

PETROLEUM DEVELOPMENT CORP Weld County CO

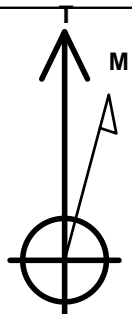
Well Name: **Wells Ranch 34E-232**

Surface Location: Wells Ranch NW-34 Pad Sec.34-T6N-R63W
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
 Ground Elevation: 4804.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1407390.52	3297091.91	40.446780	-104.432520	
RKB Ensign 32 - 15' WELL @ 4819.0ft (RKB Ensign 32 - 15')						

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
HARDLINE BHL 460'FEL	1.0	1240.0	4777.0	Polygon
HARDLINE SHL 460'FWL	1.0	1240.0	410.0	Polygon
SECTION LINE 1240'N & 50'W OF SHL	1.0	1240.0	-50.0	Polygon
BHL 200'FNL & 500'FEL	6669.0	1060.6	4737.0	Point



Azimuths to True North
 Magnetic North: 8.59°

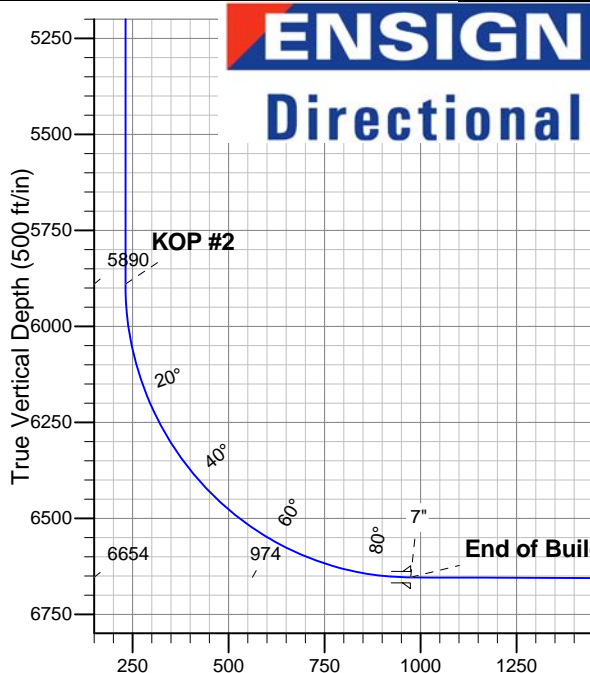
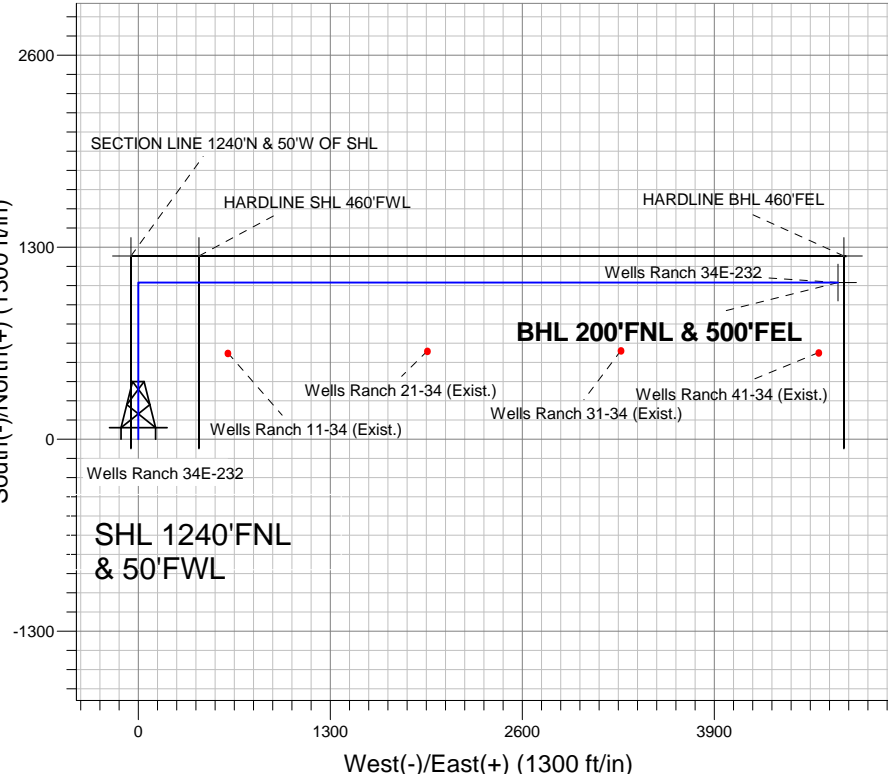
Magnetic Field
 Strength: 53110.8nT
 Dip Angle: 67.12°
 Date: 3/20/2012
 Model: IGRF2010

Wells Ranch NW-34 Pad Sec.34-T6N-R63W
 Wells Ranch 34E-232
 Plan #1 (3-20-12)
 11:26, April 03 2012

ANNOTATIONS

TVD	MD	Annotation
200.0	200.0	KOP #1
5889.8	6017.7	KOP #2
6653.7	7214.8	End of Build

South(-)/North(+) (1300 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	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	930.7	14.61	0.00	922.8	92.7	0.0	2.00	0.00	20.3	
4	4397.2	14.61	0.00	4277.2	967.3	0.0	0.00	0.00	211.4	
5	5127.9	0.00	0.00	5000.0	1060.0	0.0	2.00	180.00	231.6	
6	6017.7	0.00	0.00	5889.8	1060.0	0.0	0.00	0.00	231.6	
7	7214.8	89.78	89.99	6653.7	1060.1	761.0	7.50	89.99	974.2	
8	11190.8	89.78	89.99	6669.0	1060.6	4737.0	0.00	0.00	4854.2	BHL 200'FNL & 500'FEL

Vertical Section at 77.38° (500 ft/in)