

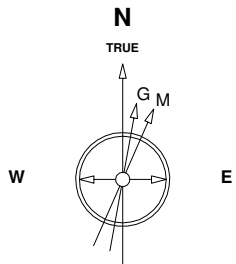
Great Western Operating Company, LLC

Location Colorado
Field Wattenburg
Installation Tower

Slot Slot N13 - Tower LD 19-179HN
Well Tower LD 19-179HN
Wellbore Tower LD 19-179HN (PWB)

Created by admin
Date plotted 15-May-2017

Plot reference is Tower LD 19-179HN (PWB).
Ref wellpath is Tower LD 19-179HN (PWP#1).
Coordinates are in Feet reference Slot N13 - Tower LD 19-179HN.
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

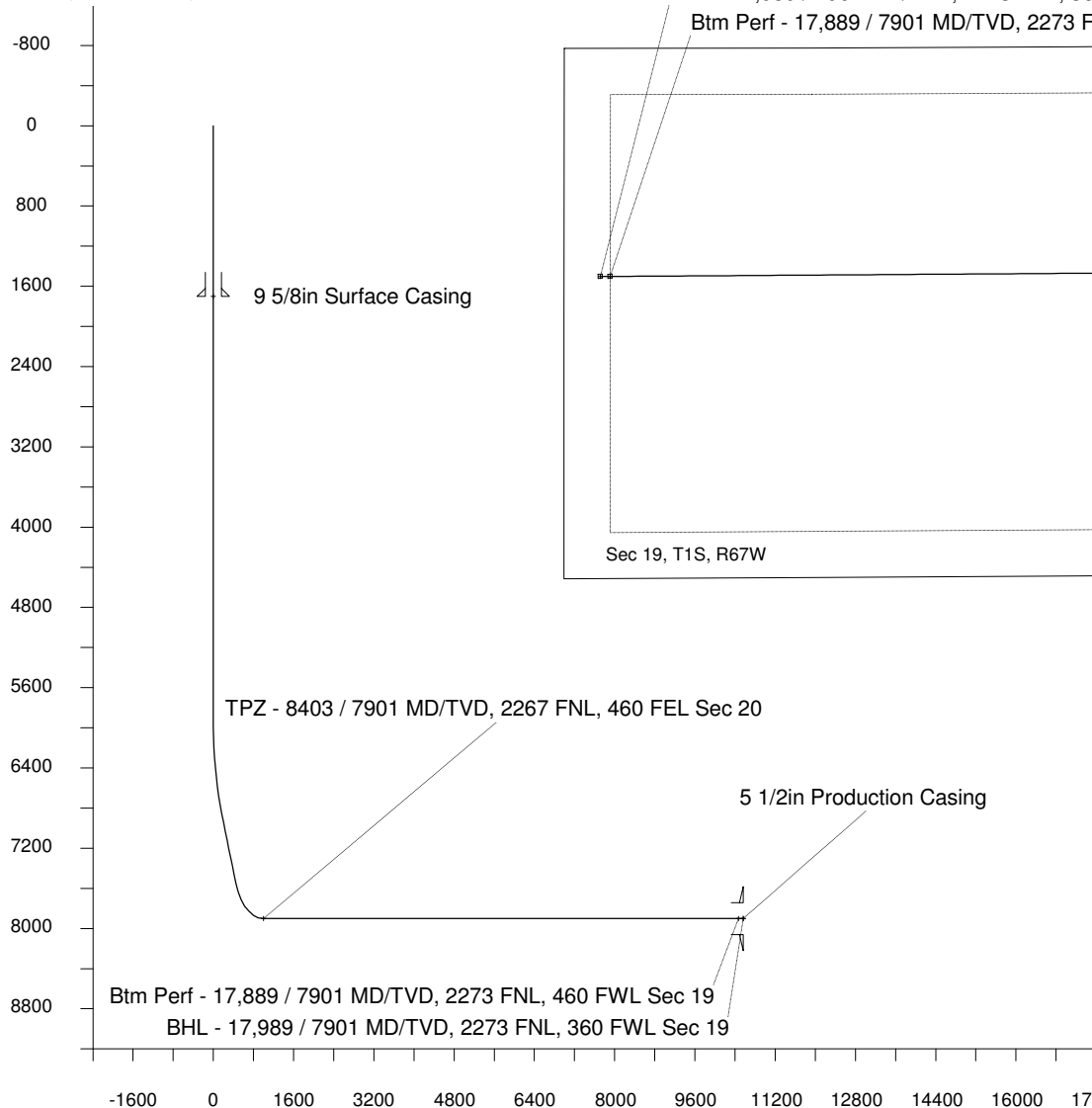
East (Feet) ->

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

10-May-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

Scale 1 cm = 400 ft

<- True Vertical Depth (Feet)



Scale 1 cm = 800 ft

Vertical Section (Feet) ->

Azimuth 266.19 with reference 0.00 N, 0.00 E from Slot N13 - Tower LD 19-179HN

TPZ - 8403 / 7901 MD/TVD, 2267 FNL, 460 FEL Sec 20

BHL - 17,989 / 7901 MD/TVD, 2273 FNL, 360 FWL Sec 19

Btm Perf - 17,889 / 7901 MD/TVD, 2273 FNL, 460 FWL Sec 19

9 5/8in Surface Casing

TPZ - 8403 / 7901 MD/TVD, 2267 FNL, 460 FEL Sec 20

5 1/2in Production Casing

Btm Perf - 17,889 / 7901 MD/TVD, 2273 FNL, 460 FWL Sec 19

BHL - 17,989 / 7901 MD/TVD, 2273 FNL, 360 FWL Sec 19

Sec 19, T1S, R67W

Sec 20, T1S, R67W

Sec 21, T1S, R67W

<- North(Feet)

Scale 1 cm = 400 ft

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	5932.00	0.00	221.03	5932.00	S 0.00	W 0.00	0.00	-0.00
End of Build	6931.98	30.00	221.03	6886.91	S 193.03	W 167.95	9.84	180.40
End of Hold	7696.62	30.00	221.03	7549.11	S 481.45	W 418.90	0.00	449.95
Target TPZ - ...Sec 20	8403.48	90.00	269.61	7901.00	S 637.48	W 958.56	32.81	998.79
Target Btm Pe...Sec 19	17888.67	90.00	269.61	7901.00	S 701.97	W 10443.53	0.00	10467.09
End of Turn	17891.70	90.00	270.00	7901.00	S 701.98	W 10446.56	42.65	10470.11
T.D. & Target BHL... 19	17988.67	90.00	270.00	7901.00	S 701.97	W 10543.53	0.00	10566.87