

# ENSIGN

## Directional

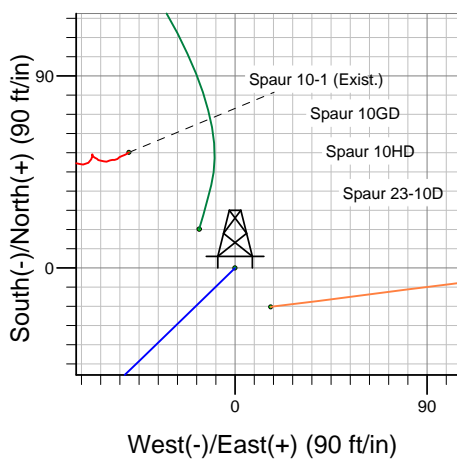
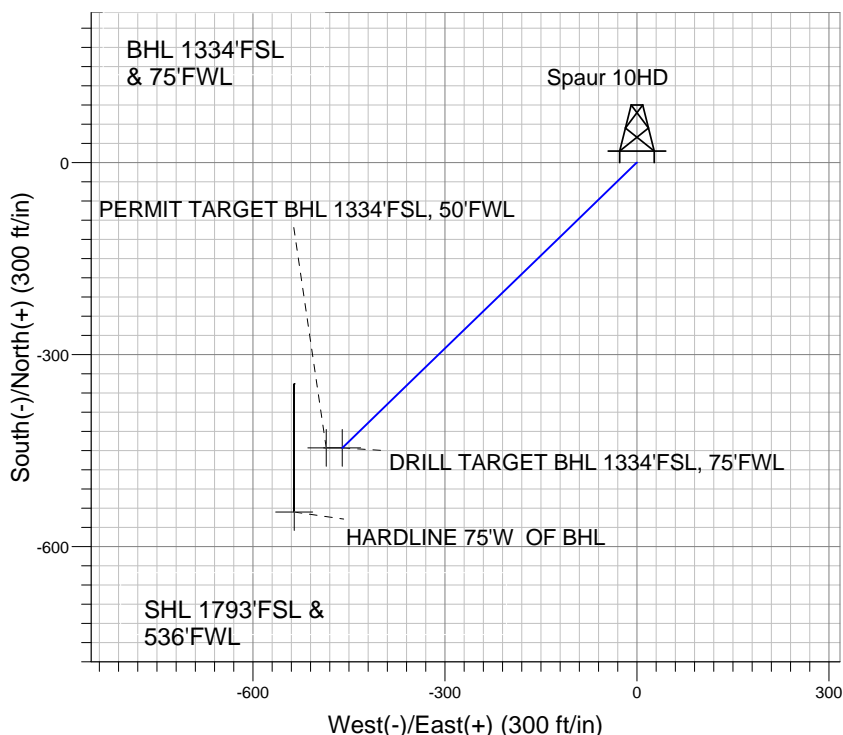
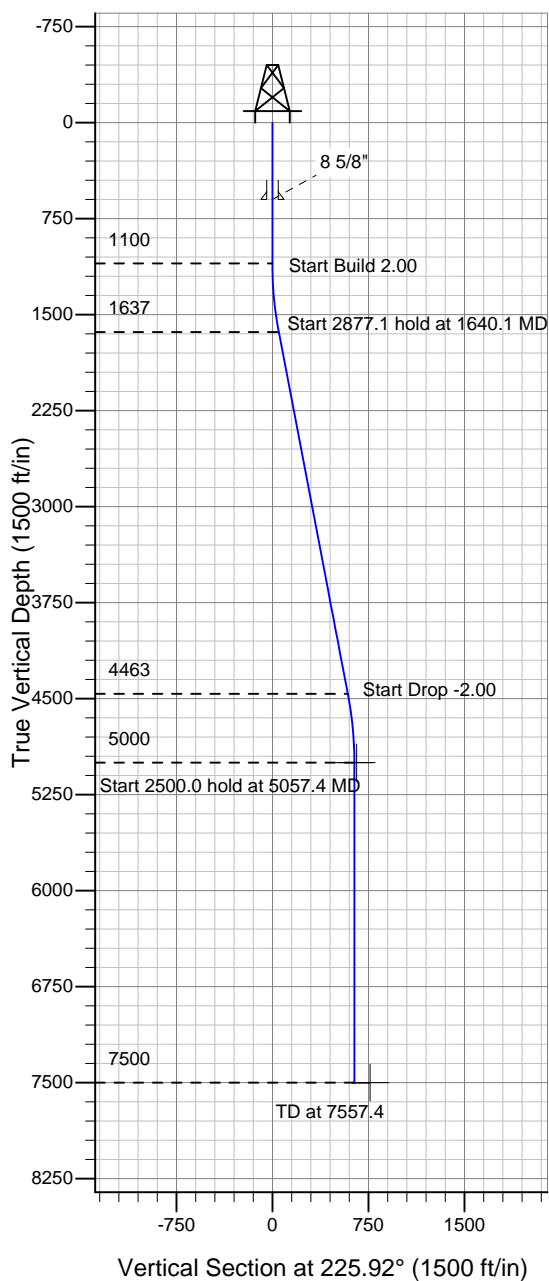
Well Name: **Spaur 10HD**

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	1361698.83	3171567.72	40° 19' 28.668 N	104° 53' 4.776 W	
Original Well Elev WELL @ 4818.0ft (Original Well Elev)						

### PETROLEUM DEVELOPMENT CORP Weld County CO



Spaur 10HD  
Plan #1 (6-27-10)  
10:48, June 30 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
DRILL TARGET BHL 1334'FSL, 75'FWL	5000.0	-445.8	-460.3	40° 19' 24.263 N	104° 53' 10.719 W	Point
PERMIT TARGET BHL 1334'FSL, 50'FWL	5000.0	-445.8	-485.3	40° 19' 24.262 N	104° 53' 11.042 W	Point
HARDLINE 75'W OF BHL	7500.0	-545.8	-535.3	40° 19' 23.274 N	104° 53' 11.687 W	Polygon

#### 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	1100.0	0.00	0.00	1100.0	0.0	0.0	0.00	0.00	0.0	
3	1640.1	10.80	225.92	1636.9	-35.3	-36.5	2.00	225.92	50.8	
4	4517.2	10.80	225.92	4463.1	-410.5	-423.8	0.00	0.00	590.0	
5	5057.4	0.00	0.00	5000.0	-445.8	-460.3	2.00	180.00	640.8	DRILL TARGET BHL 1334'FSL, 75'FWL
6	7557.4	0.00	0.00	7500.0	-445.8	-460.3	0.00	0.00	640.8	