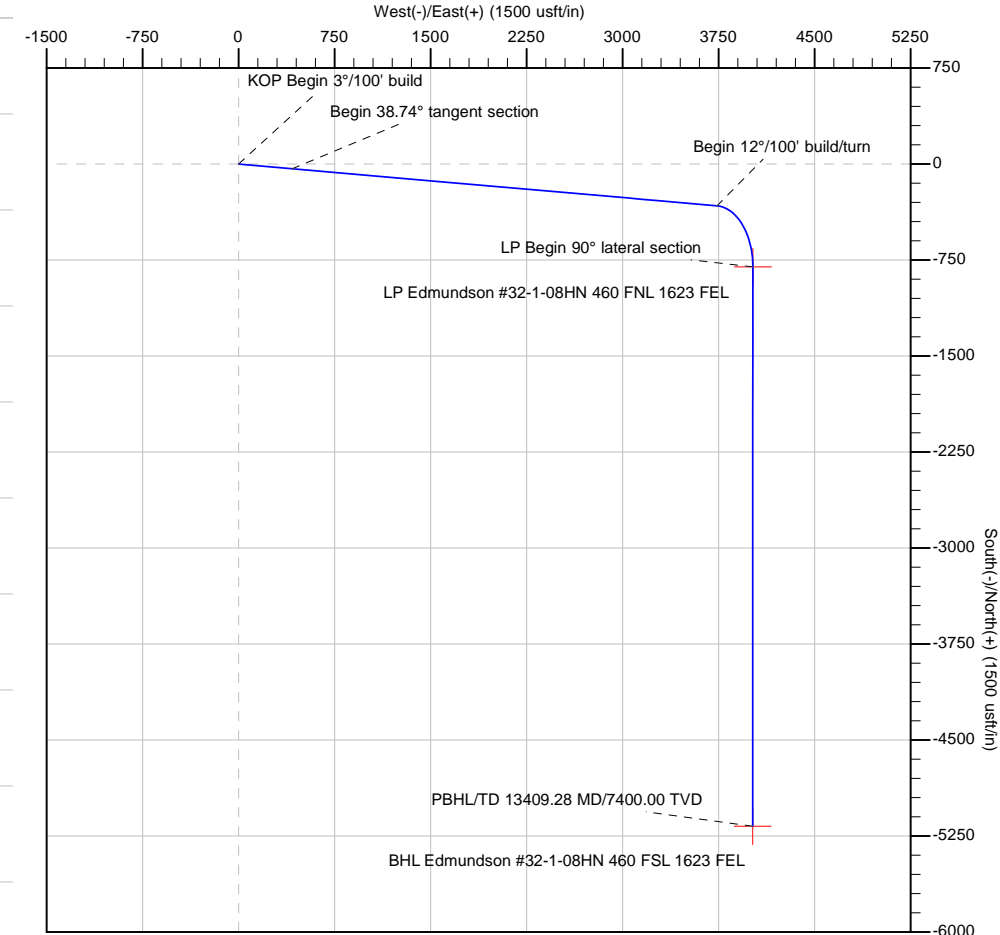
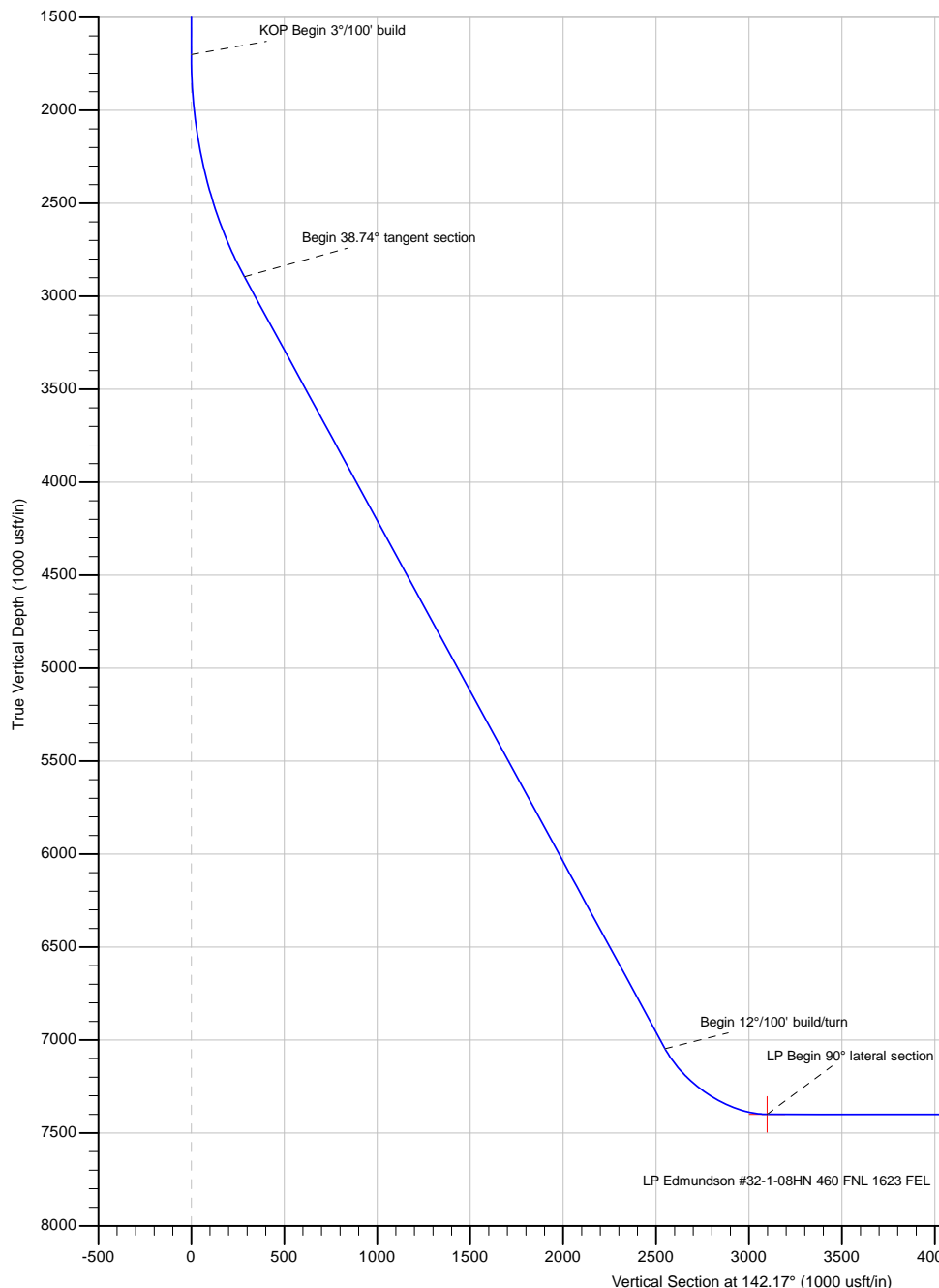




WARD PETROLEUM

Well: Edmundson #32-1-08HN
Site: Edmundson
Project: Adams County, Colorado
Design: rev0

Section Details										Annotation
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	1700.00	0.00	0.00	1700.00	0.00	0.00	0.00	0.00	0.00	KOP Begin 3°/100' build
3	2991.28	38.74	94.98	2895.12	-36.48	418.56	3.00	94.98	285.53	Begin 38.74° tangent section
4	8314.39	38.74	94.98	7047.21	-325.74	3737.00	0.00	0.00	2549.29	Begin 12°/100' build/turn
5	9038.54	90.00	180.02	7400.00	-802.60	4018.80	12.00	86.13	3098.76	LP Begin 90° lateral section
6	13409.28	90.00	180.02	7400.00	-5173.34	4017.28	0.00	0.00	6549.96	PBHL/TD 13409.28 MD/7400.00 TVD



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=5059.6+17 @ 5076.60usft

Surf loc: 365 FSL 314 FEL Section 30-T01S-R66W
North 1218054.29 Easting 3193489.63 Latitude 39.92987317 Longitude -104.81004696
Total Corr (M->G): To convert a Magnetic Direction to a Grid Direction, Add 7.77°