

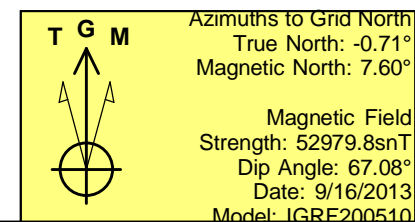
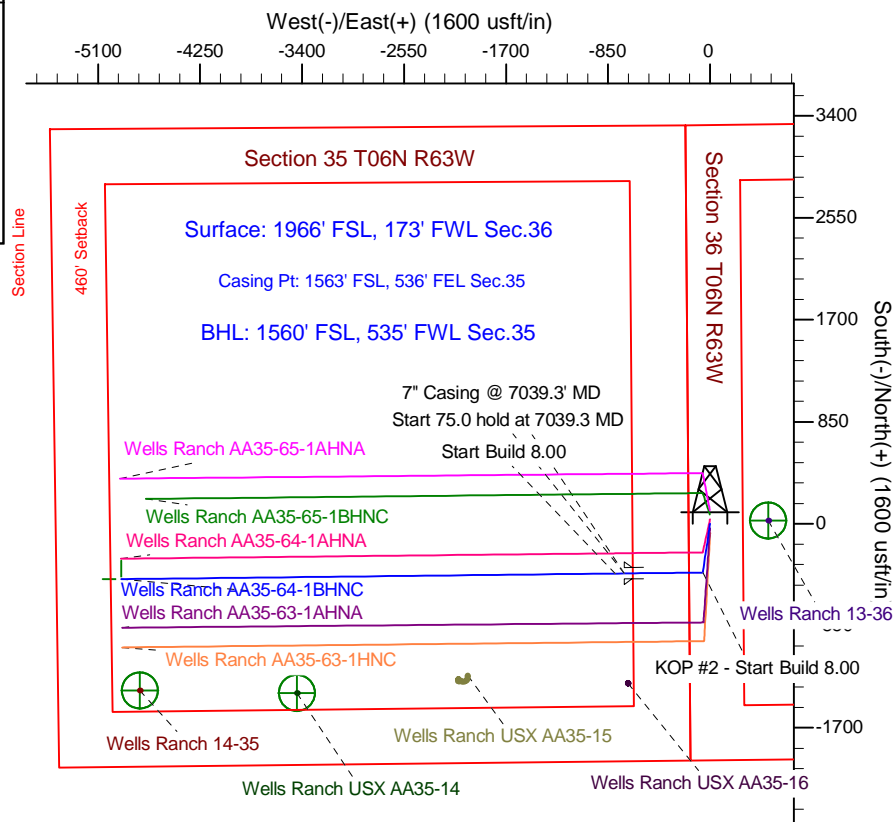
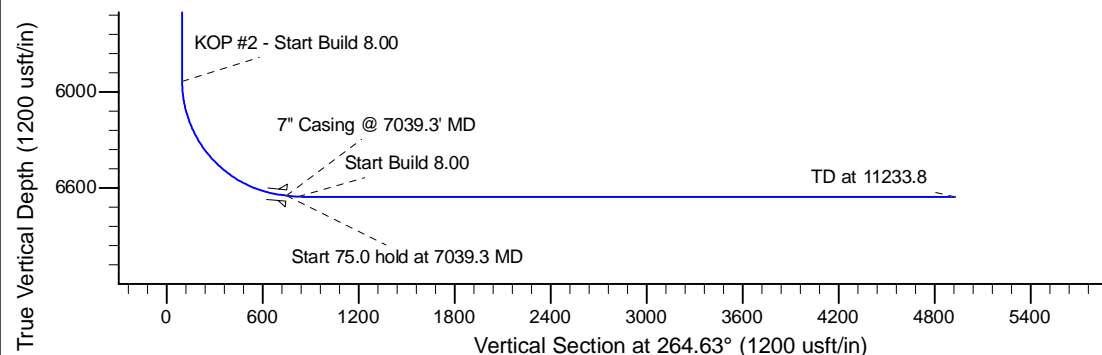
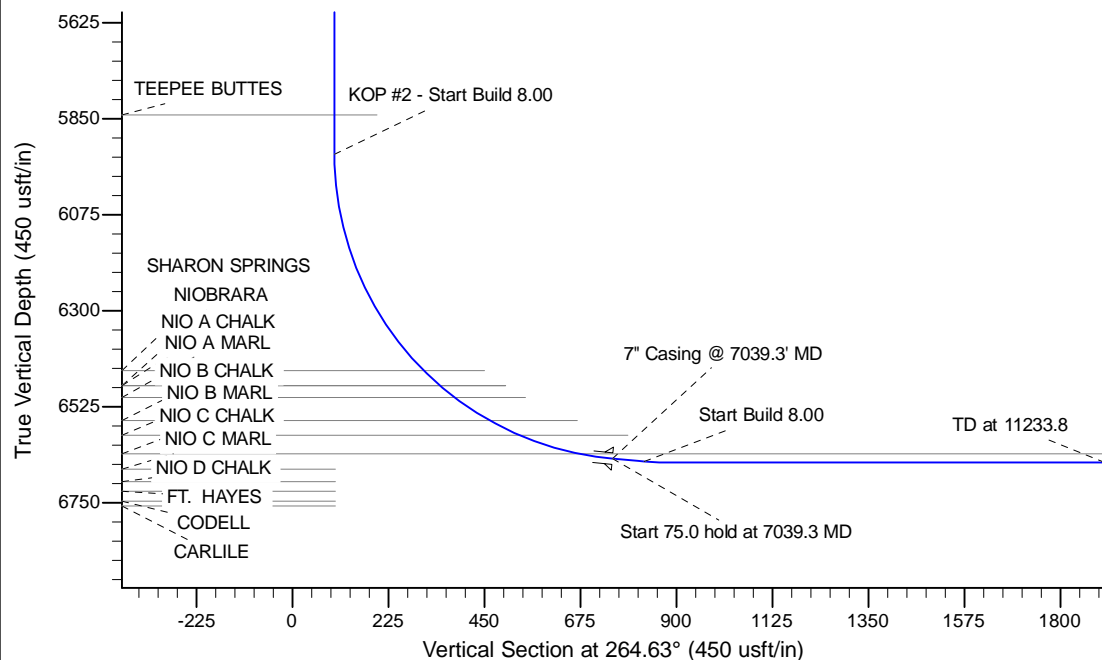
Project: Wattenberg Field
Site: AA (Sec.36-T06N-R63W) Weld County, CO
Well: Wells Ranch AA35-64-1BHNC
Wellbore: Original Drilling
Design: APD - Rev 0

Northern Region Drilling - Working

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	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	
3	2203.2	14.06	188.41	2196.2	-85.0	-12.6	2.00	188.41	20.5	
4	3185.3	14.06	188.41	3148.8	-321.0	-47.4	0.00	0.00	77.3	
5	3888.5	0.00	0.00	3845.0	-406.0	-60.0	2.00	180.00	97.7	
6	5976.8	0.00	0.00	5933.3	-406.0	-60.0	0.00	0.00	97.7	
7	7039.3	85.00	269.34	6646.7	-413.5	-713.7	8.00	269.34	749.3	
8	7114.3	85.00	269.34	6653.3	-414.3	-788.4	0.00	0.00	823.8	
9	7176.8	90.00	269.34	6656.0	-415.1	-850.9	8.00	0.00	886.0	
10	11233.8	90.00	269.34	6656.0	-461.5	-4907.6	0.00	0.00	4929.3	Wells Ranch AA35-64-1BHNC BHL 1560'FSL, 535'FWL



WELL DETAILS: Wells Ranch AA35-64-1BHNC				
Ground Level: 4772.0				
0.0	0.0	Northing	Easting	Latitude
		1405423.35	3307810.26	40.441020
				Longitude
				-104.394100
Plan: APD - Rev 0 (Wells Ranch AA35-64-1BHNC/Original Drilling)				
Created By: Shailey Jewell		Date: 13:43, September 16 2013		
Checked: _____		Date: _____		
Reviewed: _____		Date: _____		
Approved: _____		Date: _____		

Northern Region Drilling - Working

Wattenberg Field

AA (06N-63W)

Wells Ranch AA35-64-1BHNC

Original Drilling

Plan: APD - Rev 0

Standard Planning Report

16 September, 2013

Noble Energy Inc

Planning Report

Database:	EDM Production	Local Co-ordinate Reference:	Well Wells Ranch AA35-64-1BHNC
Company:	Northern Region Drilling - Working	TVD Reference:	WELL @ 4796.0usft (Original Well Elev)
Project:	Wattenberg Field	MD Reference:	WELL @ 4796.0usft (Original Well Elev)
Site:	AA (06N-63W)	North Reference:	Grid
Well:	Wells Ranch AA35-64-1BHNC	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		AA (06N-63W)			
Site Position:		Northing:	1,427,844.88 usft	Latitude:	40.502740
From:	Lat/Long	Easting:	3,302,558.01 usft	Longitude:	-104.411980
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.70 °

Well	Wells Ranch AA35-64-1BHNC					
Well Position	+N/-S	-22,422.3 usft	Northing:	1,405,423.35 usft	Latitude:	40.441020
	+E/-W	5,252.4 usft	Easting:	3,307,810.26 usft	Longitude:	-104.394100
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	4,772.0 usft

Wellbore	Original Drilling				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	9/16/2013	8.31	67.08	52,980

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	264.63

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	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,203.2	14.06	188.41	2,196.2	-85.0	-12.6	2.00	2.00	0.00	188.41	
3,185.3	14.06	188.41	3,148.8	-321.0	-47.4	0.00	0.00	0.00	0.00	
3,888.5	0.00	0.00	3,845.0	-406.0	-60.0	2.00	-2.00	0.00	180.00	
5,976.8	0.00	0.00	5,933.3	-406.0	-60.0	0.00	0.00	0.00	0.00	
7,039.3	85.00	269.34	6,646.7	-413.5	-713.7	8.00	8.00	0.00	269.34	
7,114.3	85.00	269.34	6,653.3	-414.3	-788.4	0.00	0.00	0.00	0.00	
7,176.8	90.00	269.34	6,656.0	-415.1	-850.9	8.00	8.00	0.00	0.00	
11,233.8	90.00	269.34	6,656.0	-461.5	-4,907.6	0.00	0.00	0.00	0.00	Wells Ranch AA35-64

Noble Energy Inc

Planning Report

Database:	EDM Production	Local Co-ordinate Reference:	Well Wells Ranch AA35-64-1BHNC
Company:	Northern Region Drilling - Working	TVD Reference:	WELL @ 4796.0usft (Original Well Elev)
Project:	Wattenberg Field	MD Reference:	WELL @ 4796.0usft (Original Well Elev)
Site:	AA (06N-63W)	North Reference:	Grid
Well:	Wells Ranch AA35-64-1BHNC	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
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
1,250.0	0.00	0.00	1,250.0	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
1,350.0	0.00	0.00	1,350.0	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
1,450.0	0.00	0.00	1,450.0	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
KOP - Start Build 2.00									
1,550.0	1.00	188.41	1,550.0	-0.4	-0.1	0.1	2.00	2.00	0.00
1,600.0	2.00	188.41	1,600.0	-1.7	-0.3	0.4	2.00	2.00	0.00
1,650.0	3.00	188.41	1,649.9	-3.9	-0.6	0.9	2.00	2.00	0.00
1,700.0	4.00	188.41	1,699.8	-6.9	-1.0	1.7	2.00	2.00	0.00
1,750.0	5.00	188.41	1,749.7	-10.8	-1.6	2.6	2.00	2.00	0.00
1,800.0	6.00	188.41	1,799.5	-15.5	-2.3	3.7	2.00	2.00	0.00
1,850.0	7.00	188.41	1,849.1	-21.1	-3.1	5.1	2.00	2.00	0.00
1,900.0	8.00	188.41	1,898.7	-27.6	-4.1	6.6	2.00	2.00	0.00
1,950.0	9.00	188.41	1,948.2	-34.9	-5.2	8.4	2.00	2.00	0.00
2,000.0	10.00	188.41	1,997.5	-43.1	-6.4	10.4	2.00	2.00	0.00
2,050.0	11.00	188.41	2,046.6	-52.1	-7.7	12.5	2.00	2.00	0.00
2,100.0	12.00	188.41	2,095.6	-61.9	-9.2	14.9	2.00	2.00	0.00
2,150.0	13.00	188.41	2,144.4	-72.6	-10.7	17.5	2.00	2.00	0.00
2,200.0	14.00	188.41	2,193.1	-84.2	-12.4	20.3	2.00	2.00	0.00
2,203.2	14.06	188.41	2,196.2	-85.0	-12.6	20.5	2.00	2.00	0.00
2,250.0	14.06	188.41	2,241.6	-96.2	-14.2	23.2	0.00	0.00	0.00
2,300.0	14.06	188.41	2,290.1	-108.2	-16.0	26.1	0.00	0.00	0.00
2,350.0	14.06	188.41	2,338.6	-120.2	-17.8	28.9	0.00	0.00	0.00
2,400.0	14.06	188.41	2,387.1	-132.3	-19.5	31.8	0.00	0.00	0.00
2,450.0	14.06	188.41	2,435.6	-144.3	-21.3	34.7	0.00	0.00	0.00
2,476.2	14.06	188.41	2,461.0	-150.6	-22.3	36.3	0.00	0.00	0.00
PIERRE									

Noble Energy Inc

Planning Report

Database:	EDM Production	Local Co-ordinate Reference:	Well Wells Ranch AA35-64-1BHNC
Company:	Northern Region Drilling - Working	TVD Reference:	WELL @ 4796.0usft (Original Well Elev)
Project:	Wattenberg Field	MD Reference:	WELL @ 4796.0usft (Original Well Elev)
Site:	AA (06N-63W)	North Reference:	Grid
Well:	Wells Ranch AA35-64-1BHNC	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	14.06	188.41	2,484.1	-156.3	-23.1	37.6	0.00	0.00	0.00
2,550.0	14.06	188.41	2,532.6	-168.3	-24.9	40.5	0.00	0.00	0.00
2,600.0	14.06	188.41	2,581.1	-180.3	-26.7	43.4	0.00	0.00	0.00
2,650.0	14.06	188.41	2,629.6	-192.4	-28.4	46.3	0.00	0.00	0.00
2,700.0	14.06	188.41	2,678.1	-204.4	-30.2	49.2	0.00	0.00	0.00
2,750.0	14.06	188.41	2,726.6	-216.4	-32.0	52.1	0.00	0.00	0.00
2,800.0	14.06	188.41	2,775.1	-228.4	-33.8	55.0	0.00	0.00	0.00
2,850.0	14.06	188.41	2,823.6	-240.4	-35.5	57.9	0.00	0.00	0.00
2,900.0	14.06	188.41	2,872.1	-252.5	-37.3	60.8	0.00	0.00	0.00
2,950.0	14.06	188.41	2,920.6	-264.5	-39.1	63.7	0.00	0.00	0.00
3,000.0	14.06	188.41	2,969.1	-276.5	-40.9	66.6	0.00	0.00	0.00
3,050.0	14.06	188.41	3,017.6	-288.5	-42.6	69.5	0.00	0.00	0.00
3,100.0	14.06	188.41	3,066.1	-300.5	-44.4	72.4	0.00	0.00	0.00
3,150.0	14.06	188.41	3,114.6	-312.6	-46.2	75.3	0.00	0.00	0.00
3,185.3	14.06	188.41	3,148.8	-321.0	-47.4	77.3	0.00	0.00	0.00
Start Drop -2.00									
3,200.0	13.77	188.41	3,163.1	-324.5	-48.0	78.1	2.00	-2.00	0.00
3,250.0	12.77	188.41	3,211.8	-335.9	-49.6	80.9	2.00	-2.00	0.00
3,300.0	11.77	188.41	3,260.6	-346.4	-51.2	83.4	2.00	-2.00	0.00
3,350.0	10.77	188.41	3,309.6	-356.1	-52.6	85.7	2.00	-2.00	0.00
3,400.0	9.77	188.41	3,358.8	-364.9	-53.9	87.9	2.00	-2.00	0.00
3,450.0	8.77	188.41	3,408.2	-372.9	-55.1	89.8	2.00	-2.00	0.00
3,500.0	7.77	188.41	3,457.7	-380.0	-56.2	91.5	2.00	-2.00	0.00
3,550.0	6.77	188.41	3,507.3	-386.2	-57.1	93.0	2.00	-2.00	0.00
3,600.0	5.77	188.41	3,557.0	-391.6	-57.9	94.3	2.00	-2.00	0.00
3,633.2	5.11	188.41	3,590.0	-394.8	-58.3	95.0	2.00	-2.00	0.00
PARKMAN									
3,650.0	4.77	188.41	3,606.8	-396.2	-58.5	95.4	2.00	-2.00	0.00
3,700.0	3.77	188.41	3,656.6	-399.9	-59.1	96.3	2.00	-2.00	0.00
3,750.0	2.77	188.41	3,706.5	-402.7	-59.5	96.9	2.00	-2.00	0.00
3,800.0	1.77	188.41	3,756.5	-404.6	-59.8	97.4	2.00	-2.00	0.00
3,850.0	0.77	188.41	3,806.5	-405.7	-60.0	97.7	2.00	-2.00	0.00
3,888.5	0.00	0.00	3,845.0	-406.0	-60.0	97.7	2.00	-2.00	0.00
3,900.0	0.00	0.00	3,856.5	-406.0	-60.0	97.7	0.00	0.00	0.00
3,950.0	0.00	0.00	3,906.5	-406.0	-60.0	97.7	0.00	0.00	0.00
4,000.0	0.00	0.00	3,956.5	-406.0	-60.0	97.7	0.00	0.00	0.00
4,050.0	0.00	0.00	4,006.5	-406.0	-60.0	97.7	0.00	0.00	0.00
4,100.0	0.00	0.00	4,056.5	-406.0	-60.0	97.7	0.00	0.00	0.00
4,150.0	0.00	0.00	4,106.5	-406.0	-60.0	97.7	0.00	0.00	0.00
4,200.0	0.00	0.00	4,156.5	-406.0	-60.0	97.7	0.00	0.00	0.00
4,250.0	0.00	0.00	4,206.5	-406.0	-60.0	97.7	0.00	0.00	0.00
4,300.0	0.00	0.00	4,256.5	-406.0	-60.0	97.7	0.00	0.00	0.00
4,344.5	0.00	0.00	4,301.0	-406.0	-60.0	97.7	0.00	0.00	0.00
SUSSEX									
4,350.0	0.00	0.00	4,306.5	-406.0	-60.0	97.7	0.00	0.00	0.00
4,400.0	0.00	0.00	4,356.5	-406.0	-60.0	97.7	0.00	0.00	0.00
4,450.0	0.00	0.00	4,406.5	-406.0	-60.0	97.7	0.00	0.00	0.00
4,500.0	0.00	0.00	4,456.5	-406.0	-60.0	97.7	0.00	0.00	0.00
4,550.0	0.00	0.00	4,506.5	-406.0	-60.0	97.7	0.00	0.00	0.00
4,600.0	0.00	0.00	4,556.5	-406.0	-60.0	97.7	0.00	0.00	0.00
4,650.0	0.00	0.00	4,606.5	-406.0	-60.0	97.7	0.00	0.00	0.00
4,700.0	0.00	0.00	4,656.5	-406.0	-60.0	97.7	0.00	0.00	0.00
4,750.0	0.00	0.00	4,706.5	-406.0	-60.0	97.7	0.00	0.00	0.00

Noble Energy Inc

Planning Report

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Project:	Wattenberg Field	MD Reference:	WELL @ 4796.0usft (Original Well Elev)
Site:	AA (06N-63W)	North Reference:	Grid
Well:	Wells Ranch AA35-64-1BHNC	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	4,756.5	-406.0	-60.0	97.7	0.00	0.00	0.00
4,850.0	0.00	0.00	4,806.5	-406.0	-60.0	97.7	0.00	0.00	0.00
4,900.0	0.00	0.00	4,856.5	-406.0	-60.0	97.7	0.00	0.00	0.00
4,936.5	0.00	0.00	4,893.0	-406.0	-60.0	97.7	0.00	0.00	0.00
SHANNON									
4,950.0	0.00	0.00	4,906.5	-406.0	-60.0	97.7	0.00	0.00	0.00
5,000.0	0.00	0.00	4,956.5	-406.0	-60.0	97.7	0.00	0.00	0.00
5,050.0	0.00	0.00	5,006.5	-406.0	-60.0	97.7	0.00	0.00	0.00
5,100.0	0.00	0.00	5,056.5	-406.0	-60.0	97.7	0.00	0.00	0.00
5,150.0	0.00	0.00	5,106.5	-406.0	-60.0	97.7	0.00	0.00	0.00
5,200.0	0.00	0.00	5,156.5	-406.0	-60.0	97.7	0.00	0.00	0.00
5,250.0	0.00	0.00	5,206.5	-406.0	-60.0	97.7	0.00	0.00	0.00
5,300.0	0.00	0.00	5,256.5	-406.0	-60.0	97.7	0.00	0.00	0.00
5,350.0	0.00	0.00	5,306.5	-406.0	-60.0	97.7	0.00	0.00	0.00
5,400.0	0.00	0.00	5,356.5	-406.0	-60.0	97.7	0.00	0.00	0.00
5,450.0	0.00	0.00	5,406.5	-406.0	-60.0	97.7	0.00	0.00	0.00
5,500.0	0.00	0.00	5,456.5	-406.0	-60.0	97.7	0.00	0.00	0.00
5,550.0	0.00	0.00	5,506.5	-406.0	-60.0	97.7	0.00	0.00	0.00
5,600.0	0.00	0.00	5,556.5	-406.0	-60.0	97.7	0.00	0.00	0.00
5,650.0	0.00	0.00	5,606.5	-406.0	-60.0	97.7	0.00	0.00	0.00
5,700.0	0.00	0.00	5,656.5	-406.0	-60.0	97.7	0.00	0.00	0.00
5,750.0	0.00	0.00	5,706.5	-406.0	-60.0	97.7	0.00	0.00	0.00
5,800.0	0.00	0.00	5,756.5	-406.0	-60.0	97.7	0.00	0.00	0.00
5,850.0	0.00	0.00	5,806.5	-406.0	-60.0	97.7	0.00	0.00	0.00
5,884.5	0.00	0.00	5,841.0	-406.0	-60.0	97.7	0.00	0.00	0.00
TEEPEE BUTTES									
5,900.0	0.00	0.00	5,856.5	-406.0	-60.0	97.7	0.00	0.00	0.00
5,950.0	0.00	0.00	5,906.5	-406.0	-60.0	97.7	0.00	0.00	0.00
5,976.8	0.00	0.00	5,933.3	-406.0	-60.0	97.7	0.00	0.00	0.00
KOP #2 - Start Build 8.00									
6,000.0	1.86	269.34	5,956.5	-406.0	-60.4	98.1	8.00	8.00	0.00
6,050.0	5.86	269.34	6,006.4	-406.0	-63.7	101.5	8.00	8.00	0.00
6,100.0	9.86	269.34	6,055.9	-406.1	-70.6	108.3	8.00	8.00	0.00
6,150.0	13.86	269.34	6,104.8	-406.2	-80.8	118.5	8.00	8.00	0.00
6,200.0	17.86	269.34	6,152.9	-406.4	-94.5	132.1	8.00	8.00	0.00
6,250.0	21.86	269.34	6,199.9	-406.6	-111.5	149.1	8.00	8.00	0.00
6,300.0	25.86	269.34	6,245.6	-406.8	-131.7	169.2	8.00	8.00	0.00
6,350.0	29.86	269.34	6,289.8	-407.1	-155.1	192.5	8.00	8.00	0.00
6,400.0	33.86	269.34	6,332.3	-407.4	-181.4	218.8	8.00	8.00	0.00
6,450.0	37.86	269.34	6,372.8	-407.7	-210.7	248.0	8.00	8.00	0.00
6,500.0	41.86	269.34	6,411.2	-408.1	-242.8	279.9	8.00	8.00	0.00
6,541.1	45.15	269.34	6,441.0	-408.4	-271.1	308.1	8.00	8.00	0.00
SHARON SPRINGS									
6,550.0	45.86	269.34	6,447.2	-408.5	-277.4	314.4	8.00	8.00	0.00
6,592.7	49.27	269.34	6,476.0	-408.8	-308.9	345.8	8.00	8.00	0.00
NIOBRARA - NIO A CHALK									
6,600.0	49.86	269.34	6,480.8	-408.9	-314.5	351.4	8.00	8.00	0.00
6,637.2	52.83	269.34	6,504.0	-409.2	-343.5	380.3	8.00	8.00	0.00
NIO A MARL									
6,650.0	53.86	269.34	6,511.6	-409.4	-353.8	390.5	8.00	8.00	0.00
Wells Ranch 13-36									
6,700.0	57.86	269.34	6,539.7	-409.8	-395.1	431.8	8.00	8.00	0.00
6,735.9	60.73	269.34	6,558.0	-410.2	-426.0	462.5	8.00	8.00	0.00

Noble Energy Inc

Planning Report

Database:	EDM Production	Local Co-ordinate Reference:	Well Wells Ranch AA35-64-1BHNC
Company:	Northern Region Drilling - Working	TVD Reference:	WELL @ 4796.0usft (Original Well Elev)
Project:	Wattenberg Field	MD Reference:	WELL @ 4796.0usft (Original Well Elev)
Site:	AA (06N-63W)	North Reference:	Grid
Well:	Wells Ranch AA35-64-1BHNC	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)
NIO B CHALK									
6,750.0	61.86	269.34	6,564.8	-410.3	-438.4	474.9	8.00	8.00	0.00
6,800.0	65.86	269.34	6,586.8	-410.8	-483.2	519.6	8.00	8.00	0.00
6,812.9	66.89	269.34	6,592.0	-411.0	-495.1	531.4	8.00	8.00	0.00
NIO B MARL									
6,850.0	69.86	269.34	6,605.7	-411.4	-529.5	565.7	8.00	8.00	0.00
6,900.0	73.86	269.34	6,621.2	-411.9	-577.0	613.1	8.00	8.00	0.00
6,950.0	77.86	269.34	6,633.4	-412.5	-625.5	661.4	8.00	8.00	0.00
6,957.6	78.47	269.34	6,635.0	-412.6	-633.0	668.8	8.00	8.00	0.00
NIO C CHALK									
7,000.0	81.86	269.34	6,642.2	-413.0	-674.7	710.4	8.00	8.00	0.00
7,039.3	85.00	269.34	6,646.7	-413.5	-713.7	749.3	8.00	8.00	0.00
Start 75.0 hold at 7039.3 MD - 7" Casing @ 7039.3' MD									
7,050.0	85.00	269.34	6,647.7	-413.6	-724.4	759.9	0.00	0.00	0.00
7,100.0	85.00	269.34	6,652.0	-414.2	-774.2	809.6	0.00	0.00	0.00
7,114.3	85.00	269.34	6,653.3	-414.3	-788.5	823.8	0.00	0.00	0.00
Start Build 8.00									
7,150.0	87.86	269.34	6,655.5	-414.7	-824.1	859.3	8.00	8.00	0.00
7,176.8	90.00	269.34	6,656.0	-415.1	-850.9	886.0	8.00	8.00	0.00
7,200.0	90.00	269.34	6,656.0	-415.3	-874.1	909.1	0.00	0.00	0.00
7,250.0	90.00	269.34	6,656.0	-415.9	-924.1	958.9	0.00	0.00	0.00
7,300.0	90.00	269.34	6,656.0	-416.5	-974.1	1,008.8	0.00	0.00	0.00
7,350.0	90.00	269.34	6,656.0	-417.0	-1,024.1	1,058.6	0.00	0.00	0.00
7,400.0	90.00	269.34	6,656.0	-417.6	-1,074.1	1,108.4	0.00	0.00	0.00
7,450.0	90.00	269.34	6,656.0	-418.2	-1,124.1	1,158.3	0.00	0.00	0.00
7,500.0	90.00	269.34	6,656.0	-418.8	-1,174.1	1,208.1	0.00	0.00	0.00
7,550.0	90.00	269.34	6,656.0	-419.3	-1,224.0	1,257.9	0.00	0.00	0.00
7,600.0	90.00	269.34	6,656.0	-419.9	-1,274.0	1,307.8	0.00	0.00	0.00
7,650.0	90.00	269.34	6,656.0	-420.5	-1,324.0	1,357.6	0.00	0.00	0.00
7,700.0	90.00	269.34	6,656.0	-421.0	-1,374.0	1,407.4	0.00	0.00	0.00
7,750.0	90.00	269.34	6,656.0	-421.6	-1,424.0	1,457.3	0.00	0.00	0.00
7,800.0	90.00	269.34	6,656.0	-422.2	-1,474.0	1,507.1	0.00	0.00	0.00
7,850.0	90.00	269.34	6,656.0	-422.8	-1,524.0	1,556.9	0.00	0.00	0.00
7,900.0	90.00	269.34	6,656.0	-423.3	-1,574.0	1,606.7	0.00	0.00	0.00
7,950.0	90.00	269.34	6,656.0	-423.9	-1,624.0	1,656.6	0.00	0.00	0.00
8,000.0	90.00	269.34	6,656.0	-424.5	-1,674.0	1,706.4	0.00	0.00	0.00
8,050.0	90.00	269.34	6,656.0	-425.0	-1,724.0	1,756.2	0.00	0.00	0.00
8,100.0	90.00	269.34	6,656.0	-425.6	-1,774.0	1,806.1	0.00	0.00	0.00
8,150.0	90.00	269.34	6,656.0	-426.2	-1,824.0	1,855.9	0.00	0.00	0.00
8,200.0	90.00	269.34	6,656.0	-426.8	-1,874.0	1,905.7	0.00	0.00	0.00
8,250.0	90.00	269.34	6,656.0	-427.3	-1,924.0	1,955.6	0.00	0.00	0.00
8,300.0	90.00	269.34	6,656.0	-427.9	-1,974.0	2,005.4	0.00	0.00	0.00
8,350.0	90.00	269.34	6,656.0	-428.5	-2,024.0	2,055.2	0.00	0.00	0.00
8,400.0	90.00	269.34	6,656.0	-429.1	-2,074.0	2,105.1	0.00	0.00	0.00
8,450.0	90.00	269.34	6,656.0	-429.6	-2,124.0	2,154.9	0.00	0.00	0.00
8,500.0	90.00	269.34	6,656.0	-430.2	-2,174.0	2,204.7	0.00	0.00	0.00
8,550.0	90.00	269.34	6,656.0	-430.8	-2,224.0	2,254.5	0.00	0.00	0.00
8,600.0	90.00	269.34	6,656.0	-431.3	-2,274.0	2,304.4	0.00	0.00	0.00
8,650.0	90.00	269.34	6,656.0	-431.9	-2,324.0	2,354.2	0.00	0.00	0.00
8,700.0	90.00	269.34	6,656.0	-432.5	-2,374.0	2,404.0	0.00	0.00	0.00
8,750.0	90.00	269.34	6,656.0	-433.1	-2,424.0	2,453.9	0.00	0.00	0.00
8,800.0	90.00	269.34	6,656.0	-433.6	-2,474.0	2,503.7	0.00	0.00	0.00
8,850.0	90.00	269.34	6,656.0	-434.2	-2,524.0	2,553.5	0.00	0.00	0.00

Noble Energy Inc

Planning Report

Database:	EDM Production	Local Co-ordinate Reference:	Well Wells Ranch AA35-64-1BHNC
Company:	Northern Region Drilling - Working	TVD Reference:	WELL @ 4796.0usft (Original Well Elev)
Project:	Wattenberg Field	MD Reference:	WELL @ 4796.0usft (Original Well Elev)
Site:	AA (06N-63W)	North Reference:	Grid
Well:	Wells Ranch AA35-64-1BHNC	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)
8,900.0	90.00	269.34	6,656.0	-434.8	-2,574.0	2,603.4	0.00	0.00	0.00
8,950.0	90.00	269.34	6,656.0	-435.4	-2,624.0	2,653.2	0.00	0.00	0.00
9,000.0	90.00	269.34	6,656.0	-435.9	-2,674.0	2,703.0	0.00	0.00	0.00
9,050.0	90.00	269.34	6,656.0	-436.5	-2,724.0	2,752.9	0.00	0.00	0.00
9,100.0	90.00	269.34	6,656.0	-437.1	-2,773.9	2,802.7	0.00	0.00	0.00
9,150.0	90.00	269.34	6,656.0	-437.6	-2,823.9	2,852.5	0.00	0.00	0.00
9,200.0	90.00	269.34	6,656.0	-438.2	-2,873.9	2,902.3	0.00	0.00	0.00
9,250.0	90.00	269.34	6,656.0	-438.8	-2,923.9	2,952.2	0.00	0.00	0.00
9,300.0	90.00	269.34	6,656.0	-439.4	-2,973.9	3,002.0	0.00	0.00	0.00
9,350.0	90.00	269.34	6,656.0	-439.9	-3,023.9	3,051.8	0.00	0.00	0.00
9,400.0	90.00	269.34	6,656.0	-440.5	-3,073.9	3,101.7	0.00	0.00	0.00
9,450.0	90.00	269.34	6,656.0	-441.1	-3,123.9	3,151.5	0.00	0.00	0.00
9,500.0	90.00	269.34	6,656.0	-441.6	-3,173.9	3,201.3	0.00	0.00	0.00
9,550.0	90.00	269.34	6,656.0	-442.2	-3,223.9	3,251.2	0.00	0.00	0.00
9,600.0	90.00	269.34	6,656.0	-442.8	-3,273.9	3,301.0	0.00	0.00	0.00
9,650.0	90.00	269.34	6,656.0	-443.4	-3,323.9	3,350.8	0.00	0.00	0.00
9,700.0	90.00	269.34	6,656.0	-443.9	-3,373.9	3,400.7	0.00	0.00	0.00
9,750.0	90.00	269.34	6,656.0	-444.5	-3,423.9	3,450.5	0.00	0.00	0.00
9,779.9	90.00	269.34	6,656.0	-444.8	-3,453.8	3,480.3	0.00	0.00	0.00
Wells Ranch USX AA35-14									
9,800.0	90.00	269.34	6,656.0	-445.1	-3,473.9	3,500.3	0.00	0.00	0.00
9,850.0	90.00	269.34	6,656.0	-445.7	-3,523.9	3,550.1	0.00	0.00	0.00
9,900.0	90.00	269.34	6,656.0	-446.2	-3,573.9	3,600.0	0.00	0.00	0.00
9,950.0	90.00	269.34	6,656.0	-446.8	-3,623.9	3,649.8	0.00	0.00	0.00
10,000.0	90.00	269.34	6,656.0	-447.4	-3,673.9	3,699.6	0.00	0.00	0.00
10,050.0	90.00	269.34	6,656.0	-447.9	-3,723.9	3,749.5	0.00	0.00	0.00
10,100.0	90.00	269.34	6,656.0	-448.5	-3,773.9	3,799.3	0.00	0.00	0.00
10,150.0	90.00	269.34	6,656.0	-449.1	-3,823.9	3,849.1	0.00	0.00	0.00
10,200.0	90.00	269.34	6,656.0	-449.7	-3,873.9	3,899.0	0.00	0.00	0.00
10,250.0	90.00	269.34	6,656.0	-450.2	-3,923.9	3,948.8	0.00	0.00	0.00
10,300.0	90.00	269.34	6,656.0	-450.8	-3,973.9	3,998.6	0.00	0.00	0.00
10,350.0	90.00	269.34	6,656.0	-451.4	-4,023.9	4,048.5	0.00	0.00	0.00
10,400.0	90.00	269.34	6,656.0	-451.9	-4,073.9	4,098.3	0.00	0.00	0.00
10,450.0	90.00	269.34	6,656.0	-452.5	-4,123.9	4,148.1	0.00	0.00	0.00
10,500.0	90.00	269.34	6,656.0	-453.1	-4,173.9	4,197.9	0.00	0.00	0.00
10,550.0	90.00	269.34	6,656.0	-453.7	-4,223.9	4,247.8	0.00	0.00	0.00
10,600.0	90.00	269.34	6,656.0	-454.2	-4,273.8	4,297.6	0.00	0.00	0.00
10,650.0	90.00	269.34	6,656.0	-454.8	-4,323.8	4,347.4	0.00	0.00	0.00
10,700.0	90.00	269.34	6,656.0	-455.4	-4,373.8	4,397.3	0.00	0.00	0.00
10,750.0	90.00	269.34	6,656.0	-456.0	-4,423.8	4,447.1	0.00	0.00	0.00
10,800.0	90.00	269.34	6,656.0	-456.5	-4,473.8	4,496.9	0.00	0.00	0.00
10,850.0	90.00	269.34	6,656.0	-457.1	-4,523.8	4,546.8	0.00	0.00	0.00
10,900.0	90.00	269.34	6,656.0	-457.7	-4,573.8	4,596.6	0.00	0.00	0.00
10,950.0	90.00	269.34	6,656.0	-458.2	-4,623.8	4,646.4	0.00	0.00	0.00
11,000.0	90.00	269.34	6,656.0	-458.8	-4,673.8	4,696.2	0.00	0.00	0.00
11,050.0	90.00	269.34	6,656.0	-459.4	-4,723.8	4,746.1	0.00	0.00	0.00
11,088.3	90.00	269.34	6,656.0	-459.8	-4,762.1	4,784.2	0.00	0.00	0.00
Wells Ranch 14-35									
11,100.0	90.00	269.34	6,656.0	-460.0	-4,773.8	4,795.9	0.00	0.00	0.00
11,150.0	90.00	269.34	6,656.0	-460.5	-4,823.8	4,845.7	0.00	0.00	0.00
11,200.0	90.00	269.34	6,656.0	-461.1	-4,873.8	4,895.6	0.00	0.00	0.00
11,233.8	90.00	269.34	6,656.0	-461.5	-4,907.6	4,929.3	0.00	0.00	0.00
TD at 11233.8 - Wells Ranch AA35-64-1BHNC BHL 1560°FSL, 535°FWL									

Noble Energy Inc

Planning Report

Database:	EDM Production	Local Co-ordinate Reference:	Well Wells Ranch AA35-64-1BHNC
Company:	Northern Region Drilling - Working	TVD Reference:	WELL @ 4796.0usft (Original Well Elev)
Project:	Wattenberg Field	MD Reference:	WELL @ 4796.0usft (Original Well Elev)
Site:	AA (06N-63W)	North Reference:	Grid
Well:	Wells Ranch AA35-64-1BHNC	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD - Rev 0		

Design Targets

Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Wells Ranch AA35-64-1I - plan hits target center - Point	0.00	0.00	6,656.0	-461.5	-4,907.6	1,404,961.88	3,302,902.82	40.439920	-104.411750
Wells Ranch USX AA35- - plan misses target center by 1006.6usft at 9779.9usft MD (6656.0 TVD, -444.8 N, -3453.8 E) - Circle (radius 150.0)	0.00	0.00	6,945.0	-1,409.0	-3,442.8	1,404,014.43	3,304,367.58	40.437270	-104.406530
Wells Ranch 14-35 - plan misses target center by 1207.2usft at 11088.3usft MD (6656.0 TVD, -459.8 N, -4762.1 E) - Circle (radius 150.0)	0.00	0.00	7,427.0	-1,388.6	-4,751.5	1,404,034.76	3,303,058.96	40.437370	-104.411230
Wells Ranch 13-36 - plan misses target center by 1516.8usft at 6650.0usft MD (6511.6 TVD, -409.4 N, -353.8 E) - Circle (radius 150.0)	0.00	0.00	7,698.0	27.9	484.0	1,405,451.26	3,308,294.26	40.441080	-104.392360

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
7,039.3	6,646.7	7" Casing @ 7039.3' MD	7	8-3/4

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,476.2	2,461.0	PIERRE		0.00	
3,633.2	3,590.0	PARKMAN		0.00	
4,344.5	4,301.0	SUSSEX		0.00	
4,936.5	4,893.0	SHANNON		0.00	
5,884.5	5,841.0	TEEPEE BUTTES		0.00	
6,541.1	6,441.0	SHARON SPRINGS		0.00	
6,592.7	6,476.0	NIOBRARA		0.00	
6,592.7	6,476.0	NIO A CHALK		0.00	
6,637.2	6,504.0	NIO A MARL		0.00	
6,735.9	6,558.0	NIO B CHALK		0.00	
6,812.9	6,592.0	NIO B MARL		0.00	
6,957.6	6,635.0	NIO C CHALK		0.00	

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,500.0	1,500.0	0.0	0.0	KOP - Start Build 2.00
3,185.3	3,148.8	-321.0	-47.4	Start Drop -2.00
5,976.8	5,933.3	-406.0	-60.0	KOP #2 - Start Build 8.00
7,039.3	6,646.7	-413.5	-713.7	Start 75.0 hold at 7039.3 MD
7,114.3	6,653.3	-414.3	-788.5	Start Build 8.00
11,233.8	6,656.0	-461.5	-4,907.6	TD at 11233.8

Northern Region Drilling - Working

Wattenberg Field

AA (06N-63W)

Wells Ranch AA35-64-1BHNC

Original Drilling

APD - Rev 0

Anticollision Summary Report

16 September, 2013

Noble Energy Inc
Anticollision Summary Report

Company:	Northern Region Drilling - Working	Local Co-ordinate Reference:	Well Wells Ranch AA35-64-1BHNC
Project:	Wattenberg Field	TVD Reference:	WELL @ 4796.0usft (Original Well Elev)
Reference Site:	AA (06N-63W)	MD Reference:	WELL @ 4796.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Wells Ranch AA35-64-1BHNC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 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	9/16/2013		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	11,233.8	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
AA (06N-63W)						
Wells Ranch 13-36 - Wellbore #1 - Wellbore #1 - As Drill	1,500.0	1,474.0	484.8	479.9	99.170	CC, ES
Wells Ranch 13-36 - Wellbore #1 - Wellbore #1 - As Drill	6,050.0	5,980.4	698.8	678.4	34.226	SF
Wells Ranch 14-35 - Wellbore #1 - Wellbore #1 - As Drill	11,088.3	6,621.0	928.9	790.4	6.706	CC
Wells Ranch 14-35 - Wellbore #1 - Wellbore #1 - As Drill	11,100.0	6,621.0	929.0	790.1	6.691	ES
Wells Ranch 14-35 - Wellbore #1 - Wellbore #1 - As Drill	11,233.8	6,621.0	940.2	797.6	6.594	SF
Wells Ranch AA35-63-1AHNA - Original Drilling - APD - R	1,200.0	1,199.0	36.4	31.3	7.125	CC, ES
Wells Ranch AA35-63-1AHNA - Original Drilling - APD - R	11,233.8	11,172.2	420.4	159.3	1.610	Level 3, SF
Wells Ranch AA35-63-1HNC - Original Drilling - APD - R	1,000.0	998.0	76.5	72.3	18.164	CC, ES
Wells Ranch AA35-63-1HNC - Original Drilling - APD - R	11,233.8	11,316.4	568.3	298.0	2.103	SF
Wells Ranch AA35-64-1AHNA - Original Drilling - APD - R	1,500.0	1,501.0	36.4	30.0	5.633	CC
Wells Ranch AA35-64-1AHNA - Original Drilling - APD - R	11,233.8	11,105.8	204.6	-24.5	0.893	Level 1, ES, SF
Wells Ranch AA35-65-1AHNA - Original Drilling - APD - R	1,165.6	1,168.6	112.9	108.0	22.733	CC
Wells Ranch AA35-65-1AHNA - Original Drilling - APD - R	1,200.0	1,202.9	112.9	107.8	22.049	ES
Wells Ranch AA35-65-1AHNA - Original Drilling - APD - R	11,233.8	11,118.2	845.4	577.1	3.151	SF
Wells Ranch AA35-65-1BHNC - Wellbore #1 - APD - Rev	1,466.0	1,468.0	76.5	70.2	12.113	CC
Wells Ranch AA35-65-1BHNC - Wellbore #1 - APD - Rev	1,500.0	1,502.0	76.5	70.0	11.827	ES
Wells Ranch AA35-65-1BHNC - Wellbore #1 - APD - Rev	11,100.0	11,001.7	671.6	410.8	2.575	SF
Wells Ranch USX AA35-14 - Wellbore #1 - Wellbore #1 -	9,779.9	6,618.0	964.2	862.1	9.445	CC
Wells Ranch USX AA35-14 - Wellbore #1 - Wellbore #1 -	9,800.0	6,618.0	964.4	861.8	9.396	ES
Wells Ranch USX AA35-14 - Wellbore #1 - Wellbore #1 -	10,000.0	6,618.0	989.0	880.8	9.141	SF
Wells Ranch USX AA35-15 - Wellbore #1 - Wellbore #1 -	8,356.1	6,584.7	837.4	770.5	12.515	CC
Wells Ranch USX AA35-15 - Wellbore #1 - Wellbore #1 -	8,400.0	6,584.5	838.6	770.5	12.314	ES
Wells Ranch USX AA35-15 - Wellbore #1 - Wellbore #1 -	8,600.0	6,583.6	872.2	798.7	11.861	SF
Wells Ranch USX AA35-16 - Wellbore #1 - Wellbore #1 -	7,017.6	6,574.4	916.7	883.4	27.575	CC
Wells Ranch USX AA35-16 - Wellbore #1 - Wellbore #1 -	7,039.3	6,576.6	916.9	883.2	27.214	ES
Wells Ranch USX AA35-16 - Wellbore #1 - Wellbore #1 -	7,700.0	6,585.8	1,142.4	1,092.9	23.066	SF

Noble Energy Inc

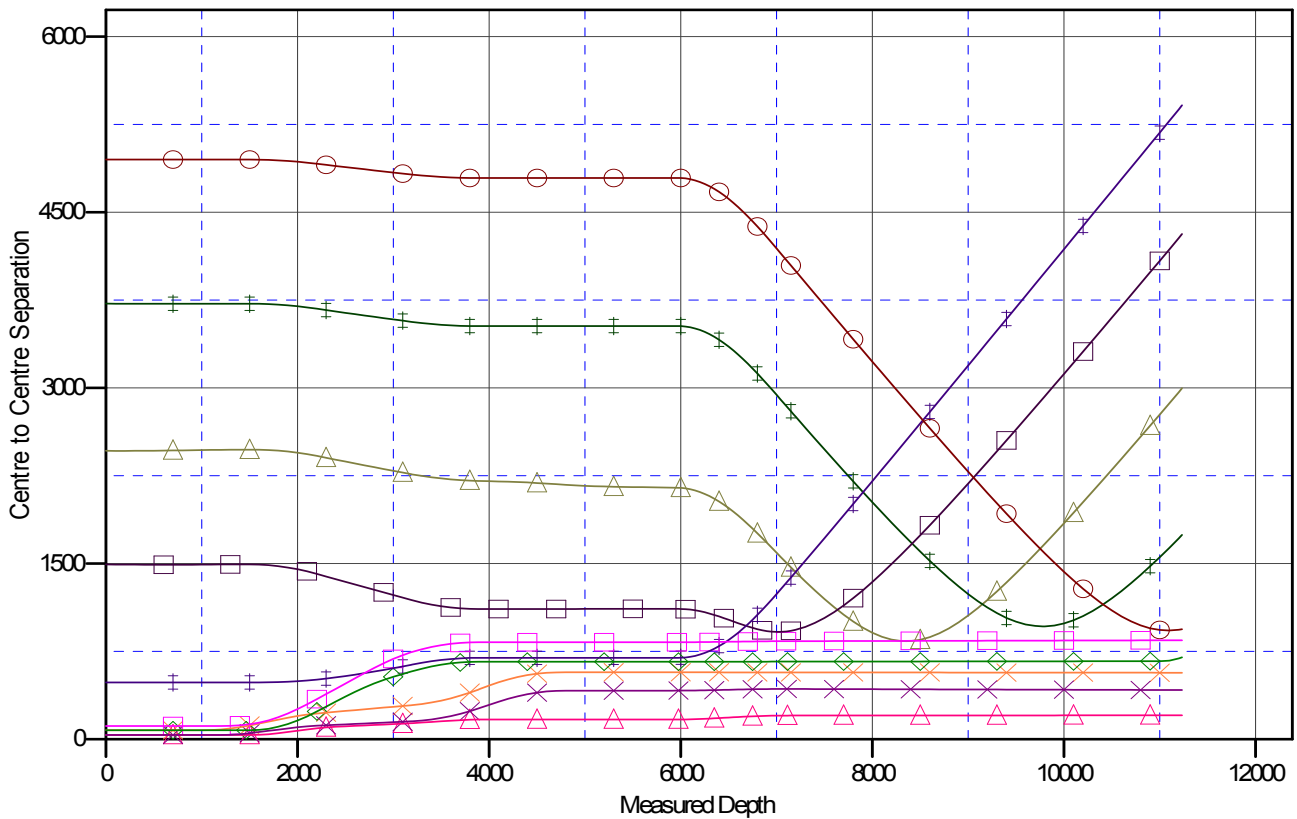
Anticollision Summary Report

Company:	Northern Region Drilling - Working	Local Co-ordinate Reference:	Well Wells Ranch AA35-64-1BHNC
Project:	Wattenberg Field	TVD Reference:	WELL @ 4796.0usft (Original Well Elev)
Reference Site:	AA (06N-63W)	MD Reference:	WELL @ 4796.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Wells Ranch AA35-64-1BHNC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	EDM Production
Reference Design:	APD - Rev 0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4796.0usft (Original Well Ele
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: Wells Ranch AA35-64-1BHNC
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.71°

Ladder Plot



LEGEND

INC, Original Drilling, APD - Rev0 V0	Wells Ranch USX AA35-16, Wellbore #1, Wellbore #1 - As Drilled V0	Wells Ranch AA35-63-1AHNA, Original Drilling, APD - Rev0 V0
15 Wellbore #1, Wellbore #1 - As Drilled V0	Wells Ranch 13-36, Wellbore #1, Wellbore #1 - As Drilled V0	Wells Ranch AA35-65-1AHNA, Original Drilling, APD - Rev0 V0
14 Wellbore #1, Wellbore #1 - As Drilled V0	Wells Ranch 14-35, Wellbore #1, Wellbore #1 - As Drilled V0	
AHNA, Original Drilling, APD - Rev0 V0	Wells Ranch AA35-65-1BHNC, Wellbore #1, APD - Rev0 V0	

Noble Energy Inc
Anticollision Summary Report

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Project:	Wattenberg Field	TVD Reference:	WELL @ 4796.0usft (Original Well Elev)
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Reference Well:	Wells Ranch AA35-64-1BHNC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	EDM Production
Reference Design:	APD - Rev 0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4796.0usft (Original Well Ele
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: Wells Ranch AA35-64-1BHNC
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.71°

