



WHITING PETROLEUM CORP.

Project: Weld County, CO
Site: Sec 30-T10N-R57W
Well: Horsetail #30G-3144
Wellbore: Original Hole
Design: Original Hole



Precision
Directional Services

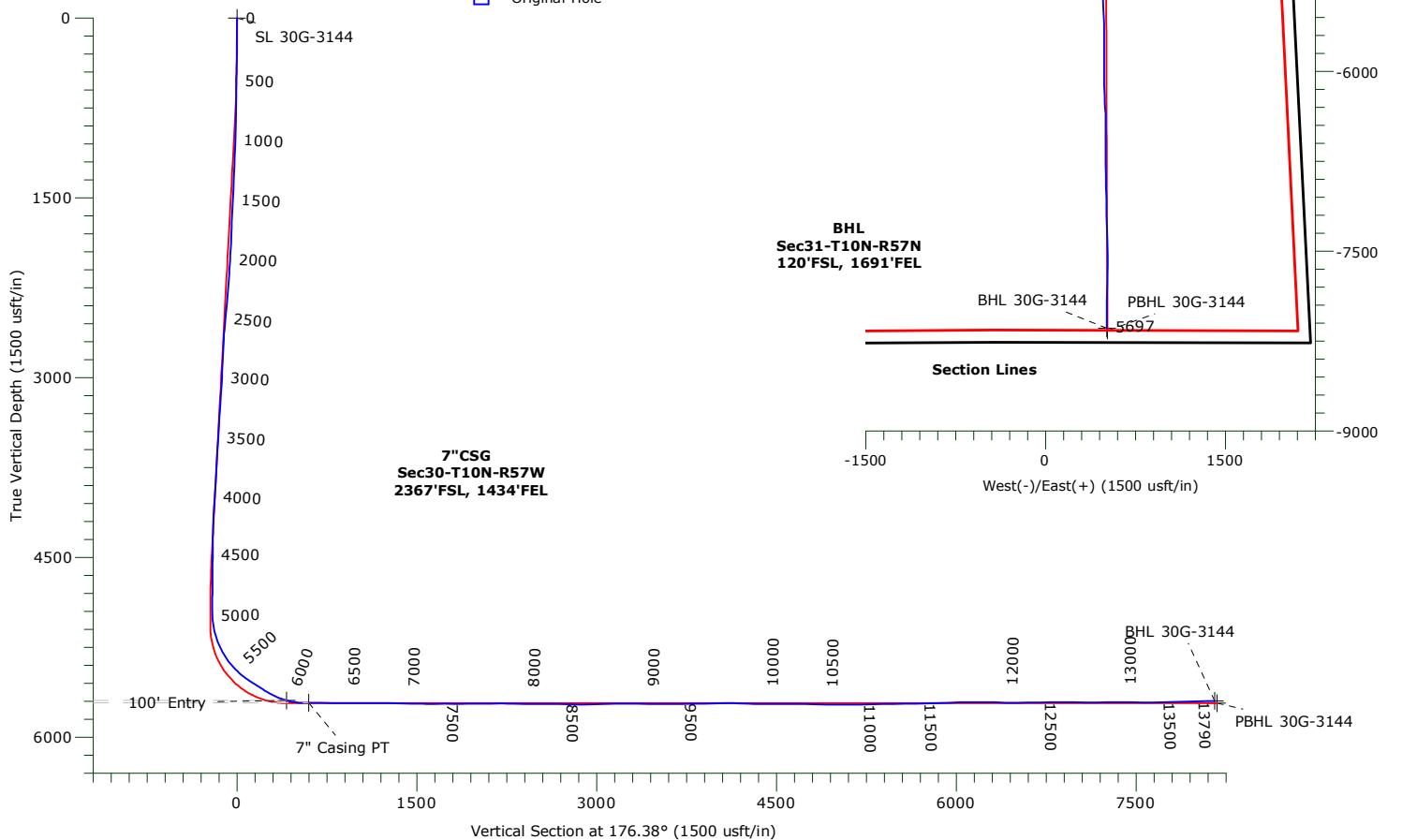
ANNOTATIONS

TVD	MD	+N/-S	+E/-W	Annotation
5694.66	6027.00	-384.33	495.23	100' Entry
5713.86	6214.00	-569.51	488.30	7" Casing PT

MWD CORRECTION
WILL BE PROVIDED BY MAGVAR

LEGEND

- Horsetail #30G-3144, Original Hole, Plan #3 V0
- Original Hole



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
SL 30G-3144	0.00	0.00	0.00	1542678.56	3472930.99	40.810528°N	103.791475°W	Point
100' Entry 30G-3144	5694.66	-384.33	495.23	1542303.84	3473433.53	40.809473°N	103.789686°W	Point
BHL 30G-3144	5697.11	-8141.56	512.65	1534548.39	3473600.40	40.788182°N	103.789624°W	Point
7" Casing PT 30G-3144	5713.86	-569.51	488.30	1542118.56	3473430.17	40.808965°N	103.789711°W	Point
PBHL 30G-3144	5717.00	-8160.13	516.14	1534529.89	3473604.25	40.788131°N	103.789611°W	Point

WHITING PETROLEUM CORP.

Weld County, CO

Sec 30-T10N-R57W

Horsetail #30G-3144

Original Hole

Design: Original Hole

Standard Survey Report

21 February, 2017

Precision Drilling Corporation

Survey Report

Company:	WHITING PETROLEUM CORP.	Local Co-ordinate Reference:	Well Horsetail #30G-3144
Project:	Weld County, CO	TVD Reference:	4738'GL+21'KB @ 4759.00usft (PD 406)
Site:	Sec 30-T10N-R57W	MD Reference:	4738'GL+21'KB @ 4759.00usft (PD 406)
Well:	Horsetail #30G-3144	North Reference:	True
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Local2

Project	Weld County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		Sec 30-T10N-R57W				
Site Position:		Northing:	1,542,678.56 usft	Latitude:	40.810528°N	
From:	Map	Easting:	3,472,930.99 usft	Longitude:	103.791475°W	
Position Uncertainty:		0.00 usft	Slot Radius:	13.20 in	Grid Convergence:	1.10 °

Well		Horsetail #30G-3144				
Well Position	+N-S	0.00 usft	Northing:	1,542,678.56 usft	Latitude:	40.810528°N
	+E-W	0.00 usft	Easting:	3,472,930.99 usft	Longitude:	103.791475°W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	4,738.00 usft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	11/29/2016	7.77	67.34	52,766

Survey Program	Date	2/21/2017			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
225.00	13,653.00	Survey #1 (Original Hole)	MWD+IFR1+MS+sag	Fixed:v2:crustal dec & 3-axis correction + sag OWSG BLIND	
13,731.00	13,790.00	Survey #2 (Original Hole)	BLIND		

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	
225.00	0.38	275.50	225.00	0.07	-0.74	-0.12	0.17	0.17	0.00	
318.00	0.87	28.58	317.99	0.72	-0.71	-0.76	1.16	0.53	121.59	
411.00	2.21	54.26	410.96	2.39	1.08	-2.32	1.59	1.44	27.61	
504.00	3.89	62.58	503.83	4.89	5.34	-4.54	1.86	1.81	8.95	
597.00	4.98	78.11	596.55	7.17	12.09	-6.40	1.73	1.17	16.70	
690.00	6.28	88.17	689.10	8.17	21.12	-6.82	1.75	1.40	10.82	
875.00	6.76	78.37	872.91	10.69	41.90	-8.02	0.65	0.26	-5.30	
969.00	7.23	67.73	966.21	14.04	52.79	-10.68	1.46	0.50	-11.32	
1,062.00	7.27	69.69	1,058.47	18.30	63.73	-14.24	0.27	0.04	2.11	
1,155.00	7.72	68.52	1,150.67	22.63	75.06	-17.85	0.51	0.48	-1.26	
1,249.00	8.42	70.43	1,243.74	27.25	87.42	-21.68	0.80	0.74	2.03	
1,342.00	8.85	70.02	1,335.69	31.98	100.56	-25.56	0.47	0.46	-0.44	
1,435.00	9.45	70.98	1,427.51	36.91	114.50	-29.60	0.67	0.65	1.03	
1,528.00	9.08	69.13	1,519.29	42.01	128.57	-33.81	0.51	-0.40	-1.99	
1,621.00	8.53	68.20	1,611.20	47.19	141.84	-38.14	0.61	-0.59	-1.00	

Precision Drilling Corporation

Survey Report

Company:	WHITING PETROLEUM CORP.	Local Co-ordinate Reference:	Well Horsetail #30G-3144
Project:	Weld County, CO	TVD Reference:	4738'GL+21'KB @ 4759.00usft (PD 406)
Site:	Sec 30-T10N-R57W	MD Reference:	4738'GL+21'KB @ 4759.00usft (PD 406)
Well:	Horsetail #30G-3144	North Reference:	True
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Local2

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)
1,715.00	7.61	68.51	1,704.26	52.06	154.10	-42.22	0.98	-0.98	0.33
1,808.00	5.98	67.66	1,796.61	56.15	164.31	-45.67	1.76	-1.75	-0.91
1,901.00	5.23	53.97	1,889.17	60.49	172.22	-49.49	1.64	-0.81	-14.72
1,994.00	4.83	47.27	1,981.81	65.64	178.52	-54.23	0.76	-0.43	-7.20
2,030.00	4.93	46.57	2,017.68	67.73	180.76	-56.18	0.32	0.28	-1.94
2,120.00	5.77	45.87	2,107.29	73.54	186.82	-61.60	0.94	0.93	-0.78
2,215.00	8.21	51.81	2,201.57	81.06	195.58	-68.55	2.68	2.57	6.25
2,309.00	8.13	50.49	2,294.62	89.44	205.98	-76.25	0.22	-0.09	-1.40
2,404.00	7.48	50.95	2,388.74	97.61	215.97	-83.78	0.69	-0.68	0.48
2,498.00	9.02	47.88	2,481.76	106.40	226.18	-91.91	1.70	1.64	-3.27
2,593.00	9.05	46.00	2,575.59	116.59	237.08	-101.39	0.31	0.03	-1.98
2,687.00	7.87	63.42	2,668.58	124.60	248.16	-108.69	2.99	-1.26	18.53
2,782.00	7.54	67.03	2,762.72	129.95	259.71	-113.29	0.62	-0.35	3.80
2,877.00	7.37	64.71	2,856.92	134.98	270.96	-117.61	0.36	-0.18	-2.44
2,972.00	6.40	64.49	2,951.23	139.87	281.25	-121.83	1.02	-1.02	-0.23
3,066.00	8.20	60.82	3,044.47	145.39	291.83	-126.68	1.98	1.91	-3.90
3,161.00	7.44	58.95	3,138.58	151.87	303.02	-132.43	0.84	-0.80	-1.97
3,256.00	7.29	57.91	3,232.80	158.24	313.39	-138.14	0.21	-0.16	-1.09
3,351.00	7.32	55.90	3,327.03	164.84	323.51	-144.08	0.27	0.03	-2.12
3,446.00	8.67	58.81	3,421.10	171.94	334.65	-150.47	1.48	1.42	3.06
3,540.00	8.73	60.65	3,514.02	179.10	346.93	-156.84	0.30	0.06	1.96
3,635.00	8.21	64.75	3,607.98	185.53	359.34	-162.47	0.84	-0.55	4.32
3,730.00	7.57	62.26	3,702.08	191.34	371.02	-167.53	0.76	-0.67	-2.62
3,824.00	6.96	56.83	3,795.33	197.34	381.27	-172.87	0.98	-0.65	-5.78
3,919.00	6.91	54.12	3,889.64	203.83	390.71	-178.76	0.35	-0.05	-2.85
4,014.00	7.66	62.14	3,983.87	210.14	400.94	-184.41	1.33	0.79	8.44
4,109.00	7.41	58.80	4,078.05	216.27	411.78	-189.84	0.53	-0.26	-3.52
4,203.00	6.68	57.36	4,171.34	222.36	421.57	-195.30	0.80	-0.78	-1.53
4,298.00	5.74	75.78	4,265.79	226.51	430.83	-198.86	2.31	-0.99	19.39
4,393.00	8.16	82.63	4,360.09	228.54	442.12	-200.17	2.69	2.55	7.21
4,487.00	7.92	79.28	4,453.16	230.60	455.10	-201.41	0.56	-0.26	-3.56
4,582.00	6.38	81.49	4,547.42	232.60	466.75	-202.67	1.65	-1.62	2.33
4,676.00	5.54	86.72	4,640.91	233.63	476.45	-203.09	1.06	-0.89	5.56
4,771.00	4.38	85.03	4,735.56	234.21	484.64	-203.14	1.23	-1.22	-1.78
4,866.00	1.44	9.60	4,830.45	235.70	488.45	-204.39	4.48	-3.09	-79.40
4,960.00	1.16	9.89	4,924.42	237.81	488.81	-206.47	0.30	-0.30	0.31
5,055.00	4.49	156.66	5,019.34	235.34	490.45	-203.90	5.79	3.51	154.49
5,150.00	14.17	171.55	5,112.98	220.38	493.64	-188.78	10.42	10.19	15.67
5,244.00	21.45	169.58	5,202.42	192.06	498.45	-160.21	7.77	7.74	-2.10
5,339.00	27.89	176.19	5,288.72	152.76	503.07	-120.69	7.37	6.78	6.96
5,434.00	36.94	180.92	5,368.85	101.93	504.09	-69.90	9.89	9.53	4.98
5,528.00	46.40	186.38	5,439.01	39.70	499.85	-8.06	10.77	10.06	5.81
5,623.00	52.86	181.45	5,500.53	-32.44	495.06	63.63	7.86	6.80	-5.19
5,718.00	58.20	178.61	5,554.28	-110.72	495.08	141.76	6.14	5.62	-2.99

Precision Drilling Corporation

Survey Report

Company:	WHITING PETROLEUM CORP.	Local Co-ordinate Reference:	Well Horsetail #30G-3144
Project:	Weld County, CO	TVD Reference:	4738'GL+21'KB @ 4759.00usft (PD 406)
Site:	Sec 30-T10N-R57W	MD Reference:	4738'GL+21'KB @ 4759.00usft (PD 406)
Well:	Horsetail #30G-3144	North Reference:	True
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Local2

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)
5,812.00	57.01	176.88	5,604.65	-190.02	498.20	221.10	2.00	-1.27	-1.84
5,907.00	64.26	180.77	5,651.21	-272.72	499.79	303.73	8.42	7.63	4.09
6,001.00	71.08	183.35	5,686.91	-359.55	496.62	390.19	7.69	7.26	2.74
6,096.00	82.71	182.33	5,708.42	-451.81	492.06	481.97	12.29	12.24	-1.07
6,190.00	90.46	181.46	5,714.01	-545.52	488.97	575.30	8.30	8.24	-0.93
6,316.00	89.51	182.84	5,714.04	-671.42	484.24	700.66	1.33	-0.75	1.10
6,411.00	89.22	182.85	5,715.10	-766.30	479.52	795.05	0.31	-0.31	0.01
6,505.00	89.27	182.13	5,716.34	-860.20	475.44	888.51	0.77	0.05	-0.77
6,600.00	91.03	181.88	5,716.09	-955.14	472.12	983.04	1.87	1.85	-0.26
6,694.00	90.17	179.95	5,715.10	-1,049.12	470.62	1,076.74	2.25	-0.91	-2.05
6,789.00	89.16	177.89	5,715.66	-1,144.09	472.41	1,171.64	2.41	-1.06	-2.17
6,883.00	88.64	177.03	5,717.46	-1,237.98	476.57	1,265.60	1.07	-0.55	-0.91
6,978.00	89.43	181.09	5,719.06	-1,332.94	478.13	1,360.46	4.35	0.83	4.27
7,073.00	89.12	180.23	5,720.27	-1,427.92	477.04	1,455.19	0.96	-0.33	-0.91
7,168.00	88.63	179.78	5,722.13	-1,522.90	477.03	1,549.98	0.70	-0.52	-0.47
7,263.00	90.37	180.88	5,722.96	-1,617.89	476.48	1,644.75	2.17	1.83	1.16
7,357.00	90.23	179.97	5,722.47	-1,711.89	475.78	1,738.51	0.98	-0.15	-0.97
7,452.00	89.37	178.17	5,722.80	-1,806.87	477.32	1,833.40	2.10	-0.91	-1.89
7,547.00	91.00	179.81	5,722.49	-1,901.85	479.00	1,928.30	2.43	1.72	1.73
7,641.00	90.87	179.96	5,720.96	-1,995.83	479.19	2,022.11	0.21	-0.14	0.16
7,736.00	90.45	179.84	5,719.86	-2,090.83	479.35	2,116.92	0.46	-0.44	-0.13
7,831.00	90.10	179.40	5,719.41	-2,185.82	479.98	2,211.77	0.59	-0.37	-0.46
7,925.00	88.52	178.77	5,720.54	-2,279.80	481.48	2,305.65	1.81	-1.68	-0.67
8,020.00	87.77	178.28	5,723.62	-2,374.72	483.93	2,400.54	0.94	-0.79	-0.52
8,114.00	90.28	179.45	5,725.22	-2,468.68	485.79	2,494.43	2.95	2.67	1.24
8,209.00	90.29	178.60	5,724.74	-2,563.66	487.41	2,589.32	0.89	0.01	-0.89
8,304.00	89.56	178.02	5,724.87	-2,658.62	490.21	2,684.27	0.98	-0.77	-0.61
8,399.00	88.96	178.30	5,726.09	-2,753.56	493.26	2,779.21	0.70	-0.63	0.29
8,493.00	89.88	178.49	5,727.05	-2,847.52	495.89	2,873.15	1.00	0.98	0.20
8,588.00	91.56	178.47	5,725.85	-2,942.48	498.41	2,968.07	1.77	1.77	-0.02
8,683.00	91.08	177.50	5,723.66	-3,037.39	501.75	3,063.01	1.14	-0.51	-1.02
8,778.00	90.87	177.22	5,722.05	-3,132.28	506.12	3,157.98	0.37	-0.22	-0.29
8,871.00	89.97	174.91	5,721.37	-3,225.05	512.51	3,250.97	2.67	-0.97	-2.48
8,963.00	88.67	177.70	5,722.46	-3,316.84	518.43	3,342.95	3.35	-1.41	3.03
9,056.00	89.35	181.01	5,724.06	-3,409.80	519.48	3,435.80	3.63	0.73	3.56
9,150.00	90.20	182.14	5,724.43	-3,503.77	516.90	3,529.41	1.50	0.90	1.20
9,243.00	90.37	181.70	5,723.97	-3,596.71	513.78	3,621.98	0.51	0.18	-0.47
9,336.00	90.56	180.46	5,723.22	-3,689.69	512.03	3,714.66	1.35	0.20	-1.33
9,429.00	91.44	180.52	5,721.59	-3,782.67	511.23	3,807.40	0.95	0.95	0.06
9,523.00	90.92	178.94	5,719.66	-3,876.65	511.68	3,901.22	1.77	-0.55	-1.68
9,615.00	90.55	182.30	5,718.48	-3,968.62	510.68	3,992.95	3.67	-0.40	3.65
9,708.00	90.78	181.98	5,717.40	-4,061.55	507.21	4,085.47	0.42	0.25	-0.34
9,801.00	88.39	181.37	5,718.07	-4,154.50	504.49	4,178.07	2.65	-2.57	-0.66

Precision Drilling Corporation

Survey Report

Company:	WHITING PETROLEUM CORP.	Local Co-ordinate Reference:	Well Horsetail #30G-3144
Project:	Weld County, CO	TVD Reference:	4738'GL+21'KB @ 4759.00usft (PD 406)
Site:	Sec 30-T10N-R57W	MD Reference:	4738'GL+21'KB @ 4759.00usft (PD 406)
Well:	Horsetail #30G-3144	North Reference:	True
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Local2

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)
9,895.00	87.66	181.14	5,721.31	-4,248.42	502.43	4,271.67	0.81	-0.78	-0.24
9,988.00	89.30	181.82	5,723.78	-4,341.35	500.03	4,364.26	1.91	1.76	0.73
10,081.00	90.18	182.28	5,724.20	-4,434.29	496.70	4,456.81	1.07	0.95	0.49
10,174.00	90.48	182.90	5,723.66	-4,527.20	492.50	4,549.26	0.74	0.32	0.67
10,267.00	89.51	180.50	5,723.67	-4,620.15	489.74	4,641.85	2.78	-1.04	-2.58
10,360.00	88.65	179.99	5,725.16	-4,713.13	489.35	4,734.63	1.08	-0.92	-0.55
10,454.00	89.27	180.28	5,726.87	-4,807.12	489.12	4,828.41	0.73	0.66	0.31
10,547.00	89.22	179.60	5,728.10	-4,900.11	489.22	4,921.22	0.73	-0.05	-0.73
10,640.00	89.76	180.66	5,728.92	-4,993.10	489.01	5,014.02	1.28	0.58	1.14
10,733.00	90.50	182.10	5,728.71	-5,086.07	486.77	5,106.66	1.74	0.80	1.55
10,826.00	90.28	183.14	5,728.08	-5,178.97	482.52	5,199.10	1.14	-0.24	1.12
10,919.00	91.38	181.62	5,726.73	-5,271.88	478.66	5,291.58	2.02	1.18	-1.63
11,013.00	91.01	178.63	5,724.77	-5,365.85	478.45	5,385.35	3.20	-0.39	-3.18
11,106.00	90.98	177.66	5,723.16	-5,458.78	481.46	5,478.29	1.04	-0.03	-1.04
11,199.00	90.43	177.22	5,722.01	-5,551.68	485.62	5,571.27	0.76	-0.59	-0.47
11,292.00	90.32	178.74	5,721.40	-5,644.62	488.89	5,664.23	1.64	-0.12	1.63
11,385.00	92.05	180.49	5,719.48	-5,737.59	489.52	5,757.05	2.65	1.86	1.88
11,478.00	92.05	180.63	5,716.15	-5,830.53	488.61	5,849.74	0.15	0.00	0.15
11,570.00	91.78	179.60	5,713.08	-5,922.47	488.43	5,941.50	1.16	-0.29	-1.12
11,665.00	91.39	179.62	5,710.45	-6,017.43	489.07	6,036.31	0.41	-0.41	0.02
11,760.00	90.67	178.73	5,708.74	-6,112.41	490.44	6,131.18	1.20	-0.76	-0.94
11,854.00	89.64	178.13	5,708.49	-6,206.37	493.02	6,225.12	1.27	-1.10	-0.64
11,949.00	88.57	176.84	5,709.97	-6,301.26	497.18	6,320.08	1.76	-1.13	-1.36
12,044.00	88.75	178.18	5,712.20	-6,396.15	501.31	6,415.04	1.42	0.19	1.41
12,139.00	90.70	180.60	5,712.65	-6,491.13	502.32	6,509.89	3.27	2.05	2.55
12,234.00	90.65	180.44	5,711.53	-6,586.12	501.46	6,604.64	0.18	-0.05	-0.17
12,328.00	90.30	179.81	5,710.75	-6,680.11	501.25	6,698.43	0.77	-0.37	-0.67
12,423.00	90.20	179.63	5,710.34	-6,775.11	501.72	6,793.27	0.22	-0.11	-0.19
12,518.00	90.20	178.88	5,710.01	-6,870.10	502.95	6,888.15	0.79	0.00	-0.79
12,612.00	89.68	178.47	5,710.11	-6,964.08	505.13	6,982.07	0.70	-0.55	-0.44
12,707.00	89.43	178.23	5,710.84	-7,059.03	507.86	7,077.02	0.36	-0.26	-0.25
12,801.00	90.35	179.80	5,711.02	-7,153.02	509.48	7,170.91	1.94	0.98	1.67
12,896.00	90.49	178.64	5,710.33	-7,248.00	510.77	7,265.79	1.23	0.15	-1.22
12,991.00	89.94	178.33	5,709.97	-7,342.97	513.28	7,360.73	0.66	-0.58	-0.33
13,085.00	89.42	177.89	5,710.50	-7,436.92	516.38	7,454.68	0.72	-0.55	-0.47
13,180.00	89.51	178.43	5,711.38	-7,531.86	519.43	7,549.63	0.58	0.09	0.57
13,274.00	91.45	182.08	5,710.60	-7,625.84	519.02	7,643.39	4.40	2.06	3.88
13,369.00	91.50	181.85	5,708.15	-7,720.75	515.76	7,737.91	0.25	0.05	-0.24
13,464.00	91.55	181.03	5,705.62	-7,815.69	513.37	7,832.51	0.86	0.05	-0.86
13,559.00	91.49	180.37	5,703.10	-7,910.64	512.21	7,927.20	0.70	-0.06	-0.69
13,653.00	91.42	179.93	5,700.71	-8,004.61	511.97	8,020.97	0.47	-0.07	-0.47
13,731.00	91.54	179.63	5,698.70	-8,082.59	512.27	8,098.80	0.41	0.15	-0.38
13,790.00	91.54	179.63	5,697.11	-8,141.56	512.65	8,157.69	0.00	0.00	0.00

Precision Drilling Corporation

Survey Report

Company:	WHITING PETROLEUM CORP.	Local Co-ordinate Reference:	Well Horsetail #30G-3144
Project:	Weld County, CO	TVD Reference:	4738'GL+21'KB @ 4759.00usft (PD 406)
Site:	Sec 30-T10N-R57W	MD Reference:	4738'GL+21'KB @ 4759.00usft (PD 406)
Well:	Horsetail #30G-3144	North Reference:	True
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Local2

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)
-----------------------	-----------------	-------------	-----------------------	--------------	--------------	-------------------------	-------------------------	------------------------	-----------------------

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
SL 30G-3144	0.00	0.00	0.00	0.00	0.00	1,542,678.56	3,472,930.99	40.810528°N	103.791475°W
- actual wellpath hits target center									
- Point									
100' Entry 30G-3144	0.00	0.00	5,694.66	-384.33	495.23	1,542,303.85	3,473,433.53	40.809473°N	103.789686°W
- actual wellpath misses target center by 0.03usft at 6026.97usft MD (5694.65 TVD, -384.30 N, 495.24 E)									
- Point									
BHL 30G-3144	0.00	0.00	5,697.11	-8,141.56	512.65	1,534,548.39	3,473,600.40	40.788182°N	103.789624°W
- actual wellpath misses target center by 0.01usft at 13790.00usft MD (5697.11 TVD, -8141.56 N, 512.65 E)									
- Point									
7" Casing PT 30G-3144	0.00	0.00	5,713.86	-569.51	488.30	1,542,118.57	3,473,430.17	40.808965°N	103.789711°W
- actual wellpath hits target center									
- Point									
PBHL 30G-3144	0.00	0.00	5,717.00	-8,160.13	516.14	1,534,529.89	3,473,604.25	40.788131°N	103.789611°W
- actual wellpath misses target center by 27.43usft at 13790.00usft MD (5697.11 TVD, -8141.56 N, 512.65 E)									
- Point									

Design Annotations

	Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
			+N/-S (usft)	+E/-W (usft)	
	6,027.00	5,694.66	-384.33	495.23	100' Entry
	6,214.00	5,713.86	-569.51	488.30	7" Casing PT

Checked By: _____ Approved By: _____ Date: _____