

PETROLEUM DEVELOPMENT CORP Weld County CO

Well Name: Gaddis 36E-223

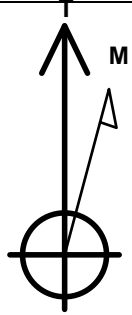
Surface Location: Gaddis Pad Sec.36-T4N-R68W
North American Datum 1983 , US State Plane 1983 Colorado Northern Zone
Ground Elevation: 5059.0

+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.0 0.0 1344112.08 3151736.78 40.276710 -104.956170

RKB Ensign 32 - 15' WELL @ 5074.0ft (RKB Ensign 32 - 15')

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
HARDLINE BHL 460'FSL	1.0	-4590.1	-1270.5	1339514.48	3150494.52	40.264110	-104.960722	Polygon
HARDLINE SHL 460'FNL	1.0	-210.0	-1270.0	1343894.31	3150468.15	40.276133	-104.960721	Polygon
SECTION LINE 250'N & 1270'W OF SHL	1.0	250.0	-1270.0	1344354.28	3150465.33	40.277396	-104.960722	Polygon
BHL 500'FSL, 200'FWL	7184.0	-4550.1	-1071.7	1339555.68	3150693.09	40.264220	-104.960010	Point



Azimuths to True North
Magnetic North: 8.87°

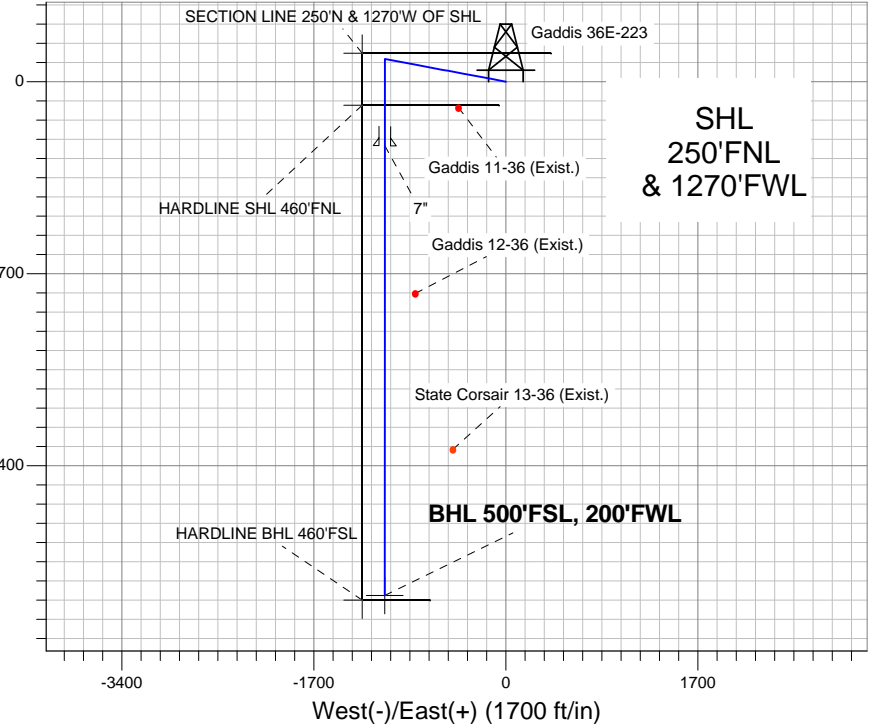
Magnetic Field
Strength: 52977.9nT
Dip Angle: 66.90°
Date: 1/30/2012
Model: IGRF2010

ANNOTATIONS

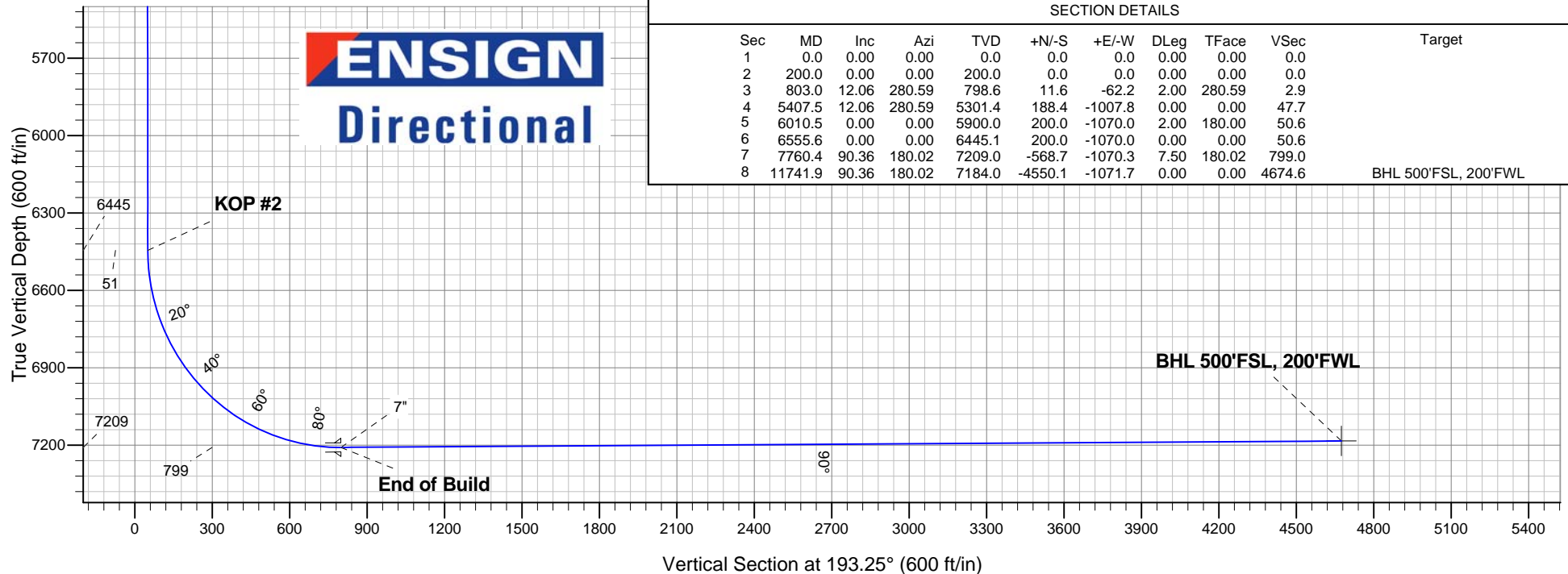
TVD	MD	Annotation
200.0	200.0	KOP #1
6445.1	6555.6	KOP #2
7209.0	7760.4	End of Build

Gaddis Pad Sec.36-T4N-R68W
Gaddis 36E-223
Plan #2 (2-8-12)
14:17, February 10 2012

South(-)/North(+) (1700 ft/in)



ENSIGN
Directional



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	803.0	12.06	280.59	798.6	11.6	-62.2	2.00	280.59	2.9	
4	5407.5	12.06	280.59	5301.4	188.4	-1007.8	0.00	0.00	47.7	
5	6010.5	0.00	0.00	5900.0	200.0	-1070.0	2.00	180.00	50.6	
6	6555.6	0.00	0.00	6445.1	200.0	-1070.0	0.00	0.00	50.6	
7	7760.4	90.36	180.02	7209.0	-568.7	-1070.3	7.50	180.02	799.0	
8	11741.9	90.36	180.02	7184.0	-4550.1	-1071.7	0.00	0.00	4674.6	BHL 500'FSL, 200'FWL