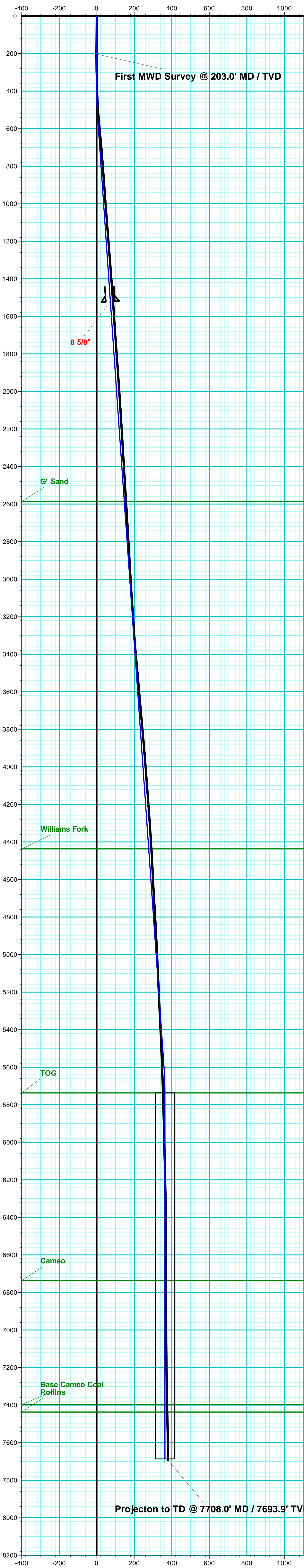


Bruton 19-21E
Mesa County, CO
Q170676 & RM-170566
Design #2

Company Name: Laramie Energy, LLC
Bruton 19-21E
Mesa County, CO
Rig: H&P #290
Created By: Will Jircik
Date: 6/13/2017

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



T

M

Azimuths to True North

Magnetic North: 9.59°

Strength: 51421.4snT

Dip Angle: 65.43°

Date: 5/16/2017

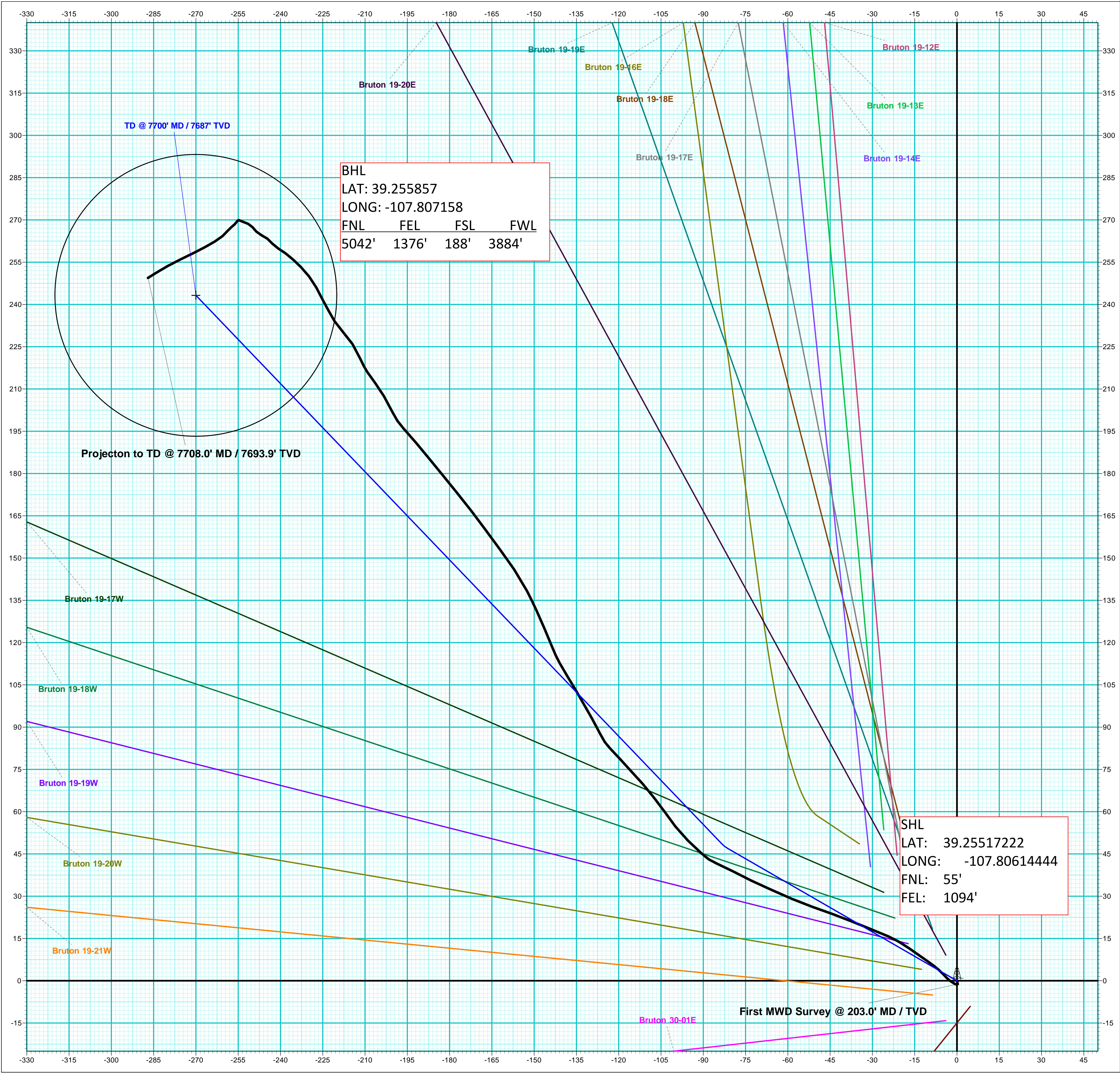
Model: IGRF2015

| FORMATION TOP DETAILS | | |
|-----------------------|--------|-----------------|
| TVDPath | MDPath | Formation |
| 2587.0 | 2592.2 | G' Sand |
| 4437.0 | 4446.8 | Williams Fork |
| 5737.0 | 5749.8 | TOG |
| 6737.0 | 6749.8 | Cameo |
| 7397.0 | 7409.8 | Base Cameo Coal |
| 7437.0 | 7449.8 | Rollins |

| WELL DETAILS: Bruton 19-21E | | | | | | |
|-----------------------------|-------|------------|---------------|------------|-----------|-------------|
| +N/-S | +E/-W | Northing | Ground Level: | 7425.0 | Latitude | Longitude |
| 0.0 | 0.0 | 1526118.70 | Easting | 2347048.40 | 39.255172 | -107.806144 |

| DESIGN TARGET DETAILS | | | | | | | | |
|-----------------------|---------------------------|-----|--------|-------|-------|-------|--------|-----------------------|
| Name | BRUTON 19-21E | TVD | 7687.0 | +N/-S | 243.2 | +E/-W | -270.0 | Northing |
| | - plan hits target center | | | | | | | 1526368.70 |
| | | | | | | | | Easting |
| | | | | | | | | 2346784.65 |
| | | | | | | | | Latitude |
| | | | | | | | | 39.255840 |
| | | | | | | | | Longitude |
| | | | | | | | | -107.807098 |
| | | | | | | | | Shape |
| | | | | | | | | Circle (Radius: 50.0) |

| ANNOTATIONS | | | | | | | | | |
|-------------|------|--------|--------|-------|--------|-------|-----------|---|--|
| MD | Inc | Azi | TVD | +N/-S | +E/-W | VSect | Departure | Annotation | |
| 203.0 | 0.70 | 166.50 | 203.0 | -1.2 | 0.3 | -1.0 | 1.2 | First MWD Survey @ 203.0' MD / TVD | |
| 7708.0 | 2.90 | 237.80 | 7693.9 | 249.4 | -287.0 | 380.2 | 425.8 | Projection to TD @ 7708.0' MD / 7693.9' TVD | |



Vertical Section at 312.01° (200 usft/in)