

Whiting Oil & Gas

Well Name: Wildhorse #02-0214AH

Surface Location: Wildhorse #02-0214AH Pad Sec.2-T9N-R59W
North American Datum 1983 , US State Plane 1983 Colorado Northern Zone

Ground Elevation: 5003.0

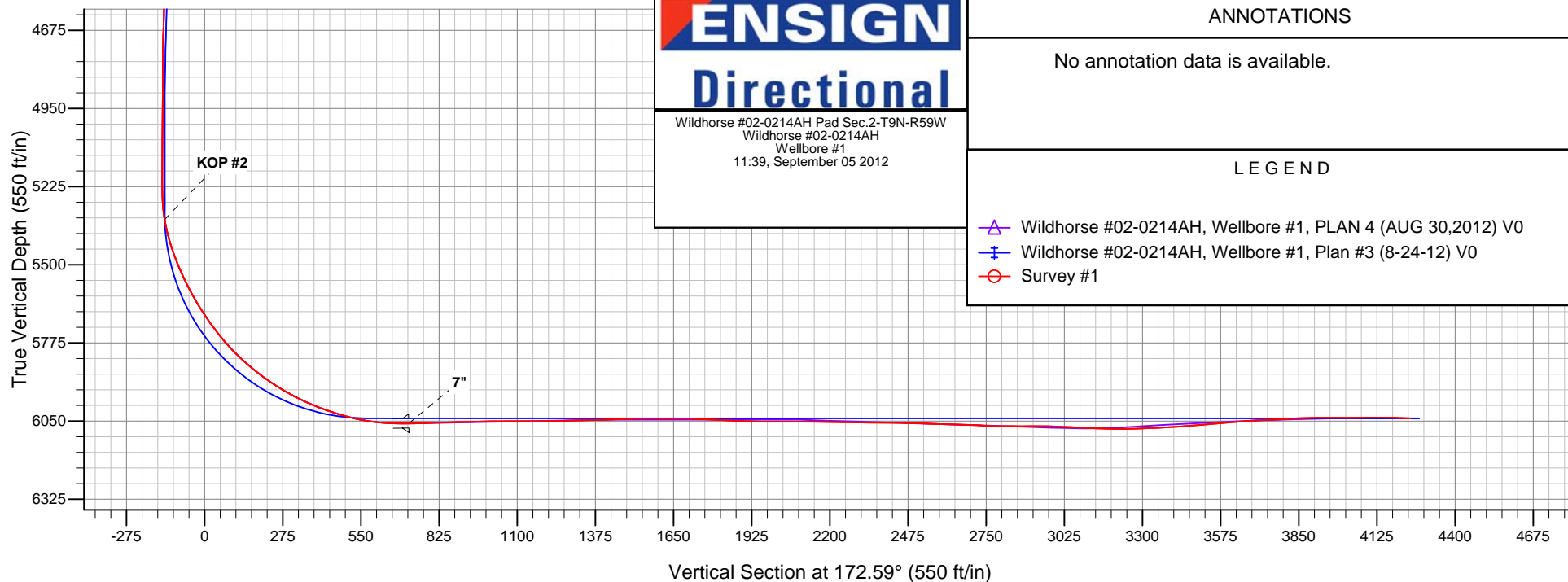
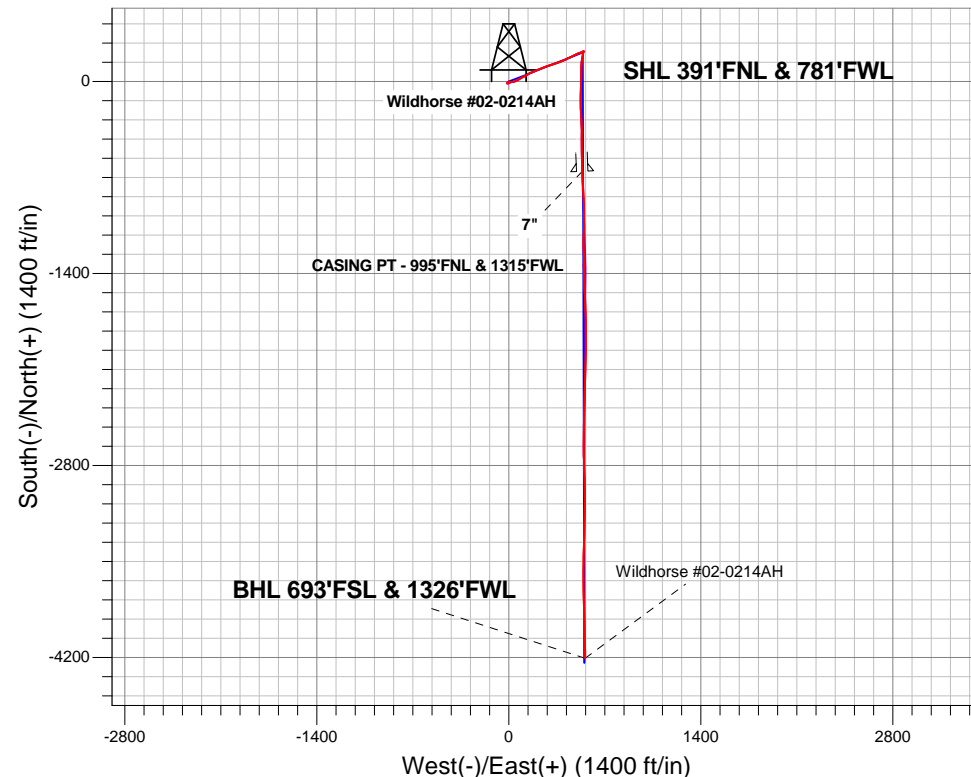
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1532974.64	3428615.82	40.786131	-103.952147	

Original Well Elev WELL @ 5019.5ft (Original Well Elev)

FINAL SURVEY

Projected Bottom Hole Location
10174' MD 6040' TVD 4205' S & 557' E of SHL

88.10 degree Incl @ 178.80 degree AZM





Whiting Oil & Gas

SEC.2-T9N-R59W

Wildhorse #02-0214AH Pad Sec.2-T9N-R59W

Wildhorse #02-0214AH

Wellbore #1

Survey: Survey #1

Standard Survey Report

05 September, 2012

Company:	Whiting Oil & Gas	Local Co-ordinate Reference:	Well Wildhorse #02-0214AH
Project:	SEC.2-T9N-R59W	TVD Reference:	WELL @ 5019.5ft (Original Well Elev)
Site:	Wildhorse #02-0214AH Pad Sec.2-T9N-R59W	MD Reference:	WELL @ 5019.5ft (Original Well Elev)
Well:	Wildhorse #02-0214AH	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.2-T9N-R59W, Weld County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site		Wildhorse #02-0214AH Pad Sec.2-T9N-R59W			
Site Position:		Northing:	1,532,974.64ft	Latitude:	40.786131
From:	Lat/Long	Easting:	3,428,615.82ft	Longitude:	-103.952147
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	1.00 °

Well	Wildhorse #02-0214AH					
Well Position	+N/-S	0.0 ft	Northing:	1,532,974.64 ft	Latitude:	40.786131
	+E/-W	0.0 ft	Easting:	3,428,615.82 ft	Longitude:	-103.952147
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,003.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/24/2012	8.29	67.45	53,289

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	172.59	

Survey Program		Date	9/5/2012		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
156.0	10,174.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

Survey										
	Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	1.0	0.01	241.20	1.0	0.0	0.0	0.0	0.58	0.58	0.00
	SHL 391'FNL, 781'FWL									
	1.1	0.01	241.20	1.1	0.0	0.0	0.0	0.00	0.00	0.00
	HARDLINES SHL 660'FNL									
	10.5	0.06	241.20	10.5	0.0	0.0	0.0	0.58	0.58	0.00
	HARDLINES BHL 660'FSL									
	156.0	0.90	241.20	156.0	-0.6	-1.1	0.4	0.58	0.58	0.00
	249.0	0.90	237.70	249.0	-1.3	-2.3	1.0	0.06	0.00	-3.76
	340.0	0.80	235.80	340.0	-2.1	-3.5	1.6	0.11	-0.11	-2.09
	432.0	1.00	216.80	432.0	-3.1	-4.5	2.5	0.39	0.22	-20.65
	524.0	1.70	222.60	523.9	-4.7	-5.9	3.9	0.77	0.76	6.30
	616.0	1.80	225.80	615.9	-6.7	-7.8	5.7	0.15	0.11	3.48

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Well:	Wildhorse #02-0214AH	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
709.0	1.80	230.30	708.8	-8.7	-10.0	7.3	0.15	0.00	4.84
800.0	1.50	218.40	799.8	-10.5	-11.8	8.9	0.50	-0.33	-13.08
893.0	1.00	223.30	892.8	-12.1	-13.2	10.3	0.55	-0.54	5.27
984.0	0.60	127.70	983.8	-12.9	-13.3	11.1	1.34	-0.44	-105.06
1,074.0	1.70	108.50	1,073.8	-13.7	-11.7	12.0	1.28	1.22	-21.33
1,167.0	2.60	89.00	1,166.7	-14.1	-8.3	12.9	1.23	0.97	-20.97
1,258.0	2.80	72.30	1,257.6	-13.3	-4.1	12.7	0.89	0.22	-18.35
1,351.0	3.10	59.30	1,350.5	-11.4	0.2	11.3	0.79	0.32	-13.98
1,444.0	2.00	56.50	1,443.4	-9.2	3.8	9.6	1.19	-1.18	-3.01
1,476.0	2.10	46.30	1,475.4	-8.5	4.6	9.0	1.18	0.31	-31.88
1,558.0	2.30	43.10	1,557.3	-6.2	6.9	7.1	0.29	0.24	-3.90
1,620.0	2.80	71.90	1,619.2	-4.9	9.1	6.0	2.19	0.81	46.45
1,682.0	4.80	78.10	1,681.1	-3.9	13.1	5.5	3.29	3.23	10.00
1,744.0	6.90	88.80	1,742.8	-3.2	19.4	5.7	3.80	3.39	17.26
1,804.0	9.10	86.00	1,802.2	-2.8	27.7	6.4	3.72	3.67	-4.67
1,866.0	9.50	74.20	1,863.4	-1.1	37.5	5.9	3.14	0.65	-19.03
1,927.0	9.30	63.50	1,923.6	2.5	46.8	3.6	2.88	-0.33	-17.54
1,988.0	9.70	62.50	1,983.7	7.0	55.8	0.2	0.71	0.66	-1.64
2,049.0	10.60	61.60	2,043.8	12.1	65.3	-3.6	1.50	1.48	-1.48
2,111.0	11.90	61.00	2,104.6	17.9	75.9	-8.0	2.11	2.10	-0.97
2,170.0	10.90	60.50	2,162.4	23.6	86.0	-12.3	1.70	-1.69	-0.85
2,235.0	11.00	62.50	2,226.2	29.5	96.9	-16.7	0.60	0.15	3.08
2,299.0	11.80	61.90	2,289.0	35.4	108.1	-21.2	1.26	1.25	-0.94
2,330.0	11.40	61.20	2,319.3	38.4	113.6	-23.4	1.37	-1.29	-2.26
2,456.0	11.30	59.20	2,442.9	50.7	135.1	-32.8	0.32	-0.08	-1.59
2,551.0	9.80	58.60	2,536.3	59.6	150.0	-39.8	1.58	-1.58	-0.63
2,646.0	11.70	72.50	2,629.6	66.8	166.1	-44.8	3.37	2.00	14.63
2,741.0	12.10	64.20	2,722.6	74.0	184.2	-49.6	1.85	0.42	-8.74
2,836.0	11.10	64.20	2,815.6	82.3	201.4	-55.7	1.05	-1.05	0.00
2,931.0	11.60	73.50	2,908.8	89.0	218.8	-60.0	1.99	0.53	9.79
3,026.0	10.10	67.90	3,002.1	94.8	235.7	-63.7	1.93	-1.58	-5.89
3,121.0	9.80	67.40	3,095.7	101.1	250.9	-67.9	0.33	-0.32	-0.53
3,216.0	10.10	70.50	3,189.2	107.0	266.2	-71.8	0.65	0.32	3.26
3,311.0	9.80	67.40	3,282.8	112.9	281.5	-75.6	0.65	-0.32	-3.26
3,406.0	9.70	74.20	3,376.4	118.1	296.7	-78.9	1.22	-0.11	7.16
3,501.0	12.00	72.30	3,469.7	123.3	313.8	-81.9	2.45	2.42	-2.00
3,594.0	12.70	70.90	3,560.6	129.6	332.6	-85.6	0.82	0.75	-1.51
3,690.0	12.70	69.80	3,654.2	136.7	352.5	-90.1	0.25	0.00	-1.15
3,785.0	12.80	69.30	3,746.9	144.0	372.2	-94.9	0.16	0.11	-0.53
3,880.0	13.20	67.50	3,839.4	151.9	392.0	-100.1	0.60	0.42	-1.89
3,975.0	13.40	66.80	3,931.9	160.4	412.2	-105.9	0.27	0.21	-0.74
4,070.0	13.10	64.90	4,024.4	169.3	432.0	-112.2	0.56	-0.32	-2.00
4,165.0	13.20	63.30	4,116.9	178.7	451.5	-119.0	0.40	0.11	-1.68
4,260.0	11.90	61.00	4,209.6	188.4	469.7	-126.2	1.47	-1.37	-2.42
4,354.0	10.70	66.80	4,301.8	196.5	486.2	-132.2	1.76	-1.28	6.17
4,449.0	11.20	66.30	4,395.1	203.7	502.8	-137.2	0.54	0.53	-0.53
4,544.0	8.40	71.40	4,488.7	209.6	517.8	-141.1	3.08	-2.95	5.37
4,639.0	6.80	78.30	4,582.8	213.0	529.9	-142.9	1.94	-1.68	7.26
4,733.0	5.30	55.10	4,676.3	216.6	538.9	-145.3	3.02	-1.60	-24.68
4,829.0	1.20	108.90	4,772.2	218.8	543.5	-146.9	4.89	-4.27	56.04
4,924.0	0.60	31.90	4,867.1	218.9	544.7	-146.8	1.28	-0.63	-81.05
5,019.0	0.80	16.90	4,962.1	219.9	545.2	-147.8	0.28	0.21	-15.79
5,114.0	0.30	324.90	5,057.1	220.8	545.2	-148.6	0.69	-0.53	-54.74
5,209.0	0.40	296.60	5,152.1	221.1	544.8	-149.1	0.21	0.11	-29.79

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Well:	Wildhorse #02-0214AH	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
5,240.0	0.40	336.10	5,183.1	221.3	544.6	-149.2	0.87	0.00	127.42	
5,272.0	0.60	340.70	5,215.1	221.5	544.5	-149.5	0.64	0.63	14.38	
5,304.0	1.80	178.60	5,247.1	221.2	544.5	-149.2	7.43	3.75	-506.56	
5,336.0	3.00	193.40	5,279.1	219.9	544.3	-147.9	4.19	3.75	46.25	
5,367.0	6.80	193.40	5,310.0	217.3	543.7	-145.4	12.26	12.26	0.00	
5,399.0	10.00	189.40	5,341.6	212.7	542.8	-141.0	10.16	10.00	-12.50	
5,431.0	13.00	187.40	5,373.0	206.4	541.9	-134.8	9.46	9.38	-6.25	
5,462.0	15.80	188.70	5,403.0	198.8	540.8	-127.4	9.09	9.03	4.19	
5,494.0	18.60	190.20	5,433.6	189.4	539.2	-118.3	8.86	8.75	4.69	
5,526.0	21.10	191.60	5,463.7	178.8	537.2	-108.0	7.95	7.81	4.38	
5,558.0	22.50	190.20	5,493.4	167.1	534.9	-96.8	4.67	4.38	-4.38	
5,589.0	24.50	189.20	5,521.8	154.9	532.8	-84.9	6.58	6.45	-3.23	
5,621.0	26.10	186.90	5,550.7	141.4	530.9	-71.8	5.87	5.00	-7.19	
5,653.0	27.60	183.90	5,579.3	127.0	529.6	-57.7	6.32	4.69	-9.38	
5,685.0	29.40	181.50	5,607.4	111.7	528.9	-42.6	6.67	5.63	-7.50	
5,716.0	31.50	180.40	5,634.1	96.0	528.6	-27.1	7.01	6.77	-3.55	
5,748.0	33.20	180.80	5,661.2	78.9	528.4	-10.1	5.35	5.31	1.25	
5,780.0	34.60	181.10	5,687.7	61.1	528.1	7.5	4.41	4.38	0.94	
5,811.0	36.20	182.00	5,713.0	43.1	527.7	25.3	5.43	5.16	2.90	
5,843.0	38.30	182.30	5,738.5	23.8	526.9	44.4	6.59	6.56	0.94	
5,875.0	40.40	182.00	5,763.2	3.5	526.2	64.4	6.59	6.56	-0.94	
5,906.0	43.00	181.30	5,786.4	-17.1	525.6	84.7	8.52	8.39	-2.26	
5,938.0	45.30	180.90	5,809.3	-39.4	525.2	106.8	7.24	7.19	-1.25	
5,969.0	47.20	180.60	5,830.7	-61.8	524.9	128.9	6.17	6.13	-0.97	
6,001.0	49.30	181.50	5,852.1	-85.7	524.4	152.5	6.89	6.56	2.81	
6,033.0	51.60	181.10	5,872.4	-110.3	523.9	176.9	7.25	7.19	-1.25	
6,064.0	53.70	179.20	5,891.2	-135.0	523.8	201.4	8.34	6.77	-6.13	
6,096.0	55.70	179.20	5,909.7	-161.1	524.2	227.3	6.25	6.25	0.00	
6,128.0	57.50	177.60	5,927.3	-187.8	524.9	253.9	7.00	5.63	-5.00	
6,159.0	59.50	178.10	5,943.5	-214.2	525.9	280.2	6.60	6.45	1.61	
6,191.0	62.20	177.80	5,959.1	-242.1	526.9	308.0	8.48	8.44	-0.94	
6,223.0	64.40	176.90	5,973.5	-270.7	528.2	336.5	7.32	6.88	-2.81	
6,254.0	66.40	177.60	5,986.4	-298.8	529.6	364.6	6.77	6.45	2.26	
6,286.0	68.60	177.40	5,998.7	-328.4	530.9	394.1	6.90	6.88	-0.63	
6,317.0	70.30	177.90	6,009.5	-357.4	532.1	423.0	5.69	5.48	1.61	
6,349.0	72.10	179.20	6,019.8	-387.6	532.8	453.1	6.81	5.63	4.06	
6,381.0	73.70	180.00	6,029.3	-418.2	533.0	483.5	5.54	5.00	2.50	
6,412.0	76.50	180.80	6,037.2	-448.2	532.8	513.1	9.37	9.03	2.58	
6,444.0	78.30	181.10	6,044.2	-479.4	532.3	544.0	5.70	5.63	0.94	
6,475.0	81.40	180.00	6,049.7	-509.9	532.0	574.2	10.59	10.00	-3.55	
6,507.0	83.90	180.00	6,053.8	-541.6	532.0	605.7	7.81	7.81	0.00	
6,539.0	85.60	178.10	6,056.7	-573.5	532.5	637.4	7.95	5.31	-5.94	
6,570.0	88.50	178.10	6,058.3	-604.4	533.6	668.2	9.35	9.35	0.00	
6,620.0	91.10	178.00	6,058.5	-654.4	535.3	718.0	5.20	5.20	-0.20	
6,621.0	90.70	177.00	6,058.4	-655.4	535.3	718.9	107.69	-40.00	-100.00	
6,652.0	92.00	176.50	6,057.7	-686.3	537.1	749.9	4.49	4.19	-1.61	
6,683.0	92.20	176.50	6,056.6	-717.3	539.0	780.8	0.65	0.65	0.00	
6,714.0	91.40	177.40	6,055.6	-748.2	540.6	811.7	3.88	-2.58	2.90	
6,745.0	91.50	177.20	6,054.8	-779.2	542.1	842.5	0.72	0.32	-0.65	
6,776.0	91.80	176.90	6,053.9	-810.1	543.7	873.4	1.37	0.97	-0.97	
6,807.0	90.80	177.00	6,053.2	-841.1	545.3	904.3	3.24	-3.23	0.32	
6,838.0	91.30	178.60	6,052.7	-872.0	546.5	935.2	5.41	1.61	5.16	
6,869.0	91.40	178.60	6,051.9	-903.0	547.3	966.0	0.32	0.32	0.00	
6,900.0	91.50	178.40	6,051.1	-934.0	548.1	996.9	0.72	0.32	-0.65	

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6,931.0	91.00	179.30	6,050.5	-965.0	548.7	1,027.7	3.32	-1.61	2.90	
6,962.0	89.70	179.70	6,050.3	-996.0	549.0	1,058.4	4.39	-4.19	1.29	
6,965.9	89.57	179.90	6,050.3	-999.9	549.0	1,062.3	6.09	-3.23	5.16	
WP1										
6,993.0	88.70	181.30	6,050.7	-1,027.0	548.7	1,089.1	6.09	-3.23	5.16	
7,024.0	89.40	181.10	6,051.2	-1,058.0	548.0	1,119.8	2.35	2.26	-0.65	
7,055.0	90.80	180.90	6,051.2	-1,089.0	547.5	1,150.4	4.56	4.52	-0.65	
7,086.0	91.30	182.00	6,050.6	-1,119.9	546.7	1,181.1	3.90	1.61	3.55	
7,116.0	91.70	182.00	6,049.8	-1,149.9	545.7	1,210.7	1.33	1.33	0.00	
7,147.0	91.30	180.70	6,049.0	-1,180.9	544.9	1,241.3	4.39	-1.29	-4.19	
7,178.0	90.70	177.70	6,048.5	-1,211.9	545.4	1,272.1	9.87	-1.94	-9.68	
7,210.0	91.00	178.40	6,048.0	-1,243.9	546.5	1,303.9	2.38	0.94	2.19	
7,241.0	90.50	179.00	6,047.6	-1,274.8	547.2	1,334.7	2.52	-1.61	1.94	
7,273.0	91.60	180.20	6,047.0	-1,306.8	547.4	1,366.5	5.09	3.44	3.75	
7,305.0	92.90	180.70	6,045.7	-1,338.8	547.1	1,398.2	4.35	4.06	1.56	
7,337.0	92.90	179.00	6,044.1	-1,370.8	547.2	1,429.9	5.31	0.00	-5.31	
7,369.0	92.60	178.10	6,042.6	-1,402.7	548.0	1,461.7	2.96	-0.94	-2.81	
7,400.0	91.70	178.30	6,041.4	-1,433.7	549.0	1,492.5	2.97	-2.90	0.65	
7,432.0	90.30	178.10	6,040.9	-1,465.7	550.0	1,524.3	4.42	-4.38	-0.63	
7,464.0	89.00	177.40	6,041.1	-1,497.6	551.3	1,556.2	4.61	-4.06	-2.19	
7,466.5	89.08	177.42	6,041.1	-1,500.1	551.4	1,558.7	3.37	3.23	0.97	
WP2										
7,495.0	90.00	177.70	6,041.3	-1,528.6	552.6	1,587.1	3.37	3.23	0.97	
7,526.0	91.00	178.40	6,041.1	-1,559.6	553.7	1,617.9	3.94	3.23	2.26	
7,558.0	90.70	177.40	6,040.6	-1,591.6	554.8	1,649.8	3.26	-0.94	-3.13	
7,590.0	89.30	176.30	6,040.6	-1,623.5	556.6	1,681.7	5.56	-4.38	-3.44	
7,622.0	88.00	177.60	6,041.3	-1,655.5	558.3	1,713.6	5.74	-4.06	4.06	
7,654.0	86.80	179.00	6,042.8	-1,687.4	559.2	1,745.4	5.76	-3.75	4.38	
7,685.0	86.80	179.00	6,044.5	-1,718.4	559.8	1,776.2	0.00	0.00	0.00	
7,717.0	87.30	179.00	6,046.2	-1,750.3	560.3	1,807.9	1.56	1.56	0.00	
7,749.0	87.70	179.00	6,047.6	-1,782.3	560.9	1,839.7	1.25	1.25	0.00	
7,780.0	87.50	178.60	6,048.9	-1,813.2	561.5	1,870.5	1.44	-0.65	-1.29	
7,812.0	87.70	179.00	6,050.2	-1,845.2	562.2	1,902.3	1.40	0.63	1.25	
7,844.0	88.40	178.60	6,051.3	-1,877.2	562.9	1,934.1	2.52	2.19	-1.25	
7,876.0	89.70	180.40	6,051.8	-1,909.2	563.2	1,965.8	6.94	4.06	5.63	
7,907.0	90.40	182.10	6,051.8	-1,940.2	562.5	1,996.5	5.93	2.26	5.48	
7,939.0	90.20	182.00	6,051.6	-1,972.1	561.3	2,028.0	0.70	-0.63	-0.31	
7,967.1	90.20	181.82	6,051.5	-2,000.3	560.4	2,055.8	0.62	0.00	-0.63	
WP3										
7,971.0	90.20	181.80	6,051.5	-2,004.1	560.3	2,059.6	0.62	0.00	-0.63	
8,002.0	89.80	180.20	6,051.5	-2,035.1	559.7	2,090.3	5.32	-1.29	-5.16	
8,034.0	88.60	180.00	6,052.0	-2,067.1	559.7	2,122.0	3.80	-3.75	-0.63	
8,066.0	88.80	181.30	6,052.7	-2,099.1	559.3	2,153.7	4.11	0.63	4.06	
8,097.0	89.20	182.00	6,053.2	-2,130.1	558.4	2,184.3	2.60	1.29	2.26	
8,129.0	89.30	182.00	6,053.6	-2,162.1	557.3	2,215.9	0.31	0.31	0.00	
8,161.0	88.60	181.30	6,054.2	-2,194.0	556.4	2,247.5	3.09	-2.19	-2.19	
8,192.0	89.00	182.00	6,054.9	-2,225.0	555.5	2,278.1	2.60	1.29	2.26	
8,224.0	90.00	182.50	6,055.2	-2,257.0	554.2	2,309.6	3.49	3.13	1.56	
8,255.0	90.00	182.30	6,055.2	-2,288.0	552.9	2,340.2	0.65	0.00	-0.65	
8,287.0	89.70	181.80	6,055.2	-2,319.9	551.8	2,371.7	1.82	-0.94	-1.56	
8,319.0	89.30	182.30	6,055.5	-2,351.9	550.6	2,403.3	2.00	-1.25	1.56	
8,350.0	89.40	182.10	6,055.9	-2,382.9	549.5	2,433.8	0.72	0.32	-0.65	
8,382.0	88.30	181.60	6,056.5	-2,414.9	548.4	2,465.4	3.78	-3.44	-1.56	
8,413.0	88.10	181.10	6,057.5	-2,445.9	547.7	2,496.0	1.74	-0.65	-1.61	

Company: Whiting Oil & Gas
Project: SEC.2-T9N-R59W
Site: Wildhorse #02-0214AH Pad Sec.2-T9N-R59W
Well: Wildhorse #02-0214AH
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Wildhorse #02-0214AH
TVD Reference: WELL @ 5019.5ft (Original Well Elev)
MD Reference: WELL @ 5019.5ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Landmark

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,445.0	88.30	180.90	6,058.5	-2,477.8	547.1	2,527.7	0.88	0.63	-0.63
8,467.3	88.09	180.41	6,059.2	-2,500.1	546.9	2,549.8	2.38	-0.94	-2.19
WP4									
8,477.0	88.00	180.20	6,059.5	-2,509.8	546.8	2,559.4	2.38	-0.94	-2.19
8,508.0	88.10	180.60	6,060.6	-2,540.8	546.6	2,590.1	1.33	0.32	1.29
8,540.0	88.50	180.20	6,061.5	-2,572.8	546.4	2,621.7	1.77	1.25	-1.25
8,572.0	88.80	180.20	6,062.3	-2,604.8	546.3	2,653.5	0.94	0.94	0.00
8,603.0	88.20	180.20	6,063.1	-2,635.8	546.2	2,684.2	1.94	-1.94	0.00
8,636.0	86.90	179.90	6,064.5	-2,668.7	546.1	2,716.9	4.04	-3.94	-0.91
8,667.0	86.00	178.60	6,066.4	-2,699.7	546.5	2,747.6	5.09	-2.90	-4.19
8,699.0	88.90	179.30	6,067.9	-2,731.6	547.1	2,779.4	9.32	9.06	2.19
8,731.0	90.60	179.30	6,068.0	-2,763.6	547.5	2,811.1	5.31	5.31	0.00
8,763.0	89.70	178.30	6,067.9	-2,795.6	548.2	2,843.0	4.20	-2.81	-3.13
8,794.0	90.00	177.60	6,068.0	-2,826.6	549.3	2,873.8	2.46	0.97	-2.26
8,826.0	90.60	178.60	6,067.8	-2,858.6	550.4	2,905.7	3.64	1.88	3.13
8,858.0	89.30	178.10	6,067.9	-2,890.6	551.3	2,937.5	4.35	-4.06	-1.56
8,890.0	88.50	178.30	6,068.5	-2,922.5	552.3	2,969.3	2.58	-2.50	0.63
8,921.0	88.80	178.10	6,069.2	-2,953.5	553.3	3,000.2	1.16	0.97	-0.65
8,952.0	87.40	178.40	6,070.2	-2,984.5	554.2	3,031.0	4.62	-4.52	0.97
8,967.6	87.06	178.84	6,071.0	-3,000.1	554.6	3,046.6	3.56	-2.19	2.81
WP5									
8,984.0	86.70	179.30	6,071.9	-3,016.4	554.8	3,062.8	3.56	-2.19	2.81
9,016.0	87.10	180.20	6,073.6	-3,048.4	555.0	3,094.5	3.07	1.25	2.81
9,048.0	87.40	180.40	6,075.1	-3,080.3	554.8	3,126.2	1.13	0.94	0.63
9,079.0	88.10	180.20	6,076.4	-3,111.3	554.7	3,156.9	2.35	2.26	-0.65
9,111.0	89.00	180.60	6,077.2	-3,143.3	554.4	3,188.6	3.08	2.81	1.25
9,143.0	89.50	182.00	6,077.6	-3,175.3	553.7	3,220.2	4.65	1.56	4.38
9,174.0	90.70	182.30	6,077.5	-3,206.3	552.5	3,250.8	3.99	3.87	0.97
9,206.0	92.20	181.80	6,076.7	-3,238.2	551.4	3,282.3	4.94	4.69	-1.56
9,238.0	92.40	181.40	6,075.4	-3,270.2	550.5	3,313.9	1.40	0.63	-1.25
9,269.0	92.30	181.80	6,074.2	-3,301.2	549.6	3,344.5	1.33	-0.32	1.29
9,301.0	92.60	181.40	6,072.8	-3,333.1	548.8	3,376.1	1.56	0.94	-1.25
9,333.0	93.70	181.60	6,071.0	-3,365.1	547.9	3,407.6	3.49	3.44	0.63
9,364.0	94.70	182.50	6,068.8	-3,396.0	546.8	3,438.1	4.33	3.23	2.90
9,396.0	95.00	180.90	6,066.1	-3,427.8	545.9	3,469.6	5.07	0.94	-5.00
9,427.0	94.40	180.90	6,063.5	-3,458.7	545.4	3,500.2	1.94	-1.94	0.00
9,459.0	94.30	180.70	6,061.1	-3,490.6	544.9	3,531.8	0.70	-0.31	-0.63
9,468.7	94.36	181.04	6,060.4	-3,500.3	544.8	3,541.3	3.60	0.65	3.55
WP6									
9,490.0	94.50	181.80	6,058.7	-3,521.5	544.3	3,562.3	3.60	0.64	3.55
9,522.0	95.10	180.90	6,056.0	-3,553.4	543.5	3,593.8	3.37	1.88	-2.81
9,554.0	94.80	180.20	6,053.3	-3,585.3	543.2	3,625.4	2.37	-0.94	-2.19
9,585.0	94.60	180.00	6,050.7	-3,616.2	543.1	3,656.0	0.91	-0.65	-0.65
9,617.0	94.00	178.40	6,048.3	-3,648.1	543.6	3,687.7	5.33	-1.88	-5.00
9,649.0	92.60	178.60	6,046.5	-3,680.0	544.4	3,719.5	4.42	-4.38	0.63
9,680.0	91.80	179.70	6,045.3	-3,711.0	544.9	3,750.3	4.39	-2.58	3.55
9,712.0	92.40	179.50	6,044.1	-3,743.0	545.1	3,782.0	1.98	1.88	-0.63
9,744.0	93.60	177.90	6,042.5	-3,774.9	545.8	3,813.8	6.24	3.75	-5.00
9,775.0	93.40	178.40	6,040.6	-3,805.8	546.8	3,844.6	1.73	-0.65	1.61
9,807.0	92.20	177.90	6,039.0	-3,837.8	547.9	3,876.4	4.06	-3.75	-1.56
9,838.0	91.00	178.40	6,038.1	-3,868.8	548.9	3,907.2	4.19	-3.87	1.61
9,870.0	90.30	178.60	6,037.8	-3,900.7	549.7	3,939.1	2.28	-2.19	0.63
9,902.0	89.80	177.90	6,037.7	-3,932.7	550.7	3,970.9	2.69	-1.56	-2.19
9,933.0	89.20	179.00	6,038.0	-3,963.7	551.5	4,001.7	4.04	-1.94	3.55

Company:	Whiting Oil & Gas	Local Co-ordinate Reference:	Well Wildhorse #02-0214AH
Project:	SEC.2-T9N-R59W	TVD Reference:	WELL @ 5019.5ft (Original Well Elev)
Site:	Wildhorse #02-0214AH Pad Sec.2-T9N-R59W	MD Reference:	WELL @ 5019.5ft (Original Well Elev)
Well:	Wildhorse #02-0214AH	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,965.0	89.70	178.10	6,038.3	-3,995.7	552.3	4,033.6	3.22	1.56	-2.81
9,969.2	89.77	178.31	6,038.3	-3,999.9	552.5	4,037.8	5.24	1.56	5.00
WP7									
9,997.0	90.20	179.70	6,038.4	-4,027.7	552.9	4,065.4	5.24	1.56	5.00
10,028.0	90.90	179.30	6,038.1	-4,058.7	553.2	4,096.1	2.60	2.26	-1.29
10,060.0	90.50	178.60	6,037.7	-4,090.7	553.8	4,127.9	2.52	-1.25	-2.19
10,092.0	89.10	178.10	6,037.8	-4,122.7	554.7	4,159.8	4.65	-4.38	-1.56
10,124.0	88.10	178.80	6,038.6	-4,154.7	555.6	4,191.6	3.81	-3.13	2.19
10,174.0	88.10	178.80	6,040.2	-4,204.6	556.6	4,241.3	0.00	0.00	0.00
WP8 - BHL 660'FSL, 1320'FWL									

Checked By: _____	Approved By: _____	Date: _____
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