

Well Name: Magness P25-11D

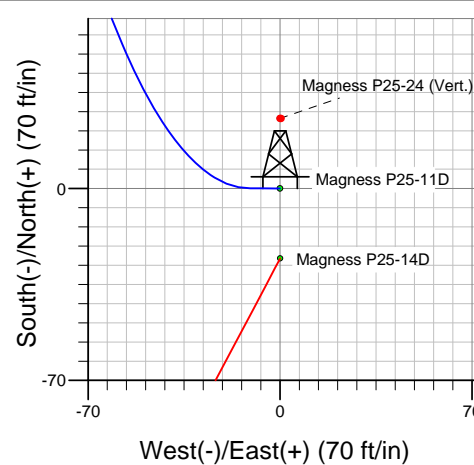
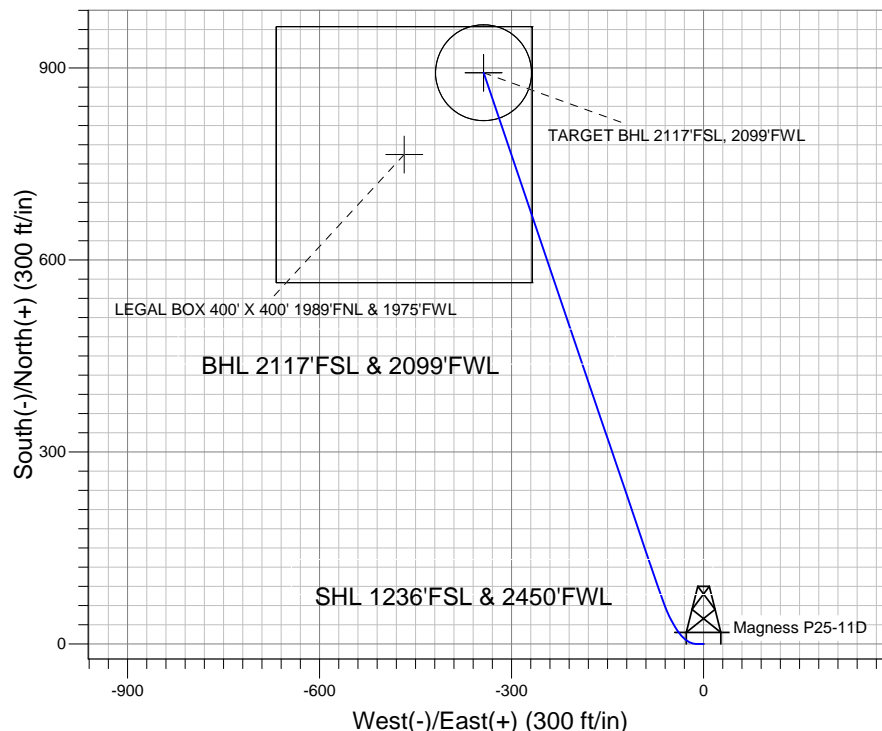
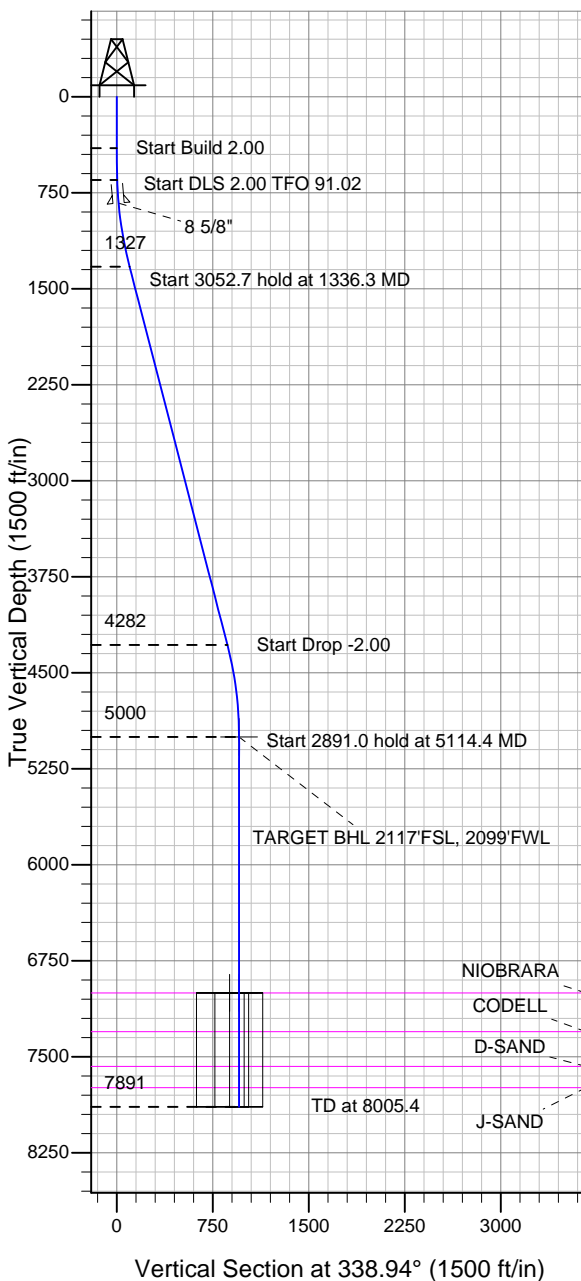
Surface Location: Magness P25-11D Pad Sec.25-T3N-R67W
North American Datum 1983 US State Plane 1983 Colorado Northern Zone

Ground Elevation: 4810.0

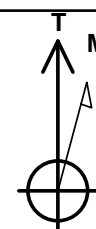
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1313477.92	3184370.69	40.192010	-104.840030	

Original Well Elev WELL @ 4823.0ft (Original Well Elev)

NOBLE ENERGY INC WELD COUNTY CO



Magness P25-11D Pad Sec.25-T3N-R67W
Magness P25-11D
Noble Magness P25-11D Plan #1 (9-02-11)
13:58, September 07 2011



Azimuths to True North
Magnetic North: 8.81°

Magnetic Field
Strength: 53013.1nT
Dip Angle: 66.87°
Date: 9/7/2011
Model: IGRF200510

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 2117'FSL, 2099'FWL	5000.0	892.6	-343.6	40.194460	-104.841260	Point
LEGAL BOX 400' X 400' 1989'FNL & 1975'FWL	7000.0	764.6	-467.6	40.194109	-104.841704	Rectangle (Sides: L400.0 W400.0)
TARGET CIRCLE 2117'FSL & 2099'FWL	7000.0	892.6	-343.6	40.194460	-104.841260	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	
3	650.0	5.00	270.00	649.7	0.0	-10.9	2.00	270.00	3.9	
4	1336.3	14.51	341.27	1327.0	81.8	-68.7	2.00	91.02	101.0	
5	4389.0	14.51	341.27	4282.3	806.0	-314.3	0.00	0.00	865.1	
6	5114.4	0.00	0.00	5000.0	892.6	-343.6	2.00	180.00	956.4	TARGET BHL 2117'FSL, 2099'FWL
7	8005.4	0.00	0.00	7891.0	892.6	-343.6	0.00	0.00	956.4	



Directional

NOBLE ENERGY INC WELD COUNTY CO

SEC.25-T3N-R67W

Magness P25-11D Pad Sec.25-T3N-R67W

Magness P25-11D

Wellbore #1

Plan: Noble Magness P25-11D Plan #1 (9-02-11)

Standard Planning Report

07 September, 2011



Database:	Landmark	Local Co-ordinate Reference:	Well Magness P25-11D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4823.0ft (Original Well Elev)
Project:	SEC.25-T3N-R67W	MD Reference:	WELL @ 4823.0ft (Original Well Elev)
Site:	Magness P25-11D Pad Sec.25-T3N-R67W	North Reference:	True
Well:	Magness P25-11D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble Magness P25-11D Plan #1 (9-02-11)		

Project	SEC.25-T3N-R67W, Weld County, Colorado		
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						Magness P25-11D Pad Sec.25-T3N-R67W											
Site Position:						Northing:			1,313,477.94 ft			Latitude:			40.192010		
From:			Lat/Long			Easting:			3,184,370.69 ft			Longitude:			-104.840030		
Position Uncertainty:			0.0 ft			Slot Radius:			"			Grid Convergence:			0.43 °		

Well	Magness P25-11D					
Well Position	+N-S	0.0 ft	Northing:	1,313,477.92 ft	Latitude:	40.192010
	+E-W	0.0 ft	Easting:	3,184,370.69 ft	Longitude:	-104.840030
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,810.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	9/7/2011	8.81	66.87	53,013

Design	Noble Magness P25-11D Plan #1 (9-02-11)			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	338.94

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	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
650.0	5.00	270.00	649.7	0.0	-10.9	2.00	2.00	0.00	270.00	
1,336.3	14.51	341.27	1,327.0	81.8	-68.7	2.00	1.39	10.38	91.02	
4,389.0	14.51	341.27	4,282.3	806.0	-314.3	0.00	0.00	0.00	0.00	
5,114.4	0.00	0.00	5,000.0	892.6	-343.6	2.00	-2.00	0.00	180.00	TARGET BHL 2117
8,005.4	0.00	0.00	7,891.0	892.6	-343.6	0.00	0.00	0.00	0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well Magness P25-11D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4823.0ft (Original Well Elev)
Project:	SEC.25-T3N-R67W	MD Reference:	WELL @ 4823.0ft (Original Well Elev)
Site:	Magness P25-11D Pad Sec.25-T3N-R67W	North Reference:	True
Well:	Magness P25-11D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble Magness P25-11D Plan #1 (9-02-11)		

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
40.0	0.00	0.00	40.0	0.0	0.0	0.0	0.00	0.00	0.00
80.0	0.00	0.00	80.0	0.0	0.0	0.0	0.00	0.00	0.00
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00
160.0	0.00	0.00	160.0	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
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	0.00
280.0	0.00	0.00	280.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
360.0	0.00	0.00	360.0	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
440.0	0.80	270.00	440.0	0.0	-0.3	0.1	2.00	2.00	0.00
480.0	1.60	270.00	480.0	0.0	-1.1	0.4	2.00	2.00	0.00
520.0	2.40	270.00	520.0	0.0	-2.5	0.9	2.00	2.00	0.00
560.0	3.20	270.00	559.9	0.0	-4.5	1.6	2.00	2.00	0.00
600.0	4.00	270.00	599.8	0.0	-7.0	2.5	2.00	2.00	0.00
640.0	4.80	270.00	639.7	0.0	-10.0	3.6	2.00	2.00	0.00
650.0	5.00	270.00	649.7	0.0	-10.9	3.9	2.00	2.00	0.00
680.0	5.03	276.86	679.6	0.2	-13.5	5.0	2.00	0.08	22.88
720.0	5.17	285.74	719.4	0.9	-17.0	6.9	2.00	0.36	22.18
760.0	5.43	293.95	759.2	2.1	-20.4	9.3	2.00	0.64	20.53
800.0	5.78	301.29	799.0	3.9	-23.9	12.2	2.00	0.89	18.34
831.1	6.12	306.34	830.0	5.7	-26.6	14.9	2.00	1.08	16.25
8 5/8"									
840.0	6.22	307.68	838.8	6.3	-27.3	15.7	2.00	1.17	15.08
880.0	6.73	313.18	878.6	9.2	-30.8	19.7	2.00	1.27	13.74
920.0	7.29	317.87	918.3	12.7	-34.2	24.1	2.00	1.40	11.74
960.0	7.89	321.88	957.9	16.8	-37.6	29.1	2.00	1.50	10.02
1,000.0	8.52	325.31	997.5	21.4	-41.0	34.6	2.00	1.58	8.57
1,040.0	9.18	328.26	1,037.0	26.5	-44.3	40.7	2.00	1.65	7.37
1,080.0	9.86	330.81	1,076.5	32.2	-47.7	47.2	2.00	1.70	6.38
1,120.0	10.56	333.03	1,115.9	38.5	-51.0	54.2	2.00	1.74	5.56
1,160.0	11.27	334.98	1,155.1	45.3	-54.3	61.8	2.00	1.78	4.87
1,200.0	11.99	336.70	1,194.3	52.6	-57.6	69.8	2.00	1.80	4.29
1,240.0	12.72	338.22	1,233.4	60.5	-60.9	78.4	2.00	1.83	3.81
1,280.0	13.46	339.58	1,272.3	69.0	-64.1	87.4	2.00	1.85	3.40
1,320.0	14.20	340.81	1,311.2	78.0	-67.4	97.0	2.00	1.86	3.05
1,336.3	14.51	341.27	1,327.0	81.8	-68.7	101.0	2.00	1.87	2.84
1,360.0	14.51	341.27	1,349.9	87.4	-70.6	107.0	0.00	0.00	0.00
1,400.0	14.51	341.27	1,388.6	96.9	-73.8	117.0	0.00	0.00	0.00
1,440.0	14.51	341.27	1,427.4	106.4	-77.0	127.0	0.00	0.00	0.00
1,480.0	14.51	341.27	1,466.1	115.9	-80.3	137.0	0.00	0.00	0.00
1,520.0	14.51	341.27	1,504.8	125.4	-83.5	147.0	0.00	0.00	0.00
1,560.0	14.51	341.27	1,543.5	134.9	-86.7	157.0	0.00	0.00	0.00
1,600.0	14.51	341.27	1,582.3	144.4	-89.9	167.0	0.00	0.00	0.00
1,640.0	14.51	341.27	1,621.0	153.9	-93.1	177.0	0.00	0.00	0.00
1,680.0	14.51	341.27	1,659.7	163.3	-96.3	187.1	0.00	0.00	0.00
1,720.0	14.51	341.27	1,698.4	172.8	-99.6	197.1	0.00	0.00	0.00
1,760.0	14.51	341.27	1,737.2	182.3	-102.8	207.1	0.00	0.00	0.00
1,800.0	14.51	341.27	1,775.9	191.8	-106.0	217.1	0.00	0.00	0.00
1,840.0	14.51	341.27	1,814.6	201.3	-109.2	227.1	0.00	0.00	0.00
1,880.0	14.51	341.27	1,853.3	210.8	-112.4	237.1	0.00	0.00	0.00
1,920.0	14.51	341.27	1,892.1	220.3	-115.7	247.1	0.00	0.00	0.00
1,960.0	14.51	341.27	1,930.8	229.8	-118.9	257.1	0.00	0.00	0.00

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Project:	SEC.25-T3N-R67W	MD Reference:	WELL @ 4823.0ft (Original Well Elev)
Site:	Magness P25-11D Pad Sec.25-T3N-R67W	North Reference:	True
Well:	Magness P25-11D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble Magness P25-11D Plan #1 (9-02-11)		

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)
2,000.0	14.51	341.27	1,969.5	239.3	-122.1	267.1	0.00	0.00	0.00
2,040.0	14.51	341.27	2,008.2	248.8	-125.3	277.2	0.00	0.00	0.00
2,080.0	14.51	341.27	2,047.0	258.2	-128.5	287.2	0.00	0.00	0.00
2,120.0	14.51	341.27	2,085.7	267.7	-131.7	297.2	0.00	0.00	0.00
2,160.0	14.51	341.27	2,124.4	277.2	-135.0	307.2	0.00	0.00	0.00
2,200.0	14.51	341.27	2,163.1	286.7	-138.2	317.2	0.00	0.00	0.00
2,240.0	14.51	341.27	2,201.9	296.2	-141.4	327.2	0.00	0.00	0.00
2,280.0	14.51	341.27	2,240.6	305.7	-144.6	337.2	0.00	0.00	0.00
2,320.0	14.51	341.27	2,279.3	315.2	-147.8	347.2	0.00	0.00	0.00
2,360.0	14.51	341.27	2,318.0	324.7	-151.1	357.3	0.00	0.00	0.00
2,400.0	14.51	341.27	2,356.8	334.2	-154.3	367.3	0.00	0.00	0.00
2,440.0	14.51	341.27	2,395.5	343.6	-157.5	377.3	0.00	0.00	0.00
2,480.0	14.51	341.27	2,434.2	353.1	-160.7	387.3	0.00	0.00	0.00
2,520.0	14.51	341.27	2,472.9	362.6	-163.9	397.3	0.00	0.00	0.00
2,560.0	14.51	341.27	2,511.7	372.1	-167.1	407.3	0.00	0.00	0.00
2,600.0	14.51	341.27	2,550.4	381.6	-170.4	417.3	0.00	0.00	0.00
2,640.0	14.51	341.27	2,589.1	391.1	-173.6	427.3	0.00	0.00	0.00
2,680.0	14.51	341.27	2,627.8	400.6	-176.8	437.4	0.00	0.00	0.00
2,720.0	14.51	341.27	2,666.6	410.1	-180.0	447.4	0.00	0.00	0.00
2,760.0	14.51	341.27	2,705.3	419.6	-183.2	457.4	0.00	0.00	0.00
2,800.0	14.51	341.27	2,744.0	429.1	-186.4	467.4	0.00	0.00	0.00
2,840.0	14.51	341.27	2,782.7	438.5	-189.7	477.4	0.00	0.00	0.00
2,880.0	14.51	341.27	2,821.5	448.0	-192.9	487.4	0.00	0.00	0.00
2,920.0	14.51	341.27	2,860.2	457.5	-196.1	497.4	0.00	0.00	0.00
2,960.0	14.51	341.27	2,898.9	467.0	-199.3	507.4	0.00	0.00	0.00
3,000.0	14.51	341.27	2,937.6	476.5	-202.5	517.5	0.00	0.00	0.00
3,040.0	14.51	341.27	2,976.4	486.0	-205.8	527.5	0.00	0.00	0.00
3,080.0	14.51	341.27	3,015.1	495.5	-209.0	537.5	0.00	0.00	0.00
3,120.0	14.51	341.27	3,053.8	505.0	-212.2	547.5	0.00	0.00	0.00
3,160.0	14.51	341.27	3,092.5	514.5	-215.4	557.5	0.00	0.00	0.00
3,200.0	14.51	341.27	3,131.2	524.0	-218.6	567.5	0.00	0.00	0.00
3,240.0	14.51	341.27	3,170.0	533.4	-221.8	577.5	0.00	0.00	0.00
3,280.0	14.51	341.27	3,208.7	542.9	-225.1	587.5	0.00	0.00	0.00
3,320.0	14.51	341.27	3,247.4	552.4	-228.3	597.6	0.00	0.00	0.00
3,360.0	14.51	341.27	3,286.1	561.9	-231.5	607.6	0.00	0.00	0.00
3,400.0	14.51	341.27	3,324.9	571.4	-234.7	617.6	0.00	0.00	0.00
3,440.0	14.51	341.27	3,363.6	580.9	-237.9	627.6	0.00	0.00	0.00
3,480.0	14.51	341.27	3,402.3	590.4	-241.2	637.6	0.00	0.00	0.00
3,520.0	14.51	341.27	3,441.0	599.9	-244.4	647.6	0.00	0.00	0.00
3,560.0	14.51	341.27	3,479.8	609.4	-247.6	657.6	0.00	0.00	0.00
3,600.0	14.51	341.27	3,518.5	618.9	-250.8	667.6	0.00	0.00	0.00
3,640.0	14.51	341.27	3,557.2	628.3	-254.0	677.7	0.00	0.00	0.00
3,680.0	14.51	341.27	3,595.9	637.8	-257.2	687.7	0.00	0.00	0.00
3,720.0	14.51	341.27	3,634.7	647.3	-260.5	697.7	0.00	0.00	0.00
3,760.0	14.51	341.27	3,673.4	656.8	-263.7	707.7	0.00	0.00	0.00
3,800.0	14.51	341.27	3,712.1	666.3	-266.9	717.7	0.00	0.00	0.00
3,840.0	14.51	341.27	3,750.8	675.8	-270.1	727.7	0.00	0.00	0.00
3,880.0	14.51	341.27	3,789.6	685.3	-273.3	737.7	0.00	0.00	0.00
3,920.0	14.51	341.27	3,828.3	694.8	-276.6	747.7	0.00	0.00	0.00
3,960.0	14.51	341.27	3,867.0	704.3	-279.8	757.8	0.00	0.00	0.00
4,000.0	14.51	341.27	3,905.7	713.8	-283.0	767.8	0.00	0.00	0.00
4,040.0	14.51	341.27	3,944.5	723.2	-286.2	777.8	0.00	0.00	0.00
4,080.0	14.51	341.27	3,983.2	732.7	-289.4	787.8	0.00	0.00	0.00
4,120.0	14.51	341.27	4,021.9	742.2	-292.6	797.8	0.00	0.00	0.00

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Project:	SEC.25-T3N-R67W	MD Reference:	WELL @ 4823.0ft (Original Well Elev)
Site:	Magness P25-11D Pad Sec.25-T3N-R67W	North Reference:	True
Well:	Magness P25-11D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble Magness P25-11D Plan #1 (9-02-11)		

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)
4,160.0	14.51	341.27	4,060.6	751.7	-295.9	807.8	0.00	0.00	0.00
4,200.0	14.51	341.27	4,099.4	761.2	-299.1	817.8	0.00	0.00	0.00
4,240.0	14.51	341.27	4,138.1	770.7	-302.3	827.8	0.00	0.00	0.00
4,280.0	14.51	341.27	4,176.8	780.2	-305.5	837.9	0.00	0.00	0.00
4,320.0	14.51	341.27	4,215.5	789.7	-308.7	847.9	0.00	0.00	0.00
4,360.0	14.51	341.27	4,254.3	799.2	-312.0	857.9	0.00	0.00	0.00
4,389.0	14.51	341.27	4,282.3	806.0	-314.3	865.1	0.00	0.00	0.00
4,400.0	14.29	341.27	4,293.0	808.6	-315.2	867.9	2.00	-2.00	0.00
4,440.0	13.49	341.27	4,331.8	817.7	-318.2	877.5	2.00	-2.00	0.00
4,480.0	12.69	341.27	4,370.8	826.3	-321.2	886.5	2.00	-2.00	0.00
4,520.0	11.89	341.27	4,409.9	834.4	-323.9	895.0	2.00	-2.00	0.00
4,560.0	11.09	341.27	4,449.1	841.9	-326.4	903.0	2.00	-2.00	0.00
4,600.0	10.29	341.27	4,488.4	848.9	-328.8	910.4	2.00	-2.00	0.00
4,640.0	9.49	341.27	4,527.8	855.4	-331.0	917.3	2.00	-2.00	0.00
4,680.0	8.69	341.27	4,567.3	861.4	-333.1	923.6	2.00	-2.00	0.00
4,720.0	7.89	341.27	4,606.9	866.9	-334.9	929.3	2.00	-2.00	0.00
4,760.0	7.09	341.27	4,646.5	871.8	-336.6	934.5	2.00	-2.00	0.00
4,800.0	6.29	341.27	4,686.2	876.2	-338.1	939.2	2.00	-2.00	0.00
4,840.0	5.49	341.27	4,726.0	880.1	-339.4	943.3	2.00	-2.00	0.00
4,880.0	4.69	341.27	4,765.9	883.5	-340.5	946.8	2.00	-2.00	0.00
4,920.0	3.89	341.27	4,805.8	886.3	-341.5	949.8	2.00	-2.00	0.00
4,960.0	3.09	341.27	4,845.7	888.6	-342.3	952.3	2.00	-2.00	0.00
5,000.0	2.29	341.27	4,885.6	890.4	-342.9	954.1	2.00	-2.00	0.00
5,040.0	1.49	341.27	4,925.6	891.6	-343.3	955.4	2.00	-2.00	0.00
5,080.0	0.69	341.27	4,965.6	892.4	-343.6	956.2	2.00	-2.00	0.00
5,114.4	0.00	0.00	5,000.0	892.6	-343.6	956.4	2.00	-2.00	0.00
TARGET BHL 2117'FSL, 2099'FWL									
5,120.0	0.00	0.00	5,005.6	892.6	-343.6	956.4	0.00	0.00	0.00
5,160.0	0.00	0.00	5,045.6	892.6	-343.6	956.4	0.00	0.00	0.00
5,200.0	0.00	0.00	5,085.6	892.6	-343.6	956.4	0.00	0.00	0.00
5,240.0	0.00	0.00	5,125.6	892.6	-343.6	956.4	0.00	0.00	0.00
5,280.0	0.00	0.00	5,165.6	892.6	-343.6	956.4	0.00	0.00	0.00
5,320.0	0.00	0.00	5,205.6	892.6	-343.6	956.4	0.00	0.00	0.00
5,360.0	0.00	0.00	5,245.6	892.6	-343.6	956.4	0.00	0.00	0.00
5,400.0	0.00	0.00	5,285.6	892.6	-343.6	956.4	0.00	0.00	0.00
5,440.0	0.00	0.00	5,325.6	892.6	-343.6	956.4	0.00	0.00	0.00
5,480.0	0.00	0.00	5,365.6	892.6	-343.6	956.4	0.00	0.00	0.00
5,520.0	0.00	0.00	5,405.6	892.6	-343.6	956.4	0.00	0.00	0.00
5,560.0	0.00	0.00	5,445.6	892.6	-343.6	956.4	0.00	0.00	0.00
5,600.0	0.00	0.00	5,485.6	892.6	-343.6	956.4	0.00	0.00	0.00
5,640.0	0.00	0.00	5,525.6	892.6	-343.6	956.4	0.00	0.00	0.00
5,680.0	0.00	0.00	5,565.6	892.6	-343.6	956.4	0.00	0.00	0.00
5,720.0	0.00	0.00	5,605.6	892.6	-343.6	956.4	0.00	0.00	0.00
5,760.0	0.00	0.00	5,645.6	892.6	-343.6	956.4	0.00	0.00	0.00
5,800.0	0.00	0.00	5,685.6	892.6	-343.6	956.4	0.00	0.00	0.00
5,840.0	0.00	0.00	5,725.6	892.6	-343.6	956.4	0.00	0.00	0.00
5,880.0	0.00	0.00	5,765.6	892.6	-343.6	956.4	0.00	0.00	0.00
5,920.0	0.00	0.00	5,805.6	892.6	-343.6	956.4	0.00	0.00	0.00
5,960.0	0.00	0.00	5,845.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,000.0	0.00	0.00	5,885.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,040.0	0.00	0.00	5,925.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,080.0	0.00	0.00	5,965.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,120.0	0.00	0.00	6,005.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,160.0	0.00	0.00	6,045.6	892.6	-343.6	956.4	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Magness P25-11D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4823.0ft (Original Well Elev)
Project:	SEC.25-T3N-R67W	MD Reference:	WELL @ 4823.0ft (Original Well Elev)
Site:	Magness P25-11D Pad Sec.25-T3N-R67W	North Reference:	True
Well:	Magness P25-11D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble Magness P25-11D Plan #1 (9-02-11)		

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)
6,200.0	0.00	0.00	6,085.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,240.0	0.00	0.00	6,125.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,280.0	0.00	0.00	6,165.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,320.0	0.00	0.00	6,205.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,360.0	0.00	0.00	6,245.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,400.0	0.00	0.00	6,285.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,440.0	0.00	0.00	6,325.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,480.0	0.00	0.00	6,365.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,520.0	0.00	0.00	6,405.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,560.0	0.00	0.00	6,445.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,600.0	0.00	0.00	6,485.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,640.0	0.00	0.00	6,525.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,680.0	0.00	0.00	6,565.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,720.0	0.00	0.00	6,605.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,760.0	0.00	0.00	6,645.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,800.0	0.00	0.00	6,685.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,840.0	0.00	0.00	6,725.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,880.0	0.00	0.00	6,765.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,920.0	0.00	0.00	6,805.6	892.6	-343.6	956.4	0.00	0.00	0.00
6,960.0	0.00	0.00	6,845.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,000.0	0.00	0.00	6,885.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,040.0	0.00	0.00	6,925.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,080.0	0.00	0.00	6,965.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,114.4	0.00	0.00	7,000.0	892.6	-343.6	956.4	0.00	0.00	0.00
NIORARA - TARGET CIRCLE 2117'FSL & 2099'FWL - LEGAL BOX 400' X 400' 1989'FNL & 1975'FWL									
7,120.0	0.00	0.00	7,005.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,160.0	0.00	0.00	7,045.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,200.0	0.00	0.00	7,085.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,240.0	0.00	0.00	7,125.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,280.0	0.00	0.00	7,165.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,320.0	0.00	0.00	7,205.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,360.0	0.00	0.00	7,245.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,400.0	0.00	0.00	7,285.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,417.4	0.00	0.00	7,303.0	892.6	-343.6	956.4	0.00	0.00	0.00
CODELL									
7,440.0	0.00	0.00	7,325.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,480.0	0.00	0.00	7,365.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,520.0	0.00	0.00	7,405.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,560.0	0.00	0.00	7,445.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,600.0	0.00	0.00	7,485.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,640.0	0.00	0.00	7,525.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,680.0	0.00	0.00	7,565.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,688.4	0.00	0.00	7,574.0	892.6	-343.6	956.4	0.00	0.00	0.00
D-SAND									
7,720.0	0.00	0.00	7,605.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,760.0	0.00	0.00	7,645.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,800.0	0.00	0.00	7,685.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,840.0	0.00	0.00	7,725.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,855.4	0.00	0.00	7,741.0	892.6	-343.6	956.4	0.00	0.00	0.00
J-SAND									
7,880.0	0.00	0.00	7,765.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,920.0	0.00	0.00	7,805.6	892.6	-343.6	956.4	0.00	0.00	0.00
7,960.0	0.00	0.00	7,845.6	892.6	-343.6	956.4	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Magness P25-11D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4823.0ft (Original Well Elev)
Project:	SEC.25-T3N-R67W	MD Reference:	WELL @ 4823.0ft (Original Well Elev)
Site:	Magness P25-11D Pad Sec.25-T3N-R67W	North Reference:	True
Well:	Magness P25-11D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble Magness P25-11D Plan #1 (9-02-11)		

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)	
8,000.0	0.00	0.00	7,885.6	892.6	-343.6	956.4	0.00	0.00	0.00	
8,005.4	0.00	0.00	7,891.0	892.6	-343.6	956.4	0.00	0.00	0.00	

Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
TARGET CIRCLE 211 - hit/miss target - Shape - plan hits target center - Circle (radius 75.0)	0.00	0.00	7,000.0	892.6	-343.6	1,314,367.85	3,184,020.45	40.194460	-104.841260	
TARGET BHL 2117'F: - plan hits target center - Point	0.00	0.00	5,000.0	892.6	-343.6	1,314,367.85	3,184,020.45	40.194460	-104.841260	
LEGAL BOX 400' X 400' - plan misses target center by 178.2ft at 7114.4ft MD (7000.0 TVD, 892.6 N, -343.6 E) - Rectangle (sides W400.0 H400.0 D891.0)	0.00	0.00	7,000.0	764.6	-467.6	1,314,238.99	3,183,897.44	40.194109	-104.841704	

Casing Points										
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")						
831.1	830.0	8 5/8"	8-5/8	12-1/4						

Formations										
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)					
7,114.4	7,000.0	NIOBRARA		0.00						
7,417.4	7,303.0	CODELL		0.00						
7,688.4	7,574.0	D-SAND		0.00						
7,855.4	7,741.0	J-SAND		0.00						