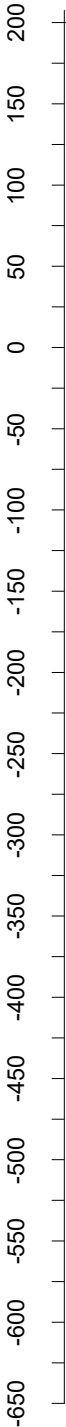


Great Western Operating Company, LLC

Location	Colorado	Slot	N02 - Ottesen LE 09-379HN
Field	Wattenburg	Well	Ottesen LE 09-379HN
Installation	Ottesen	Wellbore	Ottesen LE 09-379HN (AWB)

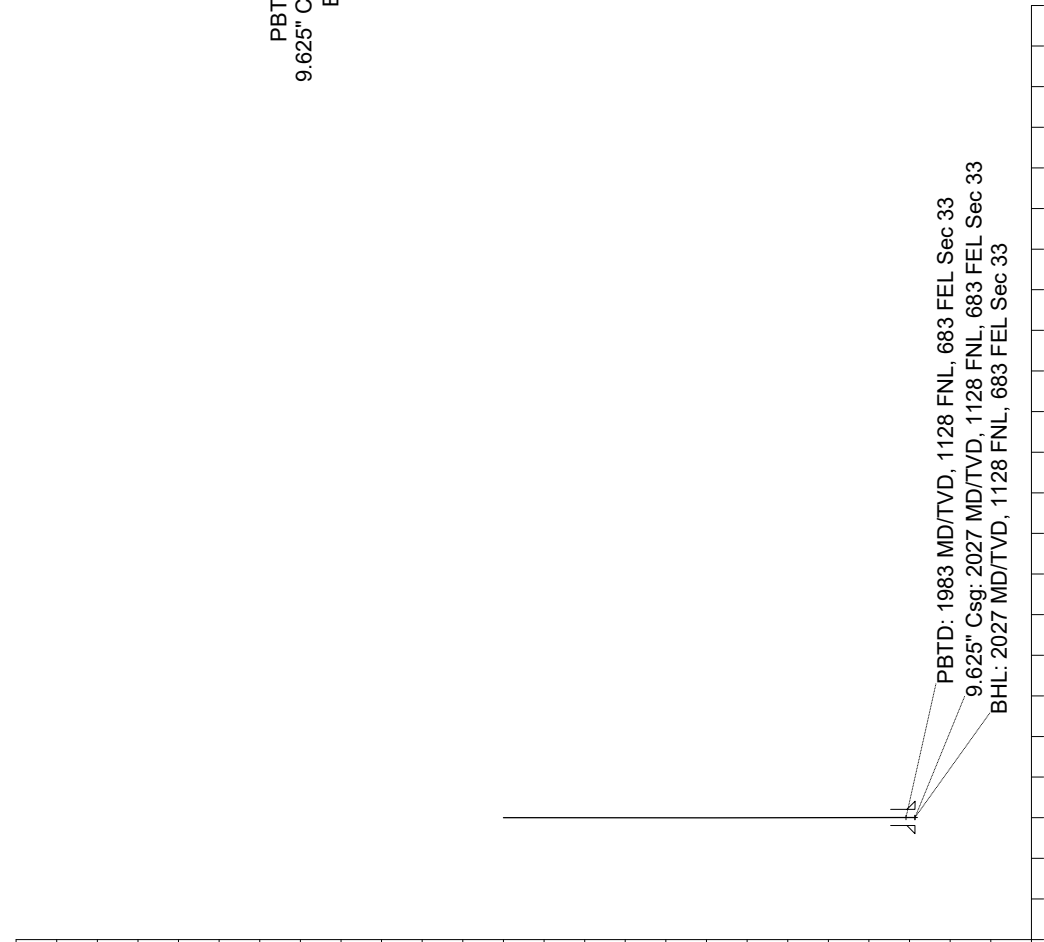
Scale 1 cm = 25 ft

East (Feet) ->



Aug8-2016
IGRF-12 Dip: 66.56 deg Field: 52280.7 nT
Lat: N40 0' 16.500 Long: W104 46 43.1784 Elev: 5076.00 ft
Magnetic North is 6.28 deg East of TRUE North
To correct azimuth from Magnetic to TRUE add 6.28 deg

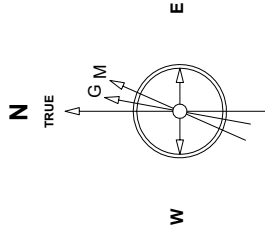
-> True Vertical Depth (Feet)
Scale 1 cm = 200 ft



-400 0 400 800 1200 1600 2000 2400
Scale 1 cm = 200 ft

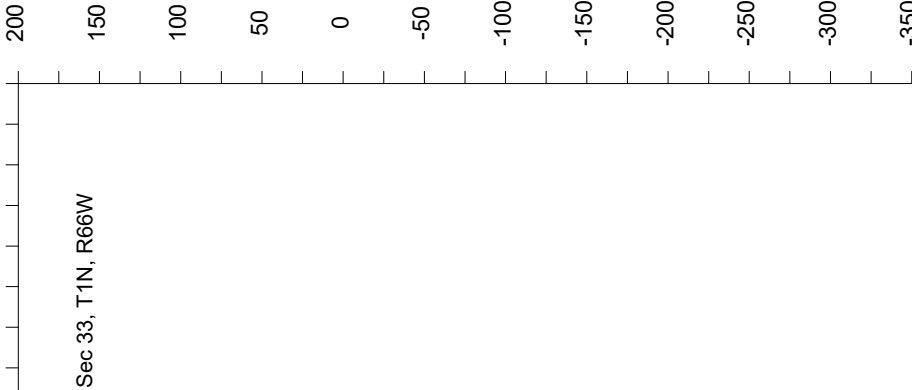
Vertical Section (Feet) ->

Azimuth 3.67 with reference 0.00 N, 0.00 E from N02 - Ottesen LE 09-379HN



<- North(Feet)

Scale 1 cm = 25 ft



Sec 33, T1N, R66W

PBTD: 1983 MD/TVDD, 1128 FNL, 683 FEL Sec 33
9.625" Csg: 2027 MD/TVDD, 1128 FNL, 683 FEL Sec 33
BHL: 2027 MD/TVDD, 1128 FNL, 683 FEL Sec 33

Created by	mmount
Date plotted	23-Apr-2020
Plot reference is Ottesen LE 09-379HN (AWB).	
Ref wellpath is Ottesen LE 09-379HN (AWP#1).	
Coordinates are in Feet reference N02 - Ottesen LE 09-379HN.	
True Vertical Depths are reference Rig Datum.	
Measured Depths are reference Rig Datum.	
Rig Datum: Actual Datum #1	
Rig Datum to Mean Sea Level: 5082.00 ft.	
Plot North is aligned to TRUE North.	

Great Western Operating Co, LLC
 Directional Survey Report
 Wellpath: Ottesen LE 09-379HN
 MDs and TVDs are from Rig Floor 5082.0ft above Mean Sea Level

Wellpath Report

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	DLS [deg/100ft]	Vertical Section[ft]
0.00	0.00	0.00	0.00	0.00	0.00		0.00
84.00	0.40	289.64	84.00	0.10	-0.28	0.48	0.08
148.00	0.26	267.23	148.00	0.17	-0.63	0.29	0.13
210.00	0.22	338.51	210.00	0.27	-0.82	0.45	0.22
300.00	0.26	222.93	300.00	0.28	-1.02	0.45	0.22
390.00	0.18	87.23	390.00	0.14	-1.02	0.45	0.07
480.00	0.35	143.92	480.00	-0.08	-0.71	0.33	-0.12
570.00	0.70	149.89	569.99	-0.77	-0.28	0.39	-0.79
660.00	0.44	297.64	659.99	-1.09	-0.31	1.22	-1.11
749.00	0.26	5.66	748.99	-0.73	-0.59	0.47	-0.77
839.00	0.31	0.74	838.99	-0.28	-0.57	0.06	-0.32
929.00	0.62	7.86	928.98	0.44	-0.50	0.35	0.41
1019.00	0.18	352.39	1018.98	1.07	-0.45	0.50	1.03
1109.00	0.13	128.89	1108.98	1.14	-0.39	0.32	1.11
1198.00	0.53	172.57	1197.98	0.67	-0.25	0.50	0.65
1288.00	0.53	153.41	1287.98	-0.12	-0.01	0.20	-0.12
1378.00	0.13	124.41	1377.98	-0.55	0.26	0.47	-0.53
1468.00	0.44	149.37	1467.97	-0.90	0.52	0.36	-0.87
1558.00	0.35	277.95	1557.97	-1.16	0.42	0.79	-1.13
1648.00	0.53	285.16	1647.97	-1.01	-0.25	0.21	-1.03
1738.00	0.92	345.71	1737.96	-0.20	-0.83	0.89	-0.26
1828.00	0.57	19.90	1827.96	0.92	-0.86	0.61	0.86
1918.00	0.44	97.95	1917.95	1.29	-0.37	0.72	1.26
1969.00	0.18	109.73	1968.95	1.24	-0.10	0.52	1.23
2027.00	0.18	109.73	2026.95	1.17	0.08	0.00	1.18