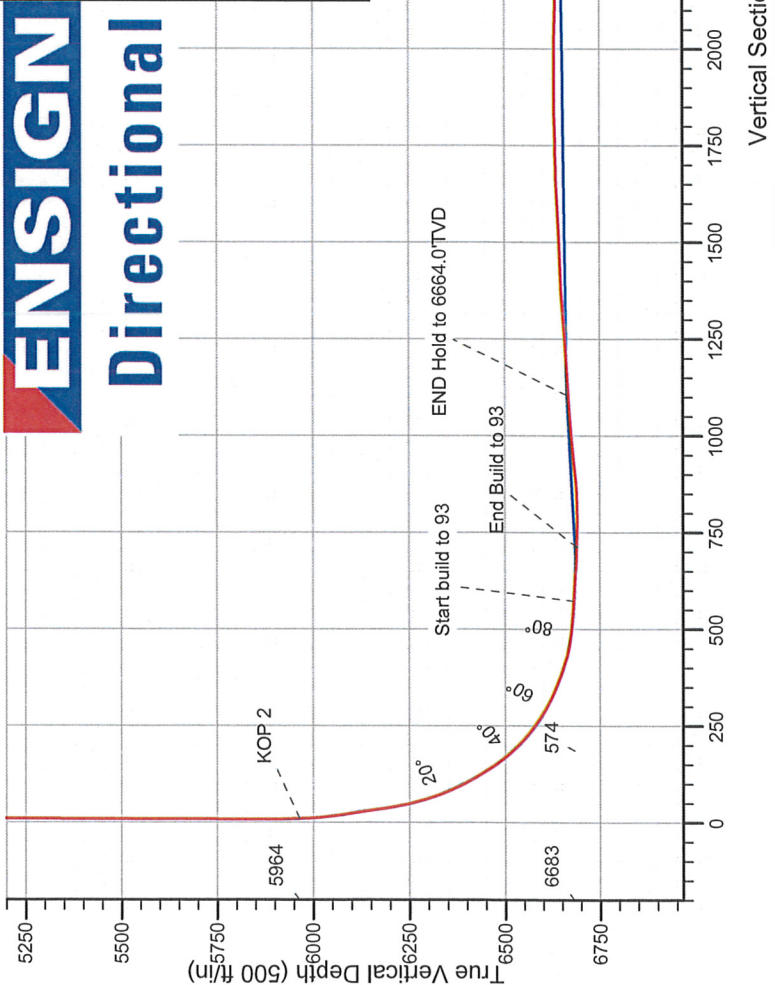
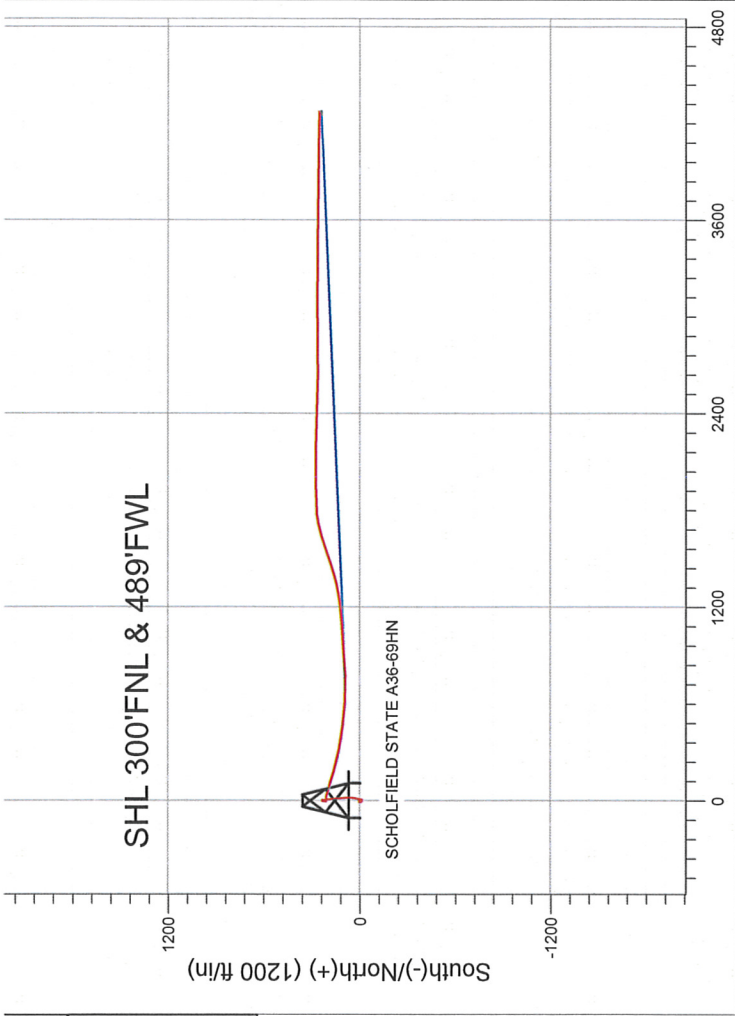


NOBLE ENERGY INC WELD COUNTY CO

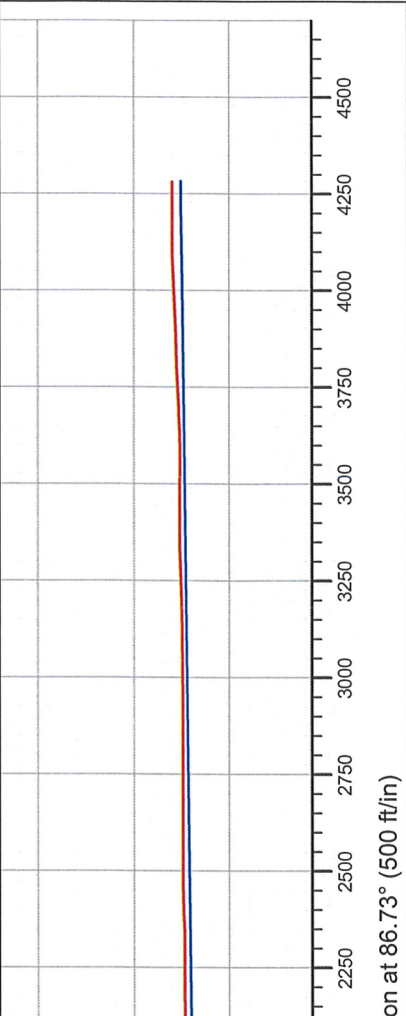
Well Name: SCHOLFIELD STATE A36-69HN					
Surface Location: SCHOLFIELD A36-79HN PAD 36-6N-64W					
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone					
Ground Elevation: 4630.0					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1408077.93	3276618.18	40.449320	-104.506050
RKB ENSIGN 132 13' RKB @ 4643.0ft (RKB ENSIGN 132 13')					
Slot					

FINAL SURVEY

Projected Bottom Hole Location
10757' MD 6602' TVD 255' N & 4274' E of
SHL 89.8 degree Incl @ 90.8 degree AZM



SCHOLFIELD A36-79HN PAD 36-6N-64W SCHOLFIELD STATE A36-69HN Wellbore #1 14:01, July 11 2011		ANNOTATIONS	
TVD	MD	Annotation	
5964.5	5987.0	KOP 2	
6682.7	7028.0	Start Build to 93	
6690.0	7168.0	End Build to 93	
6668.1	7561.0	End Hold to 6664' TVD	





Directional

NOBLE ENERGY INC WELD COUNTY CO

SEC.36-T6N-R64W

SCHOLFIELD A36-79HN PAD 36-6N-64W

SCHOLFIELD STATE A36-69HN

Wellbore #1

Survey: Survey #1

Standard Survey Report

11 July, 2011



Company: NOBLE ENERGY INC WELD COUNTY CO
 Project: SEC.36-T6N-R64W
 Site: SCHOLFIELD A36-79HN PAD 36-6N-64W
 Well: SCHOLFIELD STATE A36-69HN
 Wellbore: Wellbore #1
 Design: Wellbore #1

Local Co-ordinate Reference: Well SCHOLFIELD STATE A36-69HN
 TVD Reference: RKB @ 4643.0ft (RKB ENSIGN 132 13')
 MD Reference: RKB @ 4643.0ft (RKB ENSIGN 132 13')
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Database: Landmark

Project	SEC.36-T6N-R64W		
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 SCHOLFIELD A36-79HN PAD 36-6N-64W

Site Position:		Northing:	1,408,077.93 ft	Latitude:	40.449320
From:	Lat/Long	Easting:	3,276,618.18 ft	Longitude:	-104.506050
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.64 °

Well SCHOLFIELD STATE A36-69HN

Well Position	+N/-S	0.0 ft	Northing:	1,408,077.93 ft	Latitude:	40.449320
	+E/-W	0.0 ft	Easting:	3,276,618.18 ft	Longitude:	-104.506050
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,630.0 ft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/16/2011	8.74	67.14	53,195

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	86.73

Survey Program Date 7/11/2011

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
654.0	10,757.0	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
654.0	0.40	294.40	654.0	0.9	-2.1	-2.0	0.06	0.06	0.00
806.0	0.40	217.20	806.0	0.7	-2.9	-2.8	0.33	0.00	-50.79
990.0	0.30	271.00	990.0	0.2	-3.8	-3.7	0.18	-0.05	29.24
1,085.0	0.30	230.00	1,085.0	0.1	-4.2	-4.2	0.22	0.00	-43.16
1,275.0	0.30	260.30	1,275.0	-0.3	-5.1	-5.1	0.08	0.00	15.95
1,466.0	0.40	225.10	1,466.0	-0.9	-6.0	-6.1	0.12	0.05	-18.43
1,657.0	0.50	218.30	1,657.0	-2.0	-7.0	-7.1	0.06	0.05	-3.56
1,846.0	0.50	153.10	1,846.0	-3.4	-7.2	-7.3	0.29	0.00	-34.50
2,037.0	0.70	150.10	2,037.0	-5.1	-6.2	-6.5	0.11	0.10	-1.57
2,229.0	1.30	162.00	2,228.9	-8.2	-4.9	-5.4	0.33	0.31	6.20
2,419.0	1.60	162.40	2,418.9	-12.8	-3.5	-4.2	0.16	0.16	0.21
2,609.0	1.80	109.60	2,608.8	-16.3	0.1	-0.8	0.80	0.11	-27.79

Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.36-T6N-R64W
Site: SCHOLFIELD A36-79HN PAD 36-6N-64W
Well: SCHOLFIELD STATE A36-69HN
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well SCHOLFIELD STATE A36-69HN
TVD Reference: RKB @ 4643.0ft (RKB ENSIGN 132 13')
MD Reference: RKB @ 4643.0ft (RKB ENSIGN 132 13')
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)
2,799.0	1.70	80.80	2,798.7	-16.9	5.7	4.8	0.46	-0.05	-15.16
2,894.0	1.10	33.10	2,893.7	-15.9	7.6	6.7	1.32	-0.63	-50.21
2,989.0	1.90	14.00	2,988.7	-13.6	8.5	7.7	0.98	0.84	-20.11
3,084.0	3.10	357.80	3,083.6	-9.5	8.8	8.2	1.45	1.26	-17.05
3,179.0	5.10	11.70	3,178.3	-2.8	9.5	9.4	2.34	2.11	14.63
3,274.0	6.20	10.80	3,272.9	6.4	11.4	11.7	1.16	1.16	-0.95
3,369.0	8.30	14.40	3,367.1	18.0	14.0	15.0	2.26	2.21	3.79
3,464.0	9.80	9.10	3,460.9	32.7	17.0	18.9	1.80	1.58	-5.58
3,559.0	11.60	3.50	3,554.3	50.2	18.9	21.7	2.19	1.89	-5.89
3,654.0	12.40	0.80	3,647.2	69.9	19.6	23.6	1.03	0.84	-2.84
3,748.0	13.00	356.80	3,738.9	90.6	19.2	24.3	1.13	0.64	-4.26
3,843.0	13.40	357.00	3,831.4	112.2	18.0	24.4	0.42	0.42	0.21
3,939.0	12.00	356.30	3,925.0	133.3	16.8	24.3	1.47	-1.46	-0.73
4,033.0	11.80	349.60	4,017.0	152.5	14.4	23.1	1.48	-0.21	-7.13
4,128.0	11.00	354.00	4,110.1	171.1	11.7	21.4	1.24	-0.84	4.63
4,223.0	9.80	354.90	4,203.6	188.1	10.0	20.7	1.27	-1.26	0.95
4,318.0	8.40	351.50	4,297.4	203.1	8.3	19.9	1.58	-1.47	-3.58
4,413.0	6.50	350.80	4,391.6	215.2	6.4	18.7	2.00	-2.00	-0.74
4,508.0	4.70	349.10	4,486.1	224.4	4.8	17.6	1.90	-1.89	-1.79
4,604.0	2.50	5.00	4,581.9	230.3	4.2	17.4	2.50	-2.29	16.56
4,699.0	1.20	354.60	4,676.9	233.4	4.3	17.6	1.41	-1.37	-10.95
4,794.0	0.90	240.80	4,771.9	234.0	3.6	16.9	1.86	-0.32	-119.79
4,889.0	1.60	216.70	4,866.8	232.6	2.1	15.4	0.91	0.74	-25.37
4,984.0	1.30	212.30	4,961.8	230.6	0.8	13.9	0.34	-0.32	-4.63
5,079.0	1.10	219.00	5,056.8	229.0	-0.4	12.7	0.26	-0.21	7.05
5,174.0	1.50	201.60	5,151.8	227.1	-1.4	11.5	0.59	0.42	-18.32
5,269.0	1.30	189.30	5,246.7	224.9	-2.1	10.8	0.38	-0.21	-12.95
5,364.0	1.50	178.20	5,341.7	222.6	-2.2	10.5	0.35	0.21	-11.68
5,459.0	1.60	190.50	5,436.7	220.0	-2.4	10.2	0.36	0.11	12.95
5,554.0	1.70	184.50	5,531.6	217.3	-2.7	9.7	0.21	0.11	-6.32
5,649.0	1.20	190.00	5,626.6	214.9	-3.0	9.3	0.55	-0.53	5.79
5,744.0	1.00	178.20	5,721.6	213.1	-3.2	9.0	0.32	-0.21	-12.42
5,839.0	1.10	182.20	5,816.6	211.4	-3.2	8.9	0.13	0.11	4.21
5,870.0	1.20	188.00	5,847.6	210.8	-3.2	8.8	0.49	0.32	18.71
5,890.0	1.20	188.40	5,867.5	210.4	-3.3	8.7	0.04	0.00	2.00
5,922.0	1.40	186.50	5,899.5	209.6	-3.4	8.6	0.64	0.63	-5.94
5,954.0	1.80	130.70	5,931.5	208.9	-3.1	8.9	4.81	1.25	-174.38
5,985.0	3.00	85.90	5,962.5	208.7	-1.9	10.0	6.90	3.87	-144.52
5,987.0	3.04	85.66	5,964.5	208.7	-1.8	10.1	1.97	1.86	-12.21
KOP 2									
6,017.0	3.60	82.60	5,994.5	208.9	0.0	11.9	1.97	1.88	-10.19
6,048.0	5.30	84.50	6,025.4	209.1	2.3	14.3	5.50	5.48	6.13
6,080.0	7.50	81.00	6,057.2	209.6	5.9	17.8	6.98	6.88	-10.94
6,112.0	9.60	87.30	6,088.8	210.0	10.6	22.6	7.18	6.56	19.69
6,143.0	9.30	89.40	6,119.4	210.2	15.7	27.7	1.47	-0.97	6.77
6,175.0	7.00	95.80	6,151.1	210.0	20.2	32.2	7.72	-7.19	20.00
6,207.0	8.10	105.40	6,182.8	209.2	24.3	36.2	5.22	3.44	30.00
6,238.0	10.80	106.30	6,213.4	207.8	29.2	41.0	8.72	8.71	2.90
6,270.0	13.70	107.90	6,244.6	205.8	35.7	47.4	9.12	9.06	5.00
6,302.0	17.00	109.80	6,275.5	203.1	43.7	55.2	10.43	10.31	5.94
6,333.0	20.00	109.10	6,304.9	199.8	53.0	64.3	9.70	9.68	-2.26
6,365.0	22.50	108.10	6,334.7	196.1	64.0	75.1	7.89	7.81	-3.13
6,397.0	24.90	106.50	6,364.0	192.3	76.3	87.1	7.76	7.50	-5.00
6,428.0	27.60	105.20	6,391.8	188.6	89.5	100.1	8.90	8.71	-4.19

Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.36-T6N-R64W
Site: SCHOLFIELD A36-79HN PAD 36-6N-64W
Well: SCHOLFIELD STATE A36-69HN
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well SCHOLFIELD STATE A36-69HN
TVD Reference: RKB @ 4643.0ft (RKB ENSIGN 132 13')
MD Reference: RKB @ 4643.0ft (RKB ENSIGN 132 13')
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)
6,460.0	30.90	104.50	6,419.7	184.5	104.6	114.9	10.37	10.31	-2.19
6,492.0	33.40	106.50	6,446.8	180.0	121.0	131.1	8.49	7.81	6.25
6,523.0	36.50	107.50	6,472.2	174.8	138.0	147.7	10.17	10.00	3.23
6,555.0	40.00	106.70	6,497.3	169.0	156.9	166.3	11.05	10.94	-2.50
6,587.0	44.00	107.40	6,521.1	162.7	177.4	186.4	12.59	12.50	2.19
6,618.0	47.70	105.80	6,542.7	156.3	198.7	207.3	12.50	11.94	-5.16
6,650.0	51.40	104.70	6,563.5	150.0	222.2	230.4	11.85	11.56	-3.44
6,682.0	55.00	102.80	6,582.6	143.9	247.0	254.9	12.21	11.25	-5.94
6,713.0	59.40	102.80	6,599.4	138.1	272.5	279.9	14.19	14.19	0.00
6,745.0	62.30	100.80	6,615.0	132.4	299.8	306.9	10.58	9.06	-6.25
6,777.0	65.50	100.30	6,629.1	127.1	328.1	334.8	10.10	10.00	-1.56
6,808.0	68.20	99.10	6,641.3	122.3	356.1	362.5	9.41	8.71	-3.87
6,840.0	71.30	99.10	6,652.3	117.6	385.8	391.9	9.69	9.69	0.00
6,872.0	74.00	97.70	6,661.9	113.1	416.0	421.8	9.41	8.44	-4.38
6,903.0	78.00	97.50	6,669.4	109.2	445.8	451.3	12.92	12.90	-0.65
6,942.0	84.00	96.60	6,675.5	104.4	484.0	489.2	15.55	15.38	-2.31
6,998.0	85.60	96.00	6,680.5	98.3	539.4	544.2	3.05	2.86	-1.07
7,028.0	86.27	94.89	6,682.7	95.5	569.2	573.8	4.31	2.22	-3.71
Start Build to 93									
7,052.0	86.80	94.00	6,684.1	93.6	593.1	597.5	4.31	2.22	-3.70
7,099.0	86.60	93.10	6,686.8	90.7	640.0	644.1	1.96	-0.43	-1.91
7,147.0	87.70	91.20	6,689.2	88.9	687.9	691.8	4.57	2.29	-3.96
7,168.0	88.19	90.57	6,690.0	88.6	708.8	712.7	3.79	2.34	-2.98
End Build to 93									
7,194.0	88.80	89.80	6,690.7	88.5	734.8	738.7	3.79	2.34	-2.98
7,242.0	89.30	87.30	6,691.5	89.7	782.8	786.7	5.31	1.04	-5.21
7,289.0	92.20	86.30	6,690.8	92.3	829.7	833.6	6.53	6.17	-2.13
7,337.0	95.40	85.60	6,687.7	95.7	877.5	881.5	6.82	6.67	-1.46
7,384.0	96.50	85.40	6,682.8	99.4	924.1	928.3	2.38	2.34	-0.43
7,432.0	95.70	86.10	6,677.7	102.9	971.7	976.0	2.21	-1.67	1.46
7,479.0	93.80	86.30	6,673.8	106.0	1,018.4	1,022.8	4.06	-4.04	0.43
7,527.0	94.20	86.10	6,670.4	109.2	1,066.2	1,070.7	0.93	0.83	-0.42
7,561.0	93.73	85.70	6,668.1	111.6	1,100.0	1,104.6	1.81	-1.38	-1.17
End Hold to 6664' TVD									
7,621.0	92.90	85.00	6,664.6	116.5	1,159.7	1,164.5	1.81	-1.38	-1.17
7,716.0	94.40	81.90	6,658.6	127.3	1,253.9	1,259.1	3.62	1.58	-3.26
7,811.0	94.20	76.10	6,651.4	145.4	1,346.9	1,353.0	6.09	-0.21	-6.11
7,906.0	91.60	73.40	6,646.6	170.3	1,438.4	1,445.8	3.94	-2.74	-2.84
8,001.0	92.60	71.30	6,643.2	199.1	1,528.8	1,537.7	2.45	1.05	-2.21
8,096.0	93.40	70.30	6,638.2	230.3	1,618.4	1,628.9	1.35	0.84	-1.05
8,191.0	90.70	78.20	6,634.8	256.0	1,709.7	1,721.6	8.78	-2.84	8.32
8,286.0	91.80	86.40	6,632.7	268.8	1,803.8	1,816.2	8.71	1.16	8.63
8,381.0	90.00	88.20	6,631.2	273.2	1,898.6	1,911.1	2.68	-1.89	1.89
8,476.0	89.20	91.00	6,631.9	273.9	1,993.6	2,006.0	3.07	-0.84	2.95
8,571.0	88.70	90.30	6,633.6	272.8	2,088.6	2,100.8	0.91	-0.53	-0.74
8,666.0	91.50	90.80	6,633.5	271.9	2,183.6	2,195.6	2.99	2.95	0.53
8,761.0	89.30	90.80	6,632.8	270.6	2,278.6	2,290.3	2.32	-2.32	0.00
8,856.0	91.80	90.30	6,631.9	269.7	2,373.6	2,385.1	2.68	2.63	-0.53
8,951.0	91.20	91.90	6,629.4	267.8	2,468.5	2,479.8	1.80	-0.63	1.68
9,046.0	89.70	92.10	6,628.6	264.5	2,563.4	2,574.4	1.59	-1.58	0.21
9,142.0	90.10	90.50	6,628.8	262.3	2,659.4	2,670.1	1.72	0.42	-1.67
9,237.0	89.80	89.40	6,628.9	262.4	2,754.4	2,764.9	1.20	-0.32	-1.16
9,331.0	90.30	88.50	6,628.8	264.2	2,848.4	2,858.8	1.10	0.53	-0.96
9,426.0	89.80	90.10	6,628.7	265.3	2,943.4	2,953.7	1.76	-0.53	1.68

Company: NOBLE ENERGY INC WELD COUNTY CO
 Project: SEC.36-T6N-R64W
 Site: SCHOLFIELD A36-79HN PAD 36-6N-64W
 Well: SCHOLFIELD STATE A36-69HN
 Wellbore: Wellbore #1
 Design: Wellbore #1

Local Co-ordinate Reference: Well SCHOLFIELD STATE A36-69HN
 TVD Reference: RKB @ 4643.0ft (RKB ENSIGN 132 13')
 MD Reference: RKB @ 4643.0ft (RKB ENSIGN 132 13')
 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)
9,515.0	90.10	90.30	6,628.8	265.0	3,032.4	3,042.6	0.41	0.34	0.22
9,610.0	91.50	90.10	6,627.5	264.7	3,127.4	3,137.4	1.49	1.47	-0.21
9,705.0	92.40	90.10	6,624.2	264.5	3,222.3	3,232.2	0.95	0.95	0.00
9,799.0	91.00	90.00	6,621.5	264.4	3,316.3	3,326.0	1.49	-1.49	-0.11
9,894.0	89.80	90.10	6,620.8	264.3	3,411.3	3,420.8	1.27	-1.26	0.11
9,989.0	89.50	91.40	6,621.4	263.1	3,506.3	3,515.6	1.40	-0.32	1.37
10,084.0	90.70	91.00	6,621.2	261.1	3,601.2	3,610.3	1.33	1.26	-0.42
10,179.0	93.40	90.10	6,617.8	260.2	3,696.2	3,705.0	3.00	2.84	-0.95
10,274.0	91.90	90.50	6,613.4	259.7	3,791.0	3,799.7	1.63	-1.58	0.42
10,369.0	92.20	90.80	6,610.0	258.6	3,886.0	3,894.4	0.45	0.32	0.32
10,464.0	92.50	90.50	6,606.1	257.5	3,980.9	3,989.1	0.45	0.32	-0.32
10,559.0	92.00	90.00	6,602.4	257.1	4,075.8	4,083.9	0.74	-0.53	-0.53
10,654.0	89.30	91.20	6,601.3	256.1	4,170.8	4,178.6	3.11	-2.84	1.26
10,704.0	89.80	90.80	6,601.7	255.3	4,220.8	4,228.5	1.28	1.00	-0.80
10,757.0	89.80	90.80	6,601.9	254.5	4,273.8	4,281.3	0.00	0.00	0.00

BHL 75°FNL & 535°FEL

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
5,987.0	5,964.5	208.7	-1.8	KOP 2
7,028.0	6,682.7	95.5	569.2	Start Build to 93
7,168.0	6,690.0	88.6	708.8	End Build to 93
7,561.0	6,668.1	111.6	1,100.0	End Hold to 6664' TVD

Checked By: _____ Approved By: _____ Date: _____