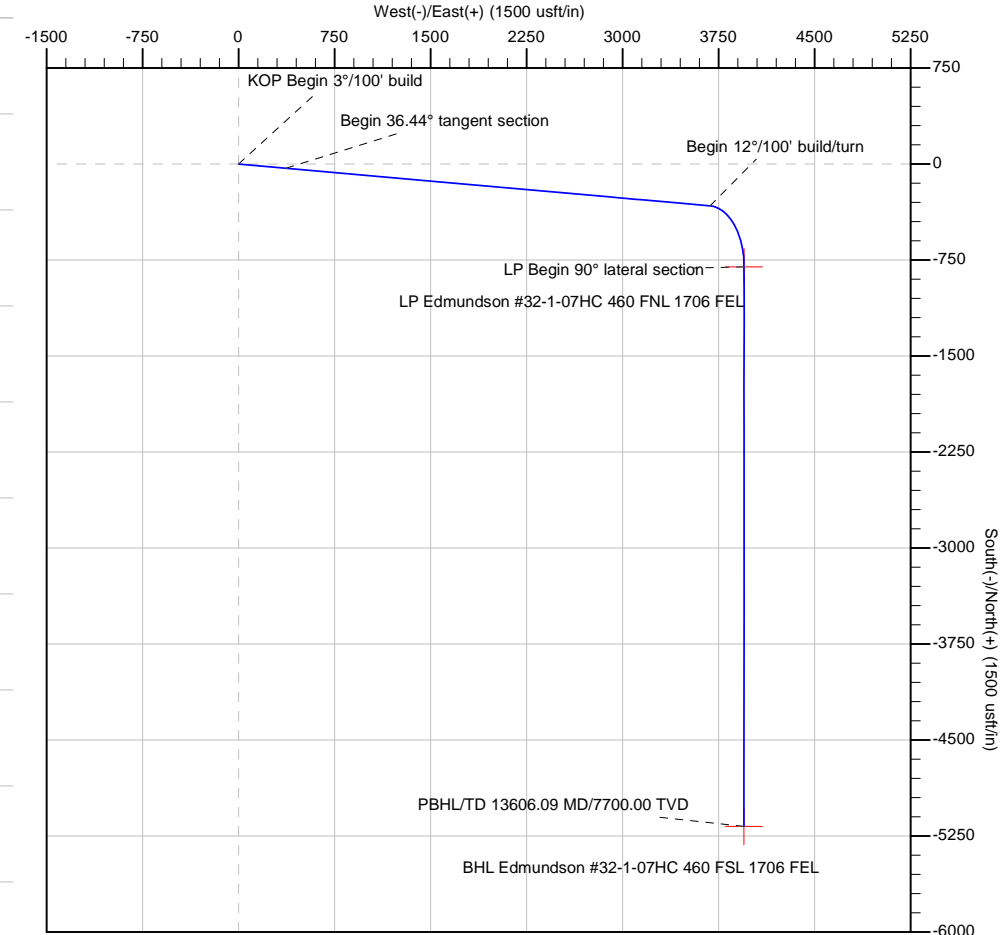
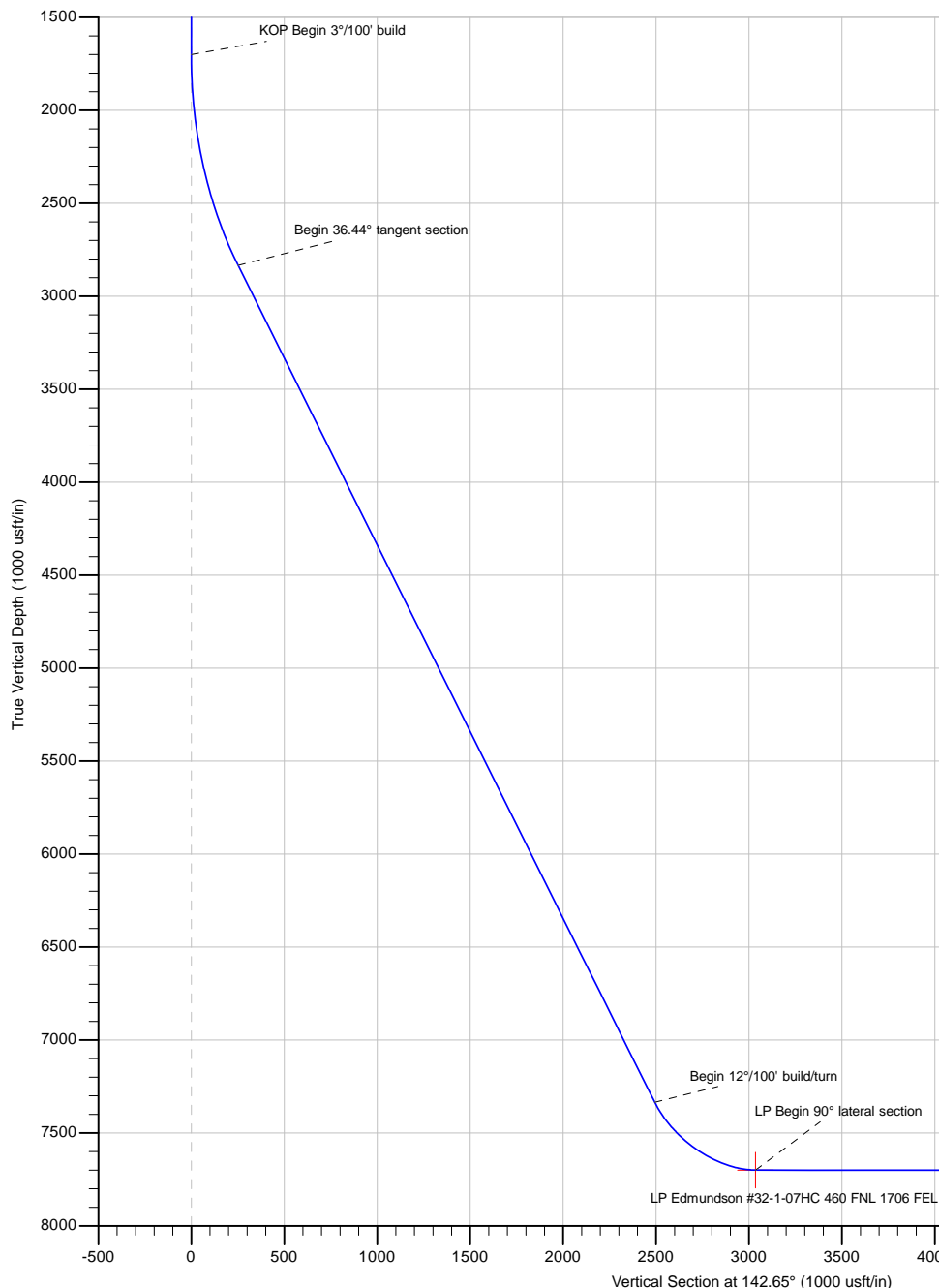




WARD PETROLEUM

Well: Edmundson #32-1-07HC
Site: Edmundson
Project: Adams County, Colorado
Design: rev0

Section Details										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP Begin 3°/100' build
2	1700.00	0.00	0.00	1700.00	0.00	0.00	0.00	0.00	0.00	Begin 36.44° tangent section
3	2914.79	36.44	95.06	2834.52	-32.92	372.04	3.00	95.06	251.90	Begin 12°/100' build/turn
4	8509.90	36.44	95.06	7335.45	-325.90	3682.78	0.00	0.00	2493.57	LP Begin 90° lateral section
5	9234.98	90.00	180.02	7700.00	-802.81	3950.78	12.00	85.94	3035.27	PBHL/TD 13606.09 MD/7700.00 TVD
6	13606.09	90.00	180.02	7700.00	-5173.92	3949.26	0.00	0.00	6508.92	BHL Edmundson #32-1-07HC 460 FSL 1706 FEL



Azimuths to Grid North
True North: -0.45°
Magnetic North: 7.77°

Magnetic Field
Strength: 52159.4snT
Dip Angle: 66.47°
Date: 4/16/2017
Model: IGRF2015

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone

System Datum: Mean Sea Level
Depth Reference: RKB=5059.1+17 @ 5076.10usft

Surf loc: 365 FSL 329 FEL Section 30-T01S-R66W
North 1218054.12 Easting 3193474.67 Latitude 39.92987302 Longitude -104.81010031
Total Corr (M->G): To convert a Magnetic Direction to a Grid Direction, Add 7.77°