

# **Occidental Petroleum**

**Weld County, CO (UTM-NAD83)**

**Hickory 10-34HZ Pad**

**Hickory 34-4HZ**

**API 123-52729**

**OH**

**Design: OH**

## **Standard Survey Report**

**14 April, 2025**



Project: Weld County, CO (UTM-NAD83)  
Site: Hickory 10-34HZ Pad  
Well: Hickory 34-4HZ  
Wellbore: OH  
Design: OH  
Lat: 40.180831  
Long: -104.872752  
GL: 4872.00  
KB: PD 564 @ 4898.00usft



Azimuths to True North  
Magnetic North: 7.76°  
Magnetic Field  
Strength: 51417.3nT  
Dip Angle: 66.28°  
Date: 3/1/2025  
Model: HRGM

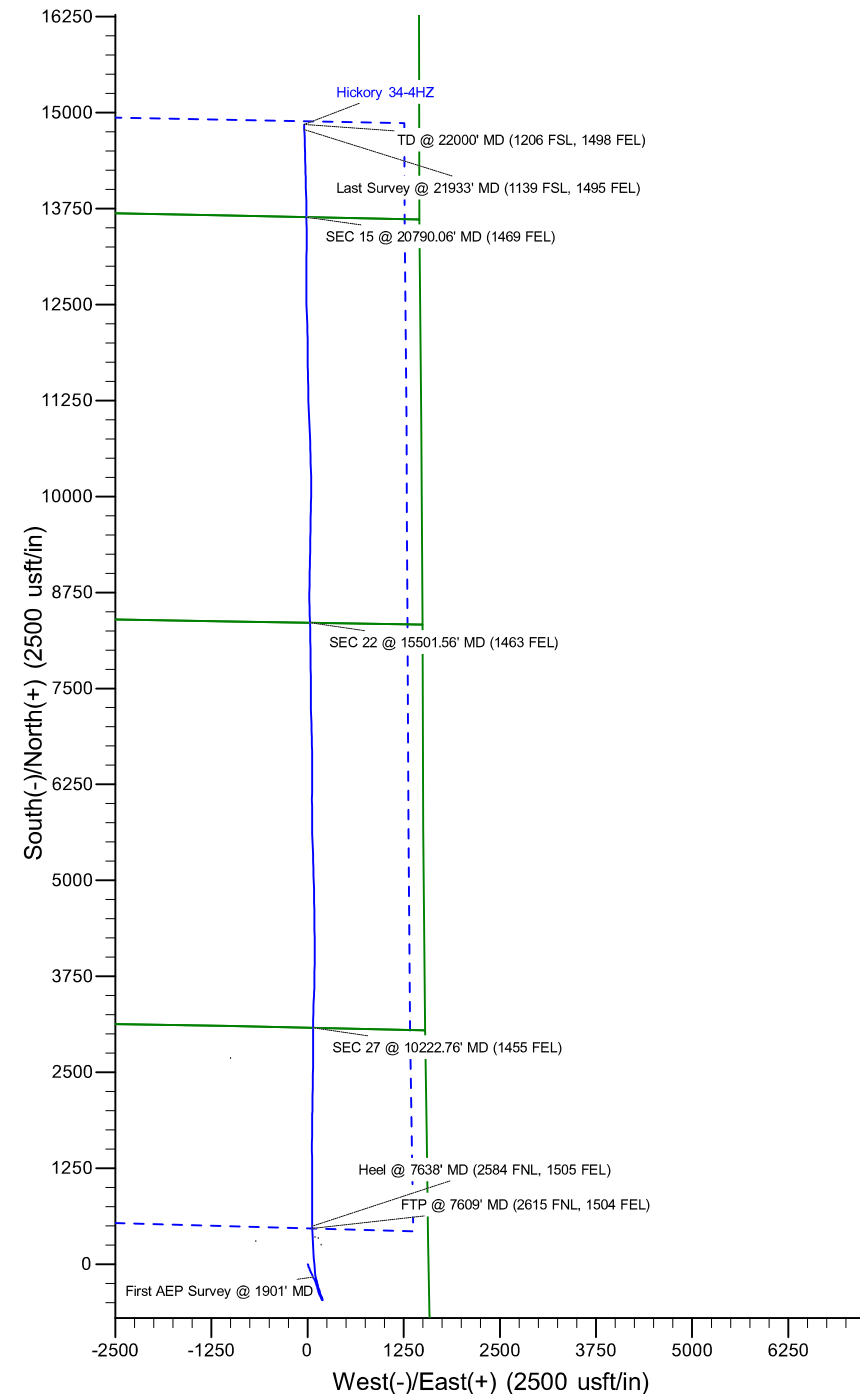
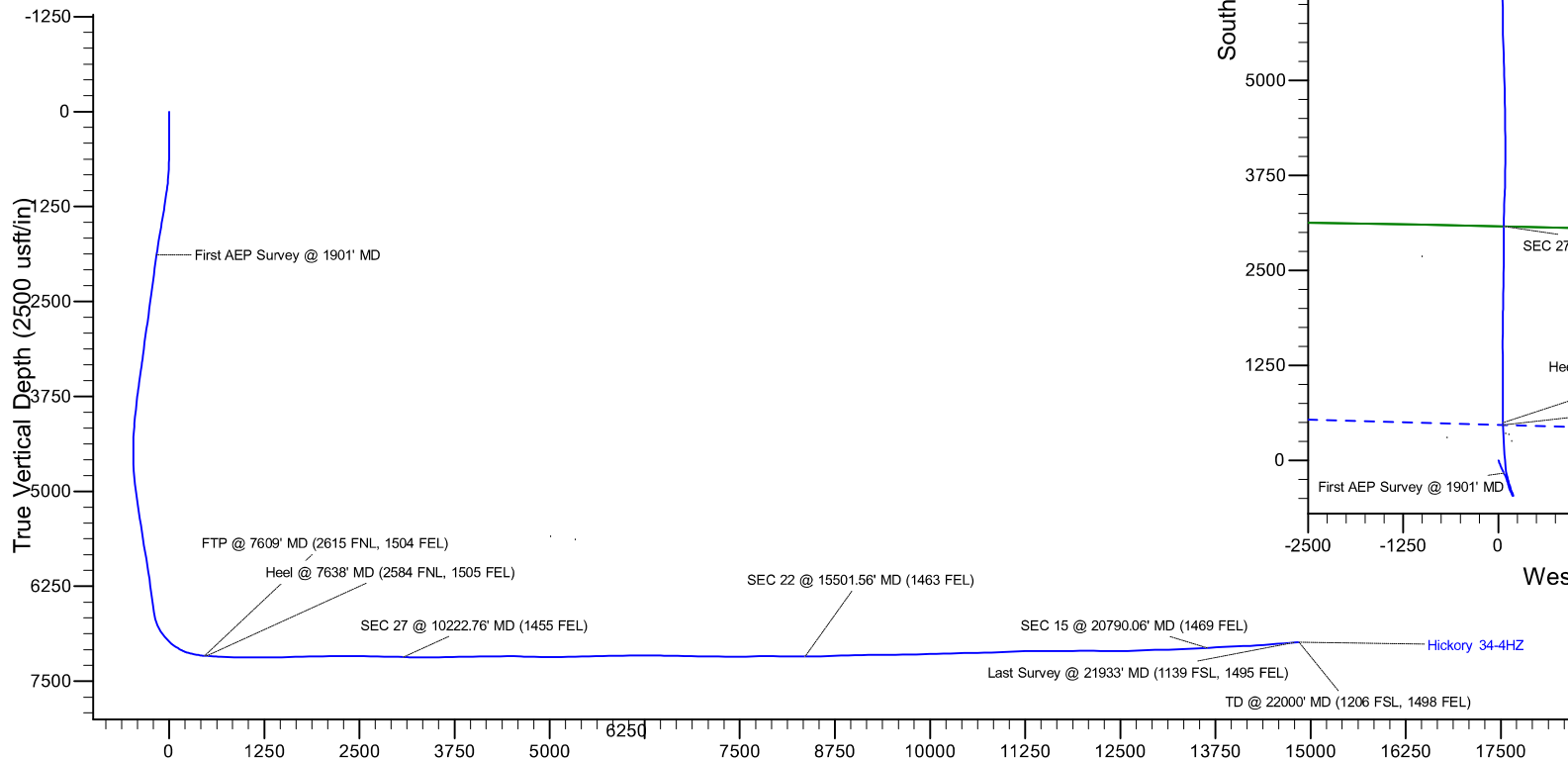
#### WELL DETAILS: Hickory 34-4HZ

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	14592607.84	1675958.41	40.180831	-104.872752

#### ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
1901.00	9.55	152.74	1886.79	-165.87	72.77	-166.44	185.03	First AEP Survey @ 1901' MD
7609.00	84.99	358.20	7165.19	466.82	62.93	466.31	1468.70	FTP @ 7609' MD (2615 FNL, 1504 FEL)
7638.00	86.54	358.02	7167.33	495.72	61.97	495.22	1497.54	Heel @ 7638' MD (2584 FNL, 1505 FEL)
10222.76	88.65	359.68	7181.26	3079.38	72.68	3078.72	4081.51	SEC 27 @ 10222.76' MD (1455 FEL)
15501.56	90.89	359.48	7173.04	8356.15	32.46	8355.64	9359.37	SEC 22 @ 15501.56' MD (1463 FEL)
20790.06	92.84	359.62	7060.57	13641.01	-13.19	13640.69	14645.73	SEC 15 @ 20790.06' MD (1469 FEL)
21933.00	95.54	357.64	6989.76	14781.13	-41.14	14781.00	15786.25	Last Survey @ 21933' MD (1139 FSL, 1495 FEL)
22000.00	95.54	357.64	6983.29	14847.76	-43.88	14847.65	15852.94	TD @ 22000' MD (1206 FSL, 1498 FEL)

SHL: 2264' FSL, 1576' FEL - Sec 34-T3N-R67W  
Heel: 2584' FNL, 1505' FEL - Sec 34-T3N-R67W  
BHL: 1206' FSL, 1498' FEL - Sec 15-T3N-R67W



## Survey Report

<b>Company:</b>	Occidental Petroleum	<b>Local Co-ordinate Reference:</b>	Well Hickory 34-4HZ
<b>Project:</b>	Weld County, CO (UTM-NAD83)	<b>TVD Reference:</b>	PD 564 @ 4898.00usft
<b>Site:</b>	Hickory 10-34HZ Pad	<b>MD Reference:</b>	PD 564 @ 4898.00usft
<b>Well:</b>	Hickory 34-4HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDMPProd2025

<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)		

Site	Hickory 10-34HZ Pad				
Site Position:		Northing:	14,592,586.41 usft	Latitude:	40.180772
From:	Lat/Long	Easting:	1,675,998.10 usft	Longitude:	-104.872610
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "		

Well		Hickory 34-4HZ				
Well Position	+N/-S	0.00 usft	Northing:	14,592,607.84 usft	Latitude:	40.180831
	+E/-W	0.00 usft	Easting:	1,675,958.41 usft	Longitude:	-104.872752
Position Uncertainty		3.28 usft	Wellhead Elevation:	usft	Ground Level:	4,872.00 usft
Grid Convergence:		0.08 °				

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HRGM	3/1/2025	7.76	66.28	51,417.26884043

<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>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	359.55	

<b>Survey Program</b>	<b>Date</b>	4/14/2025			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
11.00	1,834.00	Surface (OH)	A005Mc_MWD+IFR1_R5	MWD+IFR1	
1,901.00	22,000.00	MWD (OH)	A008Mc_MWD+IFR1+MS_R	MWD+IFR1+MSA	

<b>Survey</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Vertical Section (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	
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	
90.00	0.26	53.62	90.00	0.11	0.14	0.11	0.33	0.33	0.00	
181.00	0.48	43.79	181.00	0.50	0.57	0.50	0.25	0.24	-10.80	
272.00	0.45	60.98	271.99	0.95	1.15	0.94	0.16	-0.03	18.89	
362.00	0.64	55.43	361.99	1.41	1.87	1.39	0.22	0.21	-6.17	
451.00	0.98	137.40	450.98	1.13	2.80	1.11	1.23	0.38	92.10	
541.00	1.06	148.10	540.97	-0.14	3.76	-0.17	0.23	0.09	11.89	
630.00	1.10	147.05	629.95	-1.56	4.66	-1.59	0.05	0.04	-1.18	

# Survey Report

<b>Company:</b>	Occidental Petroleum	<b>Local Co-ordinate Reference:</b>	Well Hickory 34-4HZ
<b>Project:</b>	Weld County, CO (UTM-NAD83)	<b>TVD Reference:</b>	PD 564 @ 4898.00usft
<b>Site:</b>	Hickory 10-34HZ Pad	<b>MD Reference:</b>	PD 564 @ 4898.00usft
<b>Well:</b>	Hickory 34-4HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDMPProd2025

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)
719.00	2.83	158.39	718.90	-4.32	5.93	-4.36	1.98	1.94	12.74
809.00	3.88	165.29	808.74	-9.33	7.52	-9.39	1.25	1.17	7.67
899.00	4.95	161.77	898.48	-15.96	9.51	-16.04	1.23	1.19	-3.91
988.00	6.52	159.62	987.03	-24.35	12.47	-24.44	1.78	1.76	-2.42
1,077.00	8.28	159.05	1,075.28	-35.07	16.52	-35.20	1.98	1.98	-0.64
1,166.00	8.81	159.68	1,163.29	-47.45	21.18	-47.61	0.60	0.60	0.71
1,256.00	9.42	162.61	1,252.16	-60.94	25.78	-61.14	0.85	0.68	3.26
1,345.00	10.72	156.25	1,339.79	-75.47	31.29	-75.71	1.92	1.46	-7.15
1,435.00	11.36	156.96	1,428.12	-91.28	38.13	-91.58	0.73	0.71	0.79
1,525.00	10.22	155.68	1,516.53	-106.72	44.89	-107.07	1.29	-1.27	-1.42
1,614.00	10.37	155.78	1,604.10	-121.22	51.42	-121.62	0.17	0.17	0.11
1,704.00	10.45	154.69	1,692.61	-135.98	58.24	-136.44	0.24	0.09	-1.21
1,793.00	9.53	154.43	1,780.26	-149.93	64.87	-150.43	1.03	-1.03	-0.29
1,834.00	9.43	153.90	1,820.70	-156.00	67.81	-156.53	0.32	-0.24	-1.29
1,901.00	9.55	152.74	1,886.79	-165.87	72.77	-166.44	0.34	0.18	-1.73
First AEP Survey @ 1901' MD									
1,990.00	8.90	151.91	1,974.64	-178.51	79.39	-179.13	0.75	-0.73	-0.93
2,080.00	8.28	151.40	2,063.63	-190.34	85.77	-191.01	0.69	-0.69	-0.57
2,169.00	8.30	150.33	2,151.70	-201.55	92.02	-202.27	0.17	0.02	-1.20
2,259.00	7.57	151.79	2,240.83	-212.42	98.04	-213.18	0.84	-0.81	1.62
2,349.00	8.51	162.99	2,329.95	-224.01	102.79	-224.81	2.03	1.04	12.44
2,438.00	8.36	162.40	2,417.99	-236.48	106.67	-237.31	0.19	-0.17	-0.66
2,528.00	7.72	161.79	2,507.11	-248.45	110.54	-249.31	0.72	-0.71	-0.68
2,618.00	7.17	162.80	2,596.35	-259.56	114.09	-260.45	0.63	-0.61	1.12
2,707.00	6.98	163.96	2,684.67	-270.06	117.23	-270.98	0.27	-0.21	1.30
2,797.00	9.70	162.82	2,773.71	-282.57	120.98	-283.51	3.03	3.02	-1.27
2,887.00	9.08	162.87	2,862.50	-296.60	125.31	-297.57	0.69	-0.69	0.06
2,976.00	8.54	165.36	2,950.45	-309.70	129.05	-310.71	0.74	-0.61	2.80
3,066.00	7.93	167.01	3,039.52	-322.22	132.13	-323.24	0.73	-0.68	1.83
3,156.00	7.21	166.38	3,128.74	-333.76	134.86	-334.80	0.81	-0.80	-0.70
3,245.00	7.52	164.31	3,217.01	-344.79	137.75	-345.86	0.46	0.35	-2.33
3,335.00	8.83	163.02	3,306.09	-357.07	141.36	-358.17	1.47	1.46	-1.43
3,425.00	7.31	164.73	3,395.20	-369.20	144.88	-370.32	1.71	-1.69	1.90
3,514.00	8.18	159.91	3,483.38	-380.61	148.55	-381.76	1.22	0.98	-5.42
3,604.00	9.14	152.25	3,572.36	-392.95	154.08	-394.14	1.67	1.07	-8.51
3,694.00	7.85	151.92	3,661.37	-404.70	160.30	-405.94	1.43	-1.43	-0.37
3,783.00	8.93	155.43	3,749.42	-416.34	166.03	-417.63	1.34	1.21	3.94
3,873.00	7.38	157.41	3,838.50	-428.03	171.16	-429.36	1.75	-1.72	2.20
3,963.00	6.69	157.11	3,927.83	-438.20	175.42	-439.56	0.77	-0.77	-0.33
4,052.00	5.90	155.41	4,016.29	-447.13	179.34	-448.53	0.91	-0.89	-1.91
4,142.00	5.12	154.48	4,105.87	-454.96	182.99	-456.39	0.87	-0.87	-1.03
4,231.00	3.96	151.43	4,194.59	-461.25	186.17	-462.69	1.33	-1.30	-3.43
4,321.00	3.33	144.48	4,284.41	-466.10	189.18	-467.57	0.85	-0.70	-7.72

# Survey Report

<b>Company:</b>	Occidental Petroleum	<b>Local Co-ordinate Reference:</b>	Well Hickory 34-4HZ
<b>Project:</b>	Weld County, CO (UTM-NAD83)	<b>TVD Reference:</b>	PD 564 @ 4898.00usft
<b>Site:</b>	Hickory 10-34HZ Pad	<b>MD Reference:</b>	PD 564 @ 4898.00usft
<b>Well:</b>	Hickory 34-4HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDMPProd2025

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)
4,411.00	1.43	118.85	4,374.33	-468.77	191.68	-470.26	2.37	-2.11	-28.48
4,500.00	1.02	102.52	4,463.31	-469.48	193.43	-470.99	0.60	-0.46	-18.35
4,590.00	1.31	45.68	4,553.29	-468.94	194.94	-470.45	1.26	0.32	-63.16
4,680.00	1.55	6.67	4,643.27	-467.01	195.82	-468.53	1.09	0.27	-43.34
4,769.00	3.09	341.70	4,732.19	-463.53	195.21	-465.05	2.03	1.73	-28.06
4,859.00	4.95	352.11	4,821.97	-457.38	193.91	-458.89	2.21	2.07	11.57
4,949.00	6.42	350.34	4,911.53	-448.58	192.54	-450.08	1.64	1.63	-1.97
5,038.00	7.53	340.50	4,999.87	-438.17	189.75	-439.65	1.83	1.25	-11.06
5,128.00	9.35	335.44	5,088.89	-425.97	184.75	-427.40	2.18	2.02	-5.62
5,218.00	9.13	330.81	5,177.72	-413.08	178.23	-414.47	0.86	-0.24	-5.14
5,307.00	11.02	342.65	5,265.36	-398.80	172.24	-400.14	3.14	2.12	13.30
5,397.00	9.09	341.75	5,353.97	-383.83	167.45	-385.14	2.15	-2.14	-1.00
5,487.00	8.58	347.13	5,442.90	-370.53	163.73	-371.81	1.08	-0.57	5.98
5,576.00	8.21	345.30	5,530.95	-357.92	160.64	-359.17	0.51	-0.42	-2.06
5,666.00	9.92	340.46	5,619.82	-344.39	156.41	-345.61	2.08	1.90	-5.38
5,756.00	11.12	338.09	5,708.31	-329.03	150.58	-330.21	1.42	1.33	-2.63
5,846.00	9.02	340.11	5,796.92	-314.35	144.94	-315.48	2.37	-2.33	2.24
5,935.00	10.43	345.06	5,884.64	-300.00	140.49	-301.10	1.84	1.58	5.56
6,025.00	8.89	345.69	5,973.36	-285.39	136.67	-286.46	1.72	-1.71	0.70
6,114.00	9.52	344.49	6,061.21	-271.64	133.01	-272.67	0.74	0.71	-1.35
6,204.00	7.93	342.17	6,150.17	-258.55	129.11	-259.56	1.81	-1.77	-2.58
6,293.00	7.55	346.53	6,238.36	-247.02	125.87	-248.00	0.79	-0.43	4.90
6,383.00	8.61	349.00	6,327.47	-234.66	123.21	-235.62	1.24	1.18	2.74
6,472.00	7.00	348.34	6,415.64	-222.81	120.84	-223.75	1.81	-1.81	-0.74
6,562.00	7.95	345.38	6,504.87	-211.41	118.16	-212.33	1.14	1.06	-3.29
6,652.00	6.97	340.91	6,594.11	-200.23	114.81	-201.13	1.26	-1.09	-4.97
6,741.00	16.28	339.71	6,681.19	-183.39	108.70	-184.24	10.46	10.46	-1.35
6,831.00	25.21	353.17	6,765.32	-152.45	102.03	-153.24	11.19	9.92	14.96
6,921.00	32.07	353.96	6,844.26	-109.60	97.23	-110.36	7.63	7.62	0.88
7,010.00	39.25	355.65	6,916.52	-57.96	92.60	-58.69	8.14	8.07	1.90
7,100.00	47.21	355.16	6,982.05	3.43	87.65	2.74	8.85	8.84	-0.54
7,190.00	56.16	355.49	7,037.79	73.74	81.91	73.09	9.95	9.94	0.37
7,279.00	60.92	356.85	7,084.23	149.46	76.86	148.86	5.50	5.35	1.53
7,369.00	72.13	357.47	7,120.02	231.78	72.80	231.20	12.47	12.46	0.69
7,459.00	78.46	356.63	7,142.85	318.67	68.31	318.13	7.09	7.03	-0.93
7,549.00	81.79	358.57	7,158.29	407.25	64.61	406.73	4.27	3.70	2.16
7,609.00	84.99	358.20	7,165.19	466.82	62.93	466.31	5.37	5.34	-0.62
FTP @ 7609' MD (2615 FNL, 1504 FEL)									
7,638.00	86.54	358.02	7,167.33	495.72	61.97	495.22	5.37	5.34	-0.61
Heel @ 7638' MD (2584 FNL, 1505 FEL)									
7,728.00	86.37	358.42	7,172.90	585.50	59.18	585.02	0.48	-0.19	0.44
7,818.00	87.81	0.42	7,177.47	675.38	58.27	674.90	2.74	1.60	2.22
7,907.00	87.89	359.89	7,180.81	764.31	58.51	763.83	0.60	0.09	-0.60
7,997.00	87.75	359.98	7,184.23	854.25	58.41	853.76	0.18	-0.16	0.10

## Survey Report

<b>Company:</b>	Occidental Petroleum	<b>Local Co-ordinate Reference:</b>	Well Hickory 34-4HZ
<b>Project:</b>	Weld County, CO (UTM-NAD83)	<b>TVD Reference:</b>	PD 564 @ 4898.00usft
<b>Site:</b>	Hickory 10-34HZ Pad	<b>MD Reference:</b>	PD 564 @ 4898.00usft
<b>Well:</b>	Hickory 34-4HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDMPProd2025

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)	
8,087.00	89.85	1.42	7,186.12	944.21	59.51	943.72	2.83	2.33	1.60	
8,177.00	89.80	1.17	7,186.39	1,034.19	61.55	1,033.68	0.28	-0.06	-0.28	
8,266.00	90.35	359.92	7,186.27	1,123.19	62.39	1,122.66	1.53	0.62	-1.40	
8,356.00	90.36	0.04	7,185.72	1,213.18	62.36	1,212.66	0.13	0.01	0.13	
8,445.00	90.60	358.78	7,184.97	1,302.17	61.45	1,301.65	1.44	0.27	-1.42	
8,535.00	91.01	358.25	7,183.71	1,392.13	59.11	1,391.63	0.74	0.46	-0.59	
8,625.00	90.38	358.64	7,182.61	1,482.09	56.67	1,481.60	0.82	-0.70	0.43	
8,714.00	91.00	1.50	7,181.54	1,571.08	56.78	1,570.58	3.29	0.70	3.21	
8,804.00	91.27	1.38	7,179.76	1,661.03	59.04	1,660.52	0.33	0.30	-0.13	
8,894.00	91.67	0.89	7,177.45	1,750.98	60.82	1,750.45	0.70	0.44	-0.54	
8,984.00	91.80	0.46	7,174.73	1,840.94	61.88	1,840.39	0.50	0.14	-0.48	
9,073.00	91.90	0.02	7,171.85	1,929.89	62.26	1,929.34	0.51	0.11	-0.49	
9,163.00	90.16	1.06	7,170.24	2,019.87	63.10	2,019.31	2.25	-1.93	1.16	
9,253.00	90.28	1.10	7,169.89	2,109.85	64.80	2,109.27	0.14	0.13	0.04	
9,343.00	89.94	1.02	7,169.72	2,199.83	66.46	2,199.24	0.39	-0.38	-0.09	
9,432.00	90.65	0.57	7,169.26	2,288.82	67.70	2,288.22	0.94	0.80	-0.51	
9,522.00	91.03	0.09	7,167.94	2,378.81	68.22	2,378.20	0.68	0.42	-0.53	
9,612.00	88.87	1.39	7,168.02	2,468.80	69.38	2,468.17	2.80	-2.40	1.44	
9,702.00	88.94	0.94	7,169.74	2,558.76	71.21	2,558.12	0.51	0.08	-0.50	
9,791.00	88.94	0.42	7,171.38	2,647.74	72.27	2,647.09	0.58	0.00	-0.58	
9,881.00	88.76	0.19	7,173.19	2,737.72	72.74	2,737.06	0.32	-0.20	-0.26	
9,971.00	88.61	0.06	7,175.26	2,827.70	72.94	2,827.04	0.22	-0.17	-0.14	
10,061.00	88.60	0.06	7,177.45	2,917.67	73.04	2,917.01	0.01	-0.01	0.00	
10,150.00	88.68	359.86	7,179.56	3,006.64	72.97	3,005.98	0.24	0.09	-0.22	
10,222.76	88.65	359.68	7,181.26	3,079.38	72.68	3,078.72	0.25	-0.04	-0.24	
SEC 27 @ 10222.76' MD (1455 FEL)										
10,240.00	88.64	359.64	7,181.66	3,096.62	72.58	3,095.95	0.25	-0.04	-0.24	
10,330.00	89.80	1.55	7,182.89	3,186.60	73.52	3,185.92	2.48	1.29	2.12	
10,419.00	89.68	1.68	7,183.29	3,275.56	76.02	3,274.86	0.20	-0.13	0.15	
10,509.00	90.42	2.29	7,183.21	3,365.51	79.14	3,364.78	1.07	0.82	0.68	
10,598.00	89.39	1.89	7,183.36	3,454.45	82.39	3,453.69	1.24	-1.16	-0.45	
10,688.00	90.33	2.94	7,183.58	3,544.36	86.18	3,543.58	1.57	1.04	1.17	
10,778.00	91.10	1.12	7,182.46	3,634.30	89.37	3,633.48	2.20	0.86	-2.02	
10,868.00	90.85	0.89	7,180.93	3,724.27	90.95	3,723.44	0.38	-0.28	-0.26	
10,957.00	91.10	0.48	7,179.41	3,813.25	92.01	3,812.41	0.54	0.28	-0.46	
11,047.00	91.35	0.52	7,177.49	3,903.23	92.79	3,902.38	0.28	0.28	0.04	
11,137.00	91.79	0.15	7,175.02	3,993.19	93.32	3,992.33	0.64	0.49	-0.41	
11,226.00	90.45	0.17	7,173.28	4,082.17	93.57	4,081.31	1.51	-1.51	0.02	
11,316.00	90.53	359.60	7,172.51	4,172.17	93.39	4,171.30	0.64	0.09	-0.63	
11,406.00	90.75	359.28	7,171.51	4,262.16	92.51	4,261.30	0.43	0.24	-0.36	
11,496.00	90.67	359.25	7,170.39	4,352.14	91.35	4,351.29	0.09	-0.09	-0.03	
11,586.00	91.22	358.94	7,168.91	4,442.12	89.93	4,441.28	0.70	0.61	-0.34	
11,675.00	87.63	359.54	7,169.80	4,531.09	88.75	4,530.25	4.09	-4.03	0.67	

# Survey Report

<b>Company:</b>	Occidental Petroleum	<b>Local Co-ordinate Reference:</b>	Well Hickory 34-4HZ
<b>Project:</b>	Weld County, CO (UTM-NAD83)	<b>TVD Reference:</b>	PD 564 @ 4898.00usft
<b>Site:</b>	Hickory 10-34HZ Pad	<b>MD Reference:</b>	PD 564 @ 4898.00usft
<b>Well:</b>	Hickory 34-4HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDMPProd2025

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)
11,765.00	87.05	359.41	7,173.98	4,620.99	87.93	4,620.16	0.66	-0.64	-0.14
11,854.00	88.67	358.89	7,177.30	4,709.92	86.61	4,709.09	1.91	1.82	-0.58
11,944.00	89.23	359.09	7,178.95	4,799.89	85.02	4,799.07	0.66	0.62	0.22
12,033.00	88.98	358.81	7,180.34	4,888.86	83.39	4,888.05	0.42	-0.28	-0.31
12,123.00	89.09	358.73	7,181.86	4,978.83	81.46	4,978.03	0.15	0.12	-0.09
12,213.00	90.99	358.77	7,181.79	5,068.80	79.50	5,068.02	2.11	2.11	0.04
12,302.00	91.11	358.29	7,180.16	5,157.76	77.21	5,156.99	0.56	0.13	-0.54
12,392.00	91.13	358.26	7,178.40	5,247.70	74.51	5,246.95	0.04	0.02	-0.03
12,482.00	91.46	358.00	7,176.37	5,337.63	71.57	5,336.90	0.47	0.37	-0.29
12,571.00	91.49	357.76	7,174.08	5,426.54	68.28	5,425.83	0.27	0.03	-0.27
12,661.00	91.69	357.40	7,171.58	5,516.42	64.48	5,515.74	0.46	0.22	-0.40
12,751.00	90.67	359.73	7,169.73	5,606.37	62.23	5,605.71	2.83	-1.13	2.59
12,840.00	90.70	359.88	7,168.66	5,695.36	61.92	5,694.70	0.17	0.03	0.17
12,930.00	91.22	359.30	7,167.16	5,785.34	61.28	5,784.68	0.87	0.58	-0.64
13,020.00	91.17	359.09	7,165.28	5,875.32	60.02	5,874.66	0.24	-0.06	-0.23
13,109.00	91.57	358.72	7,163.15	5,964.27	58.32	5,963.63	0.61	0.45	-0.42
13,199.00	90.30	0.19	7,161.68	6,054.25	57.46	6,053.62	2.16	-1.41	1.63
13,288.00	90.02	0.61	7,161.43	6,143.25	58.08	6,142.61	0.57	-0.31	0.47
13,378.00	89.76	0.32	7,161.61	6,233.25	58.81	6,232.59	0.43	-0.29	-0.32
13,468.00	89.67	0.45	7,162.05	6,323.24	59.42	6,322.58	0.18	-0.10	0.14
13,557.00	90.52	359.88	7,161.91	6,412.24	59.67	6,411.58	1.15	0.96	-0.64
13,647.00	88.61	359.98	7,162.59	6,502.24	59.56	6,501.57	2.13	-2.12	0.11
13,737.00	88.57	359.35	7,164.81	6,592.21	59.04	6,591.54	0.70	-0.04	-0.70
13,826.00	88.94	359.35	7,166.74	6,681.18	58.03	6,680.52	0.42	0.42	0.00
13,916.00	89.31	359.10	7,168.11	6,771.16	56.81	6,770.51	0.50	0.41	-0.28
14,006.00	89.13	358.80	7,169.34	6,861.14	55.16	6,860.49	0.39	-0.20	-0.33
14,096.00	89.24	358.62	7,170.62	6,951.11	53.14	6,950.47	0.23	0.12	-0.20
14,185.00	89.29	358.40	7,171.76	7,040.07	50.82	7,039.45	0.25	0.06	-0.25
14,275.00	89.27	358.16	7,172.89	7,130.02	48.12	7,129.42	0.27	-0.02	-0.27
14,365.00	89.02	357.72	7,174.23	7,219.95	44.89	7,219.38	0.56	-0.28	-0.49
14,455.00	89.29	359.88	7,175.56	7,309.92	43.00	7,309.35	2.42	0.30	2.40
14,544.00	89.54	0.19	7,176.47	7,398.91	43.06	7,398.35	0.45	0.28	0.35
14,634.00	89.58	0.15	7,177.16	7,488.91	43.32	7,488.34	0.06	0.04	-0.04
14,724.00	91.39	359.76	7,176.40	7,578.90	43.25	7,578.33	2.06	2.01	-0.43
14,813.00	92.72	359.43	7,173.21	7,667.84	42.62	7,667.27	1.54	1.49	-0.37
14,903.00	92.06	359.64	7,169.46	7,757.76	41.89	7,757.19	0.77	-0.73	0.23
14,993.00	89.31	359.61	7,168.38	7,847.74	41.30	7,847.17	3.06	-3.06	-0.03
15,083.00	89.16	358.96	7,169.58	7,937.73	40.18	7,937.17	0.74	-0.17	-0.72
15,172.00	88.97	358.87	7,171.03	8,026.70	38.50	8,026.15	0.24	-0.21	-0.10
15,262.00	89.00	358.60	7,172.63	8,116.66	36.51	8,116.12	0.30	0.03	-0.30
15,352.00	89.20	358.27	7,174.04	8,206.62	34.05	8,206.10	0.43	0.22	-0.37
15,441.00	90.88	0.02	7,173.98	8,295.60	32.72	8,295.09	2.73	1.89	1.97
15,501.56	90.89	359.48	7,173.04	8,356.15	32.46	8,355.64	0.89	0.02	-0.89
SEC 22 @ 15501.56' MD (1463 FEL)									

## Survey Report

<b>Company:</b>	Occidental Petroleum	<b>Local Co-ordinate Reference:</b>	Well Hickory 34-4HZ
<b>Project:</b>	Weld County, CO (UTM-NAD83)	<b>TVD Reference:</b>	PD 564 @ 4898.00usft
<b>Site:</b>	Hickory 10-34HZ Pad	<b>MD Reference:</b>	PD 564 @ 4898.00usft
<b>Well:</b>	Hickory 34-4HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDMPProd2025

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)	
15,531.00	90.90	359.22	7,172.58	8,385.59	32.13	8,385.08	0.89	0.02	-0.89	
15,621.00	90.56	357.77	7,171.43	8,475.55	29.76	8,475.05	1.65	-0.38	-1.61	
15,711.00	90.29	357.26	7,170.77	8,565.46	25.86	8,564.99	0.64	-0.30	-0.57	
15,800.00	92.17	0.47	7,168.86	8,654.40	24.10	8,653.95	4.18	2.11	3.61	
15,890.00	92.52	0.44	7,165.17	8,744.33	24.81	8,743.86	0.39	0.39	-0.03	
15,979.00	93.00	0.14	7,160.89	8,833.22	25.26	8,832.75	0.64	0.54	-0.34	
16,069.00	91.09	1.45	7,157.68	8,923.15	26.51	8,922.67	2.57	-2.12	1.46	
16,158.00	90.38	1.39	7,156.53	9,012.11	28.72	9,011.61	0.80	-0.80	-0.07	
16,248.00	91.06	1.15	7,155.40	9,102.08	30.71	9,101.56	0.80	0.76	-0.27	
16,338.00	91.01	0.97	7,153.78	9,192.05	32.38	9,191.52	0.21	-0.06	-0.20	
16,427.00	89.95	0.81	7,153.03	9,281.04	33.76	9,280.49	1.20	-1.19	-0.18	
16,517.00	90.69	1.19	7,152.53	9,371.02	35.33	9,370.46	0.92	0.82	0.42	
16,606.00	90.18	1.09	7,151.85	9,460.00	37.10	9,459.42	0.58	-0.57	-0.11	
16,696.00	90.58	1.27	7,151.26	9,549.98	38.95	9,549.38	0.49	0.44	0.20	
16,786.00	91.30	1.28	7,149.78	9,639.95	40.95	9,639.33	0.80	0.80	0.01	
16,875.00	91.04	0.68	7,147.96	9,728.91	42.48	9,728.28	0.73	-0.29	-0.67	
16,965.00	91.12	0.87	7,146.27	9,818.89	43.69	9,818.24	0.23	0.09	0.21	
17,055.00	91.54	0.41	7,144.18	9,908.86	44.70	9,908.20	0.69	0.47	-0.51	
17,145.00	91.35	0.66	7,141.91	9,998.83	45.54	9,998.16	0.35	-0.21	0.28	
17,234.00	91.56	0.63	7,139.65	10,087.79	46.54	10,087.12	0.24	0.24	-0.03	
17,324.00	91.86	0.98	7,136.96	10,177.74	47.80	10,177.05	0.51	0.33	0.39	
17,413.00	91.47	358.06	7,134.38	10,266.69	47.06	10,266.01	3.31	-0.44	-3.28	
17,503.00	91.99	358.04	7,131.66	10,356.60	44.00	10,355.93	0.58	0.58	-0.02	
17,593.00	91.15	358.36	7,129.19	10,446.52	41.17	10,445.87	1.00	-0.93	0.36	
17,682.00	90.86	358.15	7,127.63	10,535.47	38.46	10,534.84	0.40	-0.33	-0.24	
17,772.00	92.35	359.13	7,125.11	10,625.40	36.33	10,624.79	1.98	1.66	1.09	
17,861.00	90.75	358.30	7,122.70	10,714.34	34.33	10,713.74	2.03	-1.80	-0.93	
17,951.00	91.00	357.84	7,121.33	10,804.28	31.30	10,803.70	0.58	0.28	-0.51	
18,041.00	91.86	357.39	7,119.08	10,894.17	27.56	10,893.62	1.08	0.96	-0.50	
18,130.00	92.39	357.14	7,115.78	10,983.01	23.31	10,982.49	0.66	0.60	-0.28	
18,220.00	93.08	357.03	7,111.49	11,072.79	18.74	11,072.30	0.78	0.77	-0.12	
18,310.00	93.50	356.78	7,106.32	11,162.51	13.89	11,162.06	0.54	0.47	-0.28	
18,400.00	91.86	359.23	7,102.12	11,252.35	10.76	11,251.92	3.27	-1.82	2.72	
18,489.00	90.28	359.62	7,100.45	11,341.33	9.87	11,340.90	1.83	-1.78	0.44	
18,579.00	89.79	359.33	7,100.40	11,431.32	9.04	11,430.90	0.63	-0.54	-0.32	
18,668.00	89.69	358.68	7,100.80	11,520.31	7.50	11,519.89	0.74	-0.11	-0.73	
18,758.00	88.93	358.81	7,101.89	11,610.28	5.53	11,609.88	0.86	-0.84	0.14	
18,848.00	90.31	359.34	7,102.48	11,700.26	4.08	11,699.87	1.64	1.53	0.59	
18,937.00	89.50	358.86	7,102.63	11,789.25	2.68	11,788.87	1.06	-0.91	-0.54	
19,027.00	91.50	359.99	7,101.85	11,879.24	1.77	11,878.86	2.55	2.22	1.26	
19,117.00	90.89	359.70	7,099.97	11,969.22	1.53	11,968.83	0.75	-0.68	-0.32	
19,206.00	90.02	359.29	7,099.26	12,058.21	0.75	12,057.83	1.08	-0.98	-0.46	
19,296.00	89.58	358.93	7,099.58	12,148.20	-0.65	12,147.83	0.63	-0.49	-0.40	



## Survey Report

<b>Company:</b>	Occidental Petroleum	<b>Local Co-ordinate Reference:</b>	Well Hickory 34-4HZ
<b>Project:</b>	Weld County, CO (UTM-NAD83)	<b>TVD Reference:</b>	PD 564 @ 4898.00usft
<b>Site:</b>	Hickory 10-34HZ Pad	<b>MD Reference:</b>	PD 564 @ 4898.00usft
<b>Well:</b>	Hickory 34-4HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDMPProd2025

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)	
19,385.00	89.15	358.27	7,100.56	12,237.16	-2.83	12,236.81	0.89	-0.48	-0.74	
19,475.00	88.66	357.55	7,102.28	12,327.09	-6.11	12,326.75	0.97	-0.54	-0.80	
19,565.00	90.50	358.07	7,102.94	12,417.01	-9.55	12,416.71	2.12	2.04	0.58	
19,654.00	90.51	357.24	7,102.16	12,505.94	-13.19	12,505.65	0.93	0.01	-0.93	
19,744.00	91.81	359.91	7,100.34	12,595.88	-15.43	12,595.61	3.30	1.44	2.97	
19,834.00	92.29	0.24	7,097.12	12,685.82	-15.31	12,685.55	0.65	0.53	0.37	
19,923.00	92.92	359.87	7,093.07	12,774.73	-15.22	12,774.45	0.82	0.71	-0.42	
20,013.00	91.44	359.06	7,089.65	12,864.66	-16.06	12,864.39	1.87	-1.64	-0.90	
20,103.00	91.30	1.12	7,087.50	12,954.63	-15.92	12,954.35	2.29	-0.16	2.29	
20,192.00	89.68	0.53	7,086.73	13,043.61	-14.64	13,043.32	1.94	-1.82	-0.66	
20,282.00	92.39	1.20	7,085.11	13,133.58	-13.28	13,133.27	3.10	3.01	0.74	
20,372.00	92.39	0.55	7,081.36	13,223.49	-11.91	13,223.17	0.72	0.00	-0.72	
20,461.00	92.63	0.20	7,077.46	13,312.40	-11.33	13,312.08	0.48	0.27	-0.39	
20,551.00	92.79	359.59	7,073.20	13,402.30	-11.49	13,401.97	0.70	0.18	-0.68	
20,641.00	93.68	359.30	7,068.12	13,492.15	-12.36	13,491.83	1.04	0.99	-0.32	
20,730.00	92.47	359.93	7,063.35	13,581.02	-12.96	13,580.70	1.53	-1.36	0.71	
20,790.06	92.84	359.62	7,060.57	13,641.01	-13.19	13,640.69	0.80	0.61	-0.51	
SEC 15 @ 20790.06' MD (1469 FEL)										
20,820.00	93.02	359.47	7,059.04	13,670.91	-13.43	13,670.60	0.80	0.61	-0.51	
20,910.00	93.10	359.02	7,054.23	13,760.78	-14.61	13,760.47	0.51	0.09	-0.50	
20,999.00	93.89	358.57	7,048.81	13,849.59	-16.48	13,849.29	1.02	0.89	-0.51	
21,089.00	92.55	358.92	7,043.75	13,939.42	-18.45	13,939.14	1.54	-1.49	0.39	
21,179.00	92.22	358.87	7,040.01	14,029.33	-20.18	14,029.05	0.37	-0.37	-0.06	
21,268.00	92.06	358.07	7,036.69	14,118.23	-22.56	14,117.98	0.92	-0.18	-0.90	
21,358.00	91.46	356.90	7,033.92	14,208.10	-26.51	14,207.87	1.46	-0.67	-1.30	
21,447.00	95.03	359.22	7,028.88	14,296.89	-29.52	14,296.68	4.78	4.01	2.61	
21,537.00	95.41	359.27	7,020.70	14,386.51	-30.70	14,386.30	0.43	0.42	0.06	
21,626.00	93.83	359.07	7,013.53	14,475.21	-31.98	14,475.01	1.79	-1.78	-0.22	
21,716.00	93.91	358.56	7,007.45	14,564.98	-33.84	14,564.80	0.57	0.09	-0.57	
21,806.00	94.61	357.92	7,000.77	14,654.69	-36.60	14,654.52	1.05	0.78	-0.71	
21,895.00	95.06	358.05	6,993.27	14,743.32	-39.71	14,743.17	0.53	0.51	0.15	
21,933.00	95.54	357.64	6,989.76	14,781.13	-41.14	14,781.00	1.66	1.26	-1.08	
Last Survey @ 21933' MD (1139 FSL, 1495 FEL)										
22,000.00	95.54	357.64	6,983.29	14,847.76	-43.88	14,847.65	0.00	0.00	0.00	
TD @ 22000' MD (1206 FSL, 1498 FEL)										

## Survey Report

<b>Company:</b>	Occidental Petroleum	<b>Local Co-ordinate Reference:</b>	Well Hickory 34-4HZ
<b>Project:</b>	Weld County, CO (UTM-NAD83)	<b>TVD Reference:</b>	PD 564 @ 4898.00usft
<b>Site:</b>	Hickory 10-34HZ Pad	<b>MD Reference:</b>	PD 564 @ 4898.00usft
<b>Well:</b>	Hickory 34-4HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDMProd2025

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,901.00	1,886.79	-165.87	72.77	First AEP Survey @ 1901' MD	
7,609.00	7,165.19	466.82	62.93	FTP @ 7609' MD (2615 FNL, 1504 FEL)	
7,638.00	7,167.33	495.72	61.97	Heel @ 7638' MD (2584 FNL, 1505 FEL)	
10,222.76	7,181.26	3,079.38	72.68	SEC 27 @ 10222.76' MD (1455 FEL)	
15,501.56	7,173.04	8,356.15	32.46	SEC 22 @ 15501.56' MD (1463 FEL)	
20,790.06	7,060.57	13,641.01	-13.19	SEC 15 @ 20790.06' MD (1469 FEL)	
21,933.00	6,989.76	14,781.13	-41.14	Last Survey @ 21933' MD (1139 FSL, 1495 FEL)	
22,000.00	6,983.29	14,847.76	-43.88	TD @ 22000' MD (1206 FSL, 1498 FEL)	

Checked By: _____	Approved By: _____	Date: _____
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