

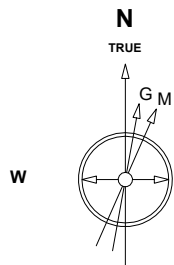
# Great Western Operating Company, LLC

**Location** Colorado  
**Field** Wattenburg  
**Installation** Tower

**Slot** Slot N10 - Tower LD 19-139HN  
**Well** Tower LD 19-139HN  
**Wellbore** Tower LD 19-139HN (PWB)

Created by admin  
Date plotted 26-Nov-2018

Plot reference is Tower LD 19-139HN (PWB).  
Ref wellpath is Tower LD 19-139HN (PWP#1).  
Coordinates are in Feet reference Slot N10 - Tower LD 19-139HN.  
True Vertical Depths are reference Rig Datum.  
Measured Depths are reference Rig Datum.  
Rig Datum: Planned Datum #1  
Rig Datum to Mean Sea Level: 5259.60 ft.  
Plot North is aligned to TRUE North.



Scale 1 cm = 400 ft

East (Feet) ->

-13600 -12800 -12000 -11200 -10400 -9600 -8800 -8000 -7200 -6400 -5600 -4800 -4000 -3200 -2400 -1600 -800 0 800 1600

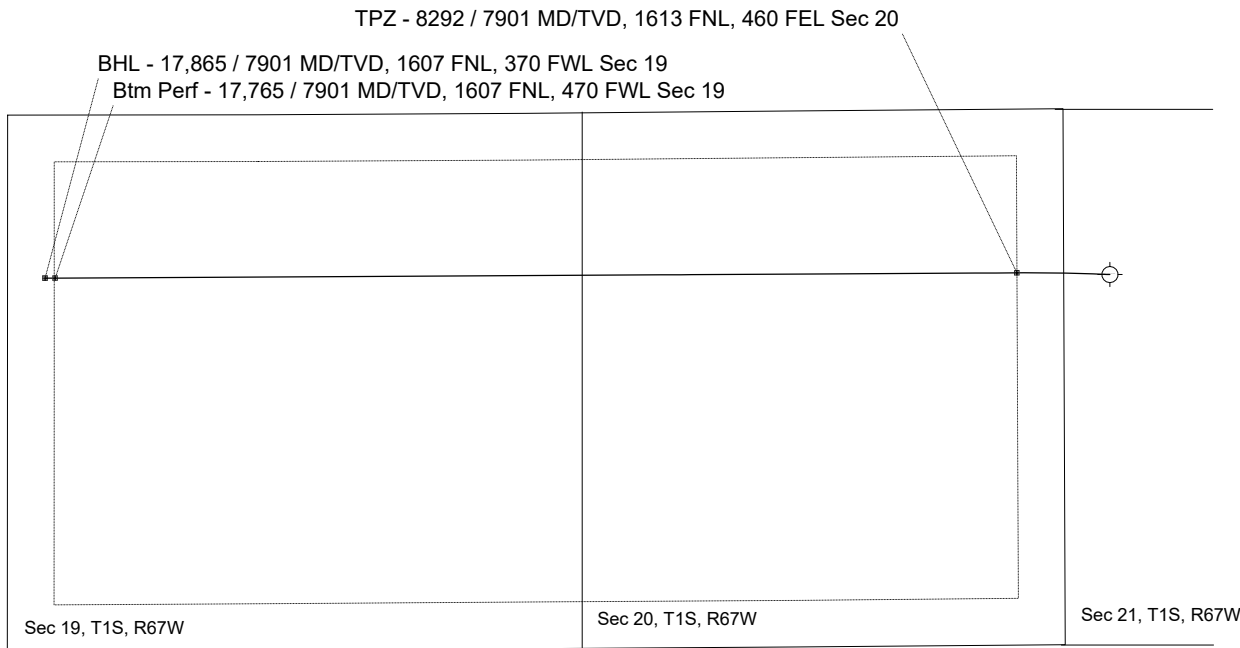
May-10-2017  
IGRF Model [1900.0-2020.0] Dip: 66.48 deg Field: 52154.2 nT  
Lat: N39 57 11.0916 Long: W104 54 7.2792 Elev: 5239.60 ft  
Magnetic North is 8.26 deg East of TRUE North  
To correct azimuth from Magnetic to TRUE add 8.26 deg

<- True Vertical Depth (Feet)

Scale 1 cm = 800 ft

<- North(Feet)

Scale 1 cm = 400 ft



9 5/8in Surface Casing

TPZ - 8292 / 7901 MD/TVD, 1613 FNL, 460 FEL Sec 20

5 1/2in Production Casing

Btm Perf - 17,765 / 7901 MD/TVD, 1607 FNL, 470 FWL Sec 19  
BHL - 17,865 / 7901 MD/TVD, 1607 FNL, 370 FWL Sec 19

Scale 1 cm = 800 ft

Vertical Section (Feet) ->

Azimuth 269.80 with reference 0.00 N, 0.00 E from Slot N10 - Tower LD 19-139HN

## 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	6270.00	0.00	271.95	6270.00	S 0.00	W 0.00	0.00	-0.00
End of Build	7064.77	23.84	271.95	7042.03	N 5.55	W 162.90	3.00	162.88
End of Hold	7630.55	23.84	271.95	7559.52	N 13.34	W 391.48	0.00	391.43
Target TPZ - ...Sec 20	8292.32	90.00	269.68	7901.00	N 16.41	W 915.64	10.00	915.58
Target Btm Pe...Sec 19	17764.84	90.00	269.68	7901.00	S 36.08	W 10388.02	0.00	10388.08
End of Turn	17766.18	90.00	269.82	7901.00	S 36.09	W 10389.36	10.00	10389.42
T.D. & Target BHL... 19	17864.93	90.00	269.82	7901.00	S 36.40	W 10488.10	0.00	10488.17