

Whiting Oil & Gas

Well Name: **WOLF #36-3624H**

Surface Location: WOLF #36-3624H PAD 36-10N-59W

North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4925.0

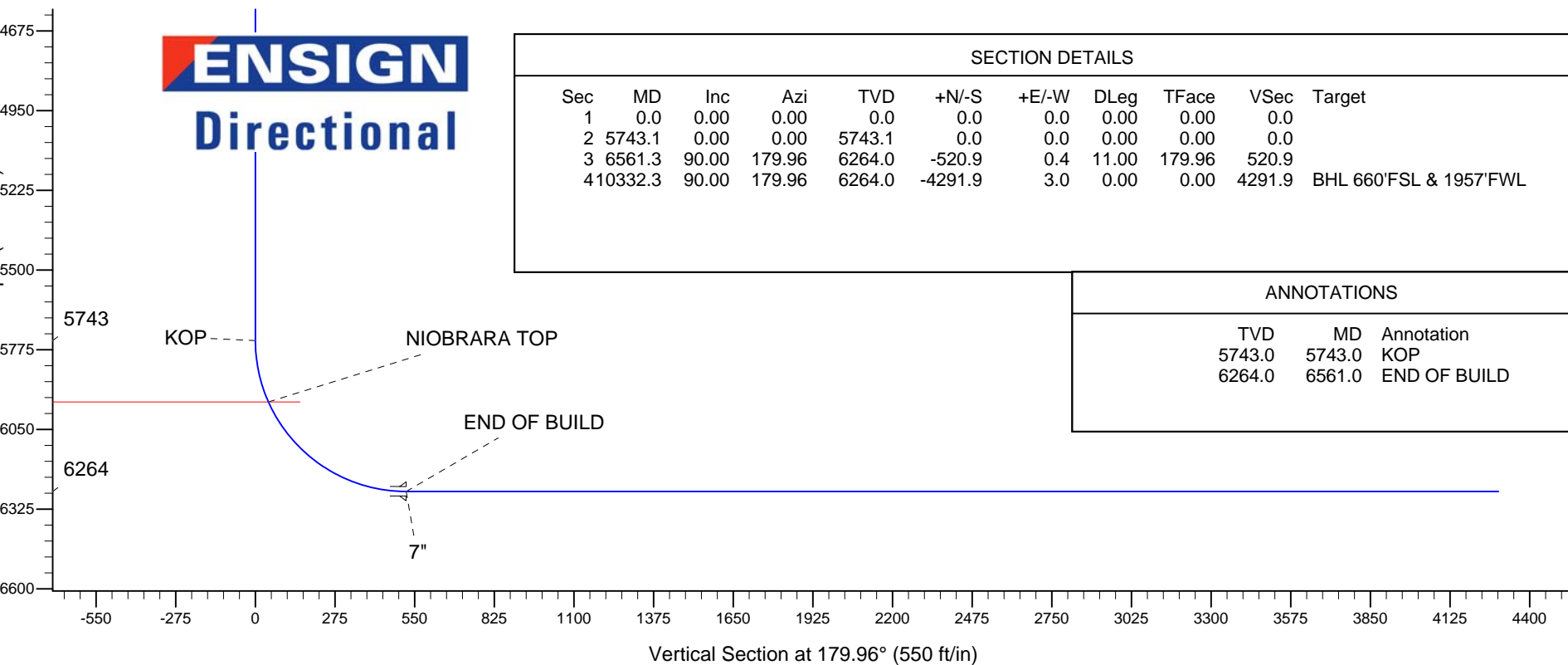
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1538510.09	3434891.04	40.801019	-103.929136	

ENSIGN RIG 14 RKB @ 4940.0ft (ENSIGN RIG 14)

ENSIGN RIG 14 RKB @ 4940.0ft (ENSIGN RIG 14)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
BH HARDLINE 660'FSL	1.0	-4291.9	-500.0	40.789239	-103.930942	Polygon
HARDLINE SH 660'FNL	1.0	-330.0	-500.0	40.800113	-103.930942	Polygon
BHL 660'FSL & 1957'FWL	6264.0	-4291.9	3.0	40.789239	-103.929125	Point

13:18, November 03 2011





Directional

Whiting Oil & Gas

SEC.36-T10N-R59W

WOLF #36-3624H PAD 36-10N-59W

WOLF #36-3624H

Wellbore #1

Plan: PLAN 1 (NOV 3,11)

Standard Planning Report

03 November, 2011

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,743.1	0.00	0.00	5,743.1	0.0	0.0	0.00	0.00	0.00	0.00	
6,561.3	90.00	179.96	6,264.0	-520.9	0.4	11.00	11.00	0.00	179.96	
10,332.3	90.00	179.96	6,264.0	-4,291.9	3.0	0.00	0.00	0.00	0.00	BHL 660'FSL & 195

Planned Survey	Measured Data									
	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)
Wellbore Data	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
	200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
	300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
	400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
	500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
	600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
	700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
	800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
	900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
	1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
	1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
	1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
	1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
	1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
	1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
	1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
	1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
	1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
	1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
	2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
	2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
	2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
	2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
	2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
	2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
	2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
	2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
	2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
	2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
	3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
	3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
	3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
	3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
	3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
	3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
	3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
	3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
	3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
	3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
	4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
	4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
	4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
	4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
	4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
	4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
	4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
	4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
	4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
	4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well WOLF #36-3624H
Company:	Whiting Oil & Gas	TVD Reference:	RKB @ 4940.0ft (ENSIGN RIG 14)
Project:	SEC.36-T10N-R59W	MD Reference:	RKB @ 4940.0ft (ENSIGN RIG 14)
Site:	WOLF #36-3624H PAD 36-10N-59W	North Reference:	True
Well:	WOLF #36-3624H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PLAN 1 (NOV 3,11)		

Planned 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)
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,743.0	0.00	0.00	5,743.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP									
5,743.1	0.00	0.00	5,743.1	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	6.26	179.96	5,799.9	-3.1	0.0	3.1	11.00	11.00	0.00
5,900.0	17.26	179.96	5,897.6	-23.4	0.0	23.4	11.00	11.00	0.00
5,961.3	24.00	179.96	5,955.0	-45.0	0.0	45.0	11.00	11.00	0.00
NIOBRARA TOP									
6,000.0	28.26	179.96	5,989.7	-62.1	0.0	62.1	11.00	11.00	0.00
6,100.0	39.26	179.96	6,072.7	-117.5	0.1	117.5	11.00	11.00	0.00
6,200.0	50.26	179.96	6,143.6	-187.8	0.1	187.8	11.00	11.00	0.00
6,300.0	61.26	179.96	6,199.8	-270.4	0.2	270.4	11.00	11.00	0.00
6,400.0	72.26	179.96	6,239.2	-362.1	0.3	362.1	11.00	11.00	0.00
6,500.0	83.26	179.96	6,260.4	-459.7	0.3	459.7	11.00	11.00	0.00
6,561.0	89.97	179.96	6,264.0	-520.6	0.4	520.6	11.00	11.00	0.00
END OF BUILD - 7"									
6,561.3	90.00	179.96	6,264.0	-520.9	0.4	520.9	11.00	11.00	0.00
6,600.0	90.00	179.96	6,264.0	-559.6	0.4	559.6	0.00	0.00	0.00
6,700.0	90.00	179.96	6,264.0	-659.6	0.5	659.6	0.00	0.00	0.00
6,800.0	90.00	179.96	6,264.0	-759.6	0.5	759.6	0.00	0.00	0.00
6,900.0	90.00	179.96	6,264.0	-859.6	0.6	859.6	0.00	0.00	0.00
7,000.0	90.00	179.96	6,264.0	-959.6	0.7	959.6	0.00	0.00	0.00
7,100.0	90.00	179.96	6,264.0	-1,059.6	0.8	1,059.6	0.00	0.00	0.00
7,200.0	90.00	179.96	6,264.0	-1,159.6	0.8	1,159.6	0.00	0.00	0.00
7,300.0	90.00	179.96	6,264.0	-1,259.6	0.9	1,259.6	0.00	0.00	0.00
7,400.0	90.00	179.96	6,264.0	-1,359.6	1.0	1,359.6	0.00	0.00	0.00
7,500.0	90.00	179.96	6,264.0	-1,459.6	1.0	1,459.6	0.00	0.00	0.00
7,600.0	90.00	179.96	6,264.0	-1,559.6	1.1	1,559.6	0.00	0.00	0.00
7,700.0	90.00	179.96	6,264.0	-1,659.6	1.2	1,659.6	0.00	0.00	0.00
7,800.0	90.00	179.96	6,264.0	-1,759.6	1.2	1,759.6	0.00	0.00	0.00
7,900.0	90.00	179.96	6,264.0	-1,859.6	1.3	1,859.6	0.00	0.00	0.00
8,000.0	90.00	179.96	6,264.0	-1,959.6	1.4	1,959.6	0.00	0.00	0.00
8,100.0	90.00	179.96	6,264.0	-2,059.6	1.5	2,059.6	0.00	0.00	0.00
8,200.0	90.00	179.96	6,264.0	-2,159.6	1.5	2,159.6	0.00	0.00	0.00
8,300.0	90.00	179.96	6,264.0	-2,259.6	1.6	2,259.6	0.00	0.00	0.00
8,400.0	90.00	179.96	6,264.0	-2,359.6	1.7	2,359.6	0.00	0.00	0.00
8,500.0	90.00	179.96	6,264.0	-2,459.6	1.7	2,459.6	0.00	0.00	0.00
8,600.0	90.00	179.96	6,264.0	-2,559.6	1.8	2,559.6	0.00	0.00	0.00
8,700.0	90.00	179.96	6,264.0	-2,659.6	1.9	2,659.6	0.00	0.00	0.00
8,800.0	90.00	179.96	6,264.0	-2,759.6	2.0	2,759.6	0.00	0.00	0.00
8,900.0	90.00	179.96	6,264.0	-2,859.6	2.0	2,859.6	0.00	0.00	0.00
9,000.0	90.00	179.96	6,264.0	-2,959.6	2.1	2,959.6	0.00	0.00	0.00
9,100.0	90.00	179.96	6,264.0	-3,059.6	2.2	3,059.6	0.00	0.00	0.00
9,200.0	90.00	179.96	6,264.0	-3,159.6	2.2	3,159.6	0.00	0.00	0.00
9,300.0	90.00	179.96	6,264.0	-3,259.6	2.3	3,259.6	0.00	0.00	0.00
9,400.0	90.00	179.96	6,264.0	-3,359.6	2.4	3,359.6	0.00	0.00	0.00
9,500.0	90.00	179.96	6,264.0	-3,459.6	2.5	3,459.6	0.00	0.00	0.00
9,600.0	90.00	179.96	6,264.0	-3,559.6	2.5	3,559.6	0.00	0.00	0.00
9,700.0	90.00	179.96	6,264.0	-3,659.6	2.6	3,659.6	0.00	0.00	0.00
9,800.0	90.00	179.96	6,264.0	-3,759.6	2.7	3,759.6	0.00	0.00	0.00

Plan Annotations					
	Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
			+N/-S (ft)	+E/-W (ft)	
	5,743.0	5,743.0	0.0	0.0	KOP
	6,561.0	6,264.0	-520.6	0.4	END OF BUILD