

PETROLEUM DEVELOPMENT CORP Weld County CO

Well Name: Spaur 41-31H

Surface Location: Spaur 41-31H Pad Sec.31-T7N-R63W
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
 Ground Elevation: 4758.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1439130.40 3285949.24 40.534260 -104.471230
 Original Well Elev WELL @ 4773.0ft (Original Well Elev)

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
HARDLINE BHL 460'FWL	1.0	-410.5	-4504.2	Polygon
HARDLINE SHL 460'FEL	1.0	-400.0	-210.0	Polygon
TARGET BHL 1130'FNL, 500'FWL	6768.0	-10.5	-4464.2	Point



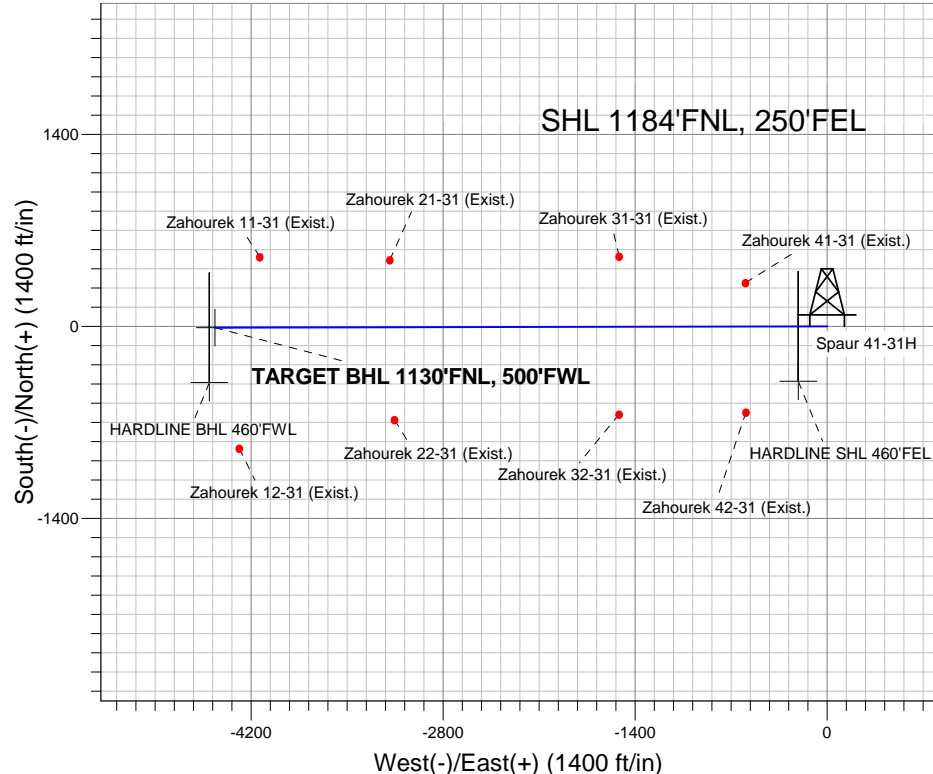
Azimuths to True North
 Magnetic North: 8.69°

Magnetic Field
 Strength: 53211.3snT
 Dip Angle: 67.20°
 Date: 8/31/2011
 Model: IGRF2010

ANNOTATIONS

TVD	MD	Annotation
6009.2	6009.2	KOP
6773.2	7210.3	End of Build

Spaur 41-31H Pad Sec.31-T7N-R63W
 Spaur 41-31H
 Plan #1 (8-31-11)
 9:25, August 31 2011



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	6009.2	0.00	0.00	6009.2	0.0	0.0	0.00	0.00	0.0	
3	7210.3	90.08	269.86	6773.2	-1.8	-765.0	7.50	269.86	765.0	
4	10909.5	90.08	269.86	6768.0	-10.5	-4464.2	0.00	0.00	4464.2	TARGET BHL 1130'FNL, 500'FWL

