

Occidental Petroleum

Project: Weld County, CO (UTM-NAD83)
Site: 4N-68W-11 (S&B 5-11HZ Pad)
Well: Bake 11-16HZ
Wellbore: OH
Design: OH



Azimuths to True North
Magnetic North: 7.98°
Magnetic Field
Strength: 51922.3nT
Dip Angle: 66.58°
Date: 3/8/2021
Model: IGRF2020

PROJECT DETAILS: Weld County, CO (UTM-NAD83)

Geodetic System: Universal Transverse Mercator (US Survey Feet)
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Zone 13N (108 W to 102 W)



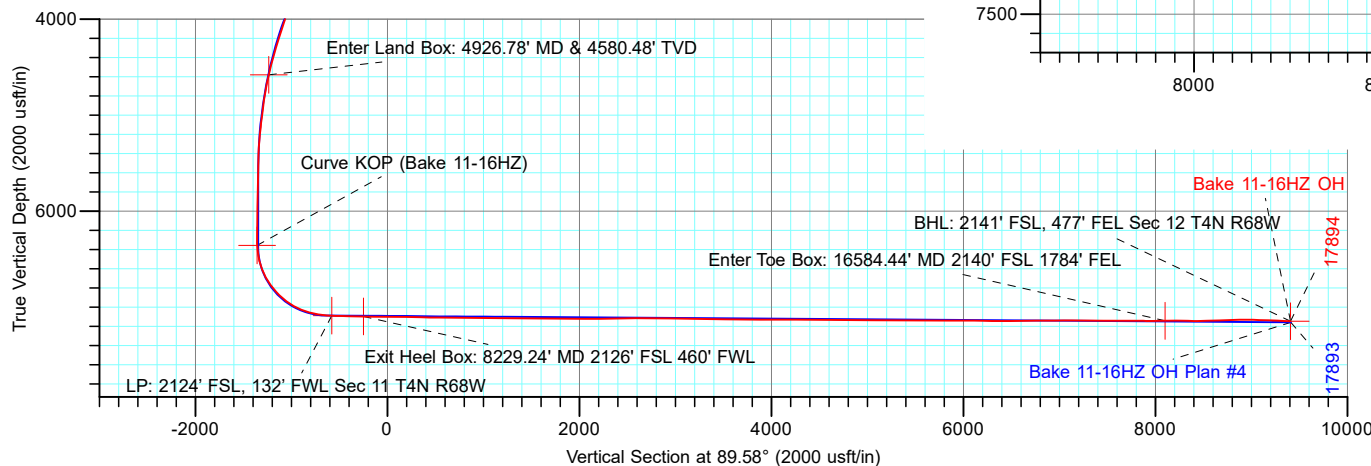
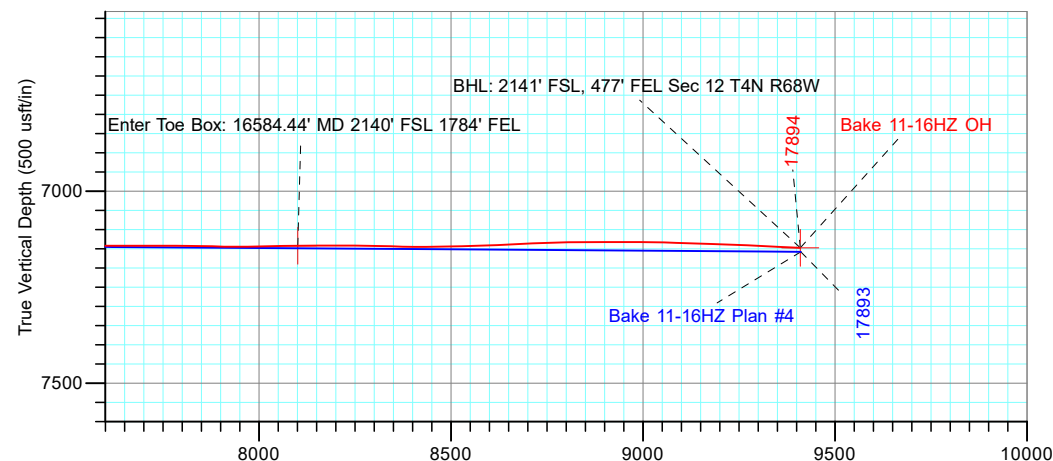
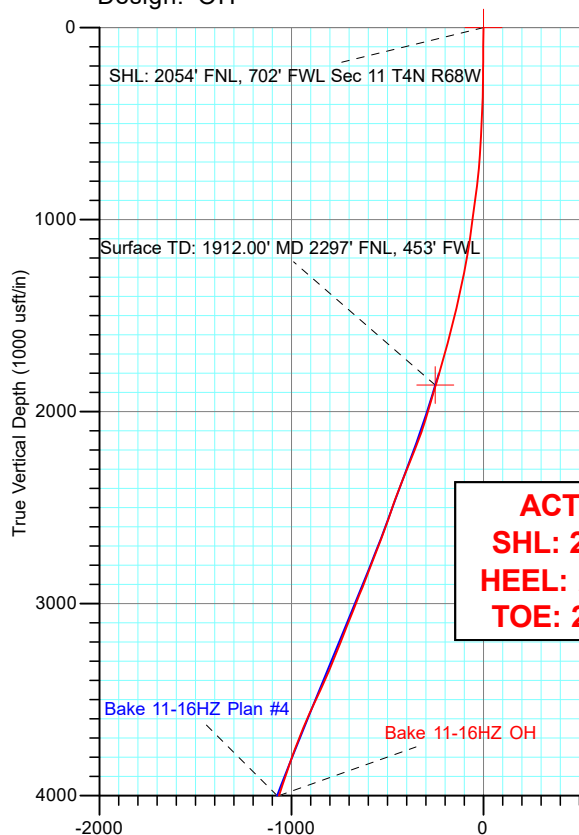
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
BHL: 2141' FSL, 477' FEL Sec 12 T4N R68W	7147.86	-1059.44	9417.86	40.326967	-104.943465
Curve KOP (Bake 11-16HZ)	6357.89	-1156.74	-1347.89	40.326704	-104.982092
Enter Land Box: 4926.78' MD & 4580.48' TVD	4580.48	-1081.40	-1227.98	40.326911	-104.981662
Enter Toe Box: 16584.44' MD 2140' FSL 1784' FEL	7142.06	-1059.59	8109.13	40.326968	-104.948161
Exit Heel Box: 8229.24' MD 2126' FSL 460' FWL	7097.93	-1153.65	-241.53	40.326713	-104.978123
LP: 2124' FSL, 132' FWL Sec 11 T4N R68W	7089.60	-1158.56	-569.60	40.326700	-104.979300
SHL: 2054' FNL, 702' FWL Sec 11 T4N R68W	0.00	0.00	0.00	40.329881	-104.977256
Surface TD: 1912.00' MD 2297' FNL, 453' FWL	1862.49	-243.39	-248.57	40.329213	-104.978148

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Annotation
1912.00	21.38	224.87	1862.89	-242.91	-247.69	-249.47	Surface TD: 2297' FNL, 453' FWL (40.329213, -104.978148)
4926.78	17.23	229.56	4580.48	-1081.40	-1227.98	-1235.88	Enter Land Box
6717.00	2.04	63.57	6357.89	-1156.74	-1347.89	-1356.33	KOP
7901.00	87.85	90.46	7089.60	-1158.56	-569.60	-578.08	LP: 2124' FSL, 132' FWL (40.326700, -104.979300)
8229.24	88.92	89.64	7097.93	-1153.65	-241.53	-249.98	Exit Heel Box
16584.44	90.89	88.77	7142.06	-1059.59	8109.13	8101.15	Enter Toe Box
17894.00	87.38	87.92	7147.86	-1059.44	9417.86	9409.84	BHL: 2141' FSL, 477' FEL (40.326967, -104.943465)

ACTUAL LINE CALLS
SHL: 2054' FNL, 702' FWL
HEEL: 2124' FSL, 132' FWL
TOE: 2141' FSL, 477' FEL



TOTAL DIRECTIONAL SERVICES LLC
671 Academy Ct, Windsor, CO 80550
Phone: (970) 460-9402

Design: OH (Bake 11-16HZ/OH)
4N-68W-11 (S&B 5-11HZ Pad)
Created By: Dustin Ault Date: 10/58, July 06 2021
Date: _____
Approved: _____ Date: _____