

ENSIGN

Directional

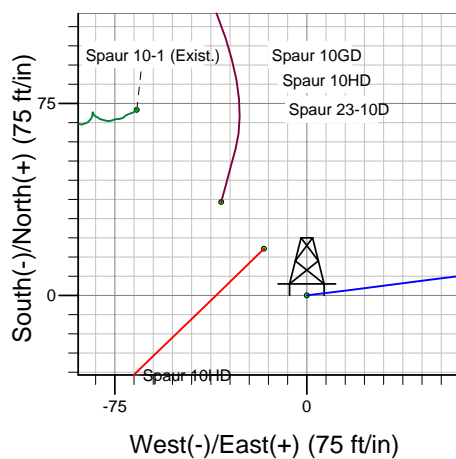
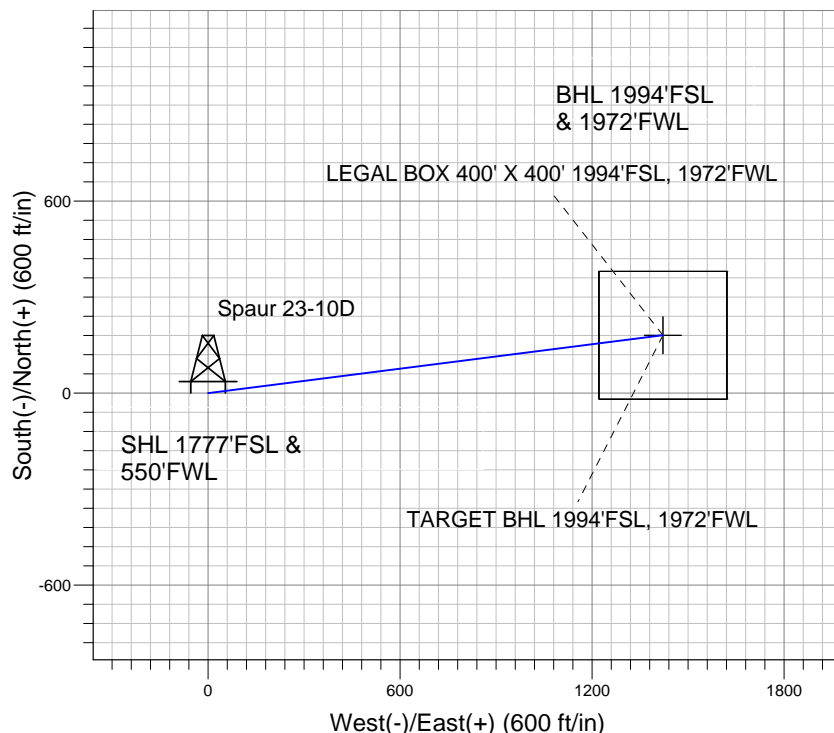
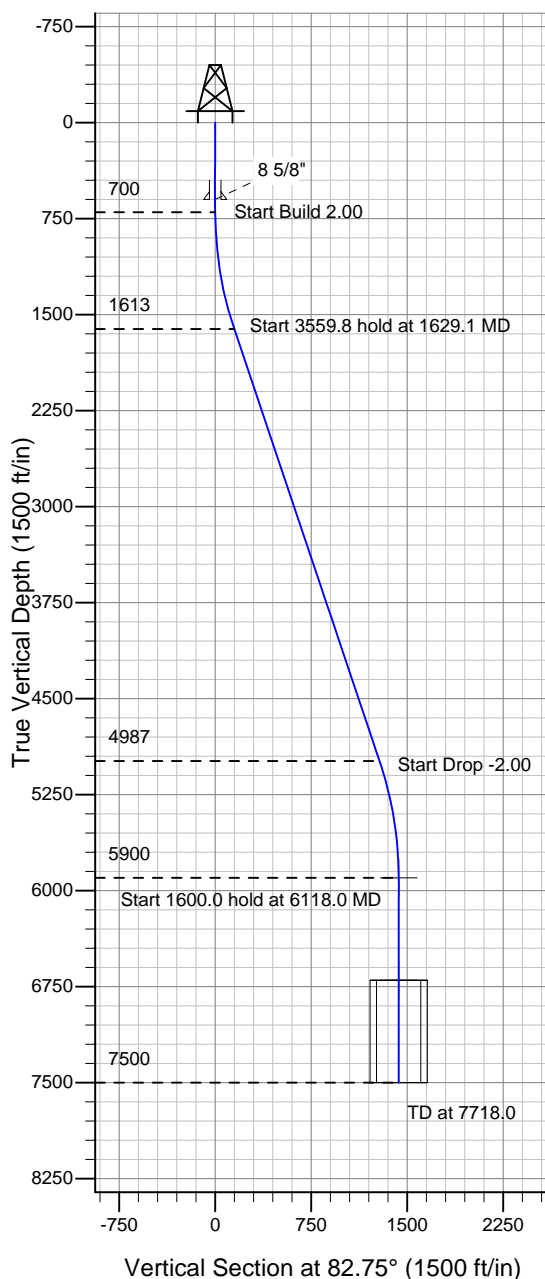
Well Name: Spaur 23-10D

Surface Location: Spaur 10GD Pad Sec.10-T4N-R67W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4805.0

+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.0 0.0 1361680.73 3171584.57 40° 19' 28.488 N 104° 53' 4.560 W
Original Well Elev WELL @ 4818.0ft (Original Well Elev)

PETROLEUM DEVELOPMENT CORP Weld County CO



Spaur 23-10D
Plan #1 (6-27-10)
8:13, July 01 2010



Azimuths to True North
Magnetic North: 9.08°
Magnetic Field
Strength: 53251.8snT
Dip Angle: 67.03°
Date: 12/31/2009
Model: IGRF200510

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 1994'FSL, 1972'FWL	5900.0	180.8	1421.5	40° 19' 30.275 N	104° 52' 46.206 W	Point
LEGAL BOX 400' X 400' 1994'FSL, 1972'FWL	6700.0	180.8	1421.5	40° 19' 30.274 N	104° 52' 46.207 W	Rectangle (Sides: L400.0 W400.0)

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	1629.1	18.58	82.75	1612.9	18.8	148.1	2.00	82.75	149.3	
4	5188.9	18.58	82.75	4987.1	162.0	1273.4	0.00	0.00	1283.7	
5	6118.0	0.00	0.00	5900.0	180.8	1421.5	2.00	180.00	1433.0	TARGET BHL 1994'FSL, 1972'FWL
6	7718.0	0.00	0.00	7500.0	180.8	1421.5	0.00	0.00	1433.0	