

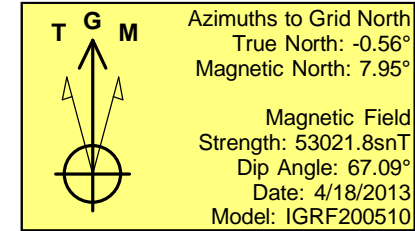
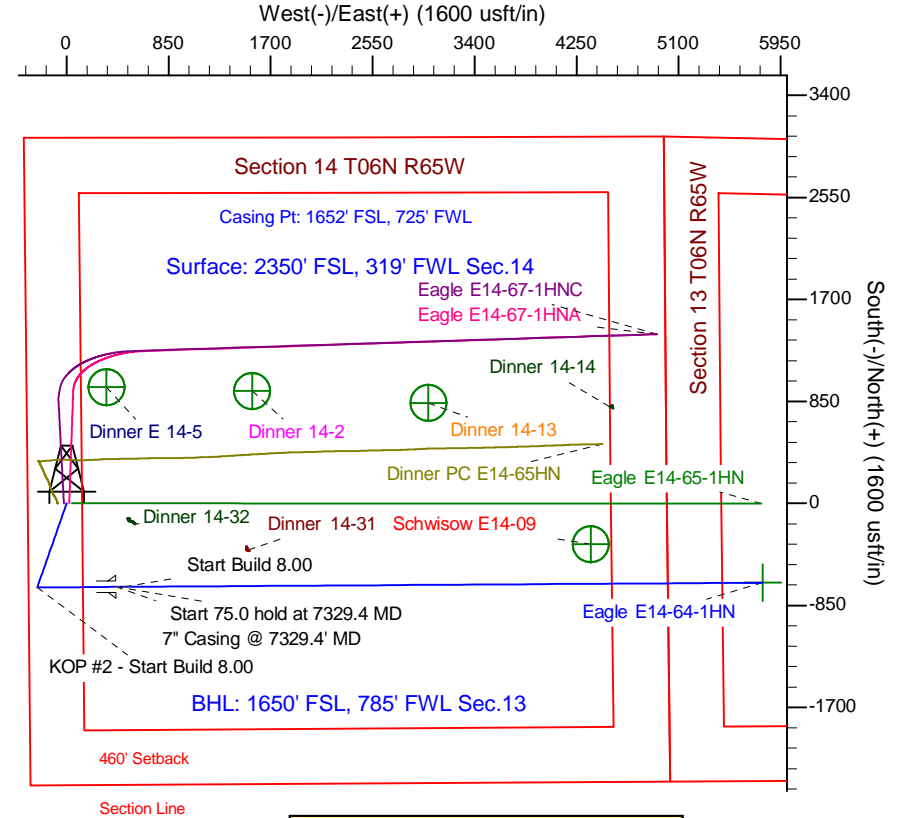
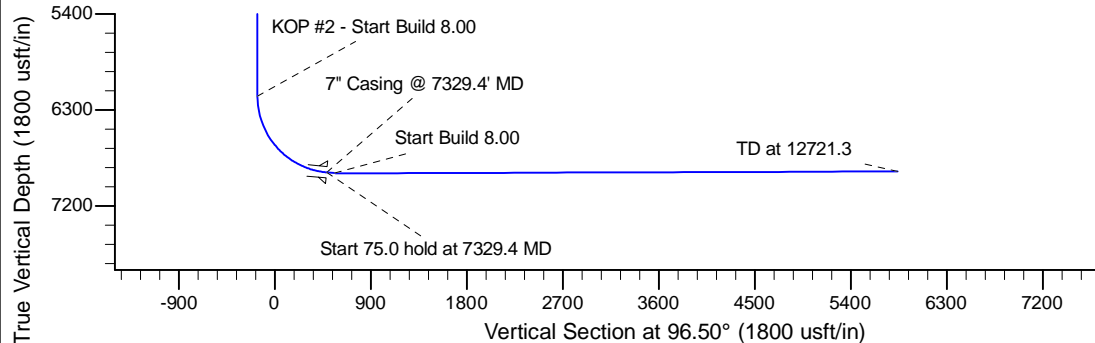
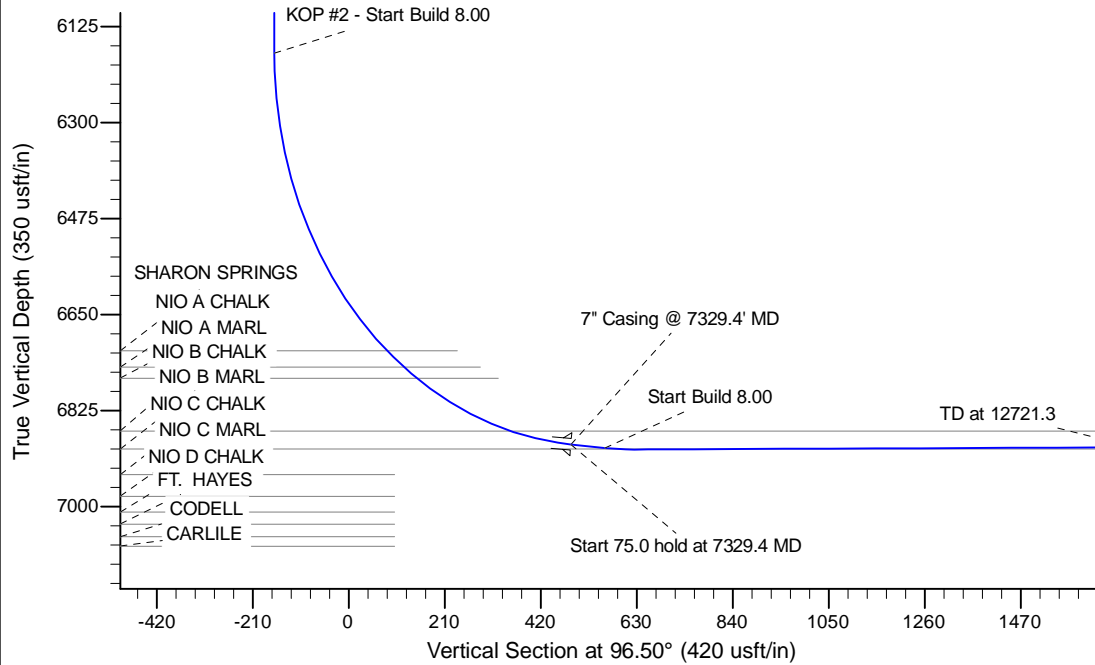
Project: Wattenberg Field
Site: E (Sec.14-T06N-R65W) Weld County, CO
Well: Eagle E14-64-1HN
Wellbore: Original Drilling
Design: APD - Rev 0

Northern Region Drilling

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level

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	1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0	
3	2000.2	16.00	199.22	1989.8	-104.8	-36.5	2.00	199.22	-24.4	
4	3883.5	16.00	199.22	3800.2	-595.2	-207.5	0.00	0.00	-138.8	
5	4683.7	0.00	0.00	4590.0	-700.0	-244.0	2.00	180.00	-163.2	
6	6266.9	0.00	0.00	6173.2	-700.0	-244.0	0.00	0.00	-163.2	
7	7329.4	85.00	89.63	6886.7	-695.8	409.8	8.00	89.63	485.9	
8	7404.4	85.00	89.63	6893.2	-695.3	484.5	0.00	0.00	560.0	
9	7469.4	90.20	89.63	6895.9	-694.8	549.4	8.00	0.00	624.5	
10	12721.3	90.20	89.63	6877.6	-660.7	5801.1	0.00	0.00	5838.6	Eagle E14-64-1HN BHL 1650'FSL, 785'FWL



WELL DETAILS: Eagle E14-64-1HN				
Ground Level: 4718.0				
0.0	0.0	1420783.53	3239511.54	-104.638930
Plan: APD - Rev 0 (Eagle E14-64-1HN/Original Drilling)				
Created By: Shailey Jewell		Date: 12:28, May 22 2013		
Checked: _____		Date: _____		
Reviewed: _____		Date: _____		
Approved: _____		Date: _____		

Northern Region Drilling

**Wattenberg Field
E (06N-65W)
Eagle E14-64-1HN**

Original Drilling

Plan: APD - Rev 0

Standard Planning Report

22 May, 2013

Noble Energy Inc

Planning Report

Database:	EDM Production	Local Co-ordinate Reference:	Well Eagle E14-64-1HN
Company:	Northern Region Drilling	TVD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Project:	Wattenberg Field	MD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Site:	E (06N-65W)	North Reference:	Grid
Well:	Eagle E14-64-1HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD - Rev 0		

Project	Wattenberg Field, Weld County CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site		E (06N-65W)			
Site Position:		Northing:	1,417,105.06 usft	Latitude:	40.475150
From:	Lat/Long	Easting:	3,240,006.32 usft	Longitude:	-104.637280
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.56 °

Well	Eagle E14-64-1HN					
Well Position	+N/-S	3,678.6 usft	Northing:	1,420,783.53 usft	Latitude:	40.485260
	+E/-W	-494.8 usft	Easting:	3,239,511.54 usft	Longitude:	-104.638930
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	4,718.0 usft

Wellbore	Original Drilling				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	4/18/2013	8.51	67.09	53,022

Design	APD - Rev 0			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	96.50

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,000.2	16.00	199.22	1,989.8	-104.8	-36.5	2.00	2.00	0.00	199.22	
3,883.5	16.00	199.22	3,800.2	-595.2	-207.5	0.00	0.00	0.00	0.00	
4,683.7	0.00	0.00	4,590.0	-700.0	-244.0	2.00	-2.00	0.00	180.00	
6,266.9	0.00	0.00	6,173.2	-700.0	-244.0	0.00	0.00	0.00	0.00	
7,329.4	85.00	89.63	6,886.7	-695.8	409.8	8.00	8.00	0.00	89.63	
7,404.4	85.00	89.63	6,893.2	-695.3	484.5	0.00	0.00	0.00	0.00	
7,469.4	90.20	89.63	6,895.9	-694.8	549.4	8.00	8.00	0.00	0.00	
12,721.3	90.20	89.63	6,877.6	-660.7	5,801.1	0.00	0.00	0.00	0.00	Eagle E14-64-1HN Bl

Noble Energy Inc

Planning Report

Database:	EDM Production	Local Co-ordinate Reference:	Well Eagle E14-64-1HN
Company:	Northern Region Drilling	TVD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Project:	Wattenberg Field	MD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Site:	E (06N-65W)	North Reference:	Grid
Well:	Eagle E14-64-1HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD - Rev 0		

Planned 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
50.0	0.00	0.00	50.0	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
150.0	0.00	0.00	150.0	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
250.0	0.00	0.00	250.0	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
350.0	0.00	0.00	350.0	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
450.0	0.00	0.00	450.0	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
550.0	0.00	0.00	550.0	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
650.0	0.00	0.00	650.0	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
750.0	0.00	0.00	750.0	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
850.0	0.00	0.00	850.0	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
950.0	0.00	0.00	950.0	0.0	0.0	0.0	0.00	0.00	0.00
987.0	0.00	0.00	987.0	0.0	0.0	0.0	0.00	0.00	0.00
PIERRE									
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,050.0	0.00	0.00	1,050.0	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
1,150.0	0.00	0.00	1,150.0	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
KOP - Start Build 2.00									
1,250.0	1.00	199.22	1,250.0	-0.4	-0.1	-0.1	2.00	2.00	0.00
1,300.0	2.00	199.22	1,300.0	-1.6	-0.6	-0.4	2.00	2.00	0.00
1,350.0	3.00	199.22	1,349.9	-3.7	-1.3	-0.9	2.00	2.00	0.00
1,400.0	4.00	199.22	1,399.8	-6.6	-2.3	-1.5	2.00	2.00	0.00
1,450.0	5.00	199.22	1,449.7	-10.3	-3.6	-2.4	2.00	2.00	0.00
1,500.0	6.00	199.22	1,499.5	-14.8	-5.2	-3.5	2.00	2.00	0.00
1,550.0	7.00	199.22	1,549.1	-20.2	-7.0	-4.7	2.00	2.00	0.00
1,600.0	8.00	199.22	1,598.7	-26.3	-9.2	-6.1	2.00	2.00	0.00
1,650.0	9.00	199.22	1,648.2	-33.3	-11.6	-7.8	2.00	2.00	0.00
1,700.0	10.00	199.22	1,697.5	-41.1	-14.3	-9.6	2.00	2.00	0.00
1,750.0	11.00	199.22	1,746.6	-49.7	-17.3	-11.6	2.00	2.00	0.00
1,800.0	12.00	199.22	1,795.6	-59.1	-20.6	-13.8	2.00	2.00	0.00
1,850.0	13.00	199.22	1,844.4	-69.3	-24.2	-16.2	2.00	2.00	0.00
1,900.0	14.00	199.22	1,893.1	-80.4	-28.0	-18.7	2.00	2.00	0.00
1,950.0	15.00	199.22	1,941.5	-92.2	-32.1	-21.5	2.00	2.00	0.00
2,000.0	16.00	199.22	1,989.6	-104.8	-36.5	-24.4	2.00	2.00	0.00
2,000.2	16.00	199.22	1,989.8	-104.8	-36.5	-24.4	2.00	2.00	0.00
2,050.0	16.00	199.22	2,037.7	-117.8	-41.1	-27.5	0.00	0.00	0.00
2,100.0	16.00	199.22	2,085.8	-130.8	-45.6	-30.5	0.00	0.00	0.00
2,150.0	16.00	199.22	2,133.8	-143.8	-50.1	-33.5	0.00	0.00	0.00
2,200.0	16.00	199.22	2,181.9	-156.9	-54.7	-36.6	0.00	0.00	0.00
2,250.0	16.00	199.22	2,230.0	-169.9	-59.2	-39.6	0.00	0.00	0.00
2,300.0	16.00	199.22	2,278.0	-182.9	-63.8	-42.6	0.00	0.00	0.00
2,350.0	16.00	199.22	2,326.1	-195.9	-68.3	-45.7	0.00	0.00	0.00
2,400.0	16.00	199.22	2,374.1	-208.9	-72.8	-48.7	0.00	0.00	0.00
2,450.0	16.00	199.22	2,422.2	-221.9	-77.4	-51.8	0.00	0.00	0.00

Noble Energy Inc

Planning Report

Database:	EDM Production	Local Co-ordinate Reference:	Well Eagle E14-64-1HN
Company:	Northern Region Drilling	TVD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Project:	Wattenberg Field	MD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Site:	E (06N-65W)	North Reference:	Grid
Well:	Eagle E14-64-1HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD - Rev 0		

Planned 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)
2,500.0	16.00	199.22	2,470.3	-235.0	-81.9	-54.8	0.00	0.00	0.00
2,550.0	16.00	199.22	2,518.3	-248.0	-86.4	-57.8	0.00	0.00	0.00
2,600.0	16.00	199.22	2,566.4	-261.0	-91.0	-60.9	0.00	0.00	0.00
2,650.0	16.00	199.22	2,614.5	-274.0	-95.5	-63.9	0.00	0.00	0.00
2,700.0	16.00	199.22	2,662.5	-287.0	-100.1	-66.9	0.00	0.00	0.00
2,750.0	16.00	199.22	2,710.6	-300.1	-104.6	-70.0	0.00	0.00	0.00
2,800.0	16.00	199.22	2,758.6	-313.1	-109.1	-73.0	0.00	0.00	0.00
2,850.0	16.00	199.22	2,806.7	-326.1	-113.7	-76.0	0.00	0.00	0.00
2,900.0	16.00	199.22	2,854.8	-339.1	-118.2	-79.1	0.00	0.00	0.00
2,950.0	16.00	199.22	2,902.8	-352.1	-122.7	-82.1	0.00	0.00	0.00
3,000.0	16.00	199.22	2,950.9	-365.1	-127.3	-85.1	0.00	0.00	0.00
3,050.0	16.00	199.22	2,998.9	-378.2	-131.8	-88.2	0.00	0.00	0.00
3,100.0	16.00	199.22	3,047.0	-391.2	-136.4	-91.2	0.00	0.00	0.00
3,150.0	16.00	199.22	3,095.1	-404.2	-140.9	-94.2	0.00	0.00	0.00
3,200.0	16.00	199.22	3,143.1	-417.2	-145.4	-97.3	0.00	0.00	0.00
3,250.0	16.00	199.22	3,191.2	-430.2	-150.0	-100.3	0.00	0.00	0.00
3,300.0	16.00	199.22	3,239.3	-443.2	-154.5	-103.3	0.00	0.00	0.00
3,350.0	16.00	199.22	3,287.3	-456.3	-159.0	-106.4	0.00	0.00	0.00
3,400.0	16.00	199.22	3,335.4	-469.3	-163.6	-109.4	0.00	0.00	0.00
3,450.0	16.00	199.22	3,383.4	-482.3	-168.1	-112.5	0.00	0.00	0.00
3,500.0	16.00	199.22	3,431.5	-495.3	-172.6	-115.5	0.00	0.00	0.00
3,550.0	16.00	199.22	3,479.6	-508.3	-177.2	-118.5	0.00	0.00	0.00
3,600.0	16.00	199.22	3,527.6	-521.3	-181.7	-121.6	0.00	0.00	0.00
3,650.0	16.00	199.22	3,575.7	-534.4	-186.3	-124.6	0.00	0.00	0.00
3,677.4	16.00	199.22	3,602.0	-541.5	-188.7	-126.3	0.00	0.00	0.00
PARKMAN									
3,700.0	16.00	199.22	3,623.8	-547.4	-190.8	-127.6	0.00	0.00	0.00
3,750.0	16.00	199.22	3,671.8	-560.4	-195.3	-130.7	0.00	0.00	0.00
3,800.0	16.00	199.22	3,719.9	-573.4	-199.9	-133.7	0.00	0.00	0.00
3,850.0	16.00	199.22	3,767.9	-586.4	-204.4	-136.7	0.00	0.00	0.00
3,883.5	16.00	199.22	3,800.1	-595.1	-207.5	-138.8	0.00	0.00	0.00
Start Drop -2.00									
3,900.0	15.67	199.22	3,816.0	-599.4	-208.9	-139.8	2.00	-2.00	0.00
3,950.0	14.67	199.22	3,864.3	-611.8	-213.2	-142.6	2.00	-2.00	0.00
4,000.0	13.67	199.22	3,912.7	-623.3	-217.3	-145.3	2.00	-2.00	0.00
4,050.0	12.67	199.22	3,961.4	-634.1	-221.0	-147.8	2.00	-2.00	0.00
4,100.0	11.67	199.22	4,010.3	-644.0	-224.5	-150.2	2.00	-2.00	0.00
4,150.0	10.67	199.22	4,059.4	-653.2	-227.7	-152.3	2.00	-2.00	0.00
4,200.0	9.67	199.22	4,108.6	-661.5	-230.6	-154.2	2.00	-2.00	0.00
4,232.9	9.02	199.22	4,141.0	-666.6	-232.3	-155.4	2.00	-2.00	0.00
SUSSEX									
4,250.0	8.67	199.22	4,157.9	-669.1	-233.2	-156.0	2.00	-2.00	0.00
4,300.0	7.67	199.22	4,207.4	-675.8	-235.6	-157.6	2.00	-2.00	0.00
4,350.0	6.67	199.22	4,257.0	-681.7	-237.6	-158.9	2.00	-2.00	0.00
4,400.0	5.67	199.22	4,306.7	-686.7	-239.4	-160.1	2.00	-2.00	0.00
4,450.0	4.67	199.22	4,356.5	-691.0	-240.9	-161.1	2.00	-2.00	0.00
4,500.0	3.67	199.22	4,406.4	-694.4	-242.1	-161.9	2.00	-2.00	0.00
4,550.0	2.67	199.22	4,456.3	-697.1	-243.0	-162.5	2.00	-2.00	0.00
4,600.0	1.67	199.22	4,506.3	-698.8	-243.6	-162.9	2.00	-2.00	0.00
4,650.0	0.67	199.22	4,556.3	-699.8	-243.9	-163.2	2.00	-2.00	0.00
4,683.7	0.00	0.00	4,590.0	-700.0	-244.0	-163.2	2.00	-2.00	0.00
4,700.0	0.00	0.00	4,606.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
4,750.0	0.00	0.00	4,656.3	-700.0	-244.0	-163.2	0.00	0.00	0.00

Noble Energy Inc

Planning Report

Database:	EDM Production	Local Co-ordinate Reference:	Well Eagle E14-64-1HN
Company:	Northern Region Drilling	TVD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Project:	Wattenberg Field	MD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Site:	E (06N-65W)	North Reference:	Grid
Well:	Eagle E14-64-1HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD - Rev 0		

Planned 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)
4,800.0	0.00	0.00	4,706.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
4,850.0	0.00	0.00	4,756.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
4,900.0	0.00	0.00	4,806.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
4,950.0	0.00	0.00	4,856.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
5,000.0	0.00	0.00	4,906.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
5,019.7	0.00	0.00	4,926.0	-700.0	-244.0	-163.2	0.00	0.00	0.00
SHANNON									
5,050.0	0.00	0.00	4,956.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
5,100.0	0.00	0.00	5,006.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
5,150.0	0.00	0.00	5,056.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
5,200.0	0.00	0.00	5,106.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
5,250.0	0.00	0.00	5,156.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
5,300.0	0.00	0.00	5,206.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
5,350.0	0.00	0.00	5,256.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
5,400.0	0.00	0.00	5,306.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
5,450.0	0.00	0.00	5,356.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
5,500.0	0.00	0.00	5,406.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
5,550.0	0.00	0.00	5,456.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
5,600.0	0.00	0.00	5,506.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
5,650.0	0.00	0.00	5,556.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
5,700.0	0.00	0.00	5,606.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
5,750.0	0.00	0.00	5,656.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
5,800.0	0.00	0.00	5,706.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
5,850.0	0.00	0.00	5,756.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
5,900.0	0.00	0.00	5,806.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
5,950.0	0.00	0.00	5,856.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
6,000.0	0.00	0.00	5,906.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
6,050.0	0.00	0.00	5,956.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
6,075.7	0.00	0.00	5,982.0	-700.0	-244.0	-163.2	0.00	0.00	0.00
TEEPEE BUTTES									
6,100.0	0.00	0.00	6,006.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
6,150.0	0.00	0.00	6,056.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
6,200.0	0.00	0.00	6,106.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
6,250.0	0.00	0.00	6,156.3	-700.0	-244.0	-163.2	0.00	0.00	0.00
6,266.9	0.00	0.00	6,173.2	-700.0	-244.0	-163.2	0.00	0.00	0.00
KOP #2 - Start Build 8.00									
6,300.0	2.65	89.63	6,206.3	-700.0	-243.2	-162.5	7.99	7.99	0.00
6,350.0	6.65	89.63	6,256.1	-700.0	-239.2	-158.4	8.00	8.00	0.00
6,400.0	10.65	89.63	6,305.5	-699.9	-231.7	-151.0	8.00	8.00	0.00
6,450.0	14.65	89.63	6,354.3	-699.8	-220.7	-140.1	8.00	8.00	0.00
6,500.0	18.65	89.63	6,402.2	-699.8	-206.4	-125.9	8.00	8.00	0.00
6,550.0	22.65	89.63	6,449.0	-699.6	-188.8	-108.4	8.00	8.00	0.00
6,600.0	26.65	89.63	6,494.4	-699.5	-167.9	-87.7	8.00	8.00	0.00
6,650.0	30.65	89.63	6,538.3	-699.3	-144.0	-63.9	8.00	8.00	0.00
6,700.0	34.65	89.63	6,580.4	-699.2	-117.0	-37.1	8.00	8.00	0.00
6,750.0	38.65	89.63	6,620.5	-699.0	-87.2	-7.5	8.00	8.00	0.00
6,800.0	42.65	89.63	6,658.4	-698.8	-54.6	24.8	8.00	8.00	0.00
6,850.0	46.65	89.63	6,694.0	-698.5	-19.5	59.7	8.00	8.00	0.00
6,882.9	49.28	89.63	6,716.0	-698.4	5.0	84.0	8.00	8.00	0.00
SHARON SPRINGS									
6,900.0	50.65	89.63	6,727.0	-698.3	18.0	96.9	8.00	8.00	0.00
6,930.8	53.11	89.63	6,746.0	-698.1	42.3	121.0	8.00	8.00	0.00
NIO A CHALK									

Noble Energy Inc

Planning Report

Database:	EDM Production	Local Co-ordinate Reference:	Well Eagle E14-64-1HN
Company:	Northern Region Drilling	TVD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Project:	Wattenberg Field	MD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Site:	E (06N-65W)	North Reference:	Grid
Well:	Eagle E14-64-1HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD - Rev 0		

Planned 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)
6,950.0	54.65	89.63	6,757.3	-698.0	57.8	136.4	8.00	8.00	0.00
6,965.2	55.86	89.63	6,766.0	-698.0	70.3	148.8	8.00	8.00	0.00
NIO A MARL									
7,000.0	58.65	89.63	6,784.8	-697.8	99.5	177.9	8.00	8.00	0.00
7,050.0	62.65	89.63	6,809.3	-697.5	143.1	221.1	8.00	8.00	0.00
7,100.0	66.65	89.63	6,830.7	-697.2	188.3	266.0	8.00	8.00	0.00
7,150.0	70.65	89.63	6,848.9	-696.9	234.8	312.2	8.00	8.00	0.00
7,193.2	74.10	89.63	6,862.0	-696.6	276.0	353.0	8.00	8.00	0.00
NIO B CHALK									
7,200.0	74.65	89.63	6,863.8	-696.6	282.5	359.6	8.00	8.00	0.00
7,250.0	78.65	89.63	6,875.4	-696.3	331.2	407.8	8.00	8.00	0.00
7,282.3	81.23	89.63	6,881.0	-696.1	363.0	439.4	8.00	8.00	0.00
Dinner E 14-5 BHL									
7,300.0	82.65	89.63	6,883.5	-695.9	380.5	456.8	8.00	8.00	0.00
7,329.4	85.00	89.63	6,886.7	-695.8	409.7	485.8	8.00	8.00	0.00
Start 75.0 hold at 7329.4 MD - 7" Casing @ 7329.4' MD									
7,350.0	85.00	89.63	6,888.5	-695.6	430.3	506.2	0.01	0.01	0.00
7,400.0	85.00	89.63	6,892.8	-695.3	480.1	555.7	0.00	0.00	0.00
7,404.4	85.00	89.63	6,893.2	-695.3	484.4	560.0	0.00	0.00	0.00
Start Build 8.00									
7,430.3	87.07	89.63	6,895.0	-695.1	510.3	585.7	7.99	7.99	0.00
NIO B MARL									
7,450.0	88.65	89.63	6,895.7	-695.0	530.0	605.2	8.00	8.00	0.00
7,469.4	90.20	89.63	6,895.9	-694.8	549.4	624.5	8.00	8.00	0.00
7,500.0	90.20	89.63	6,895.8	-694.6	580.0	654.9	0.00	0.00	0.00
7,550.0	90.20	89.63	6,895.7	-694.3	630.0	704.5	0.00	0.00	0.00
7,600.0	90.20	89.63	6,895.5	-694.0	680.0	754.1	0.00	0.00	0.00
7,650.0	90.20	89.63	6,895.3	-693.7	730.0	803.8	0.00	0.00	0.00
7,700.0	90.20	89.63	6,895.1	-693.3	780.0	853.4	0.00	0.00	0.00
7,750.0	90.20	89.63	6,895.0	-693.0	830.0	903.1	0.00	0.00	0.00
7,800.0	90.20	89.63	6,894.8	-692.7	880.0	952.7	0.00	0.00	0.00
7,850.0	90.20	89.63	6,894.6	-692.4	930.0	1,002.3	0.00	0.00	0.00
7,900.0	90.20	89.63	6,894.4	-692.0	980.0	1,052.0	0.00	0.00	0.00
7,950.0	90.20	89.63	6,894.3	-691.7	1,030.0	1,101.6	0.00	0.00	0.00
8,000.0	90.20	89.63	6,894.1	-691.4	1,080.0	1,151.3	0.00	0.00	0.00
8,050.0	90.20	89.63	6,893.9	-691.1	1,130.0	1,200.9	0.00	0.00	0.00
8,100.0	90.20	89.63	6,893.7	-690.7	1,180.0	1,250.5	0.00	0.00	0.00
8,150.0	90.20	89.63	6,893.6	-690.4	1,230.0	1,300.2	0.00	0.00	0.00
8,200.0	90.20	89.63	6,893.4	-690.1	1,279.9	1,349.8	0.00	0.00	0.00
8,250.0	90.20	89.63	6,893.2	-689.8	1,329.9	1,399.5	0.00	0.00	0.00
8,300.0	90.20	89.63	6,893.0	-689.4	1,379.9	1,449.1	0.00	0.00	0.00
8,350.0	90.20	89.63	6,892.9	-689.1	1,429.9	1,498.7	0.00	0.00	0.00
8,400.0	90.20	89.63	6,892.7	-688.8	1,479.9	1,548.4	0.00	0.00	0.00
8,450.0	90.20	89.63	6,892.5	-688.5	1,529.9	1,598.0	0.00	0.00	0.00
8,476.1	90.20	89.63	6,892.4	-688.3	1,556.1	1,624.0	0.00	0.00	0.00
Dinner 14-2 BHL									
8,500.0	90.20	89.63	6,892.3	-688.1	1,579.9	1,647.7	0.00	0.00	0.00
8,550.0	90.20	89.63	6,892.2	-687.8	1,629.9	1,697.3	0.00	0.00	0.00
8,600.0	90.20	89.63	6,892.0	-687.5	1,679.9	1,746.9	0.00	0.00	0.00
8,650.0	90.20	89.63	6,891.8	-687.2	1,729.9	1,796.6	0.00	0.00	0.00
8,700.0	90.20	89.63	6,891.6	-686.8	1,779.9	1,846.2	0.00	0.00	0.00
8,750.0	90.20	89.63	6,891.5	-686.5	1,829.9	1,895.9	0.00	0.00	0.00
8,800.0	90.20	89.63	6,891.3	-686.2	1,879.9	1,945.5	0.00	0.00	0.00

Noble Energy Inc

Planning Report

Database:	EDM Production	Local Co-ordinate Reference:	Well Eagle E14-64-1HN
Company:	Northern Region Drilling	TVD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Project:	Wattenberg Field	MD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Site:	E (06N-65W)	North Reference:	Grid
Well:	Eagle E14-64-1HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD - Rev 0		

Planned 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)
8,850.0	90.20	89.63	6,891.1	-685.9	1,929.9	1,995.1	0.00	0.00	0.00
8,900.0	90.20	89.63	6,890.9	-685.5	1,979.9	2,044.8	0.00	0.00	0.00
8,950.0	90.20	89.63	6,890.8	-685.2	2,029.9	2,094.4	0.00	0.00	0.00
9,000.0	90.20	89.63	6,890.6	-684.9	2,079.9	2,144.1	0.00	0.00	0.00
9,050.0	90.20	89.63	6,890.4	-684.6	2,129.9	2,193.7	0.00	0.00	0.00
9,100.0	90.20	89.63	6,890.2	-684.2	2,179.9	2,243.4	0.00	0.00	0.00
9,150.0	90.20	89.63	6,890.1	-683.9	2,229.9	2,293.0	0.00	0.00	0.00
9,200.0	90.20	89.63	6,889.9	-683.6	2,279.9	2,342.6	0.00	0.00	0.00
9,250.0	90.20	89.63	6,889.7	-683.3	2,329.9	2,392.3	0.00	0.00	0.00
9,300.0	90.20	89.63	6,889.5	-682.9	2,379.9	2,441.9	0.00	0.00	0.00
9,350.0	90.20	89.63	6,889.4	-682.6	2,429.9	2,491.6	0.00	0.00	0.00
9,400.0	90.20	89.63	6,889.2	-682.3	2,479.9	2,541.2	0.00	0.00	0.00
9,450.0	90.20	89.63	6,889.0	-682.0	2,529.9	2,590.8	0.00	0.00	0.00
9,500.0	90.20	89.63	6,888.8	-681.6	2,579.9	2,640.5	0.00	0.00	0.00
9,550.0	90.20	89.63	6,888.7	-681.3	2,629.9	2,690.1	0.00	0.00	0.00
9,600.0	90.20	89.63	6,888.5	-681.0	2,679.9	2,739.8	0.00	0.00	0.00
9,650.0	90.20	89.63	6,888.3	-680.7	2,729.9	2,789.4	0.00	0.00	0.00
9,700.0	90.20	89.63	6,888.1	-680.3	2,779.9	2,839.0	0.00	0.00	0.00
9,750.0	90.20	89.63	6,888.0	-680.0	2,829.9	2,888.7	0.00	0.00	0.00
9,800.0	90.20	89.63	6,887.8	-679.7	2,879.9	2,938.3	0.00	0.00	0.00
9,850.0	90.20	89.63	6,887.6	-679.4	2,929.9	2,988.0	0.00	0.00	0.00
9,900.0	90.20	89.63	6,887.4	-679.0	2,979.9	3,037.6	0.00	0.00	0.00
9,945.2	90.20	89.63	6,887.3	-678.8	3,025.1	3,082.5	0.00	0.00	0.00
Dinner 14-13									
9,950.0	90.20	89.63	6,887.3	-678.7	3,029.9	3,087.2	0.00	0.00	0.00
10,000.0	90.20	89.63	6,887.1	-678.4	3,079.9	3,136.9	0.00	0.00	0.00
10,050.0	90.20	89.63	6,886.9	-678.1	3,129.9	3,186.5	0.00	0.00	0.00
10,100.0	90.20	89.63	6,886.7	-677.7	3,179.9	3,236.2	0.00	0.00	0.00
10,150.0	90.20	89.63	6,886.6	-677.4	3,229.9	3,285.8	0.00	0.00	0.00
10,200.0	90.20	89.63	6,886.4	-677.1	3,279.9	3,335.4	0.00	0.00	0.00
10,250.0	90.20	89.63	6,886.2	-676.8	3,329.9	3,385.1	0.00	0.00	0.00
10,300.0	90.20	89.63	6,886.1	-676.5	3,379.9	3,434.7	0.00	0.00	0.00
10,350.0	90.20	89.63	6,885.9	-676.1	3,429.9	3,484.4	0.00	0.00	0.00
10,400.0	90.20	89.63	6,885.7	-675.8	3,479.9	3,534.0	0.00	0.00	0.00
10,450.0	90.20	89.63	6,885.5	-675.5	3,529.9	3,583.7	0.00	0.00	0.00
10,500.0	90.20	89.63	6,885.4	-675.2	3,579.9	3,633.3	0.00	0.00	0.00
10,550.0	90.20	89.63	6,885.2	-674.8	3,629.9	3,682.9	0.00	0.00	0.00
10,600.0	90.20	89.63	6,885.0	-674.5	3,679.9	3,732.6	0.00	0.00	0.00
10,650.0	90.20	89.63	6,884.8	-674.2	3,729.9	3,782.2	0.00	0.00	0.00
10,700.0	90.20	89.63	6,884.7	-673.9	3,779.9	3,831.9	0.00	0.00	0.00
10,750.0	90.20	89.63	6,884.5	-673.5	3,829.9	3,881.5	0.00	0.00	0.00
10,800.0	90.20	89.63	6,884.3	-673.2	3,879.9	3,931.1	0.00	0.00	0.00
10,850.0	90.20	89.63	6,884.1	-672.9	3,929.9	3,980.8	0.00	0.00	0.00
10,900.0	90.20	89.63	6,884.0	-672.6	3,979.9	4,030.4	0.00	0.00	0.00
10,950.0	90.20	89.63	6,883.8	-672.2	4,029.9	4,080.1	0.00	0.00	0.00
11,000.0	90.20	89.63	6,883.6	-671.9	4,079.9	4,129.7	0.00	0.00	0.00
11,050.0	90.20	89.63	6,883.4	-671.6	4,129.9	4,179.3	0.00	0.00	0.00
11,100.0	90.20	89.63	6,883.3	-671.3	4,179.9	4,229.0	0.00	0.00	0.00
11,150.0	90.20	89.63	6,883.1	-670.9	4,229.9	4,278.6	0.00	0.00	0.00
11,200.0	90.20	89.63	6,882.9	-670.6	4,279.9	4,328.3	0.00	0.00	0.00
11,250.0	90.20	89.63	6,882.7	-670.3	4,329.9	4,377.9	0.00	0.00	0.00
11,289.9	90.20	89.63	6,882.6	-670.0	4,369.8	4,417.5	0.00	0.00	0.00
Schwisow E14-09 BHL									
11,300.0	90.20	89.63	6,882.6	-670.0	4,379.9	4,427.5	0.00	0.00	0.00

Noble Energy Inc

Planning Report

Database:	EDM Production	Local Co-ordinate Reference:	Well Eagle E14-64-1HN
Company:	Northern Region Drilling	TVD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Project:	Wattenberg Field	MD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Site:	E (06N-65W)	North Reference:	Grid
Well:	Eagle E14-64-1HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD - Rev 0		

Planned 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)	
11,350.0	90.20	89.63	6,882.4	-669.6	4,429.9	4,477.2	0.00	0.00	0.00	
11,400.0	90.20	89.63	6,882.2	-669.3	4,479.9	4,526.8	0.00	0.00	0.00	
11,450.0	90.20	89.63	6,882.0	-669.0	4,529.9	4,576.5	0.00	0.00	0.00	
11,500.0	90.20	89.63	6,881.9	-668.7	4,579.9	4,626.1	0.00	0.00	0.00	
11,550.0	90.20	89.63	6,881.7	-668.3	4,629.9	4,675.7	0.00	0.00	0.00	
11,600.0	90.20	89.63	6,881.5	-668.0	4,679.9	4,725.4	0.00	0.00	0.00	
11,650.0	90.20	89.63	6,881.3	-667.7	4,729.9	4,775.0	0.00	0.00	0.00	
11,700.0	90.20	89.63	6,881.2	-667.4	4,779.9	4,824.7	0.00	0.00	0.00	
11,750.0	90.20	89.63	6,881.0	-667.0	4,829.9	4,874.3	0.00	0.00	0.00	
11,800.0	90.20	89.63	6,880.8	-666.7	4,879.9	4,924.0	0.00	0.00	0.00	
11,850.0	90.20	89.63	6,880.6	-666.4	4,929.8	4,973.6	0.00	0.00	0.00	
11,900.0	90.20	89.63	6,880.5	-666.1	4,979.8	5,023.2	0.00	0.00	0.00	
11,950.0	90.20	89.63	6,880.3	-665.7	5,029.8	5,072.9	0.00	0.00	0.00	
12,000.0	90.20	89.63	6,880.1	-665.4	5,079.8	5,122.5	0.00	0.00	0.00	
12,050.0	90.20	89.63	6,879.9	-665.1	5,129.8	5,172.2	0.00	0.00	0.00	
12,100.0	90.20	89.63	6,879.8	-664.8	5,179.8	5,221.8	0.00	0.00	0.00	
12,150.0	90.20	89.63	6,879.6	-664.4	5,229.8	5,271.4	0.00	0.00	0.00	
12,200.0	90.20	89.63	6,879.4	-664.1	5,279.8	5,321.1	0.00	0.00	0.00	
12,250.0	90.20	89.63	6,879.2	-663.8	5,329.8	5,370.7	0.00	0.00	0.00	
12,300.0	90.20	89.63	6,879.1	-663.5	5,379.8	5,420.4	0.00	0.00	0.00	
12,350.0	90.20	89.63	6,878.9	-663.1	5,429.8	5,470.0	0.00	0.00	0.00	
12,400.0	90.20	89.63	6,878.7	-662.8	5,479.8	5,519.6	0.00	0.00	0.00	
12,450.0	90.20	89.63	6,878.5	-662.5	5,529.8	5,569.3	0.00	0.00	0.00	
12,500.0	90.20	89.63	6,878.4	-662.2	5,579.8	5,618.9	0.00	0.00	0.00	
12,550.0	90.20	89.63	6,878.2	-661.8	5,629.8	5,668.6	0.00	0.00	0.00	
12,600.0	90.20	89.63	6,878.0	-661.5	5,679.8	5,718.2	0.00	0.00	0.00	
12,650.0	90.20	89.63	6,877.8	-661.2	5,729.8	5,767.8	0.00	0.00	0.00	
12,700.0	90.20	89.63	6,877.7	-660.9	5,779.8	5,817.5	0.00	0.00	0.00	
12,721.3	90.20	89.63	6,877.6	-660.7	5,801.1	5,838.6	0.00	0.00	0.00	
TD at 12721.3 - Eagle E14-64-1HN BHL 1650'FSL, 785'FWL										

Design Targets										
Target Name										
- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- Shape										
Eagle E14-64-1HN BHL - plan hits target center - Point	0.00	0.00	6,877.6	-660.7	5,801.1	1,420,122.83	3,245,312.48	40.483290	-104.618100	
Dinner 14-2 BHL - plan misses target center by 1628.7usft at 8476.1usft MD (6892.4 TVD, -688.3 N, 1556.1 E) - Circle (radius 150.0)	0.00	0.01	6,999.0	936.8	1,545.9	1,421,720.32	3,241,057.38	40.487790	-104.633340	
Schwisow E14-09 BHL - plan misses target center by 350.2usft at 11289.9usft MD (6882.6 TVD, -670.0 N, 4369.8 E) - Circle (radius 150.0)	0.00	0.00	6,999.0	-339.8	4,368.1	1,420,443.79	3,243,879.45	40.484210	-104.623240	
Dinner 14-13 - plan misses target center by 1521.2usft at 9945.2usft MD (6887.3 TVD, -678.8 N, 3025.1 E) - Circle (radius 150.0)	0.00	0.00	6,999.0	838.3	3,015.6	1,421,621.79	3,242,527.05	40.487480	-104.628060	
Dinner E 14-5 BHL - plan misses target center by 1669.2usft at 7282.3usft MD (6881.0 TVD, -696.1 N, 363.0 E) - Circle (radius 150.0)	0.00	0.00	6,999.0	968.7	332.7	1,421,752.21	3,239,844.28	40.487910	-104.637700	

Noble Energy Inc

Planning Report

Database:	EDM Production	Local Co-ordinate Reference:	Well Eagle E14-64-1HN
Company:	Northern Region Drilling	TVD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Project:	Wattenberg Field	MD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Site:	E (06N-65W)	North Reference:	Grid
Well:	Eagle E14-64-1HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD - Rev 0		

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
7,329.4	6,886.7	7" Casing @ 7329.4' MD	7	8-3/4

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
987.0	987.0	PIERRE		0.00	
3,677.4	3,602.0	PARKMAN		0.00	
4,232.9	4,141.0	SUSSEX		0.00	
5,019.7	4,926.0	SHANNON		0.00	
6,075.7	5,982.0	TEEPEE BUTTES		0.00	
6,882.9	6,716.0	SHARON SPRINGS		0.00	
6,930.8	6,746.0	NIO A CHALK		0.00	
6,965.2	6,766.0	NIO A MARL		0.00	
7,193.2	6,862.0	NIO B CHALK		0.00	
7,430.3	6,895.0	NIO B MARL		0.00	

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,200.0	1,200.0	0.0	0.0	KOP - Start Build 2.00
3,883.5	3,800.1	-595.1	-207.5	Start Drop -2.00
6,266.9	6,173.2	-700.0	-244.0	KOP #2 - Start Build 8.00
7,329.4	6,886.7	-695.8	409.7	Start 75.0 hold at 7329.4 MD
7,404.4	6,893.2	-695.3	484.4	Start Build 8.00
12,721.3	6,877.6	-660.7	5,801.1	TD at 12721.3

Northern Region Drilling

Wattenberg Field

E (06N-65W)

Eagle E14-64-1HN

Original Drilling

APD - Rev 0

Anticollision Summary Report

22 May, 2013

Noble Energy Inc
Anticollision Summary Report

Company:	Northern Region Drilling	Local Co-ordinate Reference:	Well Eagle E14-64-1HN
Project:	Wattenberg Field	TVD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Reference Site:	E (06N-65W)	MD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Eagle E14-64-1HN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.54 sigma
Reference Wellbore	Original Drilling	Database:	EDM Production
Reference Design:	APD - Rev 0	Offset TVD Reference:	Offset Datum

Reference	APD - Rev 0		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.0 usft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	5/22/2013		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	12,721.3	APD - Rev 0 (Original Drilling)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
E (06N-65W)						
Dinner 14-13 - Original Drilling - Design #1	9,945.6	6,888.3	1,517.1	1,413.6	14.657	CC
Dinner 14-13 - Original Drilling - Design #1	10,000.0	6,888.1	1,518.1	1,413.0	14.456	ES
Dinner 14-13 - Original Drilling - Design #1	10,600.0	6,886.0	1,652.2	1,530.6	13.582	SF
Dinner 14-14 - Original Drilling - Design #1	11,463.1	6,857.8	1,470.0	1,325.4	10.169	CC
Dinner 14-14 - Original Drilling - Design #1	11,500.0	6,856.5	1,470.4	1,324.9	10.101	ES
Dinner 14-14 - Original Drilling - Design #1	11,900.0	6,841.5	1,533.4	1,376.8	9.788	SF
Dinner 14-2 - Original Drilling - Design #1	8,476.5	6,893.4	1,625.2	1,561.7	25.605	CC
Dinner 14-2 - Original Drilling - Design #1	8,500.0	6,893.3	1,625.3	1,561.2	25.359	ES
Dinner 14-2 - Original Drilling - Design #1	9,600.0	6,889.5	1,975.7	1,881.7	21.024	SF
Dinner 14-31 - Original Drilling - Original Drilling	8,439.6	6,886.6	298.4	237.2	4.879	CC, ES
Dinner 14-31 - Original Drilling - Original Drilling	8,500.0	6,884.8	304.5	241.7	4.853	SF
Dinner 14-32 - Original Drilling - Original Drilling	7,491.7	6,918.0	526.9	490.4	14.448	CC
Dinner 14-32 - Original Drilling - Original Drilling	7,500.0	6,918.3	527.0	490.3	14.380	ES
Dinner 14-32 - Original Drilling - Original Drilling	7,700.0	6,925.3	566.5	525.4	13.772	SF
Dinner E 14-5 - Original Drilling - Design #1	1,200.0	1,201.0	1,024.3	1,019.1	199.172	CC, ES
Dinner E 14-5 - Original Drilling - Design #1	9,900.0	6,888.4	3,118.1	3,015.9	30.498	SF
Dinner PC E14-65HN - Original Drilling - Original Drilling	624.3	636.3	69.5	67.6	35.390	CC
Dinner PC E14-65HN - Original Drilling - Original Drilling	1,600.0	1,610.6	72.6	66.6	12.084	ES
Dinner PC E14-65HN - Original Drilling - Original Drilling	11,500.0	11,330.0	1,170.2	880.3	4.037	SF
Eagle E14-65-1HN - Original Drilling - APD - Rev 0	1,200.0	1,200.0	44.5	39.4	8.658	CC, ES
Eagle E14-65-1HN - Original Drilling - APD - Rev 0	12,721.3	12,400.9	663.4	339.8	2.050	SF
Eagle E14-67-1HNA - Original Drilling - APD - Rev 0	1,000.0	1,000.0	22.3	18.0	5.247	CC
Eagle E14-67-1HNA - Original Drilling - APD - Rev 0	1,100.0	1,099.9	22.4	17.7	4.776	ES
Eagle E14-67-1HNA - Original Drilling - APD - Rev 0	1,200.0	1,199.6	23.6	18.5	4.594	SF
Eagle E14-67-1HNC - Original Drilling - APD - Rev 0	1,407.7	1,407.5	20.9	15.0	3.495	CC, ES, SF
Schwisow E14-09 - Original Drilling - Design #1	11,290.3	6,883.6	330.3	189.4	2.345	CC
Schwisow E14-09 - Original Drilling - Design #1	11,300.0	6,883.6	330.4	189.3	2.341	ES, SF

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

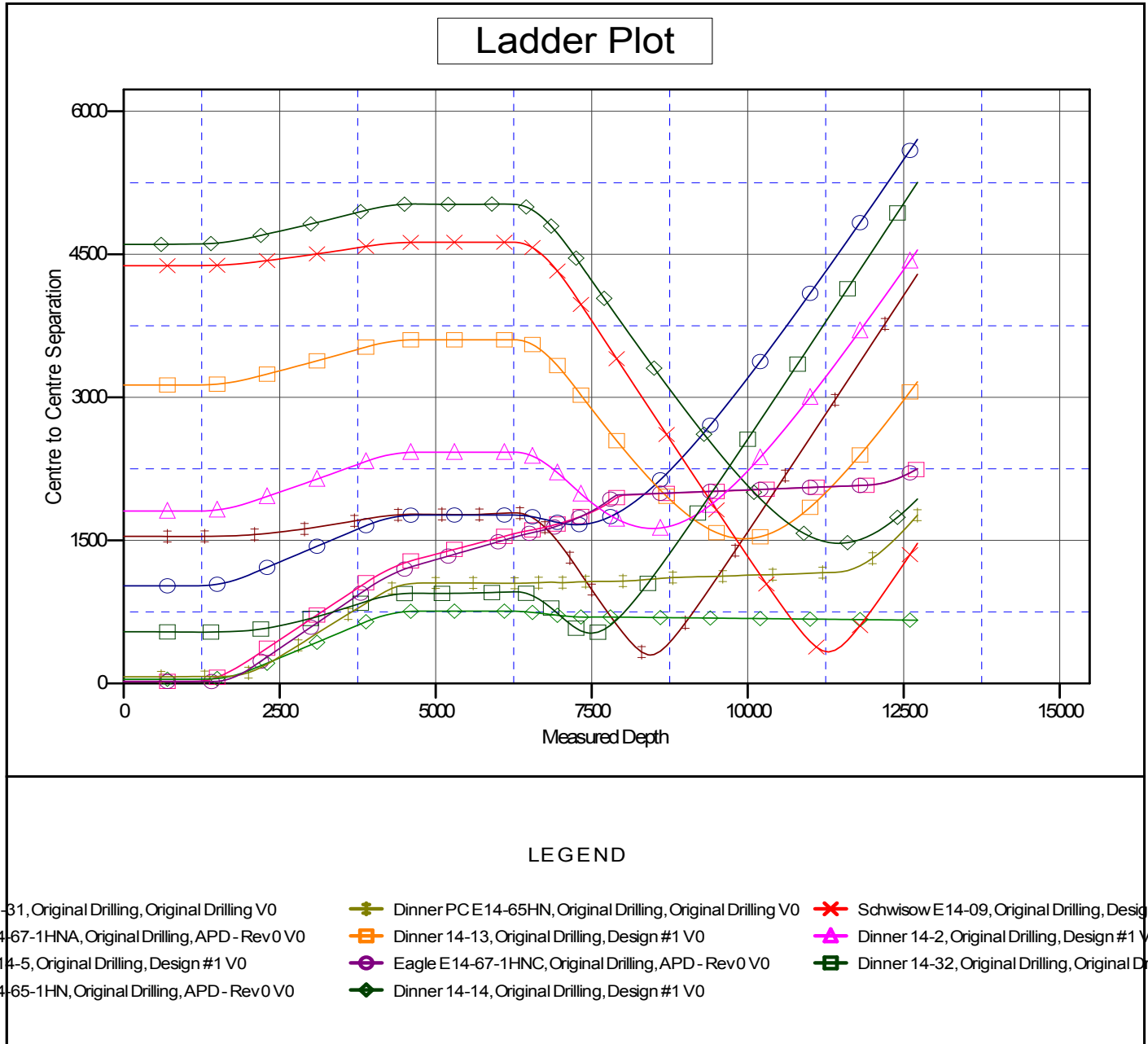
Noble Energy Inc

Anticollision Summary Report

Company:	Northern Region Drilling	Local Co-ordinate Reference:	Well Eagle E14-64-1HN
Project:	Wattenberg Field	TVD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Reference Site:	E (06N-65W)	MD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Eagle E14-64-1HN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.54 sigma
Reference Wellbore	Original Drilling	Database:	EDM Production
Reference Design:	APD - Rev 0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4731.0usft (Original Well Ele
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: Eagle E14-64-1HN
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.56°



CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Noble Energy Inc
Anticollision Summary Report

Company:	Northern Region Drilling	Local Co-ordinate Reference:	Well Eagle E14-64-1HN
Project:	Wattenberg Field	TVD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Reference Site:	E (06N-65W)	MD Reference:	WELL @ 4731.0usft (Original Well Elev.)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Eagle E14-64-1HN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.54 sigma
Reference Wellbore	Original Drilling	Database:	EDM Production
Reference Design:	APD - Rev 0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4731.0usft (Original Well Ele
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: Eagle E14-64-1HN
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.56°

