

PETROLEUM DEVELOPMENT CORP Weld County CO

Well Name: **Green 13-24H**

Surface Location: Green 13-24H Pad Sec.24-T7N-R65W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

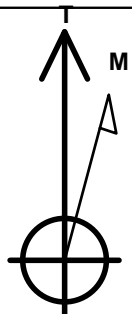
Ground Elevation: 4890.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1446762.63	3244614.03	40.556430	-104.619660	

RKB Ensign 32 - 15' WELL @ 4905.0ft (RKB Ensign 32 - 15')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
HARDLINE BHL 460'FEL	1.0	-967.2	4644.2	Polygon
HARDLINE SHL 460'FWL	1.0	-400.0	260.0	Polygon
BHL 1314'FSL, 501'FEL	6984.0	-567.2	4603.2	Point



Azimuths to True North
Magnetic North: 8.82°

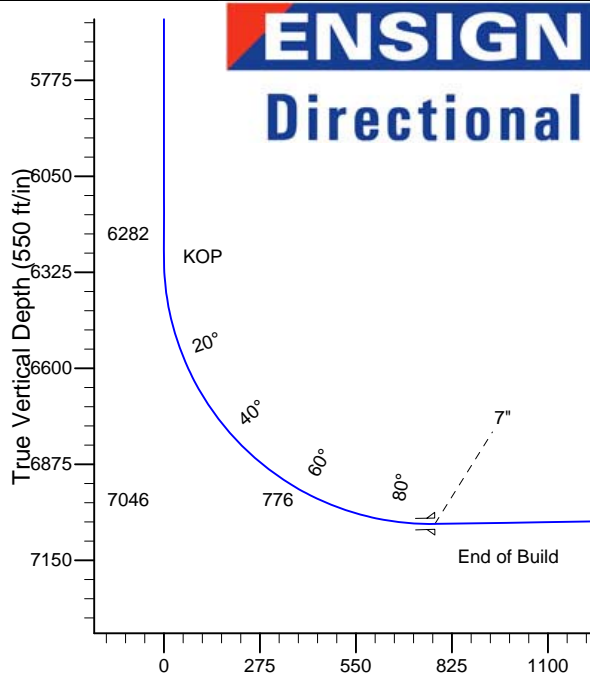
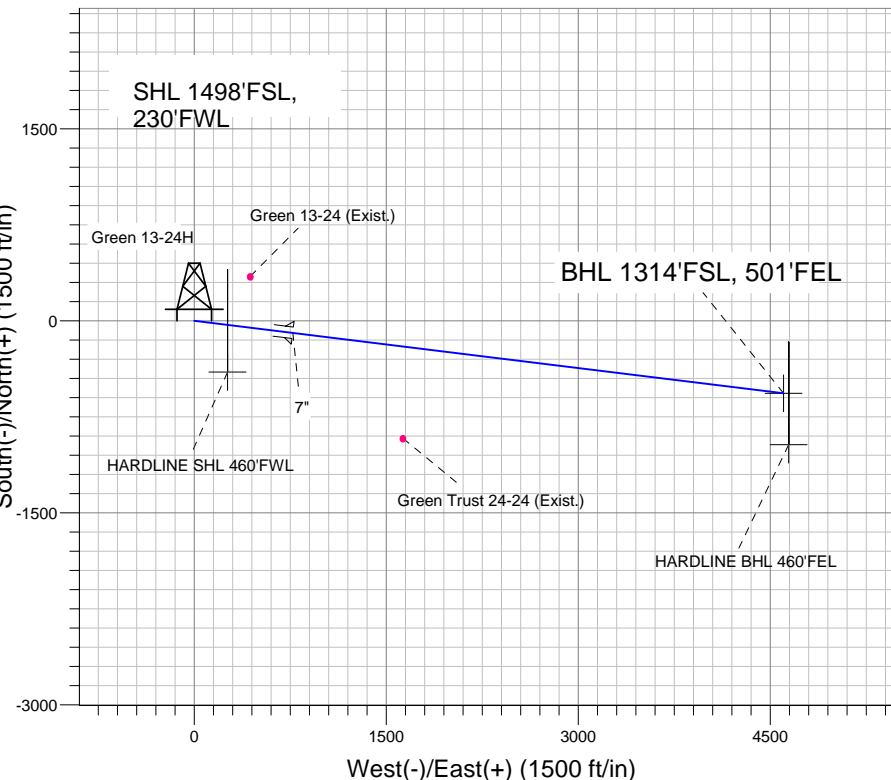
Magnetic Field
Strength: 53240.5nT
Dip Angle: 67.21°
Date: 5/4/2011
Model: IGRF2010

Green 13-24H Pad Sec.24-T7N-R65W
Green 13-24H
Plan #1 (5-4-11)
9:56, May 04 2011

ANNOTATIONS

TVD	MD	Annotation
6282.2	6282.2	KOP
7044.0	7494.4	End of Build

South(-)/North(+) (1500 ft/in)



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	6282.2	0.00	0.00	6282.2	0.0	0.0	0.00	0.00	0.0	
3	7494.4	90.92	97.02	7046.0	-94.9	770.4	7.50	97.02	776.2	
4	11356.7	90.92	97.02	6984.0	-567.2	4603.2	0.00	0.00	4638.0	BHL 1314'FSL, 501'FEL

Vertical Section at 97.02° (550 ft/in)