

Occidental Petroleum

Weld County, CO (UTM-NAD83)

Camenisch 10-33HZ Pad

Camenisch 33-2HZ

OH

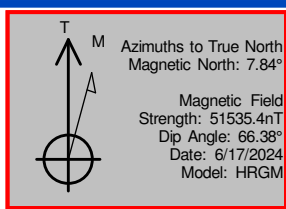
Design: OH

Standard Survey Report

02 July, 2024



Project: Weld County, CO (UTM-NAD83)
 Site: Camenisch 10-33HZ Pad
 Well: Camenisch 33-2HZ
 Wellbore: OH
 Design: OH
 Lat: 40.268723
 Long: -104.893690
 GL: 4870.00
 KB: PD 562 @ 4896.00ustf



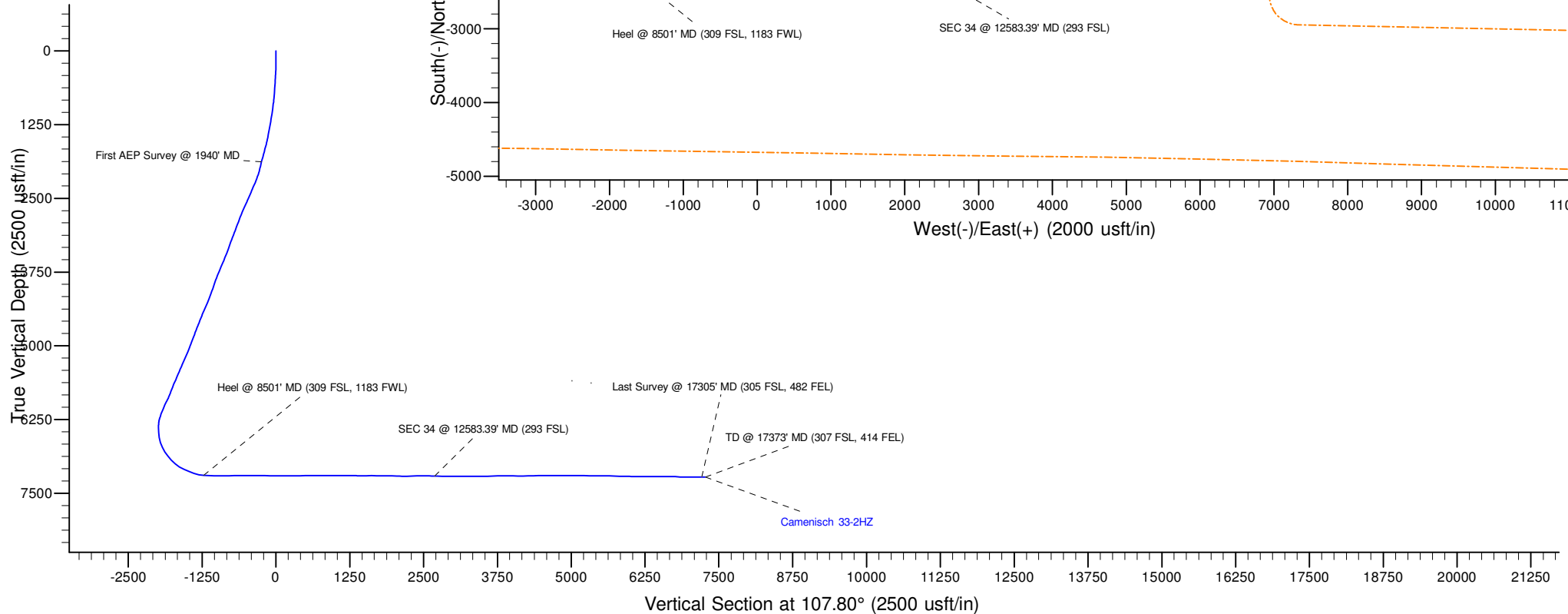
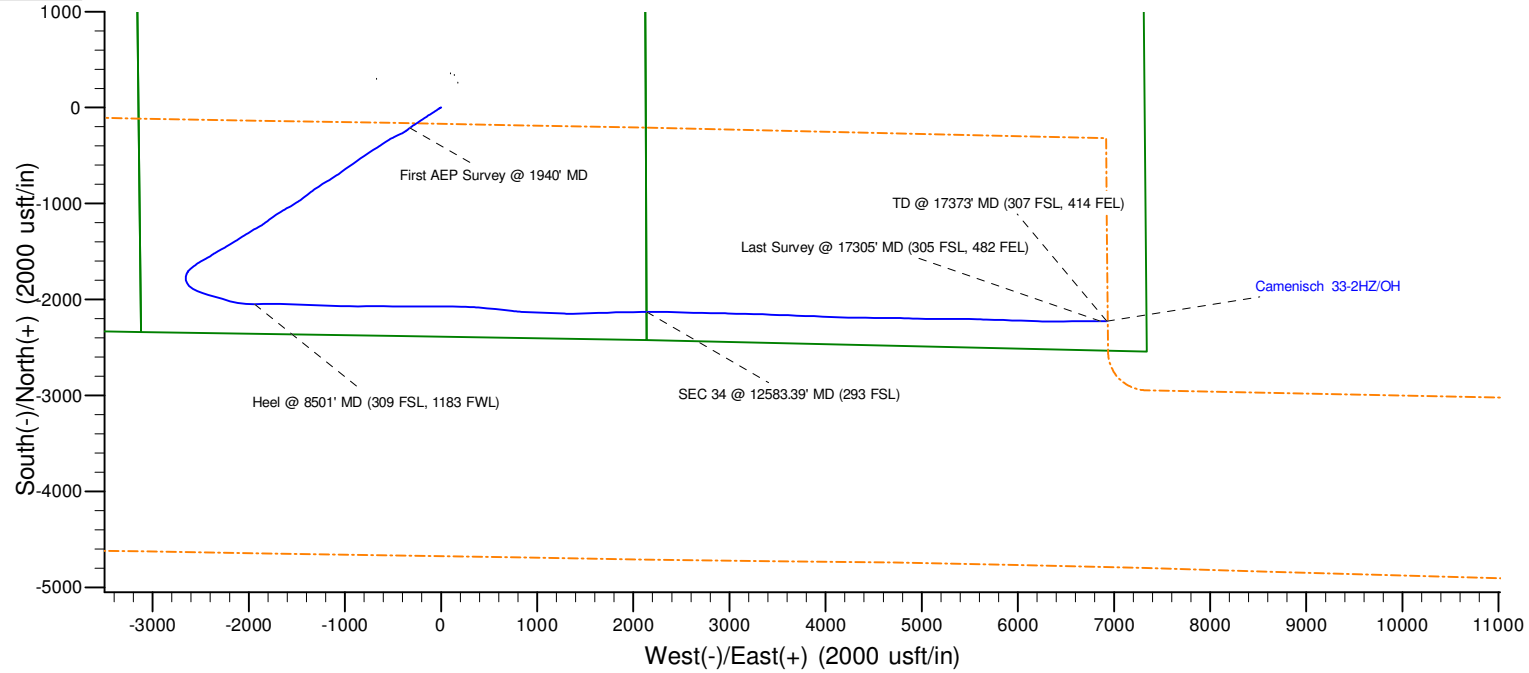
WELL DETAILS: Camenisch 33-2HZ

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	14624606.44	1670071.85	40.268723	-104.893690

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
1940.00	23.22	233.23	1882.48	-210.59	-323.89	-243.99	387.41	First AEP Survey @ 1940' MD
8501.00	88.37	88.09	7197.16	-2046.77	-1939.00	-1220.33	4025.08	Heel @ 8501' MD (309 FSL, 1183 FWL)
12583.39	89.13	89.67	7208.50	-2128.60	2139.06	2687.46	8106.84	SEC 34 @ 12583.39' MD (293 FSL)
17305.00	89.04	89.82	7225.63	-2224.51	6858.37	7210.08	12827.75	Last Survey @ 17305' MD (305 FSL, 482 FEL)
17373.00	89.04	89.82	7226.77	-2224.30	6926.36	7274.75	12895.74	TD @ 17373' MD (307 FSL, 414 FEL)

SHL: 2388' FSL, 2132' FEL - Sec 33-T4N-R67W
 Heel: 309' FSL, 1183' FWL - Sec 33-T4N-R67W
 BHL: 307' FNL, 414' FEL - Sec 34-T4N-R67W



Survey Report

Company: Occidental Petroleum	Local Co-ordinate Reference: Well Camenisch 33-2HZ
Project: Weld County, CO (UTM-NAD83)	TVD Reference: PD 562 @ 4896.00usft
Site: Camenisch 10-33HZ Pad	MD Reference: PD 562 @ 4896.00usft
Well: Camenisch 33-2HZ	North Reference: True
Wellbore: OH	Survey Calculation Method: Minimum Curvature
Design: OH	Database: Fhartmann

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 Camenisch 10-33HZ Pad		
Site Position:	Northing: 14,624,606.43 usft	Latitude: 40.268723
From: Lat/Long	Easting: 1,670,071.57 usft	Longitude: -104.893691
Position Uncertainty: 0.00 usft	Slot Radius: 13-3/16 "	

Well Camenisch 33-2HZ			
Well Position	+N/-S 0.00 usft	Northing: 14,624,606.43 usft	Latitude: 40.268723
	+E/-W 0.00 usft	Easting: 1,670,071.85 usft	Longitude: -104.893690
Position Uncertainty	2.00 usft	Wellhead Elevation: usft	Ground Level: 4,870.00 usft
Grid Convergence:	0.07 °		

Wellbore OH					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HRGM	6/17/2024	7.84	66.38	51,535.43671554

Design OH					
Audit Notes:					
Version: 1.0	Phase: ACTUAL	Tie On Depth: 0.00			
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	107.80	

Survey Program		Date 7/2/2024		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
11.00	1,850.00	Surface (OH)	A005Mc_MWD+IFR1_R5	MWD+IFR1
1,940.00	17,373.00	MWD (OH)	A008Mc_MWD+IFR1+MS_R	MWD+IFR1+MSA

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.00	0.00	0.00	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.00	0.51	321.26	90.00	0.27	-0.22	-0.29	0.65	0.65	0.00	
181.00	0.30	256.19	181.00	0.53	-0.70	-0.83	0.52	-0.23	-71.51	
273.00	0.57	231.02	272.99	0.19	-1.29	-1.29	0.35	0.29	-27.36	
364.00	2.45	254.75	363.96	-0.61	-3.52	-3.17	2.13	2.07	26.08	
453.00	4.68	242.80	452.78	-2.77	-8.59	-7.33	2.63	2.51	-13.43	
543.00	5.78	239.19	542.41	-6.77	-15.75	-12.92	1.28	1.22	-4.01	
632.00	7.40	233.15	630.82	-12.50	-24.18	-19.20	1.98	1.82	-6.79	

Survey Report

Company:	Occidental Petroleum	Local Co-ordinate Reference:	Well Camenisch 33-2HZ
Project:	Weld County, CO (UTM-NAD83)	TVD Reference:	PD 562 @ 4896.00usft
Site:	Camenisch 10-33HZ Pad	MD Reference:	PD 562 @ 4896.00usft
Well:	Camenisch 33-2HZ	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Fhartmann

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
721.00	7.97	234.44	719.02	-19.53	-33.79	-26.20	0.67	0.64	1.45	
811.00	8.12	235.53	808.13	-26.75	-44.10	-33.81	0.24	0.17	1.21	
900.00	10.76	236.52	895.92	-34.89	-56.22	-42.86	2.97	2.97	1.11	
990.00	11.50	237.82	984.23	-44.31	-70.82	-53.88	0.87	0.82	1.44	
1,079.00	13.64	237.72	1,071.09	-54.64	-87.20	-66.32	2.40	2.40	-0.11	
1,169.00	14.91	239.21	1,158.31	-66.23	-106.12	-80.79	1.47	1.41	1.66	
1,258.00	16.14	237.95	1,244.06	-78.66	-126.44	-96.34	1.43	1.38	-1.42	
1,348.00	16.94	235.56	1,330.33	-92.71	-147.86	-112.43	1.17	0.89	-2.66	
1,437.00	17.04	235.10	1,415.45	-107.51	-169.25	-128.27	0.19	0.11	-0.52	
1,527.00	19.32	235.90	1,500.95	-123.40	-192.39	-145.45	2.55	2.53	0.89	
1,616.00	21.56	237.06	1,584.34	-140.55	-218.31	-164.88	2.56	2.52	1.30	
1,705.00	21.94	236.02	1,667.01	-158.73	-245.82	-185.52	0.61	0.43	-1.17	
1,795.00	23.68	237.35	1,749.97	-177.88	-274.99	-207.43	2.02	1.93	1.48	
1,850.00	24.51	237.58	1,800.17	-189.96	-293.92	-221.76	1.52	1.51	0.42	
1,940.00	23.22	233.23	1,882.48	-210.59	-323.89	-243.99	2.42	-1.43	-4.83	
First AEP Survey @ 1940' MD										
2,030.00	22.69	230.28	1,965.36	-232.30	-351.46	-263.60	1.41	-0.59	-3.28	
2,120.00	24.63	237.47	2,047.81	-253.49	-380.63	-284.89	3.86	2.16	7.99	
2,209.00	26.43	244.72	2,128.13	-271.92	-414.19	-311.21	4.05	2.02	8.15	
2,299.00	28.11	245.27	2,208.13	-289.35	-451.56	-341.46	1.89	1.87	0.61	
2,388.00	31.01	244.67	2,285.54	-307.93	-491.33	-373.65	3.28	3.26	-0.67	
2,478.00	32.62	237.71	2,362.04	-330.82	-532.81	-406.14	4.45	1.79	-7.73	
2,567.00	34.54	237.02	2,436.18	-357.37	-574.26	-437.49	2.20	2.16	-0.78	
2,657.00	34.14	237.15	2,510.49	-384.96	-616.88	-469.63	0.45	-0.44	0.14	
2,747.00	36.25	238.32	2,584.04	-412.64	-660.74	-502.93	2.46	2.34	1.30	
2,836.00	35.54	236.85	2,656.14	-440.60	-704.79	-536.32	1.25	-0.80	-1.65	
2,926.00	33.98	236.16	2,730.08	-468.91	-747.59	-568.41	1.79	-1.73	-0.77	
3,037.00	32.70	235.58	2,822.81	-503.14	-798.09	-606.03	1.19	-1.15	-0.52	
3,126.00	31.02	234.80	2,898.39	-529.95	-836.66	-634.56	1.94	-1.89	-0.88	
3,216.00	32.15	235.06	2,975.06	-557.03	-875.24	-663.01	1.26	1.26	0.29	
3,305.00	31.47	235.05	3,050.69	-583.90	-913.69	-691.41	0.76	-0.76	-0.01	
3,395.00	33.59	234.64	3,126.57	-611.77	-953.26	-720.56	2.37	2.36	-0.46	
3,484.00	31.93	234.35	3,201.41	-639.73	-992.46	-749.33	1.87	-1.87	-0.33	
3,574.00	30.50	234.17	3,278.38	-666.98	-1,030.32	-777.05	1.59	-1.59	-0.20	
3,663.00	30.92	236.44	3,354.90	-692.84	-1,067.69	-804.72	1.39	0.47	2.55	
3,753.00	31.71	238.38	3,431.79	-718.02	-1,107.10	-834.54	1.42	0.88	2.16	
3,842.00	31.96	236.09	3,507.41	-743.43	-1,146.57	-864.35	1.39	0.28	-2.57	
3,932.00	33.54	239.28	3,583.10	-769.42	-1,187.72	-895.58	2.60	1.76	3.54	
4,022.00	33.76	237.56	3,658.02	-795.54	-1,230.20	-928.04	1.09	0.24	-1.91	
4,111.00	33.37	236.08	3,732.18	-822.46	-1,271.38	-959.02	1.02	-0.44	-1.66	
4,201.00	32.19	235.78	3,807.85	-849.76	-1,311.74	-989.11	1.32	-1.31	-0.33	
4,290.00	33.37	232.71	3,882.68	-877.92	-1,350.82	-1,017.70	2.29	1.33	-3.45	
4,380.00	30.67	232.13	3,958.98	-907.02	-1,388.64	-1,044.82	3.02	-3.00	-0.64	

Survey Report

Company:	Occidental Petroleum	Local Co-ordinate Reference:	Well Camenisch 33-2HZ
Project:	Weld County, CO (UTM-NAD83)	TVD Reference:	PD 562 @ 4896.00usft
Site:	Camenisch 10-33HZ Pad	MD Reference:	PD 562 @ 4896.00usft
Well:	Camenisch 33-2HZ	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Fhartmann

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,469.00	30.64	232.49	4,035.55	-934.76	-1,424.55	-1,070.52	0.21	-0.03	0.40	
4,559.00	31.88	233.54	4,112.48	-962.85	-1,461.86	-1,097.46	1.50	1.38	1.17	
4,648.00	31.67	237.74	4,188.15	-989.29	-1,500.53	-1,126.18	2.50	-0.24	4.72	
4,738.00	32.30	239.54	4,264.49	-1,014.09	-1,541.23	-1,157.36	1.27	0.70	2.00	
4,827.00	33.25	241.47	4,339.32	-1,037.80	-1,583.17	-1,190.04	1.59	1.07	2.17	
4,917.00	33.85	239.53	4,414.33	-1,062.30	-1,626.45	-1,223.76	1.37	0.67	-2.16	
5,006.00	30.63	238.04	4,489.60	-1,086.87	-1,667.06	-1,254.91	3.73	-3.62	-1.67	
5,096.00	31.53	238.08	4,566.68	-1,111.45	-1,706.49	-1,284.93	1.00	1.00	0.04	
5,185.00	32.71	234.23	4,642.06	-1,137.82	-1,745.76	-1,314.26	2.65	1.33	-4.33	
5,275.00	34.86	233.80	4,716.86	-1,167.22	-1,786.25	-1,343.82	2.40	2.39	-0.48	
5,365.00	32.24	232.63	4,791.86	-1,196.99	-1,826.09	-1,372.65	3.00	-2.91	-1.30	
5,454.00	30.34	237.82	4,867.92	-1,223.38	-1,863.99	-1,400.67	3.70	-2.13	5.83	
5,544.00	29.66	240.15	4,945.87	-1,246.57	-1,902.55	-1,430.29	1.50	-0.76	2.59	
5,634.00	31.87	238.77	5,023.20	-1,269.98	-1,942.18	-1,460.87	2.58	2.46	-1.53	
5,723.00	32.76	238.28	5,098.41	-1,294.82	-1,982.76	-1,491.91	1.04	1.00	-0.55	
5,813.00	32.30	240.65	5,174.30	-1,319.41	-2,024.43	-1,524.07	1.51	-0.51	2.63	
5,903.00	33.45	238.00	5,249.89	-1,344.34	-2,066.43	-1,556.43	2.05	1.28	-2.94	
5,992.00	33.60	236.06	5,324.08	-1,371.09	-2,107.66	-1,587.51	1.22	0.17	-2.18	
6,082.00	35.39	239.15	5,398.26	-1,398.36	-2,150.70	-1,620.15	2.78	1.99	3.43	
6,171.00	32.89	238.47	5,471.92	-1,424.22	-2,193.43	-1,652.93	2.84	-2.81	-0.76	
6,261.00	31.32	239.25	5,548.15	-1,448.96	-2,234.37	-1,684.34	1.80	-1.74	0.87	
6,351.00	32.51	242.47	5,624.55	-1,472.10	-2,275.92	-1,716.83	2.31	1.32	3.58	
6,440.00	30.23	240.14	5,700.54	-1,494.31	-2,316.57	-1,748.73	2.90	-2.56	-2.62	
6,530.00	29.97	235.36	5,778.42	-1,518.37	-2,354.72	-1,777.70	2.68	-0.29	-5.31	
6,620.00	34.17	237.67	5,854.67	-1,544.68	-2,394.59	-1,807.62	4.86	4.67	2.57	
6,710.00	36.87	241.99	5,927.93	-1,570.89	-2,439.80	-1,842.65	4.09	3.00	4.80	
6,799.00	34.52	241.44	6,000.20	-1,595.49	-2,485.53	-1,878.66	2.66	-2.64	-0.62	
6,888.00	34.11	235.76	6,073.73	-1,621.59	-2,528.32	-1,911.42	3.63	-0.46	-6.38	
6,978.00	34.45	231.35	6,148.11	-1,651.69	-2,569.06	-1,941.02	2.79	0.38	-4.90	
7,068.00	29.83	230.38	6,224.29	-1,681.88	-2,606.21	-1,967.15	5.17	-5.13	-1.08	
7,158.00	21.60	215.77	6,305.39	-1,709.67	-2,633.21	-1,984.36	11.48	-9.14	-16.23	
7,247.00	22.85	196.22	6,387.89	-1,739.60	-2,647.63	-1,988.94	8.39	1.40	-21.97	
7,337.00	19.19	188.69	6,471.90	-1,771.02	-2,654.75	-1,986.11	5.05	-4.07	-8.37	
7,426.00	19.13	164.99	6,556.10	-1,799.60	-2,653.18	-1,975.88	8.68	-0.07	-26.63	
7,516.00	21.96	148.97	6,640.44	-1,828.30	-2,640.67	-1,955.20	6.96	3.14	-17.80	
7,606.00	28.08	138.99	6,721.99	-1,858.74	-2,618.07	-1,924.37	8.24	6.80	-11.09	
7,696.00	35.50	120.11	6,798.62	-1,887.95	-2,581.42	-1,880.55	13.70	8.24	-20.98	
7,785.00	38.16	111.80	6,869.90	-1,911.14	-2,533.50	-1,827.83	6.34	2.99	-9.34	
7,875.00	41.77	108.17	6,938.88	-1,930.82	-2,479.18	-1,770.09	4.77	4.01	-4.03	
7,964.00	48.61	108.03	7,001.56	-1,950.42	-2,419.19	-1,706.99	7.69	7.69	-0.16	
8,054.00	58.98	105.83	7,054.65	-1,971.45	-2,349.80	-1,634.48	11.69	11.52	-2.44	
8,144.00	67.19	106.73	7,095.36	-1,993.95	-2,272.84	-1,554.33	9.17	9.12	1.00	
8,233.00	66.99	106.19	7,130.01	-2,017.18	-2,194.22	-1,472.37	0.60	-0.22	-0.61	
8,322.00	71.53	99.29	7,161.55	-2,035.44	-2,113.10	-1,389.55	8.86	5.10	-7.75	

Survey Report

Company:	Occidental Petroleum	Local Co-ordinate Reference:	Well Camenisch 33-2HZ
Project:	Weld County, CO (UTM-NAD83)	TVD Reference:	PD 562 @ 4896.00usft
Site:	Camenisch 10-33HZ Pad	MD Reference:	PD 562 @ 4896.00usft
Well:	Camenisch 33-2HZ	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Fhartmann

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
8,412.00	77.08	93.88	7,185.90	-2,045.32	-2,027.09	-1,304.65	8.45	6.17	-6.01	
8,501.00	88.37	88.09	7,197.16	-2,046.77	-1,939.00	-1,220.33	14.23	12.69	-6.51	
Heel @ 8501' MD (309 FSL, 1183 FWL)										
8,591.00	88.20	90.06	7,199.86	-2,045.32	-1,849.06	-1,135.14	2.20	-0.19	2.19	
8,681.00	88.14	90.04	7,202.73	-2,045.40	-1,759.10	-1,049.47	0.07	-0.07	-0.02	
8,770.00	88.00	89.33	7,205.73	-2,044.91	-1,670.15	-964.93	0.81	-0.16	-0.80	
8,860.00	91.76	92.25	7,205.92	-2,046.15	-1,580.19	-878.89	5.29	4.18	3.24	
8,950.00	92.37	93.26	7,202.67	-2,050.47	-1,490.35	-792.04	1.31	0.68	1.12	
9,039.00	90.76	92.70	7,200.24	-2,055.10	-1,401.51	-706.03	1.92	-1.81	-0.63	
9,129.00	90.42	91.99	7,199.32	-2,058.78	-1,311.59	-619.29	0.87	-0.38	-0.79	
9,218.00	90.28	91.89	7,198.77	-2,061.79	-1,222.64	-533.69	0.19	-0.16	-0.11	
9,308.00	89.71	91.83	7,198.78	-2,064.72	-1,132.69	-447.15	0.64	-0.63	-0.07	
9,397.00	90.07	91.92	7,198.95	-2,067.63	-1,043.74	-361.57	0.42	0.40	0.10	
9,487.00	89.34	90.95	7,199.42	-2,069.88	-953.77	-275.22	1.35	-0.81	-1.08	
9,577.00	88.39	89.70	7,201.20	-2,070.39	-863.79	-189.39	1.74	-1.06	-1.39	
9,666.00	89.35	89.11	7,202.95	-2,069.47	-774.82	-104.96	1.27	1.08	-0.66	
9,756.00	88.91	89.19	7,204.32	-2,068.13	-684.84	-19.70	0.50	-0.49	0.09	
9,845.00	89.82	91.38	7,205.31	-2,068.58	-595.85	65.16	2.66	1.02	2.46	
9,935.00	90.28	90.95	7,205.23	-2,070.41	-505.87	151.40	0.70	0.51	-0.48	
10,025.00	90.22	90.35	7,204.84	-2,071.43	-415.88	237.39	0.67	-0.07	-0.67	
10,114.00	90.79	90.11	7,204.05	-2,071.78	-326.88	322.23	0.69	0.64	-0.27	
10,204.00	90.56	89.76	7,202.99	-2,071.68	-236.89	407.89	0.47	-0.26	-0.39	
10,293.00	90.41	90.04	7,202.24	-2,071.53	-147.89	492.57	0.36	-0.17	0.31	
10,383.00	90.08	90.74	7,201.85	-2,072.14	-57.89	578.45	0.86	-0.37	0.78	
10,473.00	90.06	90.18	7,201.74	-2,072.86	32.10	664.35	0.62	-0.02	-0.62	
10,562.00	89.59	90.30	7,202.01	-2,073.23	121.10	749.21	0.55	-0.53	0.13	
10,652.00	91.02	90.99	7,201.54	-2,074.25	211.09	835.20	1.76	1.59	0.77	
10,742.00	91.36	92.42	7,199.67	-2,076.92	301.03	921.65	1.63	0.38	1.59	
10,831.00	89.31	95.10	7,199.15	-2,082.76	389.82	1,007.97	3.79	-2.30	3.01	
10,921.00	89.77	95.25	7,199.87	-2,090.88	479.45	1,095.79	0.54	0.51	0.17	
11,010.00	89.78	96.05	7,200.22	-2,099.64	568.02	1,182.79	0.90	0.01	0.90	
11,100.00	89.28	96.26	7,200.96	-2,109.29	657.50	1,270.94	0.60	-0.56	0.23	
11,189.00	88.86	96.55	7,202.40	-2,119.22	745.93	1,358.17	0.57	-0.47	0.33	
11,279.00	90.01	92.38	7,203.29	-2,126.22	835.63	1,445.72	4.81	1.28	-4.63	
11,368.00	90.70	93.07	7,202.74	-2,130.45	924.53	1,531.65	1.10	0.78	0.78	
11,458.00	90.15	92.69	7,202.07	-2,134.97	1,014.41	1,618.61	0.74	-0.61	-0.42	
11,548.00	89.25	92.15	7,202.54	-2,138.77	1,104.33	1,705.38	1.17	-1.00	-0.60	
11,637.00	89.01	91.97	7,203.89	-2,141.97	1,193.26	1,791.04	0.34	-0.27	-0.20	
11,727.00	88.64	92.29	7,205.74	-2,145.32	1,283.18	1,877.67	0.54	-0.41	0.36	
11,817.00	89.66	89.22	7,207.07	-2,146.50	1,373.15	1,963.70	3.59	1.13	-3.41	
11,906.00	89.22	88.61	7,207.94	-2,144.82	1,462.13	2,047.90	0.85	-0.49	-0.69	
11,996.00	88.10	88.12	7,210.05	-2,142.25	1,552.07	2,132.74	1.36	-1.24	-0.54	
12,085.00	91.29	88.10	7,210.52	-2,139.31	1,641.00	2,216.53	3.58	3.58	-0.02	

Survey Report

Company:	Occidental Petroleum	Local Co-ordinate Reference:	Well Camenisch 33-2HZ
Project:	Weld County, CO (UTM-NAD83)	TVD Reference:	PD 562 @ 4896.00usft
Site:	Camenisch 10-33HZ Pad	MD Reference:	PD 562 @ 4896.00usft
Well:	Camenisch 33-2HZ	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Fhartmann

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
12,175.00	91.80	88.28	7,208.09	-2,136.47	1,730.93	2,301.27	0.60	0.57	0.20	
12,264.00	91.87	88.09	7,205.24	-2,133.66	1,819.84	2,385.06	0.23	0.08	-0.21	
12,354.00	90.18	91.17	7,203.63	-2,133.08	1,909.81	2,470.55	3.90	-1.88	3.42	
12,443.00	87.88	87.68	7,205.14	-2,132.18	1,998.77	2,554.98	4.70	-2.58	-3.92	
12,533.00	88.93	88.68	7,207.65	-2,129.33	2,088.69	2,639.71	1.61	1.17	1.11	
12,583.39	89.13	89.67	7,208.50	-2,128.60	2,139.06	2,687.46	2.00	0.39	1.97	
SEC 34 @ 12583.39' MD (293 FSL)										
12,623.00	89.28	90.45	7,209.05	-2,128.64	2,178.67	2,725.18	2.00	0.39	1.97	
12,712.00	89.00	89.99	7,210.39	-2,128.99	2,267.66	2,810.01	0.61	-0.31	-0.52	
12,802.00	89.40	91.06	7,211.65	-2,129.81	2,357.64	2,895.94	1.27	0.44	1.19	
12,892.00	89.89	91.95	7,212.20	-2,132.17	2,447.61	2,982.32	1.13	0.54	0.99	
12,981.00	89.93	91.60	7,212.34	-2,134.93	2,536.57	3,067.86	0.40	0.04	-0.39	
13,071.00	90.05	91.55	7,212.36	-2,137.40	2,626.53	3,154.27	0.14	0.13	-0.06	
13,160.00	89.97	91.35	7,212.34	-2,139.66	2,715.50	3,239.67	0.24	-0.09	-0.22	
13,250.00	89.53	90.92	7,212.74	-2,141.44	2,805.49	3,325.89	0.68	-0.49	-0.48	
13,340.00	89.87	90.25	7,213.21	-2,142.36	2,895.48	3,411.85	0.83	0.38	-0.74	
13,429.00	90.92	92.42	7,212.59	-2,144.43	2,984.45	3,497.19	2.71	1.18	2.44	
13,518.00	91.14	91.69	7,210.99	-2,147.62	3,073.37	3,582.84	0.86	0.25	-0.82	
13,608.00	92.32	91.00	7,208.28	-2,149.73	3,163.31	3,669.11	1.52	1.31	-0.77	
13,698.00	92.38	90.82	7,204.59	-2,151.16	3,253.22	3,755.15	0.21	0.07	-0.20	
13,787.00	88.99	92.57	7,203.52	-2,153.79	3,342.16	3,840.64	4.29	-3.81	1.97	
13,877.00	88.88	92.21	7,205.19	-2,157.55	3,432.06	3,927.38	0.42	-0.12	-0.40	
13,967.00	89.00	92.01	7,206.86	-2,160.86	3,521.99	4,014.01	0.26	0.13	-0.22	
14,056.00	89.03	91.54	7,208.39	-2,163.62	3,610.93	4,099.54	0.53	0.03	-0.53	
14,146.00	91.32	92.24	7,208.11	-2,166.58	3,700.88	4,186.09	2.66	2.54	0.78	
14,235.00	91.48	92.23	7,205.94	-2,170.05	3,789.78	4,271.79	0.18	0.18	-0.01	
14,325.00	92.01	92.77	7,203.20	-2,173.98	3,879.65	4,358.56	0.84	0.59	0.60	
14,414.00	92.19	92.69	7,199.94	-2,178.21	3,968.49	4,444.44	0.22	0.20	-0.09	
14,504.00	90.29	91.79	7,197.99	-2,181.73	4,058.40	4,531.12	2.34	-2.11	-1.00	
14,593.00	90.04	91.81	7,197.73	-2,184.53	4,147.35	4,616.67	0.28	-0.28	0.02	
14,683.00	89.98	91.31	7,197.72	-2,186.98	4,237.32	4,703.07	0.56	-0.07	-0.56	
14,772.00	89.91	90.74	7,197.80	-2,188.57	4,326.30	4,788.28	0.65	-0.08	-0.64	
14,862.00	89.15	90.37	7,198.54	-2,189.44	4,416.30	4,874.23	0.94	-0.84	-0.41	
14,952.00	89.51	90.50	7,199.59	-2,190.12	4,506.29	4,960.12	0.43	0.40	0.14	
15,041.00	89.45	90.20	7,200.40	-2,190.67	4,595.28	5,045.02	0.34	-0.07	-0.34	
15,131.00	89.25	90.43	7,201.42	-2,191.16	4,685.27	5,130.86	0.34	-0.22	0.26	
15,220.00	89.38	92.13	7,202.49	-2,193.15	4,774.24	5,216.17	1.92	0.15	1.91	
15,310.00	89.21	90.90	7,203.60	-2,195.53	4,864.20	5,302.55	1.38	-0.19	-1.37	
15,400.00	89.80	92.09	7,204.37	-2,197.88	4,954.17	5,388.93	1.48	0.66	1.32	
15,489.00	89.44	91.11	7,204.96	-2,200.36	5,043.13	5,474.39	1.17	-0.40	-1.10	
15,579.00	89.52	90.78	7,205.78	-2,201.85	5,133.11	5,560.52	0.38	0.09	-0.37	
15,669.00	89.26	90.93	7,206.74	-2,203.19	5,223.10	5,646.60	0.33	-0.29	0.17	
15,758.00	88.77	90.04	7,208.27	-2,203.94	5,312.08	5,731.55	1.14	-0.55	-1.00	
15,848.00	88.23	88.94	7,210.62	-2,203.14	5,402.04	5,816.96	1.36	-0.60	-1.22	

Survey Report

Company:	Occidental Petroleum	Local Co-ordinate Reference:	Well Camenisch 33-2HZ
Project:	Weld County, CO (UTM-NAD83)	TVD Reference:	PD 562 @ 4896.00usft
Site:	Camenisch 10-33HZ Pad	MD Reference:	PD 562 @ 4896.00usft
Well:	Camenisch 33-2HZ	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Fhartmann

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,937.00	89.40	90.80	7,212.46	-2,202.94	5,491.02	5,901.62	2.47	1.31	2.09
16,027.00	88.10	91.35	7,214.43	-2,204.63	5,580.98	5,987.78	1.57	-1.44	0.61
16,117.00	90.09	92.35	7,215.85	-2,207.53	5,670.92	6,074.30	2.47	2.21	1.11
16,206.00	90.02	91.59	7,215.76	-2,210.59	5,759.86	6,159.92	0.86	-0.08	-0.85
16,296.00	89.72	91.74	7,215.97	-2,213.21	5,849.82	6,246.38	0.37	-0.33	0.17
16,385.00	90.01	91.94	7,216.18	-2,216.06	5,938.78	6,331.94	0.40	0.33	0.22
16,475.00	89.78	92.21	7,216.34	-2,219.32	6,028.72	6,418.57	0.39	-0.26	0.30
16,564.00	89.89	92.07	7,216.60	-2,222.65	6,117.66	6,504.27	0.20	0.12	-0.16
16,654.00	90.22	92.00	7,216.51	-2,225.84	6,207.60	6,590.88	0.37	0.37	-0.08
16,743.00	89.14	90.84	7,217.01	-2,228.05	6,296.57	6,676.26	1.78	-1.21	-1.30
16,833.00	88.03	89.10	7,219.23	-2,228.00	6,386.54	6,761.91	2.29	-1.23	-1.93
16,923.00	87.18	88.82	7,222.99	-2,226.37	6,476.44	6,847.01	0.99	-0.94	-0.31
17,012.00	89.76	89.07	7,225.37	-2,224.73	6,565.39	6,931.19	2.91	2.90	0.28
17,102.00	90.53	90.03	7,225.14	-2,224.02	6,655.38	7,016.66	1.37	0.86	1.07
17,191.00	90.22	90.39	7,224.56	-2,224.35	6,744.38	7,101.50	0.53	-0.35	0.40
17,281.00	88.95	89.89	7,225.21	-2,224.57	6,834.37	7,187.25	1.52	-1.41	-0.56
17,305.00	89.04	89.82	7,225.63	-2,224.51	6,858.37	7,210.08	0.48	0.38	-0.29
Last Survey @ 17305' MD (305 FSL, 482 FEL)									
17,373.00	89.04	89.82	7,226.77	-2,224.30	6,926.36	7,274.75	0.00	0.00	0.00
TD @ 17373' MD (307 FSL, 414 FEL)									

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
1,940.00	1,882.48	-210.59	-323.89	First AEP Survey @ 1940' MD	
8,501.00	7,197.16	-2,046.77	-1,939.00	Heel @ 8501' MD (309 FSL, 1183 FWL)	
12,583.39	7,208.50	-2,128.60	2,139.06	SEC 34 @ 12583.39' MD (293 FSL)	
17,305.00	7,225.63	-2,224.51	6,858.37	Last Survey @ 17305' MD (305 FSL, 482 FEL)	
17,373.00	7,226.77	-2,224.30	6,926.36	TD @ 17373' MD (307 FSL, 414 FEL)	

Checked By: _____ Approved By: _____ Date: _____