



Great Western Operating Company, LLC

Location Colorado
Field Wattenburg
Installation Ottesen
Slot N20 - Ottesen LE 09-366HN
Well Ottesen LE 09-366HN
Wellbore Ottesen LE 09-366HN (PWB)

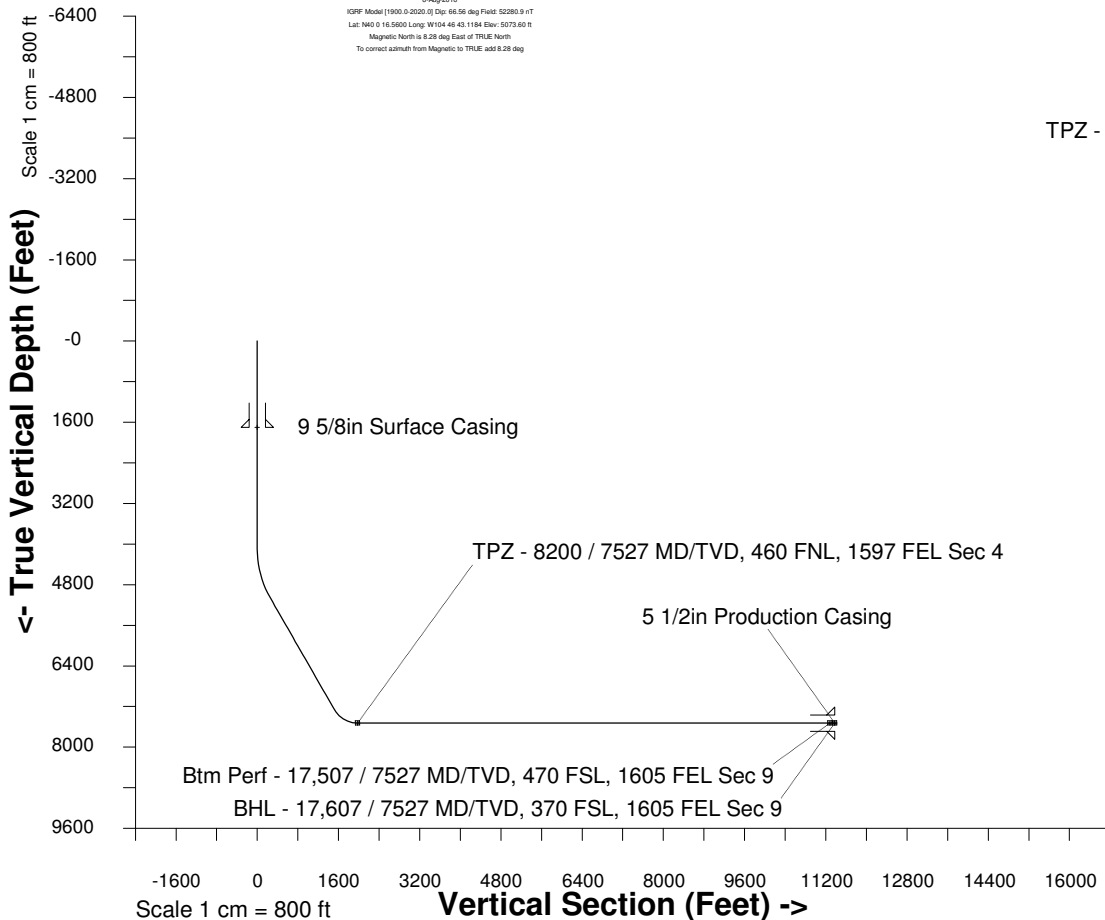
Created by admin
Date plotted 28-Dec-2017
Plot reference is Ottesen LE 09-366HN (PWB).
Ref wellpath is Ottesen LE 09-366HN (PWP#1).
Coordinates are in Feet reference N20 - Ottesen LE 09-366HN.
True Vertical Depths are reference Rig Datum.
Measured Depths are reference Rig Datum.
Rig Datum: Planned Datum #1
Rig Datum to Mean Sea Level: 5093.60 ft.
Plot North is aligned to TRUE North.

Scale 1 cm = 500 ft

East (Feet) ->

-9000 -8000 -7000 -6000 -5000 -4000 -3000 -2000 -1000 -0 1000 2000 3000

9-Aug-2016
IGPP Model [1900.0-2020.0] Dip: 66.56 deg Field: 52280.9 nT
Lat: N40 0 16.5600 Long: W104 46 43.1184 Elev: 5073.60 ft
Magnetic North is 8.28 deg East of TRUE North
To correct azimuth from Magnetic to TRUE, add 8.28 deg



Scale 1 cm = 800 ft
Vertical Section (Feet) ->
Azimuth 178.57 with reference 0.00 N, 0.00 E from N20 - Ottesen LE 09-366HN

S/2 Sec 33, T1N, R66W

TPZ - 8200 / 7527 MD/TVD, 460 FNL, 1597 FEL Sec 4

Sec 04, T1S, R66W

Sec 09, T1S, R66W

<- North(Feet)

1000

0

-1000

-2000

-3000

-4000

-5000

-6000

-7000

-8000

-9000

-10000

-11000

-12000

-13000

-14000

-15000

Scale 1 cm = 500 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	4100.00	0.00	172.03	4100.00	S 0.00	W 0.00	0.00	0.00
End of Build	5099.98	30.00	172.03	5054.91	S 253.39	E 35.49	9.84	254.20
End of Hold	7651.96	30.00	172.03	7265.01	S 1517.02	E 212.48	0.00	1521.86
Target TPZ - ... Sec 4	8200.11	90.00	179.70	7527.00	S 1969.33	E 235.06	36.09	1974.60
Target Btm Pe... Sec 9	17506.66	90.00	179.70	7527.00	S 11275.76	E 284.20	0.00	11279.34
End of Turn	17506.84	90.00	179.68	7527.00	S 11275.93	E 284.20	36.09	11279.51
T.D. & Target BHL...c 9	17606.85	90.00	179.68	7527.00	S 11375.94	E 284.76	0.00	11379.50

Btm Perf - 17,507 / 7527 MD/TVD, 470 FSL, 1605 FEL Sec 9

BHL - 17,607 / 7527 MD/TVD, 370 FSL, 1605 FEL Sec 9