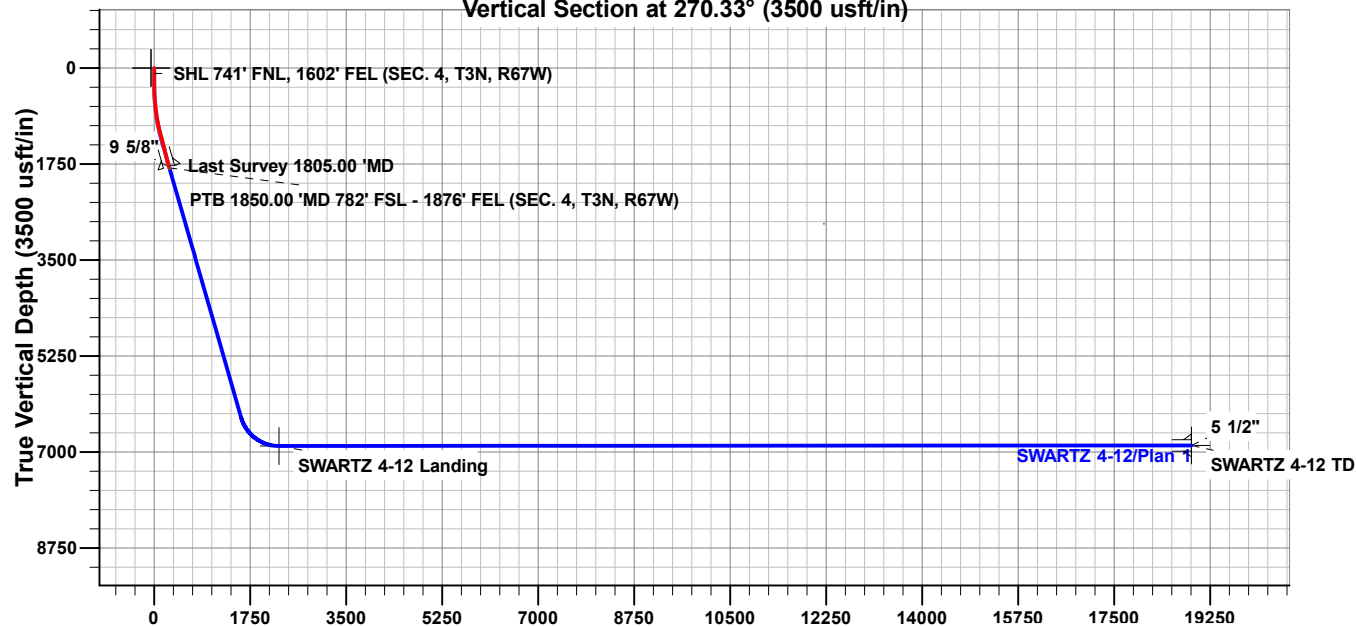


Vertical Section at 270.33° (3500 usft/in)



FORMATION TOP DETAILS

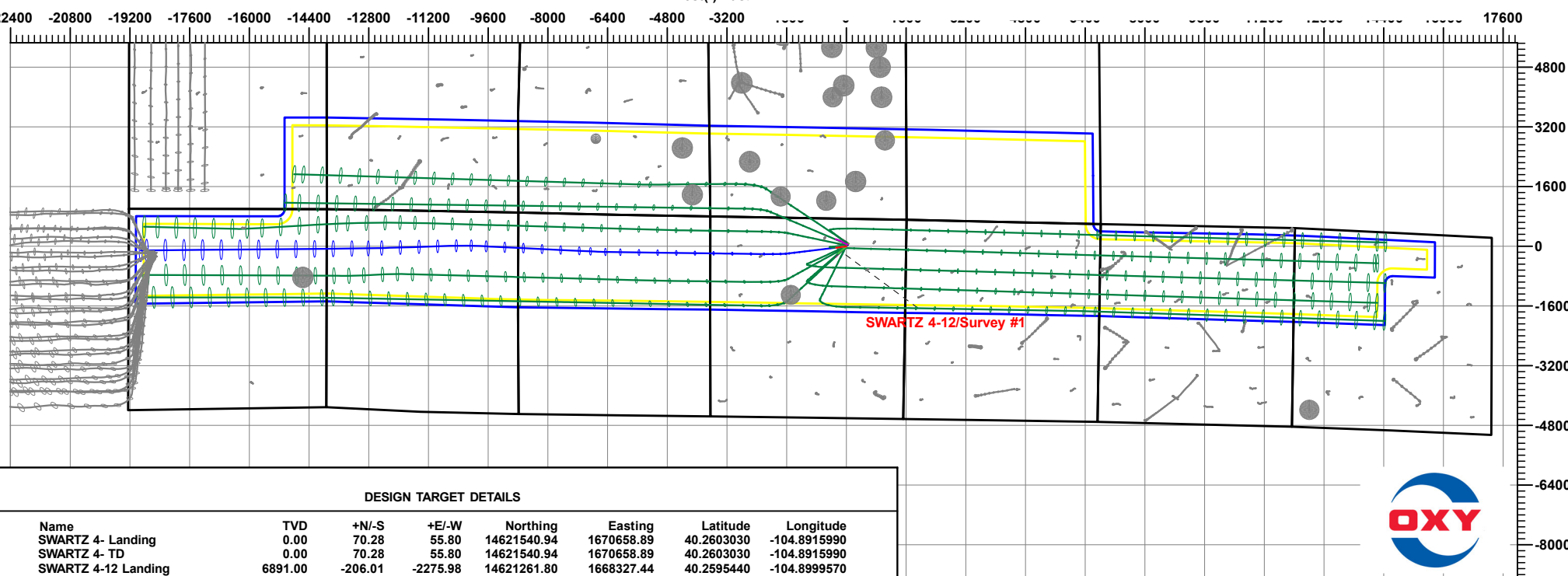
TVDPPath	MDPath	Formation
705.00	705.71	Fox Hills
3596.00	3701.56	Parkman
4078.00	4203.36	Sussex
6839.00	7242.54	Sharon Springs
6869.00	7339.20	Niobrara

ANNOTATIONS

Project:	Weld County, CO (UTM-NAD83)	MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
Site:	3N-67W-04 (Swartz Pad)	100.00	0.24	93.59	100.00	-0.09	0.18	-0.18	0.27	SHL 741' FNL, 1602' FEL (SEC. 4, T3N, R67W)
Well:	SWARTZ 4-12	805.00	16.82	263.44	1775.31	-35.74	-263.12	262.91	271.49	Last Survey 1805.00 'MD
Wellbore:	OH	850.00	16.82	263.44	1818.39	-37.23	-276.06	275.84	284.51	PTB 1850.00 'MD 782' FSL - 1876' FEL (SEC. 4, T3N, R67W)
Design:	OH									

West(-)/East

South(-)/North(+) (4000 usft/in)



DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
SWARTZ 4- Landing	0.00	70.28	55.80	14621540.94	1670658.89	40.2603030	-104.8915990
SWARTZ 4- TD	0.00	70.28	55.80	14621540.94	1670658.89	40.2603030	-104.8915990
SWARTZ 4-12 Landing	6891.00	-206.01	-2275.98	14621261.80	1668327.44	40.2595440	-104.8999570
SWARTZ 4-12 TD	6879.00	-108.94	-18911.13	14621338.57	1651692.20	40.2597910	-104.9595840



Occidental Petroleum

Weld County, CO (UTM-NAD83)

3N-67W-04 (Swartz Pad)

SWARTZ 4-12

OH

OH



Standard Survey Report

11 January, 2024

Total Report Version 1.60

COMPASS 5000.16 Build 97

Survey Report

Company:	Occidental Petroleum	Local Co-ordinate Reference:	Well SWARTZ 4-12
Project:	Weld County, CO (UTM-NAD83)	TVD Reference:	4825' GL + 15' KB @ 4840.00usft
Site:	3N-67W-04 (Swartz Pad)	MD Reference:	4825' GL + 15' KB @ 4840.00usft
Well:	SWARTZ 4-12	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

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

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

Well	SWARTZ 4-12		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	3.28 usft	Wellhead Elevation:	usft
Grid Convergence:	0.07 °		
		Latitude:	40.2601100
		Longitude:	-104.8917990
		Ground Level:	4,825.00 usft

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

Design	OH		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
Vertical Section:	Depth From (TVD)	+N/-S	Tie On Depth:
	(usft)	(usft)	
	0.00	0.00	0.00
		Direction	(°)
		270.33	

Survey Program	Date	1/11/2024	
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
80.00	1,850.00	Survey #1 (OH)	APC_ISCWSA REV 2 MWD+ Fixed:v2:crustal field declination

Survey													
Measured	Vertical	Local Coordinates		Map Coordinates		Geo Coordinates		Vertical	Dogleg	Build	Turn		
Depth	INC	AZI	Depth	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Section	Rate	Rate	Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(°)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	14,621,470.59	1,670,603.17	40.2601100	-104.8917990	0.00	0.00	0.00	0.00
80.00	0.18	121.94	80.00	-0.07	0.11	14,621,470.52	1,670,603.28	40.2601098	-104.8917986	-0.11	0.23	0.23	0.00
100.00	0.24	93.59	100.00	-0.09	0.18	14,621,470.50	1,670,603.35	40.2601098	-104.8917983	-0.18	0.59	0.30	-141.76
SHL 741' FNL, 1602' FEL (SEC. 4, T3N, R67W)													
172.00	0.62	63.83	172.00	0.08	0.68	14,621,470.67	1,670,603.85	40.2601102	-104.8917966	-0.68	0.59	0.53	-41.33
264.00	0.69	85.74	263.99	0.34	1.68	14,621,470.93	1,670,604.85	40.2601110	-104.8917930	-1.67	0.28	0.08	23.82

Survey Report

Company:	Occidental Petroleum	Local Co-ordinate Reference:	Well SWARTZ 4-12
Project:	Weld County, CO (UTM-NAD83)	TVD Reference:	4825' GL + 15' KB @ 4840.00usft
Site:	3N-67W-04 (Swartz Pad)	MD Reference:	4825' GL + 15' KB @ 4840.00usft
Well:	SWARTZ 4-12	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Map Coordinates Northing (usft)	Easting (usft)	Geo Coordinates Latitude (°)	Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
354.00	0.85	226.40	353.99	-0.08	1.73	14,621,470.51	1,670,604.91	40.2601098	-104.8917928	-1.73	1.61	0.18	156.29
444.00	4.20	252.96	443.89	-1.51	-1.90	14,621,469.08	1,670,601.27	40.2601059	-104.8918058	1.89	3.85	3.72	29.51
533.00	4.47	251.77	532.64	-3.55	-8.31	14,621,467.03	1,670,594.87	40.2601003	-104.8918288	8.29	0.32	0.30	-1.34
623.00	4.79	250.51	622.34	-5.90	-15.19	14,621,464.67	1,670,587.99	40.2600938	-104.8918534	15.15	0.37	0.36	-1.40
706.01	5.80	256.04	705.00	-8.07	-22.52	14,621,462.49	1,670,580.66	40.2600879	-104.8918797	22.48	1.36	1.21	6.66
Fox Hills													
712.00	5.87	256.36	710.96	-8.21	-23.11	14,621,462.35	1,670,580.07	40.2600875	-104.8918818	23.07	1.36	1.24	5.43
802.00	7.78	271.93	800.32	-9.09	-33.68	14,621,461.46	1,670,569.51	40.2600851	-104.8919197	33.62	2.94	2.12	17.30
891.00	8.44	273.99	888.43	-8.44	-46.21	14,621,462.10	1,670,556.97	40.2600869	-104.8919646	46.16	0.81	0.74	2.31
981.00	10.06	261.74	977.27	-9.11	-60.58	14,621,461.41	1,670,542.60	40.2600850	-104.8920161	60.53	2.82	1.80	-13.61
1,070.00	13.37	264.03	1,064.40	-11.29	-78.51	14,621,459.20	1,670,524.67	40.2600790	-104.8920804	78.45	3.75	3.72	2.57
1,159.00	15.17	267.22	1,150.65	-12.93	-100.38	14,621,457.54	1,670,502.81	40.2600745	-104.8921588	100.31	2.21	2.02	3.58
1,249.00	14.75	265.92	1,237.60	-14.32	-123.57	14,621,456.12	1,670,479.62	40.2600707	-104.8922419	123.49	0.60	-0.47	-1.44
1,338.00	15.45	259.81	1,323.53	-17.22	-146.54	14,621,453.19	1,670,456.65	40.2600627	-104.8923242	146.44	1.95	0.79	-6.87
1,428.00	14.26	259.31	1,410.52	-21.40	-169.23	14,621,448.99	1,670,433.97	40.2600513	-104.8924056	169.11	1.33	-1.32	-0.56
1,518.00	14.25	258.94	1,497.75	-25.58	-191.00	14,621,444.78	1,670,412.21	40.2600398	-104.8924836	190.85	0.10	-0.01	-0.41
1,607.00	13.79	261.24	1,584.10	-29.29	-212.23	14,621,441.04	1,670,390.98	40.2600296	-104.8925597	212.06	0.81	-0.52	2.58
1,697.00	14.48	263.39	1,671.38	-32.22	-234.01	14,621,438.08	1,670,369.20	40.2600215	-104.8926378	233.82	0.96	0.77	2.39
1,786.00	16.62	262.84	1,757.12	-35.09	-257.69	14,621,435.19	1,670,345.52	40.2600137	-104.8927227	257.49	2.41	2.40	-0.62
1,805.00	16.82	263.44	1,775.31	-35.74	-263.12	14,621,434.53	1,670,340.10	40.2600119	-104.8927421	262.91	1.39	1.05	3.16
Last Survey 1805.00 'MD													
1,850.00	16.82	263.44	1,818.39	-37.23	-276.06	14,621,433.02	1,670,327.16	40.2600078	-104.8927885	275.84	0.00	0.00	0.00
PTB 1850.00 'MD 782' FSL - 1876' FEL (SEC. 4, T3N, R67W)													

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
706.01	705.00	Fox Hills			

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
100.00	100.00	-0.09	0.18	SHL 741' FNL, 1602' FEL (SEC. 4, T3N, R67W)
1,805.00	1,775.31	-35.74	-263.12	Last Survey 1805.00 'MD
1,850.00	1,818.39	-37.23	-276.06	PTB 1850.00 'MD 782' FSL - 1876' FEL (SEC. 4, T3N, R67W)

Checked By: _____ Approved By: _____ Date: _____