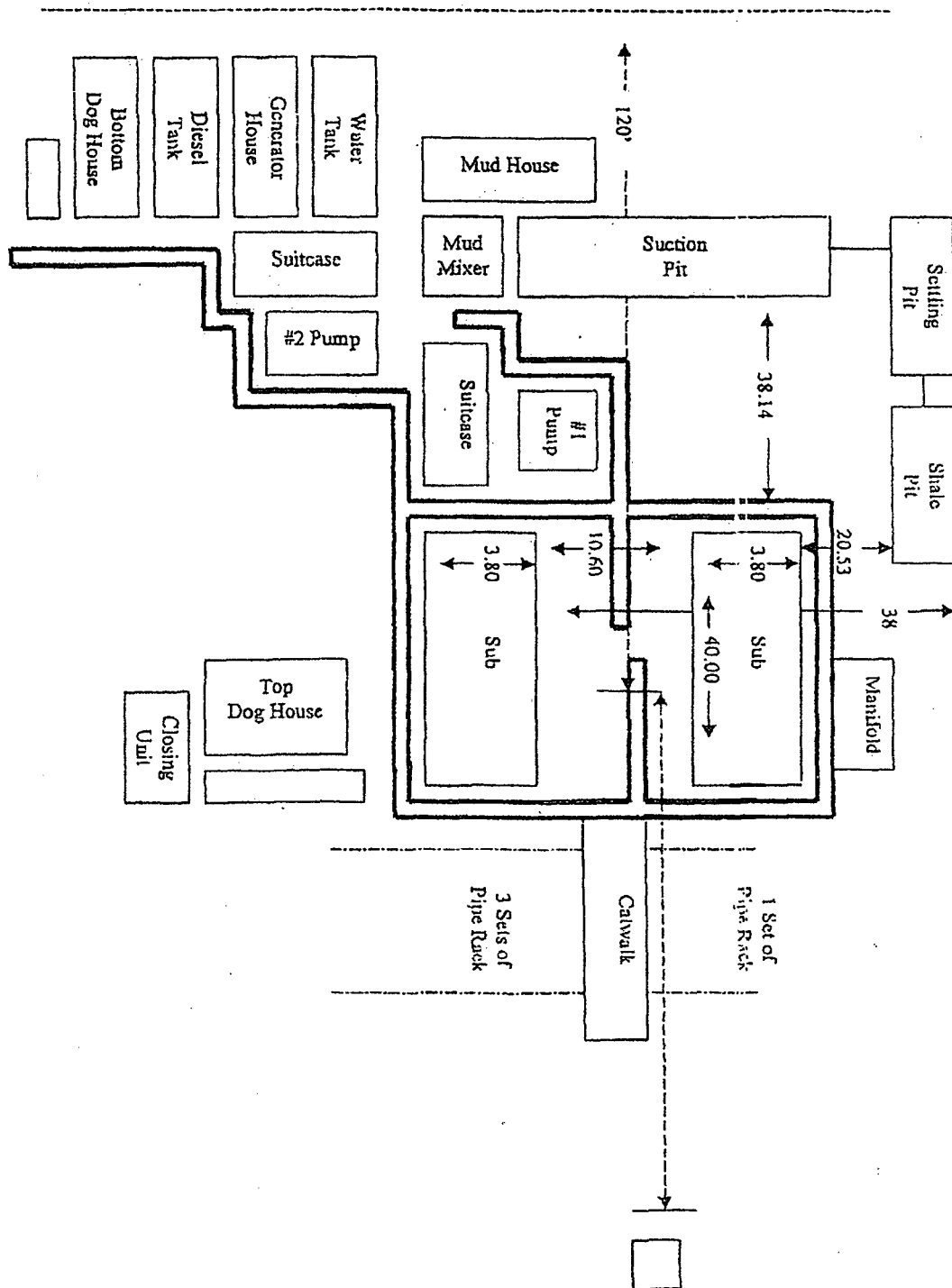
All haul bins containing cuttings will be removed from location and hauled to Controlled Recovery, Inc. (NM-01-0006) disposal site located near mile marker 66 on Highway 62/180.



Blain K. Lewis

Senior Operations Engineer

# Plat for Closed Loop System



**EXHIBIT D**

**Rig Plat Only  
LEA UNIT 38H & 40H  
V-DOOR EAST**

