



Extraction Oil & Gas
Project: Weld County, CO (NAD83)
Site: Sec 07-T01S-R68W Livingston Pad
Well: Livingston S19-25-08C
Wellbore: Wellbore #1
Design: Wellbore #1 (Livingston S19-25-08C/Wellbore #1)
Patterson 901

PROJECT DETAILS: Weld County, CO (NAD83)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Ground Level
Local North: True

WELL DETAILS: Livingston S19-25-08C

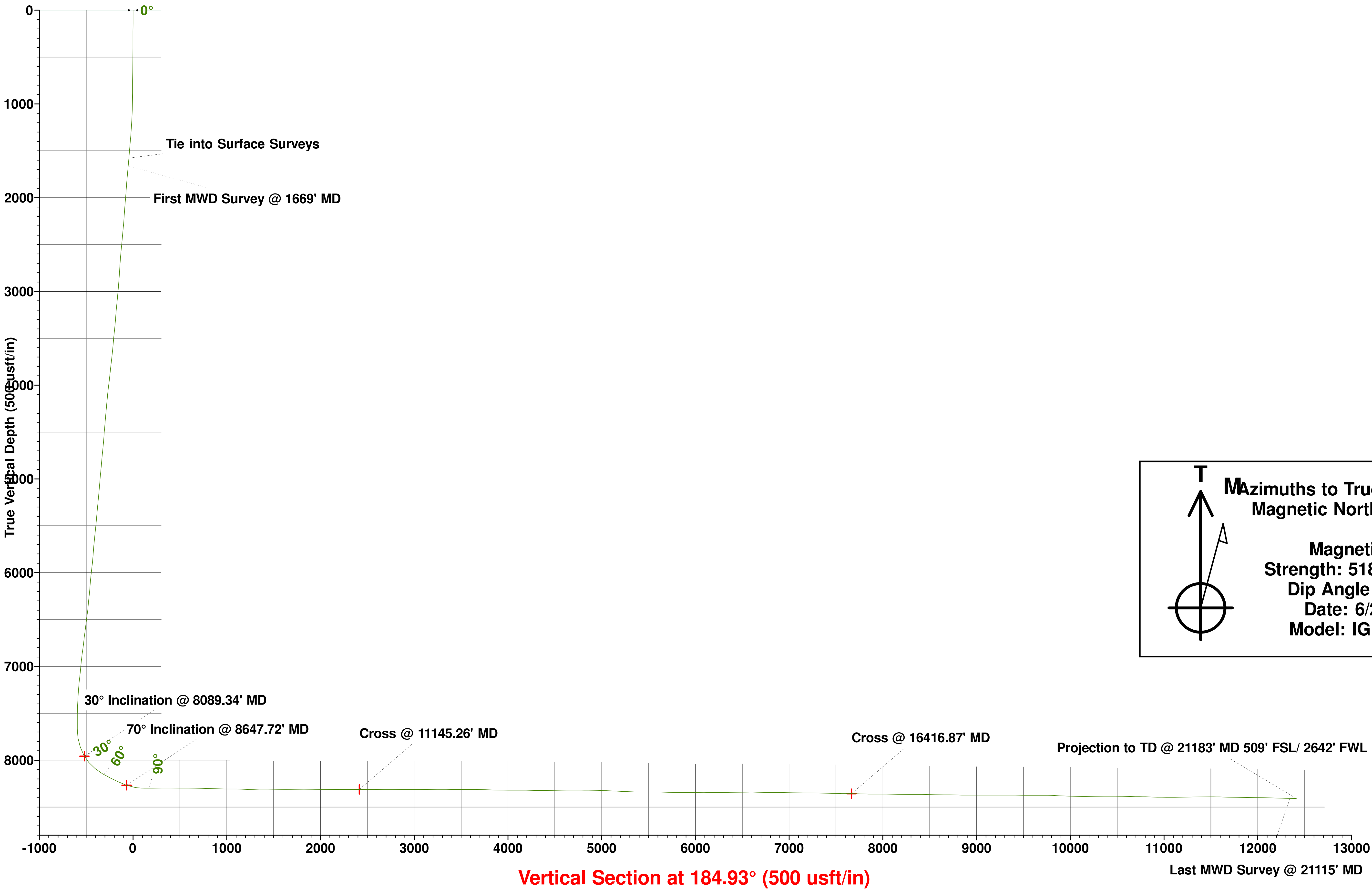
Ground Elevation:: 5321.40
RKB Elevation: KB @ 5350.40usft (Patterson 901)
Rig Name: Patterson 901

| Northing | Easting | Latitude | Longitude |
|------------|------------|-----------|-------------|
| 1235372.35 | 3129002.50 | 39.978562 | -105.039672 |

ANNOTATIONS

| MD | Inc | Azi | TVD | +N/-S | +E/-W | VSect | Departure | Annotation |
|----------|-------|--------|---------|-----------|----------|----------|-----------|--|
| 1584.00 | 11.34 | 299.91 | 1577.10 | 50.90 | -79.39 | -43.89 | 99.07 | Tie into Surface Surveys |
| 1669.00 | 12.02 | 300.62 | 1660.34 | 59.57 | -94.25 | -51.26 | 116.28 | First MWD Survey @ 1669' MD |
| 8089.34 | 29.99 | 189.55 | 7958.03 | 610.36 | -1047.77 | -518.12 | 1328.80 | 30° Inclination @ 8089.34' MD |
| 8647.72 | 70.00 | 177.77 | 8268.06 | 159.58 | -1050.32 | -68.79 | 1779.17 | 70° Inclination @ 8647.72' MD |
| 11145.26 | 90.13 | 181.04 | 8312.42 | -2333.00 | -1056.91 | 2415.15 | 4272.88 | Cross @ 11145.26' MD |
| 16416.87 | 89.02 | 181.45 | 8357.55 | -7601.00 | -1083.23 | 7665.94 | 9543.62 | Cross @ 16416.87' MD |
| 21115.00 | 89.40 | 178.46 | 8407.88 | -12297.35 | -1067.73 | 12343.62 | 14240.92 | Last MWD Survey @ 21115' MD |
| 21183.00 | 89.40 | 178.46 | 8408.59 | -12365.33 | -1065.91 | 12411.18 | 14308.92 | Projection to TD @ 21183' MD 509' FSL/ 2642' FWL |

SHL/ 2331' FSL & 1402' FEL
LP/ 2445' FSL & 2439' FEL
BHL/ 460' FSL & 2564' FEL
Ground Elevation 5321.4'



Mazimuths to True North
Magnetic North: 8.10°

Magnetic Field
Strength: 51868.6nT
Dip Angle: 66.42°
Date: 6/28/2019
Model: IGRF2015

