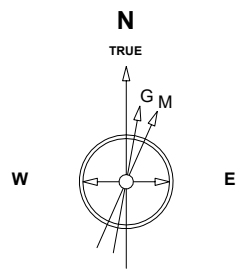


Great Western Operating Company, LLC

Location Colorado **Slot** S17 - Kortum LD 33-163HN
Field Wattenburg **Well** Kortum LD 33-163HN
Installation Kortum **Wellbore** Kortum LD 33-163HN (PWB)

Created by admin
 Date plotted 24-Aug-2018
 Plot reference is Kortum LD 33-163HN (PWB).
 Ref wellpath is Kortum LD 33-163HN (PWP#1).
 Coordinates are in Feet reference S17 - Kortum LD 33-163HN.
 True Vertical Depths are reference Rig Datum.
 Measured Depths are reference Rig Datum.
 Rig Datum: Planned Datum #1
 Rig Datum to Mean Sea Level: 5211.70 ft.
 Plot North is aligned to TRUE North.

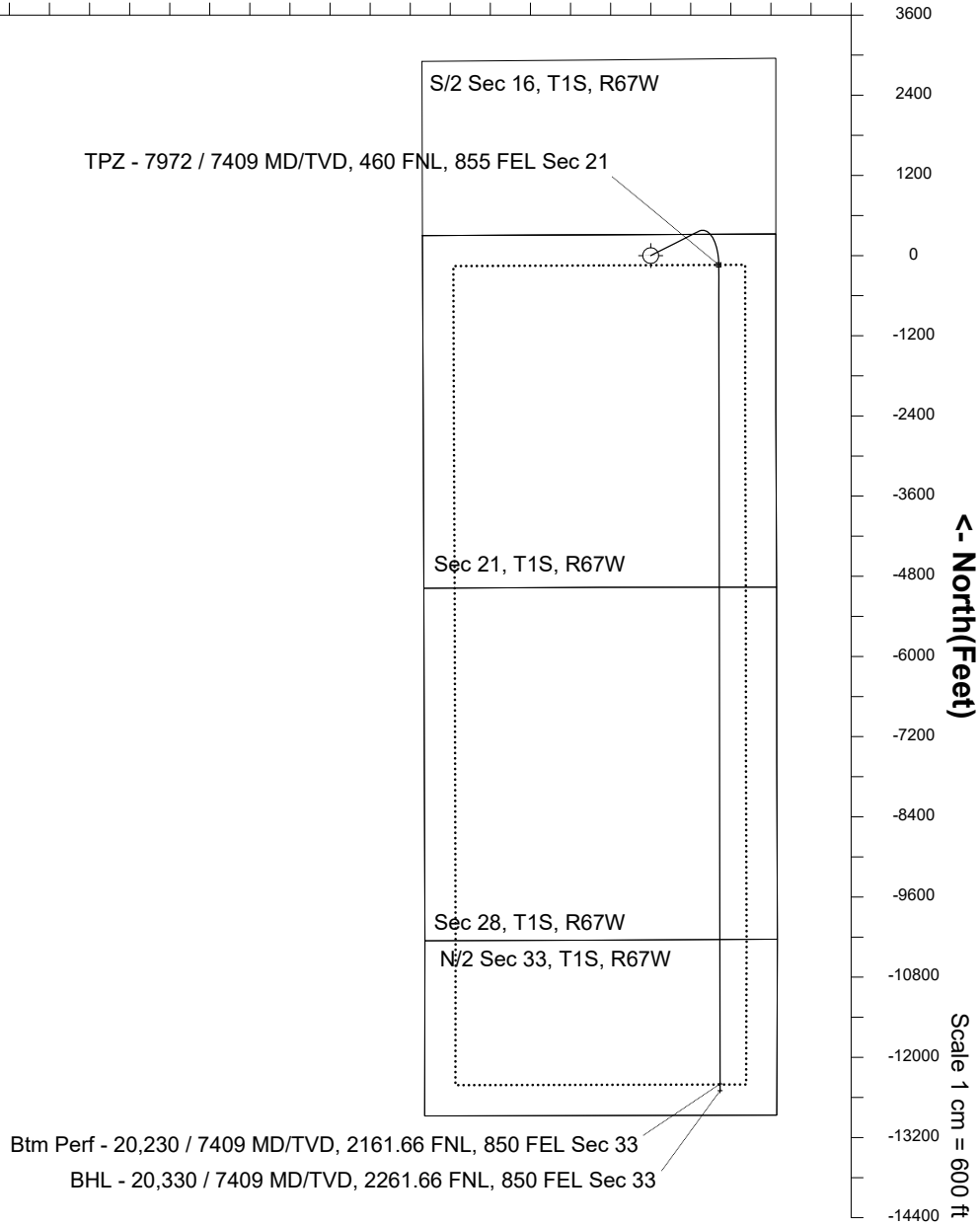
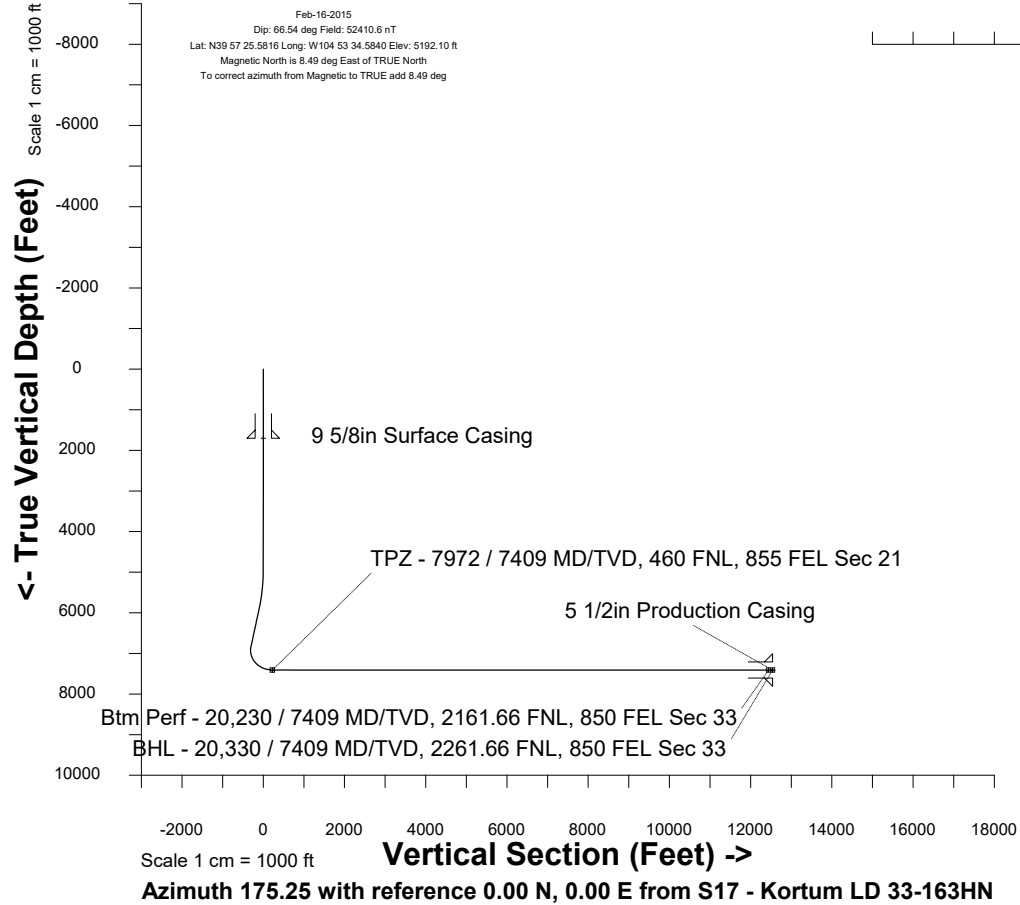


Feb-16-2015
 Dip: 66.54 deg Field: 52410.6 nT
 Lat: N39 57 25.5816 Long: W104 53 34.5840 Elev: 5192.10 ft
 Magnetic North is 8.49 deg East of TRUE North
 To correct azimuth from Magnetic to TRUE add 8.49 deg

Scale 1 cm = 600 ft

East (Feet) ->

-12000 -10800 -9600 -8400 -7200 -6000 -4800 -3600 -2400 -1200 -0 1200 2400



WELL PROFILE DATA

Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
Tie on	0.00	0.00	0.00	0.00	S 0.00	W 0.00		0.00
KOP	4921.00	0.00	63.22	4921.00	S 0.00	W 0.00	0.00	0.00
End of Build	5921.15	30.00	63.22	5876.06	N 115.30	E 228.50	3.00	-96.00
End of Hold	7036.28	30.00	63.22	6841.75	N 366.52	E 726.35	0.00	-305.15
Target TPZ - ...Sec 21	7972.45	90.00	179.91	7408.60	S 140.59	E 1019.60	11.00	224.48
Target Btm Pe...Sec 33	20229.52	90.00	179.91	7408.60	S 12397.64	E 1038.62	0.00	12441.07
End of Turn	20234.82	90.00	180.49	7408.60	S 12402.94	E 1038.60	11.00	12446.35
T.D. & Target BHL... 33	20329.70	90.00	180.49	7408.60	S 12497.82	E 1037.78	0.00	12540.83