

ENSIGN

Directional

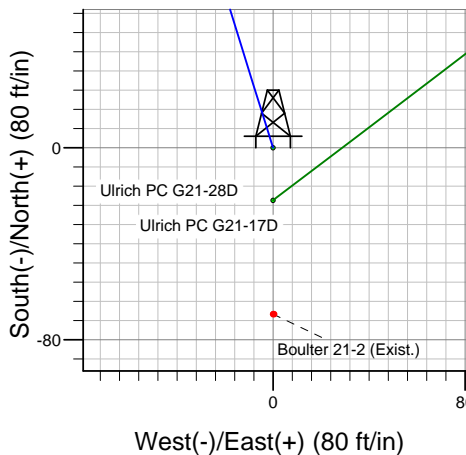
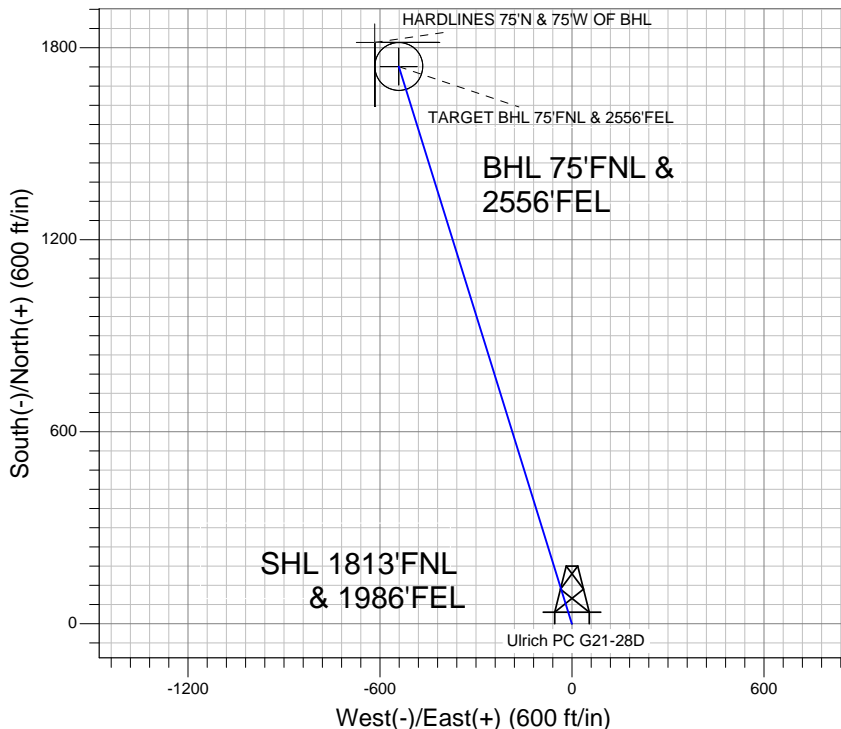
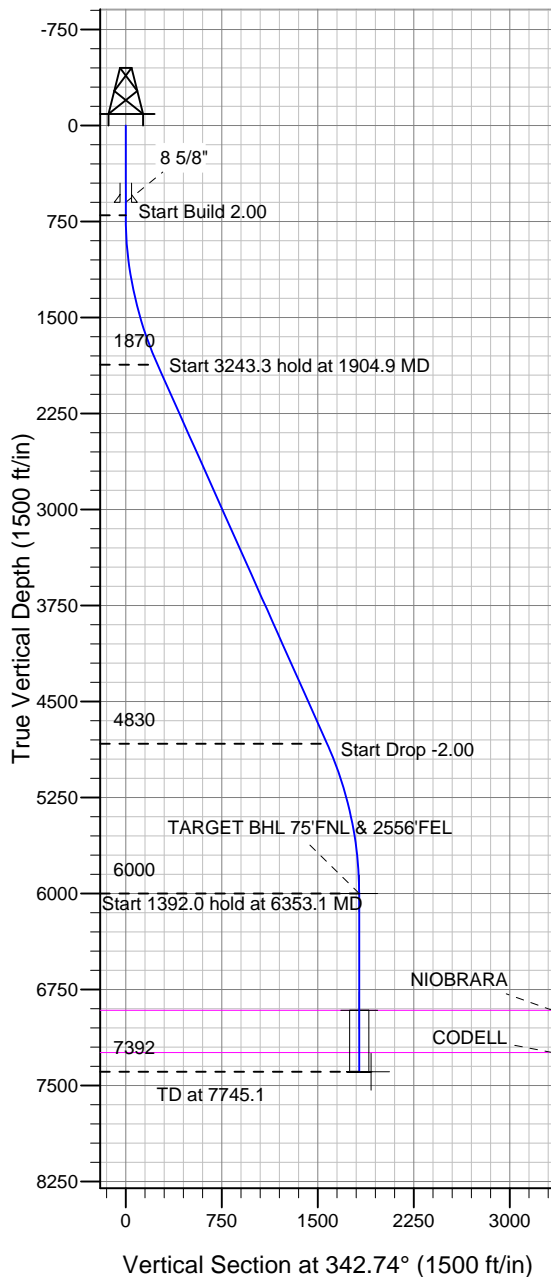
Well Name: Ulrich PC G21-28D

Surface Location: Ulrich PC G21-28D Pad Sec.21-T4N-R65W
North American Datum 1983, US State Plane 1983 Colorado Northern Zone
Ground Elevation: 4859.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1353294.53	3232652.44	40.300190	-104.665870	

Original Well EleWELL @ 4872.0ft (Original Well Elev)

NOBLE ENERGY INC WELD COUNTY CO



Ulrich PC G21-28D Pad Sec.21-T4N-R65W
Ulrich PC G21-28D
Noble Ulrich PC G21-28D Plan #1 (11-4-11)
9:42, November 08 2011



Azimuths to True North
Magnetic North: 8.71°
Magnetic Field
Strength: 53071.3snT
Dip Angle: 66.98°
Date: 11/4/2011
Model: IGRF200510

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 75'FNL & 2556'FEL	6000.0	1741.4	-541.1	40.304970	-104.667810	Point
TARGET CIRCLE 75'FNL & 2556'FEL	6912.0	1741.4	-541.1	40.304970	-104.667810	Circle (Radius: 75.0)
HARDLINES 75'N & 75'W OF BHL	7392.0	1816.4	-616.1	40.305176	-104.668079	Polygon

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	700.0	0.00	0.00	700.0	0.0	0.0	0.00	0.00	0.0	
3	1904.9	24.10	342.74	1869.7	238.4	-74.1	2.00	342.74	249.7	
4	5148.2	24.10	342.74	4830.3	1503.0	-467.0	0.00	0.00	1573.9	
5	6353.1	0.00	0.00	6000.0	1741.4	-541.1	2.00	180.00	1823.5	TARGET BHL 75'FNL & 2556'FEL
6	7745.1	0.00	0.00	7392.0	1741.4	-541.1	0.00	0.00	1823.5	