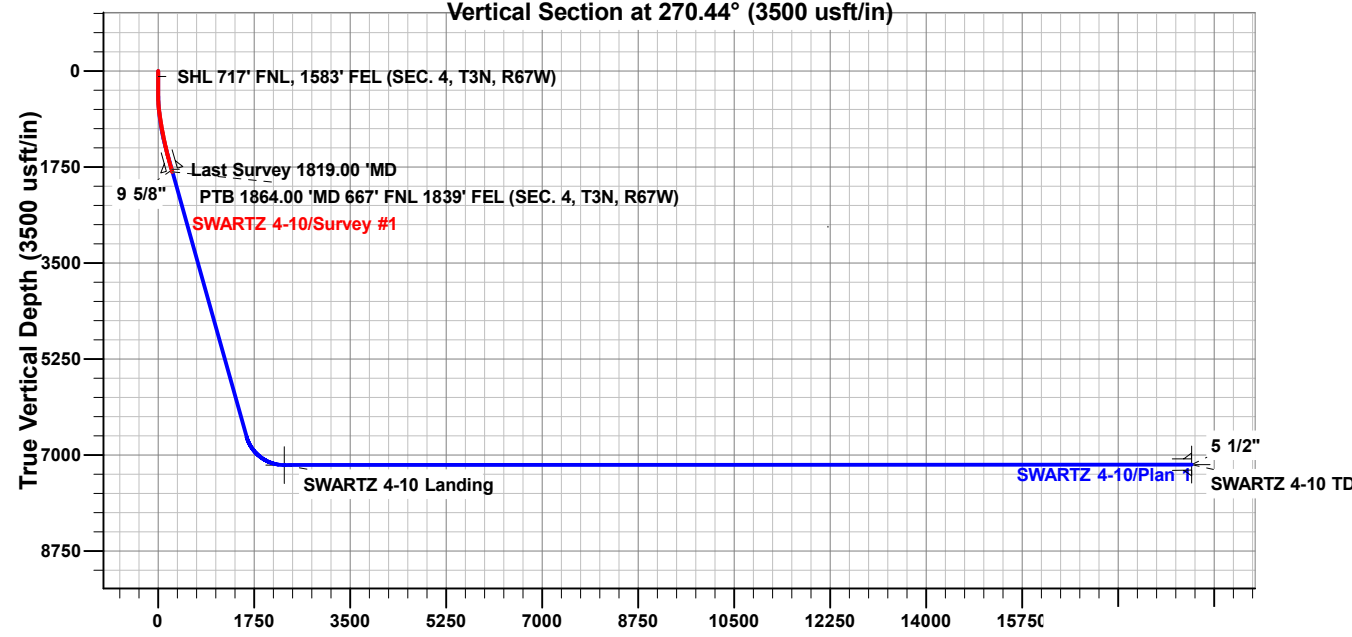


Vertical Section at 270.44° (3500 usft/in)



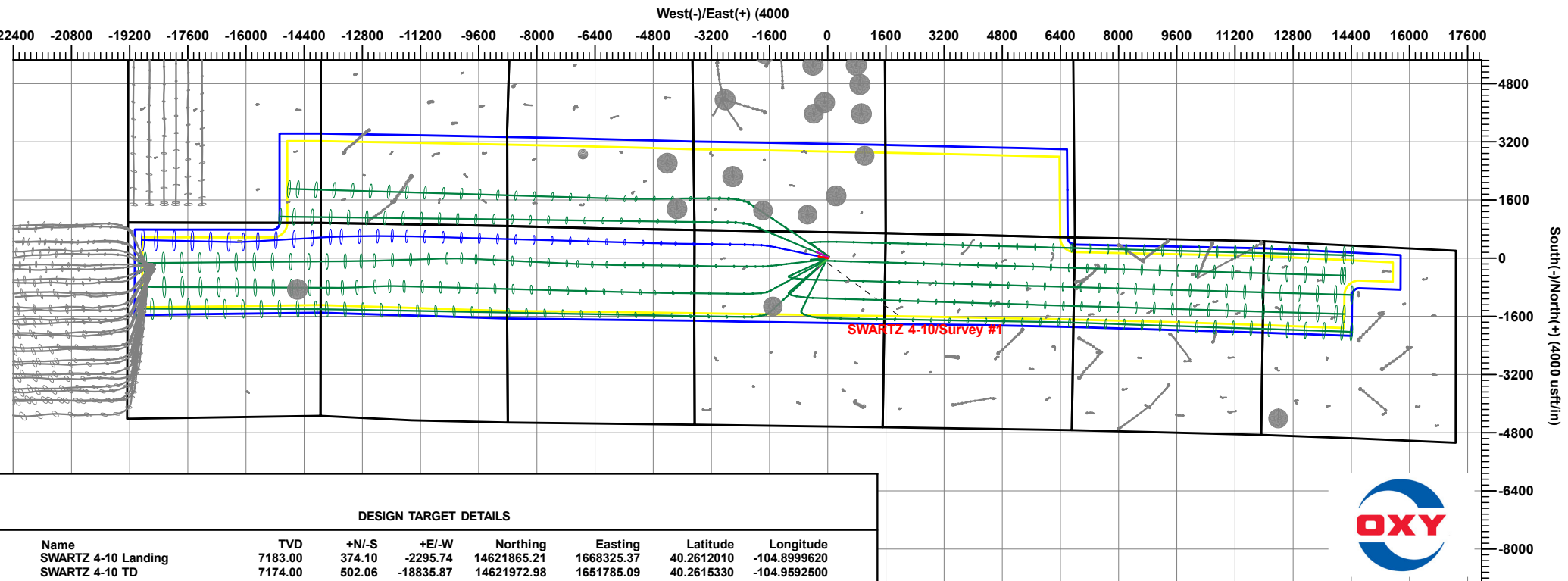
FORMATION TOP DETAILS

TVDPPath	MDPath	Formation
705.00	705.43	Fox Hills
3596.00	3696.35	Parkman
4078.00	4197.55	Sussex
6839.00	7078.35	Sharon Springs
6869.00	7114.06	Niobrara
7021.00	7320.89	Nio B
7053.00	7373.89	Nio C
7155.00	7611.48	Fort Hayes
7176.00	7712.26	Codell

ANNOTATIONS

Project: Weld County, CO (UTM-NAD83)  
 Site: 3N-67W-04 ( Swartz Pad )  
 Well: SWARTZ 4-10  
 Wellbore: OH  
 Design: OH

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
100.00	0.54	150.02	100.00	-0.62	0.32	-0.32	0.63	SHL 717' FNL, 1583' FEL (SEC. 4, T3N, R67W)
1819.00	16.26	284.19	1792.28	50.90	-242.65	243.04	254.07	Last Survey 1819.00 'MD
1864.00	16.26	284.19	1835.48	53.99	-254.87	255.28	266.67	PTB 1864.00 'MD 667' FNL 1839' FEL (SEC. 4, T3N, R67W)



DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
SWARTZ 4-10 Landing	7183.00	374.10	-2295.74	14621865.21	1668325.37	40.2612010	-104.8999620
SWARTZ 4-10 TD	7174.00	502.06	-18835.87	14621972.98	1651785.09	40.2615330	-104.9592500



# Occidental Petroleum

Weld County, CO (UTM-NAD83)

3N-67W-04 ( Swartz Pad )

SWARTZ 4-10

OH

OH



## Standard Survey Report

11 January, 2024

*Total Report Version 1.60*

*COMPASS 5000.16 Build 97*

## Survey Report

<b>Company:</b> Occidental Petroleum	<b>Local Co-ordinate Reference:</b> Well SWARTZ 4-10
<b>Project:</b> Weld County, CO (UTM-NAD83)	<b>TVD Reference:</b> 4825' GL + 15' KB @ 4840.00usft
<b>Site:</b> 3N-67W-04 ( Swartz Pad )	<b>MD Reference:</b> 4825' GL + 15' KB @ 4840.00usft
<b>Well:</b> SWARTZ 4-10	<b>North Reference:</b> True
<b>Wellbore:</b> OH	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Design:</b> OH	<b>Database:</b> EDM 5000.1 Single User Db

<b>Project</b> Weld County, CO (UTM-NAD83)	
<b>Map System:</b> Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b> Ground Level
<b>Geo Datum:</b> North American Datum 1983	
<b>Map Zone:</b> Zone 13N (108 W to 102 W)	

<b>Site</b> 3N-67W-04 ( Swartz Pad )	
<b>Site Position:</b>	<b>Northing:</b> 14,621,540.94 usft <b>Latitude:</b> 40.2603030
<b>From:</b> Lat/Long	<b>Easting:</b> 1,670,658.88 usft <b>Longitude:</b> -104.8915990
<b>Position Uncertainty:</b> 0.00 usft	<b>Slot Radius:</b> 13-3/16 "

<b>Well</b> SWARTZ 4-10	
<b>Well Position</b>	<b>+N/-S</b> 0.00 usft <b>Northing:</b> 14,621,493.92 usft <b>Latitude:</b> 40.2601740
	<b>+E/-W</b> 0.00 usft <b>Easting:</b> 1,670,621.56 usft <b>Longitude:</b> -104.8917330
<b>Position Uncertainty</b> 3.28 usft	<b>Wellhead Elevation:</b> usft <b>Ground Level:</b> 4,825.00 usft
<b>Grid Convergence:</b> 0.07 °	

<b>Wellbore</b> OH	
<b>Magnetics</b>	<b>Model Name</b> HDGM2023 <b>Sample Date</b> 9/25/2023 <b>Declination (°)</b> 7.90 <b>Dip Angle (°)</b> 66.40 <b>Field Strength (nT)</b> 51,647.70000000

<b>Design</b> OH	
<b>Audit Notes:</b>	
<b>Version:</b> 1.0	<b>Phase:</b> ACTUAL <b>Tie On Depth:</b> 0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b> 0.00 <b>+N/-S (usft)</b> 0.00 <b>+E/-W (usft)</b> 0.00 <b>Direction (°)</b> 270.44

<b>Survey Program</b>	<b>Date</b> 1/11/2024
<b>From (usft)</b> 80.00	<b>To (usft)</b> 1,864.00
<b>Survey (Wellbore)</b> Survey #1 (OH)	<b>Tool Name</b> APC_ISCWSA REV 2 MWD+ Fixed:v2:crustal field declination

Survey													
Measured	Vertical			Local Coordinates		Map Coordinates		Geo Coordinates		Vertical	Dogleg	Build	Turn
Depth (usft)	INC (°)	AZI (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude (°)	Longitude (°)	Section (usft)	Rate (°/100usft)	Rate (°/100usft)	Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	14,621,493.92	1,670,621.56	40.2601740	-104.8917330	0.00	0.00	0.00	0.00
80.00	0.69	153.21	80.00	-0.43	0.22	14,621,493.49	1,670,621.78	40.2601728	-104.8917322	-0.22	0.86	0.86	0.00
100.00	0.54	150.02	100.00	-0.62	0.32	14,621,493.30	1,670,621.88	40.2601723	-104.8917318	-0.32	0.75	-0.73	-15.95
<b>SHL 717' FNL, 1583' FEL (SEC. 4, T3N, R67W)</b>													
172.00	0.14	69.22	172.00	-0.88	0.57	14,621,493.03	1,670,622.13	40.2601716	-104.8917309	-0.58	0.75	-0.56	-112.22
264.00	0.50	47.04	263.99	-0.57	0.97	14,621,493.35	1,670,622.53	40.2601725	-104.8917295	-0.98	0.41	0.39	-24.11

## Survey Report

<b>Company:</b> Occidental Petroleum	<b>Local Co-ordinate Reference:</b> Well SWARTZ 4-10
<b>Project:</b> Weld County, CO (UTM-NAD83)	<b>TVD Reference:</b> 4825' GL + 15' KB @ 4840.00usft
<b>Site:</b> 3N-67W-04 ( Swartz Pad )	<b>MD Reference:</b> 4825' GL + 15' KB @ 4840.00usft
<b>Well:</b> SWARTZ 4-10	<b>North Reference:</b> True
<b>Wellbore:</b> OH	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Design:</b> OH	<b>Database:</b> EDM 5000.1 Single User Db

### Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates (usft)		Map Coordinates (usft)		Geo Coordinates (°)		Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
				+N/-S	+E/-W	Northing	Easting	Latitude	Longitude				
354.00	0.65	53.19	353.99	0.00	1.67	14,621,493.92	1,670,623.23	40.2601740	-104.8917270	-1.67	0.18	0.17	6.83
444.00	0.69	313.41	443.99	0.68	1.68	14,621,494.60	1,670,623.24	40.2601759	-104.8917269	-1.68	1.14	0.04	-110.87
533.00	2.93	297.67	532.94	2.11	-0.72	14,621,496.02	1,670,620.83	40.2601798	-104.8917356	0.74	2.55	2.52	-17.69
623.00	4.08	279.57	622.77	3.71	-5.92	14,621,497.62	1,670,615.64	40.2601842	-104.8917542	5.95	1.76	1.28	-20.11
705.62	7.00	270.18	705.00	4.21	-13.85	14,621,498.11	1,670,607.70	40.2601856	-104.8917826	13.88	3.69	3.53	-11.37
<b>Fox Hills</b>													
712.00	7.23	269.77	711.33	4.21	-14.64	14,621,498.11	1,670,606.91	40.2601856	-104.8917855	14.67	3.69	3.60	-6.40
802.00	8.84	273.92	800.44	4.66	-27.21	14,621,498.55	1,670,594.35	40.2601868	-104.8918305	27.24	1.90	1.79	4.61
891.00	9.20	282.51	888.34	6.67	-40.97	14,621,500.54	1,670,580.58	40.2601923	-104.8918798	41.02	1.56	0.40	9.65
981.00	9.54	286.04	977.14	10.29	-55.17	14,621,504.14	1,670,566.38	40.2602023	-104.8919307	55.24	0.74	0.38	3.92
1,070.00	10.44	288.11	1,064.79	14.83	-69.92	14,621,508.67	1,670,551.62	40.2602148	-104.8919836	70.03	1.09	1.01	2.33
1,159.00	12.01	285.63	1,152.09	19.83	-86.50	14,621,513.65	1,670,535.03	40.2602285	-104.8920430	86.65	1.85	1.76	-2.79
1,249.00	12.18	283.16	1,240.09	24.52	-104.76	14,621,518.31	1,670,516.77	40.2602414	-104.8921085	104.95	0.61	0.19	-2.74
1,338.00	12.02	283.67	1,327.11	28.85	-122.91	14,621,522.61	1,670,498.61	40.2602532	-104.8921735	123.13	0.22	-0.18	0.57
1,428.00	13.35	276.79	1,414.92	32.29	-142.34	14,621,526.03	1,670,479.18	40.2602627	-104.8922432	142.58	2.23	1.48	-7.64
1,518.00	14.02	276.73	1,502.37	34.80	-163.48	14,621,528.51	1,670,458.04	40.2602696	-104.8923190	163.74	0.74	0.74	-0.07
1,607.00	15.27	281.23	1,588.48	38.34	-185.68	14,621,532.03	1,670,435.83	40.2602793	-104.8923985	185.97	1.90	1.40	5.06
1,697.00	15.76	281.54	1,675.20	43.10	-209.28	14,621,536.76	1,670,412.22	40.2602924	-104.8924831	209.61	0.55	0.54	0.34
1,786.00	16.74	284.01	1,760.64	48.62	-233.56	14,621,542.25	1,670,387.94	40.2603075	-104.8925702	233.93	1.35	1.10	2.78
1,819.00	16.26	284.19	1,792.28	50.90	-242.65	14,621,544.52	1,670,378.84	40.2603138	-104.8926027	243.04	1.46	-1.45	0.55
<b>Last Survey 1819.00 'MD</b>													
1,864.00	16.26	284.19	1,835.48	53.99	-254.87	14,621,547.60	1,670,366.62	40.2603223	-104.8926465	255.28	0.00	0.00	0.00
<b>PTB 1864.00 'MD 667' FNL 1839' FEL (SEC. 4, T3N, R67W)</b>													

### Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
705.62	705.00	Fox Hills			

### Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates (usft)		Comment
		+N/-S	+E/-W	
100.00	100.00	-0.62	0.32	SHL 717' FNL, 1583' FEL (SEC. 4, T3N, R67W)
1,819.00	1,792.28	50.90	-242.65	Last Survey 1819.00 'MD
1,864.00	1,835.48	53.99	-254.87	PTB 1864.00 'MD 667' FNL 1839' FEL (SEC. 4, T3N, R67W)

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_