

Occidental Petroleum

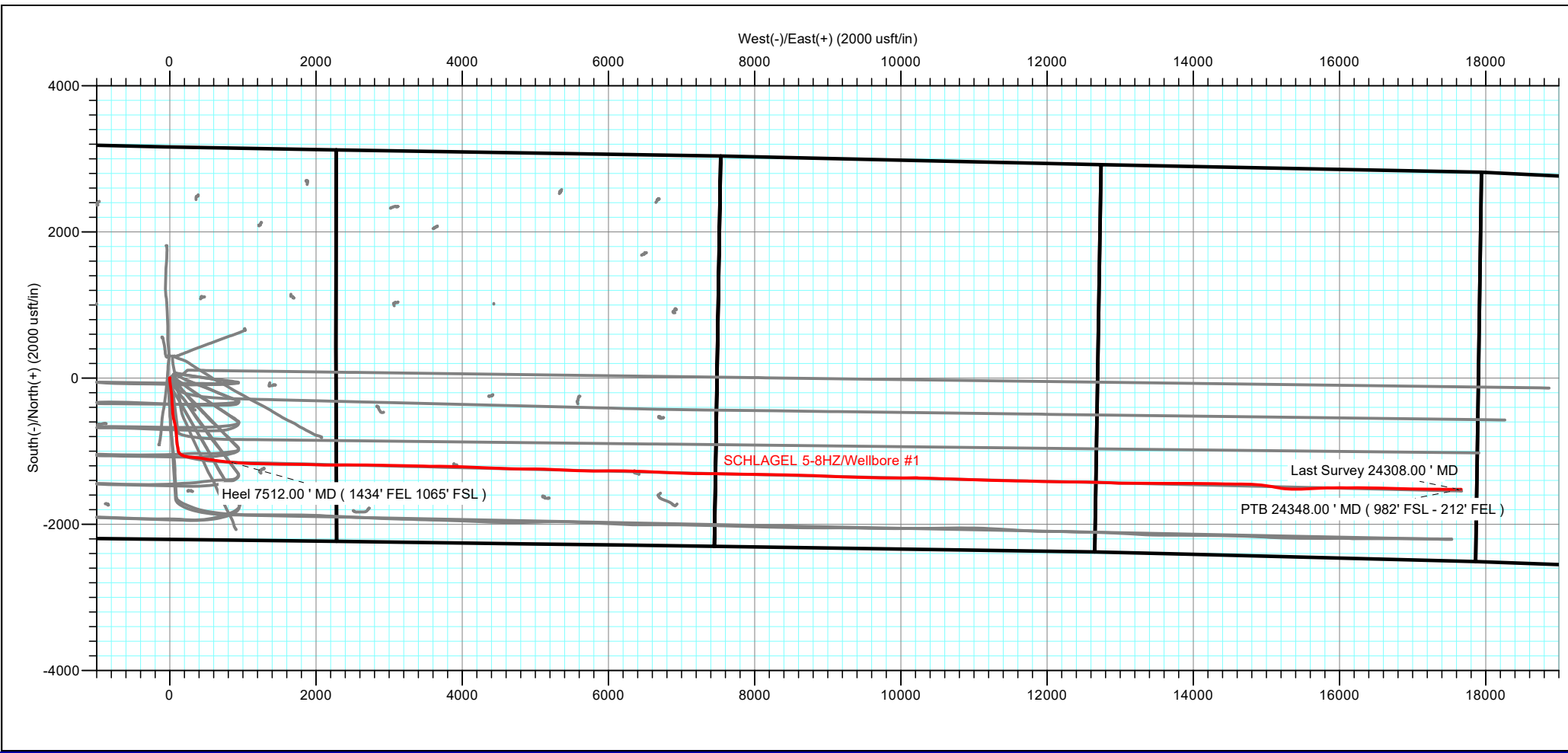
Project: Weld County, CO (UTM-NAD83)
 Site: 3N-67W-05 Schlagel 10-5HZ Pad
 Well: SCHLAGEL 5-8HZ
 Wellbore: Wellbore #1
 Design: Wellbore #1



ACTUAL LINE CALLS
SHL: 2206' FSL, 2274' FEL
LP: 1434' FEL, 1065' FSL
TOE: 212' FEL, 982' FSL

SHL: Sec 05-T3N-R67W
LP: Sec 05-T3N-R67W
BHL: Sec 02-T3N-R67W

ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation	
7512.00	87.14	95.44	6990.64	-1150.72	843.88	870.56	1775.40	Heel 7512.00 ' MD (1434' FEL 1065' FSL)	
24308.00	88.40	90.13	7140.11	-1521.18	17625.61	17656.37	18567.89	Last Survey 24308.00 ' MD	
24348.00	88.40	90.13	7141.22	-1521.27	17665.60	17696.34	18607.88	PTB 24348.00 ' MD (982' FSL - 212' FEL)	



TOTAL DIRECTIONAL SERVICES LLC

Design: Wellbore #1 (SCHLAGEL 5-8HZ/Wellbore #1)
 3N-67W-05 Schlagel 10-5HZ Pad
 Created By: Bethany Ball Date: 14:46, February 17 2023
 Date: _____ Date: _____
 Approved: _____ Date: _____

Occidental Petroleum

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



Geodetic System: Universal Transverse Mercator (US Survey Feet)

Datum: North American Datum 1983

Ellipsoid: GRS 1980

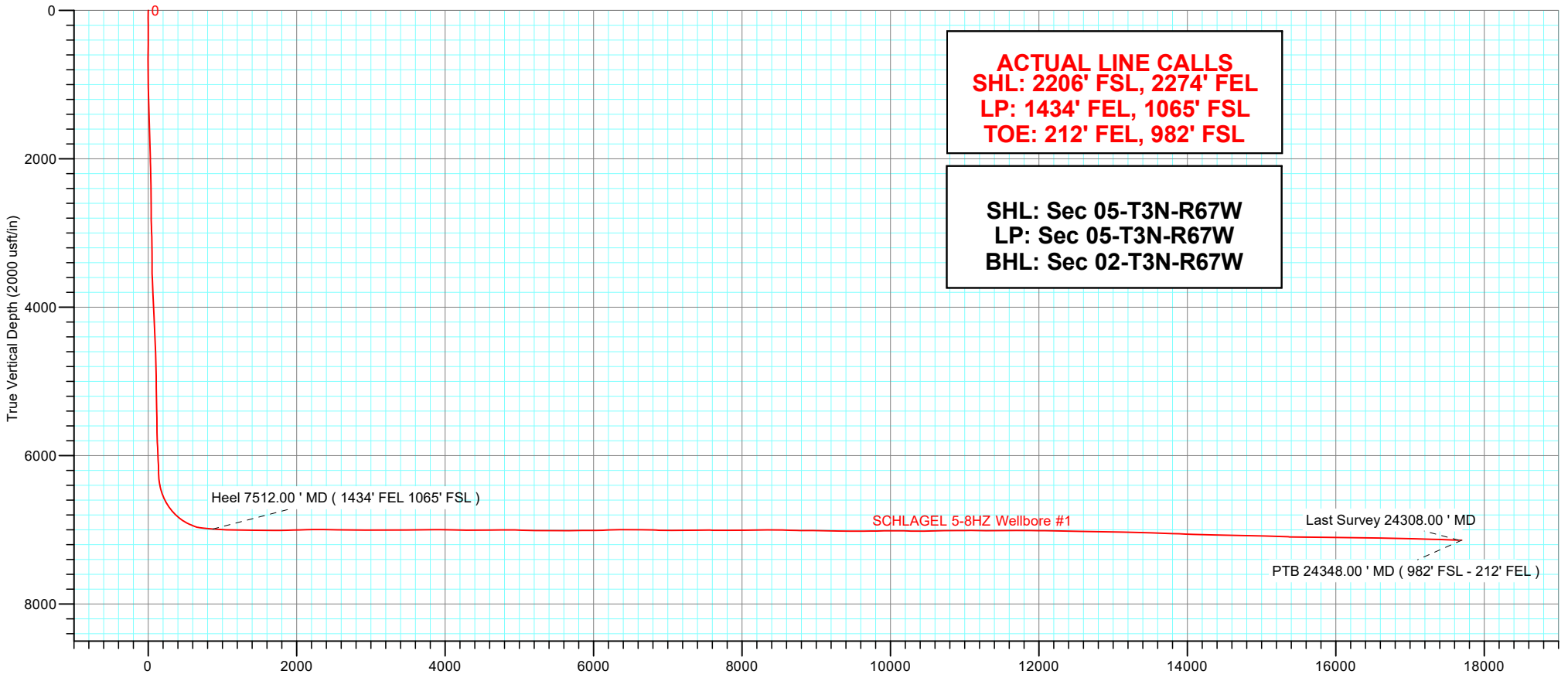
Zone: Zone 13N (108 W to 102 W)

Ground Level

Project: Weld County, CO (UTM-NAD83)
 Site: 3N-67W-05 Schlagel 10-5HZ Pad
 Well: SCHLAGEL 5-8HZ
 Wellbore: Wellbore #1
 Design: Wellbore #1

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
7512.00	87.14	95.44	6990.64	-1150.72	843.88	870.56	1775.40	Heel 7512.00 ' MD (1434' FEL 1065' FSL)
24308.00	88.40	90.13	7140.11	-1521.18	17625.61	17656.37	18567.89	Last Survey 24308.00 ' MD
24348.00	88.40	90.13	7141.22	-1521.27	17665.60	17696.34	18607.88	PTB 24348.00 ' MD (982' FSL - 212' FEL)



TOTAL DIRECTIONAL SERVICES LLC

Design: Wellbore #1 (SCHLAGEL 5-8HZ/Wellbore #1)
 Created By: Bethany Ball Date: 14:40, February 17 2023
 Date: _____
 Approved: _____ Date: _____

Occidental Petroleum

**Weld County, CO (UTM-NAD83)
3N-67W-05 Schlagel 10-5HZ Pad
SCHLAGEL 5-8HZ**

Wellbore #1

Design: Wellbore #1

Standard Survey Report

17 February, 2023

Survey Report

Company: Occidental Petroleum	Local Co-ordinate Reference: Well SCHLAGEL 5-8HZ
Project: Weld County, CO (UTM-NAD83)	TVD Reference: GE 4870' + KB 29' @ 4899.00usft
Site: 3N-67W-05 Schlager 10-5HZ Pad	MD Reference: GE 4870' + KB 29' @ 4899.00usft
Well: SCHLAGEL 5-8HZ	North Reference: True
Wellbore: Wellbore #1	Survey Calculation Method: Minimum Curvature
Design: Wellbore #1	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-05 Schlager 10-5HZ Pad		
Site Position:	Northing: 14,619,213.65 usft	Latitude: 40.2539300
From: Lat/Long	Easting: 1,664,758.13 usft	Longitude: -104.9127580
Position Uncertainty: 0.00 usft	Slot Radius: 13-3/16 "	

Well SCHLAGEL 5-8HZ			
Well Position	+N/-S 0.00 usft	Northing: 14,619,140.47 usft	Latitude: 40.2537293
	+E/-W 0.00 usft	Easting: 1,664,682.75 usft	Longitude: -104.9130284
Position Uncertainty	3.28 usft	Wellhead Elevation: usft	Ground Level: 4,870.00 usft
Grid Convergence:	0.0562 °		

Wellbore Wellbore #1					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2022	9/27/2022	8.0000	66.4500	51,752.00000000

Design Wellbore #1					
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	91.34	

Survey Program		Date 2/17/2023		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
103.00	1,857.00	Survey #1 (Wellbore #1)	APC_ISCWSA REV 2 MWD+	Fixed:v2:crustal field declination
1,857.00	24,348.00	Survey #2 (Wellbore #1)	APC_ISCWSA REV 2 MWD+	Fixed:v2:Rockies, crustal dec + 3-axis correction

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
103.00	0.34	354.14	103.00	0.30	-0.03	-0.04	0.33	0.33	0.00	
192.00	0.29	59.89	192.00	0.68	0.14	0.12	0.39	-0.06	73.88	
281.00	0.44	37.51	281.00	1.06	0.54	0.51	0.23	0.17	-25.15	
371.00	0.11	10.45	371.00	1.42	0.77	0.73	0.38	-0.37	-30.07	
461.00	0.74	220.79	460.99	1.07	0.40	0.38	0.93	0.70	-166.29	
551.00	0.98	229.86	550.98	0.13	-0.57	-0.57	0.31	0.27	10.08	
641.00	2.06	194.25	640.95	-1.93	-1.55	-1.51	1.54	1.20	-39.57	
731.00	2.96	189.45	730.86	-5.79	-2.33	-2.20	1.03	1.00	-5.33	

Survey Report

Company:	Occidental Petroleum	Local Co-ordinate Reference:	Well SCHLAGEL 5-8HZ
Project:	Weld County, CO (UTM-NAD83)	TVD Reference:	GE 4870' + KB 29' @ 4899.00usft
Site:	3N-67W-05 Schlagel 10-5HZ Pad	MD Reference:	GE 4870' + KB 29' @ 4899.00usft
Well:	SCHLAGEL 5-8HZ	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)	
821.00	4.71	179.71	820.66	-11.78	-2.70	-2.42	2.07	1.94	-10.82	
911.00	6.32	174.90	910.24	-20.41	-2.24	-1.76	1.86	1.79	-5.34	
1,001.00	8.46	170.75	999.49	-31.88	-0.73	0.01	2.45	2.38	-4.61	
1,091.00	9.33	171.58	1,088.41	-45.63	1.40	2.47	0.98	0.97	0.92	
1,180.00	10.29	170.86	1,176.10	-60.62	3.72	5.14	1.09	1.08	-0.81	
1,270.00	11.01	170.89	1,264.55	-77.04	6.36	8.16	0.80	0.80	0.03	
1,360.00	10.61	171.50	1,352.96	-93.72	8.94	11.13	0.46	-0.44	0.68	
1,450.00	9.71	170.98	1,441.54	-109.41	11.36	13.91	1.01	-1.00	-0.58	
1,540.00	11.11	175.22	1,530.06	-125.55	13.27	16.20	1.77	1.56	4.71	
1,630.00	11.02	177.27	1,618.39	-142.78	14.40	17.74	0.45	-0.10	2.28	
1,720.00	10.60	171.54	1,706.79	-159.56	16.03	19.76	1.28	-0.47	-6.37	
1,810.00	11.16	173.37	1,795.18	-176.40	18.25	22.37	0.73	0.62	2.03	
1,857.00	11.87	171.96	1,841.23	-185.70	19.45	23.79	1.62	1.51	-3.00	
1,960.00	11.21	173.05	1,942.15	-206.13	22.15	26.96	0.67	-0.64	1.06	
2,052.00	12.48	173.30	2,032.19	-224.88	24.39	29.64	1.38	1.38	0.27	
2,142.00	11.60	172.85	2,120.21	-243.52	26.65	32.34	0.98	-0.98	-0.50	
2,231.00	10.79	173.97	2,207.51	-260.68	28.64	34.73	0.94	-0.91	1.26	
2,321.00	11.82	176.60	2,295.76	-278.26	30.07	36.57	1.28	1.14	2.92	
2,410.00	11.04	177.82	2,383.00	-295.88	30.94	37.85	0.92	-0.88	1.37	
2,500.00	10.92	178.58	2,471.35	-313.01	31.47	38.79	0.21	-0.13	0.84	
2,592.00	10.75	178.55	2,561.71	-330.30	31.91	39.62	0.18	-0.18	-0.03	
2,683.00	10.21	181.07	2,651.19	-346.85	31.97	40.07	0.78	-0.59	2.77	
2,774.00	10.72	178.32	2,740.68	-363.37	32.07	40.56	0.78	0.56	-3.02	
2,866.00	10.28	175.28	2,831.14	-380.11	33.00	41.88	0.77	-0.48	-3.30	
2,956.00	10.48	170.61	2,919.67	-396.18	34.99	44.25	0.96	0.22	-5.19	
3,048.00	8.08	173.81	3,010.46	-410.87	37.05	46.65	2.67	-2.61	3.48	
3,138.00	7.47	175.50	3,099.63	-422.99	38.20	48.08	0.72	-0.68	1.88	
3,229.00	7.83	166.86	3,189.82	-434.92	40.07	50.23	1.32	0.40	-9.49	
3,320.00	8.33	177.44	3,279.93	-447.55	41.77	52.23	1.72	0.55	11.63	
3,412.00	11.35	181.26	3,370.56	-463.26	41.87	52.69	3.36	3.28	4.15	
3,503.00	12.05	181.68	3,459.67	-481.71	41.40	52.65	0.77	0.77	0.46	
3,593.00	11.22	174.95	3,547.82	-499.82	41.89	53.57	1.77	-0.92	-7.48	
3,685.00	10.53	165.73	3,638.18	-516.88	44.75	56.83	2.03	-0.75	-10.02	
3,777.00	10.48	169.03	3,728.64	-533.25	48.42	60.87	0.66	-0.05	3.59	
3,868.00	10.36	169.50	3,818.14	-549.42	51.48	64.32	0.16	-0.13	0.52	
3,960.00	11.27	165.85	3,908.50	-566.27	55.19	68.41	1.24	0.99	-3.97	
4,052.00	9.03	165.94	3,999.06	-581.99	59.14	72.73	2.43	-2.43	0.10	
4,143.00	10.11	163.89	4,088.79	-596.59	63.09	77.03	1.24	1.19	-2.25	
4,263.00	10.38	167.93	4,206.88	-617.28	68.27	82.69	0.64	0.23	3.37	
4,353.00	11.84	168.66	4,295.19	-634.26	71.79	86.60	1.63	1.62	0.81	
4,442.00	10.75	167.42	4,382.46	-651.32	75.39	90.60	1.25	-1.22	-1.39	
4,534.00	9.69	167.71	4,473.00	-667.26	78.91	94.49	1.15	-1.15	0.32	
4,624.00	10.13	170.09	4,561.66	-682.45	81.88	97.82	0.67	0.49	2.64	

Survey Report

Company:	Occidental Petroleum	Local Co-ordinate Reference:	Well SCHLAGEL 5-8HZ
Project:	Weld County, CO (UTM-NAD83)	TVD Reference:	GE 4870' + KB 29' @ 4899.00usft
Site:	3N-67W-05 Schlagel 10-5HZ Pad	MD Reference:	GE 4870' + KB 29' @ 4899.00usft
Well:	SCHLAGEL 5-8HZ	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)	
4,714.00	11.45	166.20	4,650.07	-698.93	85.37	101.69	1.67	1.47	-4.32	
4,805.00	11.56	175.12	4,739.25	-716.79	88.30	105.04	1.96	0.12	9.80	
4,896.00	10.85	179.42	4,828.51	-734.44	89.17	106.32	1.20	-0.78	4.73	
4,986.00	10.10	179.22	4,917.01	-750.80	89.36	106.89	0.83	-0.83	-0.22	
5,075.00	10.23	177.77	5,004.62	-766.50	89.77	107.67	0.32	0.15	-1.63	
5,165.00	10.87	177.63	5,093.09	-782.96	90.43	108.72	0.71	0.71	-0.16	
5,256.00	10.31	174.07	5,182.55	-799.64	91.63	110.31	0.95	-0.62	-3.91	
5,346.00	9.73	170.95	5,271.17	-815.16	93.66	112.70	0.88	-0.64	-3.47	
5,436.00	10.01	174.28	5,359.84	-830.45	95.64	115.03	0.71	0.31	3.70	
5,525.00	9.97	174.95	5,447.49	-845.82	97.08	116.84	0.14	-0.04	0.75	
5,615.00	9.85	183.14	5,536.15	-861.27	97.35	117.46	1.57	-0.13	9.10	
5,704.00	11.46	176.20	5,623.62	-877.69	97.52	118.02	2.31	1.81	-7.80	
5,795.00	10.89	174.79	5,712.89	-895.28	98.90	119.81	0.69	-0.63	-1.55	
5,884.00	11.01	168.26	5,800.28	-911.97	101.39	122.69	1.40	0.13	-7.34	
5,974.00	11.08	164.27	5,888.61	-928.71	105.48	127.17	0.85	0.08	-4.43	
6,064.00	10.81	167.47	5,976.98	-945.27	109.66	131.73	0.74	-0.30	3.56	
6,154.00	10.66	172.48	6,065.40	-961.76	112.58	135.04	1.05	-0.17	5.57	
6,244.00	11.25	169.40	6,153.76	-978.65	115.28	138.14	0.92	0.66	-3.42	
6,334.00	11.15	174.12	6,242.05	-995.93	117.79	141.05	1.02	-0.11	5.24	
6,424.00	12.45	153.90	6,330.18	-1,013.31	122.95	146.61	4.79	1.44	-22.47	
6,513.00	17.62	133.71	6,416.17	-1,031.26	136.93	161.01	8.19	5.81	-22.69	
6,603.00	19.99	123.46	6,501.38	-1,049.16	159.62	184.11	4.51	2.63	-11.39	
6,693.00	26.60	106.61	6,584.09	-1,063.43	191.83	216.65	10.36	7.34	-18.72	
6,783.00	32.63	100.44	6,662.31	-1,073.60	235.05	260.10	7.50	6.70	-6.86	
6,875.00	38.87	95.88	6,736.95	-1,081.06	288.22	313.43	7.37	6.78	-4.96	
6,966.00	46.29	94.25	6,803.92	-1,086.43	349.51	374.82	8.24	8.15	-1.79	
7,057.00	54.59	98.59	6,861.84	-1,094.42	419.12	444.60	9.83	9.12	4.77	
7,148.00	63.05	99.55	6,908.91	-1,106.71	495.93	521.67	9.34	9.30	1.05	
7,240.00	67.89	97.93	6,947.10	-1,119.40	578.63	604.65	5.50	5.26	-1.76	
7,331.00	79.30	96.84	6,972.75	-1,130.58	665.06	691.31	12.59	12.54	-1.20	
7,422.00	85.45	96.71	6,984.82	-1,141.22	754.58	781.06	6.76	6.76	-0.14	
7,512.00	87.14	95.44	6,990.64	-1,150.72	843.88	870.56	2.35	1.88	-1.41	
Heel 7512.00 ' MD (1434' FEL 1065' FSL)										
7,604.00	86.95	94.93	6,995.38	-1,159.02	935.38	962.23	0.59	-0.21	-0.55	
7,694.00	87.72	93.09	6,999.57	-1,165.31	1,025.06	1,052.03	2.21	0.86	-2.04	
7,783.00	89.28	92.22	7,001.90	-1,169.43	1,113.93	1,140.98	2.01	1.75	-0.98	
7,873.00	88.56	91.90	7,003.59	-1,172.66	1,203.86	1,230.95	0.88	-0.80	-0.36	
7,962.00	88.21	90.90	7,006.10	-1,174.84	1,292.79	1,319.91	1.19	-0.39	-1.12	
8,052.00	89.29	90.58	7,008.06	-1,176.00	1,382.76	1,409.89	1.25	1.20	-0.36	
8,143.00	90.55	89.76	7,008.19	-1,176.27	1,473.76	1,500.87	1.65	1.38	-0.90	
8,234.00	89.59	89.81	7,008.08	-1,175.93	1,564.76	1,591.83	1.06	-1.05	0.05	
8,326.00	89.82	91.82	7,008.55	-1,177.24	1,656.74	1,683.82	2.20	0.25	2.18	
8,416.00	90.15	90.38	7,008.58	-1,178.96	1,746.72	1,773.82	1.64	0.37	-1.60	
8,507.00	91.59	91.94	7,007.20	-1,180.81	1,837.69	1,864.80	2.33	1.58	1.71	

Survey Report

Company:	Occidental Petroleum	Local Co-ordinate Reference:	Well SCHLAGEL 5-8HZ
Project:	Weld County, CO (UTM-NAD83)	TVD Reference:	GE 4870' + KB 29' @ 4899.00usft
Site:	3N-67W-05 Schlagel 10-5HZ Pad	MD Reference:	GE 4870' + KB 29' @ 4899.00usft
Well:	SCHLAGEL 5-8HZ	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)	
8,597.00	91.39	91.44	7,004.86	-1,183.46	1,927.62	1,954.77	0.60	-0.22	-0.56	
8,689.00	91.60	91.54	7,002.46	-1,185.85	2,019.56	2,046.74	0.25	0.23	0.11	
8,780.00	92.67	91.23	6,999.07	-1,188.05	2,110.47	2,137.67	1.22	1.18	-0.34	
8,870.00	90.41	90.73	6,996.65	-1,189.59	2,200.41	2,227.63	2.57	-2.51	-0.56	
8,959.00	90.33	89.73	6,996.07	-1,189.94	2,289.41	2,316.61	1.13	-0.09	-1.12	
9,050.00	89.33	89.54	6,996.34	-1,189.36	2,380.41	2,407.57	1.12	-1.10	-0.21	
9,140.00	87.84	88.64	6,998.56	-1,187.94	2,470.37	2,497.47	1.93	-1.66	-1.00	
9,233.00	89.21	89.30	7,000.96	-1,186.26	2,563.32	2,590.36	1.64	1.47	0.71	
9,322.00	89.71	91.05	7,001.80	-1,186.54	2,652.31	2,679.33	2.04	0.56	1.97	
9,412.00	88.13	90.69	7,003.49	-1,187.90	2,742.28	2,769.31	1.80	-1.76	-0.40	
9,503.00	89.35	91.12	7,005.49	-1,189.34	2,833.24	2,860.28	1.42	1.34	0.47	
9,593.00	89.88	91.37	7,006.10	-1,191.30	2,923.22	2,950.28	0.65	0.59	0.28	
9,683.00	89.40	90.99	7,006.66	-1,193.15	3,013.20	3,040.28	0.68	-0.53	-0.42	
9,773.00	91.10	92.09	7,006.27	-1,195.57	3,103.16	3,130.27	2.25	1.89	1.22	
9,864.00	90.16	91.38	7,005.27	-1,198.32	3,194.11	3,221.26	1.29	-1.03	-0.78	
9,954.00	89.71	90.31	7,005.37	-1,199.65	3,284.10	3,311.26	1.29	-0.50	-1.19	
10,045.00	91.21	91.21	7,004.64	-1,200.86	3,375.09	3,402.25	1.92	1.65	0.99	
10,134.00	91.19	91.37	7,002.78	-1,202.86	3,464.04	3,491.23	0.18	-0.02	0.18	
10,225.00	91.30	90.45	7,000.80	-1,204.30	3,555.01	3,582.20	1.02	0.12	-1.01	
10,315.00	91.52	89.66	6,998.59	-1,204.39	3,644.98	3,672.15	0.91	0.24	-0.88	
10,406.00	89.34	91.64	6,997.90	-1,205.42	3,735.96	3,763.13	3.24	-2.40	2.18	
10,496.00	89.28	91.38	6,998.99	-1,207.79	3,825.93	3,853.12	0.30	-0.07	-0.29	
10,587.00	89.54	91.70	6,999.93	-1,210.24	3,916.89	3,944.12	0.45	0.29	0.35	
10,678.00	88.61	91.97	7,001.39	-1,213.15	4,007.83	4,035.10	1.06	-1.02	0.30	
10,770.00	89.24	91.86	7,003.12	-1,216.23	4,099.76	4,127.08	0.70	0.68	-0.12	
10,861.00	89.50	92.43	7,004.12	-1,219.63	4,190.69	4,218.07	0.69	0.29	0.63	
10,951.00	88.87	92.40	7,005.40	-1,223.43	4,280.60	4,308.04	0.70	-0.70	-0.03	
11,041.00	90.10	93.56	7,006.21	-1,228.10	4,370.47	4,398.00	1.88	1.37	1.29	
11,130.00	90.34	92.15	7,005.87	-1,232.54	4,459.36	4,486.96	1.61	0.27	-1.58	
11,222.00	90.36	91.92	7,005.31	-1,235.80	4,551.30	4,578.95	0.25	0.02	-0.25	
11,313.00	90.68	91.61	7,004.48	-1,238.61	4,642.25	4,669.95	0.49	0.35	-0.34	
11,403.00	90.43	91.14	7,003.61	-1,240.77	4,732.22	4,759.94	0.59	-0.28	-0.52	
11,495.00	90.03	90.54	7,003.24	-1,242.11	4,824.21	4,851.94	0.78	-0.43	-0.65	
11,586.00	89.23	90.24	7,003.83	-1,242.73	4,915.21	4,942.92	0.94	-0.88	-0.33	
11,676.00	87.73	89.71	7,006.21	-1,242.69	5,005.17	5,032.86	1.77	-1.67	-0.59	
11,767.00	88.64	91.79	7,009.10	-1,243.89	5,096.11	5,123.81	2.49	1.00	2.29	
11,858.00	89.55	92.84	7,010.53	-1,247.56	5,187.02	5,214.78	1.53	1.00	1.15	
11,948.00	89.81	92.72	7,011.04	-1,251.93	5,276.92	5,304.75	0.32	0.29	-0.13	
12,040.00	89.72	92.51	7,011.41	-1,256.12	5,368.82	5,396.73	0.25	-0.10	-0.23	
12,130.00	89.40	93.00	7,012.11	-1,260.45	5,458.71	5,486.70	0.65	-0.36	0.54	
12,223.00	88.90	91.93	7,013.48	-1,264.45	5,551.62	5,579.67	1.27	-0.54	-1.15	
12,312.00	91.63	91.89	7,013.07	-1,267.41	5,640.56	5,668.65	3.07	3.07	-0.04	
12,403.00	90.71	90.05	7,011.22	-1,268.95	5,731.52	5,759.63	2.26	-1.01	-2.02	

Survey Report

Company:	Occidental Petroleum	Local Co-ordinate Reference:	Well SCHLAGEL 5-8HZ
Project:	Weld County, CO (UTM-NAD83)	TVD Reference:	GE 4870' + KB 29' @ 4899.00usft
Site:	3N-67W-05 Schlagel 10-5HZ Pad	MD Reference:	GE 4870' + KB 29' @ 4899.00usft
Well:	SCHLAGEL 5-8HZ	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)	
12,492.00	91.43	90.78	7,009.55	-1,269.60	5,820.50	5,848.60	1.15	0.81	0.82	
12,583.00	90.14	88.03	7,008.31	-1,268.65	5,911.48	5,939.53	3.34	-1.42	-3.02	
12,674.00	90.04	88.92	7,008.16	-1,266.23	6,002.44	6,030.41	0.98	-0.11	0.98	
12,763.00	91.63	91.00	7,006.87	-1,266.17	6,091.43	6,119.37	2.94	1.79	2.34	
12,853.00	92.08	90.36	7,003.95	-1,267.24	6,181.37	6,209.32	0.87	0.50	-0.71	
12,943.00	90.92	92.89	7,001.60	-1,269.79	6,271.30	6,299.27	3.09	-1.29	2.81	
13,033.00	91.35	90.81	6,999.81	-1,272.69	6,361.23	6,389.25	2.36	0.48	-2.31	
13,123.00	90.17	92.29	6,998.62	-1,275.13	6,451.18	6,479.24	2.10	-1.31	1.64	
13,213.00	89.10	93.03	6,999.19	-1,279.30	6,541.08	6,569.21	1.45	-1.19	0.82	
13,302.00	88.83	92.78	7,000.80	-1,283.81	6,629.95	6,658.16	0.41	-0.30	-0.28	
13,393.00	88.85	92.68	7,002.64	-1,288.15	6,720.83	6,749.12	0.11	0.02	-0.11	
13,485.00	87.26	92.37	7,005.77	-1,292.20	6,812.68	6,841.04	1.76	-1.73	-0.34	
13,575.00	89.03	91.72	7,008.68	-1,295.41	6,902.58	6,930.98	2.09	1.97	-0.72	
13,665.00	91.36	92.22	7,008.37	-1,298.50	6,992.52	7,020.97	2.65	2.59	0.56	
13,755.00	90.69	91.88	7,006.76	-1,301.72	7,082.44	7,110.95	0.83	-0.74	-0.38	
13,845.00	90.24	91.32	7,006.03	-1,304.23	7,172.40	7,200.94	0.80	-0.50	-0.62	
13,937.00	89.67	90.30	7,006.10	-1,305.53	7,264.39	7,292.94	1.27	-0.62	-1.11	
14,029.00	90.27	90.99	7,006.15	-1,306.57	7,356.39	7,384.93	0.99	0.65	0.75	
14,119.00	90.91	90.28	7,005.23	-1,307.57	7,446.38	7,474.92	1.06	0.71	-0.79	
14,209.00	88.73	91.32	7,005.51	-1,308.82	7,536.36	7,564.91	2.68	-2.42	1.16	
14,299.00	89.80	90.71	7,006.66	-1,310.42	7,626.34	7,654.89	1.37	1.19	-0.68	
14,389.00	90.39	89.76	7,006.51	-1,310.79	7,716.33	7,744.88	1.24	0.66	-1.06	
14,479.00	89.57	92.04	7,006.54	-1,312.20	7,806.32	7,834.87	2.69	-0.91	2.53	
14,569.00	89.89	91.28	7,006.97	-1,314.81	7,896.28	7,924.86	0.92	0.36	-0.84	
14,659.00	90.34	91.33	7,006.79	-1,316.86	7,986.25	8,014.86	0.50	0.50	0.06	
14,749.00	91.56	90.53	7,005.30	-1,318.32	8,076.23	8,104.85	1.62	1.36	-0.89	
14,838.00	89.98	91.42	7,004.10	-1,319.83	8,165.20	8,193.83	2.04	-1.78	1.00	
14,929.00	90.41	91.29	7,003.79	-1,321.98	8,256.18	8,284.83	0.49	0.47	-0.14	
15,020.00	91.19	90.31	7,002.52	-1,323.25	8,347.16	8,375.82	1.38	0.86	-1.08	
15,110.00	88.63	90.52	7,002.66	-1,323.91	8,437.15	8,465.80	2.85	-2.84	0.23	
15,200.00	88.33	89.91	7,005.05	-1,324.24	8,527.11	8,555.75	0.76	-0.33	-0.68	
15,291.00	89.06	92.59	7,007.12	-1,326.23	8,618.06	8,646.72	3.05	0.80	2.95	
15,383.00	88.12	92.37	7,009.39	-1,330.21	8,709.94	8,738.67	1.05	-1.02	-0.24	
15,475.00	89.67	92.33	7,011.16	-1,333.98	8,801.85	8,830.63	1.69	1.68	-0.04	
15,566.00	89.68	92.50	7,011.68	-1,337.81	8,892.76	8,921.62	0.19	0.01	0.19	
15,655.00	89.22	92.50	7,012.53	-1,341.70	8,981.67	9,010.59	0.52	-0.52	0.00	
15,747.00	89.45	92.65	7,013.60	-1,345.83	9,073.58	9,102.57	0.30	0.25	0.16	
15,836.00	88.59	92.39	7,015.12	-1,349.74	9,162.48	9,191.53	1.01	-0.97	-0.29	
15,927.00	89.34	91.72	7,016.76	-1,353.00	9,253.40	9,282.51	1.11	0.82	-0.74	
16,018.00	88.54	91.18	7,018.45	-1,355.31	9,344.36	9,373.49	1.06	-0.88	-0.59	
16,109.00	89.91	91.17	7,019.68	-1,357.17	9,435.33	9,464.48	1.51	1.51	-0.01	
16,200.00	90.09	91.35	7,019.68	-1,359.17	9,526.30	9,555.48	0.28	0.20	0.20	
16,289.00	91.07	91.58	7,018.78	-1,361.45	9,615.27	9,644.48	1.13	1.10	0.26	

Survey Report

Company:	Occidental Petroleum	Local Co-ordinate Reference:	Well SCHLAGEL 5-8HZ
Project:	Weld County, CO (UTM-NAD83)	TVD Reference:	GE 4870' + KB 29' @ 4899.00usft
Site:	3N-67W-05 Schlagel 10-5HZ Pad	MD Reference:	GE 4870' + KB 29' @ 4899.00usft
Well:	SCHLAGEL 5-8HZ	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)	
16,379.00	90.84	91.29	7,017.28	-1,363.70	9,705.23	9,734.46	0.41	-0.26	-0.32	
16,469.00	90.66	91.03	7,016.10	-1,365.52	9,795.20	9,824.46	0.35	-0.20	-0.29	
16,559.00	90.54	90.55	7,015.16	-1,366.76	9,885.19	9,914.45	0.55	-0.13	-0.53	
16,648.00	90.38	87.88	7,014.44	-1,365.55	9,974.17	10,003.37	3.01	-0.18	-3.00	
16,739.00	89.54	90.47	7,014.51	-1,364.24	10,065.15	10,094.30	2.99	-0.92	2.85	
16,830.00	88.79	88.67	7,015.83	-1,363.55	10,156.13	10,185.24	2.14	-0.82	-1.98	
16,919.00	89.34	92.40	7,017.28	-1,364.38	10,245.10	10,274.21	4.24	0.62	4.19	
17,009.00	88.70	91.77	7,018.82	-1,367.66	10,335.03	10,364.19	1.00	-0.71	-0.70	
17,099.00	91.16	92.54	7,018.93	-1,371.04	10,424.96	10,454.17	2.86	2.73	0.86	
17,188.00	90.88	92.02	7,017.35	-1,374.58	10,513.87	10,543.14	0.66	-0.31	-0.58	
17,277.00	91.05	91.84	7,015.85	-1,377.58	10,602.81	10,632.12	0.28	0.19	-0.20	
17,367.00	91.45	91.50	7,013.89	-1,380.20	10,692.75	10,722.10	0.58	0.44	-0.38	
17,458.00	91.79	91.76	7,011.31	-1,382.79	10,783.68	10,813.06	0.47	0.37	0.29	
17,548.00	89.85	92.12	7,010.03	-1,385.83	10,873.61	10,903.04	2.19	-2.16	0.40	
17,638.00	90.07	91.91	7,010.09	-1,389.00	10,963.55	10,993.04	0.34	0.24	-0.23	
17,730.00	90.29	91.68	7,009.80	-1,391.88	11,055.51	11,085.04	0.35	0.24	-0.25	
17,821.00	89.39	91.86	7,010.05	-1,394.69	11,146.46	11,176.03	1.01	-0.99	0.20	
17,912.00	88.84	91.81	7,011.46	-1,397.61	11,237.41	11,267.02	0.61	-0.60	-0.05	
18,002.00	88.82	92.18	7,013.30	-1,400.74	11,327.33	11,356.99	0.41	-0.02	0.41	
18,092.00	90.47	91.23	7,013.86	-1,403.42	11,417.29	11,446.98	2.12	1.83	-1.06	
18,182.00	90.60	90.76	7,013.01	-1,404.98	11,507.27	11,536.98	0.54	0.14	-0.52	
18,273.00	91.14	90.61	7,011.63	-1,406.07	11,598.25	11,627.96	0.62	0.59	-0.16	
18,363.00	91.78	90.43	7,009.34	-1,406.88	11,688.22	11,717.92	0.74	0.71	-0.20	
18,454.00	89.24	92.44	7,008.53	-1,409.16	11,779.17	11,808.91	3.56	-2.79	2.21	
18,544.00	88.48	91.82	7,010.32	-1,412.51	11,869.09	11,898.88	1.09	-0.84	-0.69	
18,634.00	89.24	91.35	7,012.11	-1,414.99	11,959.04	11,988.86	0.99	0.84	-0.52	
18,725.00	88.78	91.07	7,013.68	-1,416.92	12,050.01	12,079.85	0.59	-0.51	-0.31	
18,818.00	89.12	90.89	7,015.39	-1,418.51	12,142.98	12,172.83	0.41	0.37	-0.19	
18,909.00	88.92	89.92	7,016.94	-1,419.15	12,233.96	12,263.80	1.09	-0.22	-1.07	
18,998.00	88.04	90.07	7,019.31	-1,419.14	12,322.93	12,352.74	1.00	-0.99	0.17	
19,088.00	89.61	89.37	7,021.15	-1,418.70	12,412.90	12,442.69	1.91	1.74	-0.78	
19,177.00	88.95	91.98	7,022.27	-1,419.75	12,501.88	12,531.67	3.02	-0.74	2.93	
19,269.00	89.18	91.47	7,023.77	-1,422.52	12,593.83	12,623.65	0.61	0.25	-0.55	
19,359.00	90.08	91.84	7,024.35	-1,425.12	12,683.79	12,713.65	1.08	1.00	0.41	
19,449.00	88.97	92.44	7,025.10	-1,428.48	12,773.72	12,803.63	1.40	-1.23	0.67	
19,540.00	89.04	92.45	7,026.68	-1,432.36	12,864.62	12,894.60	0.08	0.08	0.01	
19,629.00	88.63	92.00	7,028.49	-1,435.81	12,953.54	12,983.57	0.68	-0.46	-0.51	
19,720.00	89.01	89.82	7,030.36	-1,437.26	13,044.50	13,074.54	2.43	0.42	-2.40	
19,811.00	88.75	89.39	7,032.14	-1,436.63	13,135.48	13,165.49	0.55	-0.29	-0.47	
19,902.00	87.65	91.47	7,035.00	-1,437.31	13,226.43	13,256.42	2.58	-1.21	2.29	
19,992.00	88.04	90.06	7,038.38	-1,438.51	13,316.35	13,346.35	1.62	0.43	-1.57	
20,083.00	88.42	90.23	7,041.19	-1,438.75	13,407.31	13,437.29	0.46	0.42	0.19	
20,173.00	87.98	89.78	7,044.02	-1,438.75	13,497.26	13,527.22	0.70	-0.49	-0.50	
20,264.00	88.25	90.39	7,047.01	-1,438.89	13,588.22	13,618.15	0.73	0.30	0.67	

Survey Report

Company:	Occidental Petroleum	Local Co-ordinate Reference:	Well SCHLAGEL 5-8HZ
Project:	Weld County, CO (UTM-NAD83)	TVD Reference:	GE 4870' + KB 29' @ 4899.00usft
Site:	3N-67W-05 Schlager 10-5HZ Pad	MD Reference:	GE 4870' + KB 29' @ 4899.00usft
Well:	SCHLAGEL 5-8HZ	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)
20,353.00	88.34	89.70	7,049.66	-1,438.96	13,677.18	13,707.09	0.78	0.10	-0.78
20,445.00	88.25	90.03	7,052.40	-1,438.74	13,769.13	13,799.01	0.37	-0.10	0.36
20,536.00	87.59	90.70	7,055.70	-1,439.32	13,860.07	13,889.94	1.03	-0.73	0.74
20,627.00	87.51	90.35	7,059.59	-1,440.15	13,950.98	13,980.85	0.39	-0.09	-0.38
20,717.00	87.93	89.69	7,063.17	-1,440.18	14,040.91	14,070.75	0.87	0.47	-0.73
20,807.00	88.67	91.08	7,065.84	-1,440.79	14,130.87	14,160.70	1.75	0.82	1.54
20,897.00	88.48	91.46	7,068.08	-1,442.78	14,220.82	14,250.67	0.47	-0.21	0.42
20,986.00	88.60	91.19	7,070.35	-1,444.84	14,309.76	14,339.64	0.33	0.13	-0.30
21,076.00	89.58	90.35	7,071.78	-1,446.05	14,399.74	14,429.62	1.43	1.09	-0.93
21,166.00	88.09	91.40	7,073.61	-1,447.42	14,489.71	14,519.60	2.03	-1.66	1.17
21,256.00	89.28	90.90	7,075.67	-1,449.23	14,579.67	14,609.57	1.43	1.32	-0.56
21,345.00	88.88	90.02	7,077.10	-1,449.94	14,668.65	14,698.55	1.09	-0.45	-0.99
21,435.00	88.57	91.05	7,079.11	-1,450.78	14,758.62	14,788.51	1.19	-0.34	1.14
21,525.00	88.58	94.19	7,081.34	-1,454.90	14,848.49	14,878.45	3.49	0.01	3.49
21,615.00	88.73	96.76	7,083.46	-1,463.48	14,938.05	14,968.19	2.86	0.17	2.86
21,705.00	88.52	98.70	7,085.62	-1,475.58	15,027.20	15,057.60	2.17	-0.23	2.16
21,795.00	88.95	101.51	7,087.60	-1,491.37	15,115.77	15,146.52	3.16	0.48	3.12
21,884.00	87.87	98.47	7,090.07	-1,506.80	15,203.38	15,234.46	3.62	-1.21	-3.42
21,974.00	86.93	93.32	7,094.16	-1,516.03	15,292.78	15,324.05	5.81	-1.04	-5.72
22,063.00	88.76	89.65	7,097.51	-1,518.33	15,381.67	15,412.97	4.61	2.06	-4.12
22,153.00	89.12	87.76	7,099.17	-1,516.30	15,471.62	15,502.85	2.14	0.40	-2.10
22,244.00	89.42	87.73	7,100.33	-1,512.72	15,562.55	15,593.67	0.33	0.33	-0.03
22,333.00	89.21	87.71	7,101.40	-1,509.18	15,651.47	15,682.48	0.24	-0.24	-0.02
22,423.00	89.58	87.76	7,102.35	-1,505.62	15,741.39	15,772.30	0.41	0.41	0.06
22,514.00	89.39	88.48	7,103.16	-1,502.64	15,832.34	15,863.15	0.82	-0.21	0.79
22,603.00	89.25	88.41	7,104.22	-1,500.22	15,921.30	15,952.03	0.18	-0.16	-0.08
22,694.00	89.50	90.74	7,105.21	-1,499.55	16,012.29	16,042.98	2.57	0.27	2.56
22,783.00	89.57	90.41	7,105.94	-1,500.44	16,101.28	16,131.96	0.38	0.08	-0.37
22,874.00	89.52	90.20	7,106.66	-1,500.93	16,192.28	16,222.95	0.24	-0.05	-0.23
22,963.00	89.49	90.22	7,107.43	-1,501.25	16,281.27	16,311.93	0.04	-0.03	0.02
23,053.00	89.48	89.41	7,108.24	-1,500.96	16,371.27	16,401.89	0.90	-0.01	-0.90
23,143.00	89.41	91.11	7,109.11	-1,501.37	16,461.26	16,491.87	1.89	-0.08	1.89
23,231.00	88.64	92.21	7,110.61	-1,503.92	16,549.21	16,579.85	1.53	-0.88	1.25
23,321.00	88.48	91.60	7,112.87	-1,506.91	16,639.13	16,669.82	0.70	-0.18	-0.68
23,411.00	88.41	91.18	7,115.31	-1,509.09	16,729.07	16,759.78	0.47	-0.08	-0.47
23,501.00	88.35	90.93	7,117.85	-1,510.75	16,819.02	16,849.75	0.29	-0.07	-0.28
23,590.00	88.55	92.02	7,120.26	-1,513.04	16,907.95	16,938.71	1.24	0.22	1.22
23,680.00	88.50	90.78	7,122.58	-1,515.24	16,997.90	17,028.68	1.38	-0.06	-1.38
23,770.00	88.60	90.94	7,124.86	-1,516.59	17,087.86	17,118.65	0.21	0.11	0.18
23,860.00	88.60	90.77	7,127.05	-1,517.93	17,177.82	17,208.62	0.19	0.00	-0.19
23,950.00	88.51	90.34	7,129.32	-1,518.80	17,267.79	17,298.58	0.49	-0.10	-0.48
24,040.00	88.24	90.49	7,131.88	-1,519.45	17,357.75	17,388.53	0.34	-0.30	0.17
24,129.00	88.28	90.40	7,134.58	-1,520.14	17,446.70	17,477.48	0.11	0.04	-0.10

Survey Report

Company:	Occidental Petroleum	Local Co-ordinate Reference:	Well SCHLAGEL 5-8HZ
Project:	Weld County, CO (UTM-NAD83)	TVD Reference:	GE 4870' + KB 29' @ 4899.00usft
Site:	3N-67W-05 Schlagel 10-5HZ Pad	MD Reference:	GE 4870' + KB 29' @ 4899.00usft
Well:	SCHLAGEL 5-8HZ	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)	
24,219.00	88.12	90.40	7,137.41	-1,520.77	17,536.66	17,567.43	0.18	-0.18	0.00	
24,308.00	88.40	90.13	7,140.11	-1,521.18	17,625.62	17,656.37	0.44	0.31	-0.30	
Last Survey 24308.00 ' MD										
24,348.00	88.40	90.13	7,141.22	-1,521.27	17,665.60	17,696.34	0.00	0.00	0.00	
PTB 24348.00 ' MD (982' FSL - 212' FEL)										

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
7,512.00	6,990.64	-1,150.72	843.88	Heel 7512.00 ' MD (1434' FEL 1065' FSL)	
24,308.00	7,140.11	-1,521.18	17,625.62	Last Survey 24308.00 ' MD	
24,348.00	7,141.22	-1,521.27	17,665.60	PTB 24348.00 ' MD (982' FSL - 212' FEL)	

Checked By: _____	Approved By: _____	Date: _____
-------------------	--------------------	-------------