

Nichols 0994-24-11E
Mesa County, CO
Q180237 & RM-180207
Design #2

Company Name: Laramie Energy, LLC
Nichols 0994-24-11E
Mesa County, CO
Rig: H&P #290
Created By: Will Jircik
Date: 3/9/2018



| | |
|------------------|---------------------------|
| PROJECT DETAILS: | Mesa County, CO |
| Geodetic System: | US State Plane 1983 |
| Datum: | North American Datum 1983 |
| Ellipsoid: | GRS 1980 |
| Zone: | Colorado Central Zone |
| System Datum: | Mean Sea Level |

| FORMATION TOP DETAILS | | |
|-----------------------|--------|-----------------|
| TVDPATH | MDPATH | FORMATION |
| 2468.0 | 2542.1 | G' Sand |
| 4218.0 | 4373.4 | Williams Fork |
| 5618.0 | 5820.8 | TOG |
| 6518.0 | 6720.8 | Cameo |
| 7178.0 | 7380.8 | Base Cameo Coal |
| 7218.0 | 7420.8 | Rollins |
| 7236.0 | 7438.8 | Corcoran |
| 7236.0 | 7438.8 | Cozzette |

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M

Azimuths to True North

Magnetic North: 9.45°

Strength: 51323.7snT

Dip Angle: 65.40°

Date: 2/13/2018

Model: USER DEFINED

| DESIGN TARGET DETAILS | | | | | | | | |
|----------------------------|-------|--------|--------|------------|------------|-----------|-------------|-----------------------|
| Name | TVD | +N/-S | +E/-W | Northing | Easting | Latitude | Longitude | Shape |
| PBHL - Nichols 0994-24-11E | 468.0 | -196.6 | 1388.8 | 1529048.57 | 2341520.97 | 39.262827 | -107.825923 | Circle (Radius: 50.0) |

| DESIGN ANNOTATIONS | | | | | | | | | |
|--------------------|-------|-------|--------|--------|--------|--------|-----------|--------------------------------|--|
| MD | Inc | Azi | TVD | +N/-S | +E/-W | VSec | Departure | Annotation | |
| 494.0 | 0.00 | 0.00 | 494.0 | 0.0 | 0.0 | 0.0 | 0.0 | KOP (Build 3° / 100') | |
| 1065.3 | 17.14 | 98.06 | 1056.8 | -11.9 | 84.0 | 84.8 | 84.8 | EOB @ 17.14° Inc. / 98.06° Azm | |
| 5249.5 | 17.14 | 98.06 | 5055.2 | -184.7 | 1304.8 | 1317.8 | 1317.8 | Drop 3° / 100' | |
| 5820.8 | 0.00 | 0.00 | 5618.0 | -196.6 | 1388.8 | 1402.6 | 1402.6 | EOD @ Vertical | |
| 7670.8 | 0.00 | 0.00 | 7468.0 | -196.6 | 1388.8 | 1402.6 | 1402.6 | TD @ 7670.8' MD / 7468.0' TVD | |

| ANNOTATIONS | | | | | | | | | |
|-------------|------|--------|--------|--------|--------|--------|-----------|---|--|
| MD | Inc | Azi | TVD | +N/-S | +E/-W | VSec | Departure | Annotation | |
| 200.0 | 2.50 | 74.10 | 199.9 | 1.2 | 4.2 | 4.0 | 4.4 | First MWD Survey @ 200.0' MD / 199.9' TVD | |
| 7673.0 | 1.89 | 234.10 | 7490.2 | -184.5 | 1393.5 | 1405.6 | 1446.7 | Projection to TD @ 7673.0' MD / 7490.2' TVD | |

| WELL DETAILS: Nichols 0994-24-11E | | | | | | | |
|-----------------------------------|-------|------------|---------------|------------|--------|-----------|-------------|
| +N/-S | +E/-W | Northing | Ground Level: | Easting | 7212.0 | Latitude | Longitude |
| 0.0 | 0.0 | 1529280.75 | | 2340137.70 | | 39.263367 | -107.830828 |

