

Results of Directional Survey

API number:	30-025-40408			
OGRID:		Operator:	YATES PETROLEUM CORPORATION	
		Property:	UNDAUNTED BSD STATE COM	# 1H

surface	ULSTR:	O	02	T 25S	R 32E
				175 FSL	2200 FEL

BH Loc	ULSTR:	B	02	T 25S	R 32E
15464 MD	MD	10882.3	TVD	322 FNL	2243 FEL
				4958 FSL	

Top Perf/OH	ULSTR:	O	02	T 25S	R 32E
11265 MD	MD	10908.3	TVD	759 FSL	2213 FEL

Bot Perf/OH	ULSTR:	B	02	T 25S	R 32E
15412 MD	MD	10882.1	TVD	374 FNL	2243 FEL
				4906 FSL	

	MD	N/S	E/W	VD
	11256	575.10	-12.70	10908.2
TOP PERFS/OH	11265	584.07	-12.59	10908.28
	11288	607.00	-12.30	10908.50
	15411	4729.60	-43.20	10882.10
BOT PERFS/OH	15412	4730.60	-43.20	10882.10
	15464	4782.60	-43.10	10882.30

NEXT TO LAST	15411	4729.60	-43.20	10882.10
LAST READING	15464	4782.60	-43.10	10882.30
TD	15464	4782.60	-43.10	10882.30

Surface Location	175	FS	2200	FE
Projected BHL	4958	FS	2243	FE
Location of				
Top Perfs/OH	759	FS	2213	FE
Bottom Perfs/OH	4906	FS	2243	FE

SUMMARY of Subsurface Locations

Surface Location	O-02-25S-32E	175	FS	2200	FE	Vert. Depth
Top Perfs/OH	O-02-25S-32E	759	FS	2213	FE	10908.28
Bottom Perfs/OH	B-02-25S-32E	4906	FS	2243	FE	10882.10
Projected TD	B-02-25S-32E	4958	FS	2243	FE	10882.30

APR 16 2013



Job Number: SVMO-120158
 Company: Yates Petroleum Corporation
 Lease/Well: Undaunted BSD State Com 001H
 Location: Lea County, NM
 Rig Name: Cactus #124
 RKB: 25'
 G.L. or M.S.L.: GL

State/Country: New Mexico/USA
 Declination: 7.44°
 Grid: East To Grid North
 File name: F:\SURVEY\2012SU-1\YATES\MO\UNDAUT-1\001H.SVY
 Date/Time: 02-Jan-13 / 10:42
 Curve Name: Surface - 450' M.D. (Rate Gyro)

HOBBS OCD
 APR 01 2013
 RECEIVED

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane .00
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

SUR: O-02-25s-32e, 175/S & 2200/E
 BHL: B-02-25s-32e, 4958/S & 2243/E
 API # 30-025-40408

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
100.00	.65	348.49	100.00	.56	-.11	.56	.57	348.49	.65
200.00	.58	24.53	199.99	1.57	-.02	1.57	1.57	359.41	.39
300.00	.35	31.81	299.99	2.29	.35	2.29	2.32	8.80	.24
400.00	.61	348.72	399.99	3.07	.41	3.07	3.10	7.63	.43

Last Survey Depth Recorded									
450.00	.82	357.54	449.98	3.69	.34	3.69	3.71	5.33	.47



Yates Petroleum

Lea County, NM (NAD-83)
Undaunted BSD State Com
#1H

OH

SUR: O-02-25s-32e, 175/S & 2200/E
BHL: B-02-25s-32e, 4958/S & 2243/E
API # 30-025-40408

Design: OH

Standard Survey Report

25 January, 2013



APR 16 2013



Survey Report



Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #1H
Project:	Lea County, NM (NAD-83)	TVD Reference:	WELL @ 3540.0usft (Cactus #124 - 25' KB)
Site:	Undaunted BSD State Com	MD Reference:	WELL @ 3540.0usft (Cactus #124 - 25' KB)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Houston R5000 Database

Project	Lea County, NM (NAD-83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Undaunted BSD State Com				
Site Position:		Northing:	419,999.21 usft	Latitude:	32° 9' 10.006 N
From:	Map	Easting:	754,627.18 usft	Longitude:	103° 38' 38.895 W
Position Uncertainty:	2.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.37 °

Well	#1H					
Well Position	+N/-S	0.0 usft	Northing:	419,999.21 usft	Latitude:	32° 9' 10.006 N
	+E/-W	0.0 usft	Easting:	754,627.18 usft	Longitude:	103° 38' 38.895 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,515.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	10/11/2012	7.44	60.10	48,474

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	10,399.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	359.72	

Survey Program	Date: 1/25/2013			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	450.0	Survey #1 - MS Gyro (Pilot)	CB-GYRO-MS	Camera based gyro multishot
597.0	10,399.0	Survey #2 - Crescent1 (Pilot)	MWD	MWD - Standard
10,464.0	15,411.0	Survey #3 - Crescent2 (OH)	MWD	MWD - Standard
15,464.0	15,464.0	Survey #4 - PTB (OH)	MWD	MWD - Standard

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)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.65	348.49	100.0	0.6	-0.1	0.6	0.65	0.65	0.00	
200.0	0.58	24.53	200.0	1.6	0.0	1.6	0.39	-0.07	36.04	
300.0	0.35	31.81	300.0	2.3	0.4	2.3	0.24	-0.23	7.28	
400.0	0.61	348.72	400.0	3.1	0.4	3.1	0.43	0.26	-43.09	
450.0	0.82	357.54	450.0	3.7	0.3	3.7	0.47	0.42	17.64	
597.0	0.30	354.90	597.0	5.1	0.3	5.1	0.35	-0.35	-1.80	
773.0	0.40	334.20	773.0	6.1	0.0	6.1	0.09	0.06	-11.76	

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Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Houston R5000 Database

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)
926.0	0.40	321.50	926.0	7.0	-0.6	7.0	0.06	0.00	-8.30
1,116.0	0.40	334.20	1,116.0	8.2	-1.3	8.2	0.05	0.00	6.68
1,305.0	0.40	317.90	1,305.0	9.2	-2.0	9.2	0.06	0.00	-8.62
1,494.0	0.40	296.40	1,494.0	10.0	-3.1	10.0	0.08	0.00	-11.38
1,683.0	0.40	250.40	1,682.9	10.1	-4.3	10.1	0.17	0.00	-24.34
1,874.0	0.30	228.70	1,873.9	9.5	-5.3	9.6	0.09	-0.05	-11.36
2,061.0	0.30	206.90	2,060.9	8.8	-5.9	8.8	0.06	0.00	-11.66
2,251.0	0.30	162.70	2,250.9	7.9	-6.0	7.9	0.12	0.00	-23.26
2,441.0	0.40	174.10	2,440.9	6.7	-5.7	6.8	0.06	0.05	6.00
2,630.0	0.40	183.70	2,629.9	5.4	-5.7	5.4	0.04	0.00	5.08
2,821.0	0.40	169.20	2,820.9	4.1	-5.6	4.1	0.05	0.00	-7.59
3,010.0	0.30	181.80	3,009.9	2.9	-5.5	3.0	0.07	-0.05	6.67
3,201.0	0.40	200.80	3,200.9	1.8	-5.8	1.9	0.08	0.05	9.95
3,391.0	0.40	213.30	3,390.9	0.7	-6.4	0.7	0.05	0.00	6.58
3,580.0	0.30	203.50	3,579.9	-0.4	-6.9	-0.3	0.06	-0.05	-5.19
3,769.0	0.50	106.90	3,768.9	-1.0	-6.3	-1.0	0.32	0.11	-51.11
3,864.0	0.50	108.70	3,863.9	-1.3	-5.6	-1.3	0.02	0.00	1.89
3,958.0	0.40	105.40	3,957.9	-1.5	-4.8	-1.5	0.11	-0.11	-3.51
4,053.0	0.40	95.20	4,052.9	-1.6	-4.2	-1.6	0.07	0.00	-10.74
4,148.0	0.70	106.60	4,147.9	-1.8	-3.3	-1.8	0.33	0.32	12.00
4,243.0	1.10	112.10	4,242.9	-2.3	-1.9	-2.3	0.43	0.42	5.79
4,337.0	0.20	158.50	4,336.9	-2.8	-1.0	-2.8	1.04	-0.96	49.36
4,431.0	0.50	153.40	4,430.9	-3.4	-0.8	-3.4	0.32	0.32	-5.43
4,526.0	1.10	144.50	4,525.9	-4.5	-0.1	-4.5	0.64	0.63	-9.37
4,620.0	1.10	142.70	4,619.8	-5.9	1.0	-5.9	0.04	0.00	-1.91
4,714.0	0.40	132.10	4,713.8	-6.9	1.8	-6.9	0.76	-0.74	-11.28
4,733.0	0.30	142.50	4,732.8	-6.9	1.9	-7.0	0.62	-0.53	54.74
4,906.0	0.40	121.30	4,905.8	-7.6	2.7	-7.6	0.09	0.06	-12.25
5,001.0	0.50	133.40	5,000.8	-8.1	3.3	-8.1	0.14	0.11	12.74
5,096.0	0.60	124.40	5,095.8	-8.6	4.0	-8.7	0.14	0.11	-9.47
5,191.0	0.40	128.30	5,190.8	-9.1	4.6	-9.1	0.21	-0.21	4.11
5,381.0	0.40	148.30	5,380.8	-10.1	5.5	-10.1	0.07	0.00	10.53
5,570.0	0.70	152.70	5,569.8	-11.7	6.4	-11.7	0.16	0.16	2.33
5,760.0	0.50	164.90	5,759.8	-13.5	7.1	-13.6	0.12	-0.11	6.42
5,950.0	0.50	170.40	5,949.8	-15.1	7.5	-15.2	0.03	0.00	2.89
6,139.0	0.30	178.30	6,138.8	-16.4	7.6	-16.5	0.11	-0.11	4.18
6,328.0	0.40	57.70	6,327.8	-16.6	8.2	-16.6	0.32	0.05	-63.81
6,517.0	0.40	34.30	6,516.8	-15.7	9.1	-15.7	0.09	0.00	-12.38
6,708.0	0.30	34.10	6,707.8	-14.7	9.8	-14.8	0.05	-0.05	-0.10
6,897.0	0.30	201.30	6,896.8	-14.8	9.9	-14.8	0.32	0.00	88.47
7,086.0	0.20	157.00	7,085.8	-15.5	9.8	-15.6	0.11	-0.05	-23.44
7,275.0	0.90	351.90	7,274.8	-14.4	9.8	-14.4	0.58	0.37	-87.35
7,464.0	0.40	29.70	7,463.8	-12.3	9.9	-12.4	0.34	-0.26	20.00

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Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Houston R5000 Database

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)	
7,652.0	0.30	1.10	7,651.8	-11.3	10.2	-11.3	0.11	-0.05	-15.21	
7,841.0	1.10	21.10	7,840.7	-9.1	10.9	-9.1	0.44	0.42	10.58	
7,935.0	1.00	24.10	7,934.7	-7.5	11.5	-7.5	0.12	-0.11	3.19	
8,029.0	1.10	46.40	8,028.7	-6.1	12.5	-6.2	0.44	0.11	23.72	
8,124.0	1.10	327.40	8,123.7	-4.7	12.7	-4.8	1.47	0.00	-83.16	
8,314.0	0.80	265.70	8,313.7	-3.3	10.4	-3.3	0.53	-0.16	-32.47	
8,408.0	1.20	273.20	8,407.7	-3.3	8.8	-3.3	0.45	0.43	7.98	
8,502.0	1.30	274.90	8,501.6	-3.1	6.7	-3.2	0.11	0.11	1.81	
8,597.0	1.30	319.50	8,596.6	-2.2	4.9	-2.2	1.04	0.00	46.95	
8,692.0	0.50	302.60	8,691.6	-1.2	3.9	-1.2	0.88	-0.84	-17.79	
8,787.0	0.60	297.30	8,786.6	-0.7	3.1	-0.7	0.12	0.11	-5.58	
8,881.0	0.80	302.00	8,880.6	-0.2	2.1	-0.2	0.22	0.21	5.00	
8,976.0	1.00	320.30	8,975.6	0.8	1.0	0.8	0.37	0.21	19.26	
9,071.0	1.10	304.90	9,070.6	2.0	-0.3	2.0	0.31	0.11	-16.21	
9,164.0	1.10	266.60	9,163.5	2.5	-1.9	2.5	0.78	0.00	-41.18	
9,260.0	1.00	286.20	9,259.5	2.6	-3.6	2.6	0.39	-0.10	20.42	
9,354.0	1.10	312.50	9,353.5	3.5	-5.1	3.5	0.52	0.11	27.98	
9,449.0	0.60	322.30	9,448.5	4.5	-6.0	4.5	0.55	-0.53	10.32	
9,544.0	0.80	312.20	9,543.5	5.3	-6.8	5.4	0.25	0.21	-10.63	
9,638.0	1.10	299.40	9,637.5	6.2	-8.1	6.2	0.39	0.32	-13.62	
9,733.0	0.70	278.90	9,732.5	6.7	-9.5	6.8	0.53	-0.42	-21.58	
9,829.0	1.40	234.00	9,828.5	6.1	-11.0	6.2	1.07	0.73	-46.77	
9,924.0	0.70	227.20	9,923.4	5.1	-12.4	5.1	0.75	-0.74	-7.16	
10,019.0	1.00	214.20	10,018.4	4.0	-13.3	4.0	0.37	0.32	-13.68	
10,114.0	0.50	281.90	10,113.4	3.4	-14.1	3.5	0.98	-0.53	71.26	
10,209.0	0.60	288.00	10,208.4	3.6	-15.0	3.7	0.12	0.11	6.42	
10,304.0	0.80	317.50	10,303.4	4.3	-15.9	4.3	0.43	0.21	31.05	
10,399.0	0.30	70.90	10,398.4	4.8	-16.1	4.9	1.01	-0.53	119.37	
10,464.0	6.40	357.20	10,463.3	8.5	-16.2	8.6	9.73	9.38	-113.38	
10,496.0	10.70	352.60	10,494.9	13.2	-16.6	13.3	13.60	13.44	-14.38	
10,528.0	14.80	353.60	10,526.1	20.3	-17.5	20.3	12.83	12.81	3.13	
10,559.0	18.30	356.40	10,555.8	29.0	-18.2	29.1	11.58	11.29	9.03	
10,591.0	22.20	1.10	10,585.8	40.1	-18.4	40.2	13.20	12.19	14.69	
10,623.0	26.40	2.20	10,615.0	53.3	-18.0	53.4	13.20	13.13	3.44	
10,654.0	30.50	1.90	10,642.3	68.0	-17.5	68.1	13.23	13.23	-0.97	
10,686.0	33.40	0.60	10,669.4	85.0	-17.1	85.0	9.31	9.06	-4.06	
10,717.0	36.40	359.20	10,694.8	102.7	-17.2	102.8	10.02	9.68	-4.52	
10,749.0	39.50	358.60	10,720.1	122.4	-17.6	122.4	9.76	9.69	-1.88	
10,781.0	43.20	358.60	10,744.1	143.5	-18.1	143.6	11.56	11.56	0.00	
10,813.0	47.10	358.50	10,766.6	166.2	-18.7	166.3	12.19	12.19	-0.31	
10,844.0	50.60	358.50	10,787.0	189.5	-19.3	189.6	11.29	11.29	0.00	
10,876.0	54.10	358.70	10,806.6	214.8	-19.9	214.9	10.95	10.94	0.63	
10,907.0	58.10	359.40	10,823.9	240.5	-20.3	240.6	13.04	12.90	2.26	
10,939.0	61.70	0.10	10,839.9	268.2	-20.4	268.3	11.41	11.25	2.19	

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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Houston R5000 Database

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)
10,971.0	66.50	0.80	10,853.9	297.0	-20.2	297.1	15.13	15.00	2.19
11,002.0	70.70	1.30	10,865.2	325.9	-19.7	325.9	13.63	13.55	1.61
11,055.0	75.00	2.10	10,880.8	376.5	-18.2	376.5	8.24	8.11	1.51
11,097.0	78.50	1.90	10,890.4	417.3	-16.7	417.4	8.35	8.33	-0.48
11,129.0	80.50	1.70	10,896.3	448.8	-15.7	448.8	6.28	6.25	-0.63
11,161.0	82.90	1.60	10,900.9	480.4	-14.8	480.5	7.51	7.50	-0.31
11,192.0	84.30	1.60	10,904.3	511.2	-14.0	511.3	4.52	4.52	0.00
11,224.0	86.50	1.20	10,906.9	543.1	-13.2	543.1	6.99	6.88	-1.25
11,256.0	88.90	0.70	10,908.2	575.1	-12.7	575.1	7.66	7.50	-1.56
11,288.0	89.90	0.70	10,908.5	607.0	-12.3	607.1	3.13	3.13	0.00
11,351.0	90.90	0.10	10,908.1	670.0	-11.8	670.1	1.85	1.59	-0.95
11,383.0	91.30	359.80	10,907.5	702.0	-11.9	702.1	1.56	1.25	-0.94
11,478.0	90.20	359.60	10,906.2	797.0	-12.4	797.1	1.18	-1.16	-0.21
11,574.0	90.10	359.60	10,906.0	893.0	-13.0	893.1	0.10	-0.10	0.00
11,669.0	90.40	359.60	10,905.6	988.0	-13.7	988.1	0.32	0.32	0.00
11,764.0	90.00	359.60	10,905.2	1,083.0	-14.4	1,083.1	0.42	-0.42	0.00
11,860.0	90.40	359.40	10,904.9	1,179.0	-15.2	1,179.1	0.47	0.42	-0.21
11,955.0	90.20	359.60	10,904.4	1,274.0	-16.0	1,274.1	0.30	-0.21	0.21
12,051.0	89.70	359.80	10,904.5	1,370.0	-16.5	1,370.1	0.56	-0.52	0.21
12,147.0	90.60	359.90	10,904.2	1,466.0	-16.8	1,466.1	0.94	0.94	0.10
12,242.0	90.60	359.80	10,903.2	1,561.0	-17.0	1,561.1	0.11	0.00	-0.11
12,337.0	90.70	0.40	10,902.2	1,656.0	-16.9	1,656.1	0.64	0.11	0.63
12,431.0	90.70	359.90	10,901.0	1,750.0	-16.6	1,750.0	0.53	0.00	-0.53
12,526.0	90.30	0.70	10,900.2	1,845.0	-16.1	1,845.0	0.94	-0.42	0.84
12,621.0	90.90	0.10	10,899.2	1,940.0	-15.5	1,940.0	0.89	0.63	-0.63
12,716.0	90.20	358.50	10,898.3	2,035.0	-16.6	2,035.0	1.84	-0.74	-1.68
12,810.0	90.20	358.70	10,898.0	2,128.9	-18.9	2,129.0	0.21	0.00	0.21
12,905.0	90.30	358.80	10,897.5	2,223.9	-21.0	2,224.0	0.15	0.11	0.11
13,000.0	90.70	359.30	10,896.7	2,318.9	-22.6	2,319.0	0.67	0.42	0.53
13,094.0	90.90	359.40	10,895.4	2,412.9	-23.6	2,413.0	0.24	0.21	0.11
13,189.0	90.90	359.20	10,893.9	2,507.9	-24.8	2,507.9	0.21	0.00	-0.21
13,285.0	90.50	359.70	10,892.7	2,603.8	-25.7	2,603.9	0.67	-0.42	0.52
13,380.0	89.50	359.50	10,892.7	2,698.8	-26.4	2,698.9	1.07	-1.05	-0.21
13,475.0	89.10	359.60	10,893.9	2,793.8	-27.1	2,793.9	0.43	-0.42	0.11
13,570.0	89.80	359.40	10,894.8	2,888.8	-27.9	2,888.9	0.77	0.74	-0.21
13,666.0	89.90	359.50	10,895.1	2,984.8	-28.9	2,984.9	0.15	0.10	0.10
13,761.0	90.00	359.80	10,895.1	3,079.8	-29.4	3,079.9	0.33	0.11	0.32
13,856.0	89.90	0.30	10,895.2	3,174.8	-29.4	3,174.9	0.54	-0.11	0.53
13,951.0	89.50	359.80	10,895.7	3,269.8	-29.3	3,269.9	0.67	-0.42	-0.53
14,046.0	90.10	359.60	10,896.1	3,364.8	-29.8	3,364.9	0.67	0.63	-0.21
14,141.0	91.20	0.10	10,895.0	3,459.8	-30.0	3,459.9	1.27	1.16	0.53
14,236.0	91.00	0.40	10,893.2	3,554.8	-29.6	3,554.9	0.38	-0.21	0.32
14,331.0	90.40	359.50	10,892.0	3,649.8	-29.7	3,649.9	1.14	-0.63	-0.95

Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #1H
Project:	Lea County, NM (NAD-83)	TVD Reference:	WELL @ 3540.0usft (Cactus #124 - 25' KB)
Site:	Undaunted BSD State Com	MD Reference:	WELL @ 3540.0usft (Cactus #124 - 25' KB)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Houston R5000 Database

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)	
14,426.0	90.60	359.80	10,891.2	3,744.8	-30.3	3,744.9	0.38	0.21	0.32	
14,520.0	90.40	0.10	10,890.3	3,838.8	-30.4	3,838.9	0.38	-0.21	0.32	
14,615.0	90.30	0.10	10,889.8	3,933.8	-30.2	3,933.9	0.11	-0.11	0.00	
14,712.0	90.70	358.70	10,888.9	4,030.7	-31.2	4,030.9	1.50	0.41	-1.44	
14,807.0	90.70	357.90	10,887.8	4,125.7	-34.0	4,125.8	0.84	0.00	-0.84	
14,901.0	90.90	358.70	10,886.4	4,219.6	-36.8	4,219.8	0.88	0.21	0.85	
14,998.0	90.90	358.80	10,884.9	4,316.6	-38.9	4,316.8	0.10	0.00	0.10	
15,091.0	90.60	358.80	10,883.7	4,409.6	-40.9	4,409.7	0.32	-0.32	0.00	
15,186.0	90.40	359.30	10,882.9	4,504.6	-42.4	4,504.7	0.57	-0.21	0.53	
15,281.0	90.30	359.90	10,882.3	4,599.6	-43.1	4,599.7	0.64	-0.11	0.63	
15,376.0	90.00	0.00	10,882.0	4,694.6	-43.2	4,694.7	0.33	-0.32	0.11	
15,411.0	89.80	0.10	10,882.1	4,729.6	-43.2	4,729.7	0.64	-0.57	0.29	
15,464.0	89.80	0.10	10,882.3	4,782.6	-43.1	4,782.7	0.00	0.00	0.00	
BHL - 15464.0' MD, 10882.3' TVD, 89.80° INC, 0.10° AZI, 4782.6' N, -43.1° E, 4782.7' VS										

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
15,464.0	10,882.3	4,782.6	-43.1	BHL - 15464.0' MD, 10882.3' TVD, 89.80° INC, 0.10° AZI, 4782.6' N, -43.1° E, 4	

Checked By: _____ Approved By: _____ Date: _____