

# **Northern Region - DJ Basin**

**Wells Ranch**

**BB Section 06**

**SLW Ranch State BB06-662**

**Original Drilling**

**Plan 1**

## **Anticollision Summary Report**

**26 September, 2017**

**Noble Energy, Inc.**  
Anticollision Summary Report

<b>Company:</b>	Northern Region - DJ Basin	<b>Local Co-ordinate Reference:</b>	Well SLW Ranch State BB06-662
<b>Project:</b>	Wells Ranch	<b>TVD Reference:</b>	WELL @ 4639.0ft (Original Well Elev.)
<b>Reference Site:</b>	BB Section 06	<b>MD Reference:</b>	WELL @ 4639.0ft (Original Well Elev.)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	SLW Ranch State BB06-662	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	EDMP
<b>Reference Design:</b>	Plan 1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan 1		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	Stations	<b>Error Model:</b>	ISCWSA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum center-center distance of 10,000.0 ft	<b>Error Surface:</b>	Pedal Curve
<b>Warning Levels Evaluated at:</b>	2.00 Sigma	<b>Casing Method:</b>	Not applied

<b>Survey Tool Program</b>	<b>Date</b>	9/26/2017		
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	12,150.2	Plan 1 (Original Drilling)	2_MWD+IFR1+MS	A008Mb: IFR dec & multi-station analysis

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
B Section 01						
Lucci B01-69HNL - Original Drilling - Original Drilling - As	7,673.6	12,090.4	1,895.7	1,745.9	12.656	CC
Lucci B01-69HNL - Original Drilling - Original Drilling - As	11,230.7	15,648.0	1,929.5	1,662.8	7.235	ES
Lucci B01-69HNL - Original Drilling - Original Drilling - As	11,300.0	15,648.0	1,930.7	1,663.3	7.219	SF
Lucci B01-99HZ - Original Drilling - Original Drilling - As	6,157.9	10,536.0	1,798.4	1,731.1	26.740	CC, ES
Lucci B01-99HZ - Original Drilling - Original Drilling - As	6,300.0	10,555.9	1,814.9	1,745.9	26.295	SF
Lucci B03-69HNL - Original Drilling - Original Drilling - As	5,997.8	5,665.7	4,780.6	4,741.7	122.707	CC
Lucci B03-69HNL - Original Drilling - Original Drilling - As	6,000.0	5,667.0	4,780.6	4,741.7	122.666	ES
Lucci B03-69HNL - Original Drilling - Original Drilling - As	6,300.0	5,836.0	4,852.5	4,812.0	119.755	SF
Lucci BC B1-16 - Wellbore #1 - Wellbore #1	2,016.7	2,005.1	2,345.1	2,331.3	169.645	CC
Lucci BC B1-16 - Wellbore #1 - Wellbore #1	2,100.0	2,068.5	2,345.5	2,331.1	163.514	ES
Lucci BC B1-16 - Wellbore #1 - Wellbore #1	6,550.0	6,377.1	2,822.0	2,776.5	62.120	SF
SLW Ranch B01-62-1HN - Original Drilling - As Drilled	2,439.4	2,479.5	2,232.8	2,216.0	133.037	CC
SLW Ranch B01-62-1HN - Original Drilling - As Drilled	2,500.0	2,523.1	2,233.3	2,216.0	129.375	ES
SLW Ranch B01-62-1HN - Original Drilling - As Drilled	7,300.0	6,398.0	3,087.1	3,033.8	58.011	SF
SLW Ranch B01-63-1HN - Original Drilling - As Drilled	3,515.4	3,743.6	2,070.5	2,044.2	78.803	CC
SLW Ranch B01-63-1HN - Original Drilling - As Drilled	3,600.0	3,809.8	2,071.0	2,044.0	76.510	ES
SLW Ranch B01-63-1HN - Original Drilling - As Drilled	6,400.0	6,491.0	2,428.8	2,379.2	49.008	SF
SLW Ranch B01-64-1HN - Original Drilling - As Drilled	5,098.2	5,425.1	1,649.7	1,608.2	39.749	CC
SLW Ranch B01-64-1HN - Original Drilling - As Drilled	5,200.0	5,521.7	1,650.2	1,607.7	38.822	ES
SLW Ranch B01-64-1HN - Original Drilling - As Drilled	6,250.0	6,468.1	1,712.9	1,663.6	34.766	SF
SLW Ranch B01-66-1HN - Original Drilling - Original Drill	5,697.8	5,694.3	109.1	68.2	2.667	CC
SLW Ranch B01-66-1HN - Original Drilling - Original Drill	5,700.0	5,696.3	109.1	68.2	2.666	ES, SF
SLW Ranch B01-67-1HN - Original Drilling - As Drilled - S	6,461.7	6,354.3	228.9	184.8	5.197	CC, ES, SF
SLW Ranch B01-68-1HN - Original Drilling - Original Drill	6,551.2	6,429.1	876.7	832.0	19.606	CC, ES
SLW Ranch B01-68-1HN - Original Drilling - Original Drill	6,600.0	6,433.3	878.5	833.6	19.559	SF
SLW Ranch B01-69-1HN - Original Drilling - As Drilled	3,714.8	3,499.6	1,079.1	1,055.1	44.937	CC, ES
SLW Ranch B01-69-1HN - Original Drilling - As Drilled	6,550.0	6,162.0	1,218.9	1,175.2	27.852	SF
SLW Ranch B12-69-1HN - Wellbore #1 - Wellbore #1- As	849.2	1,480.2	2,281.7	2,276.1	403.561	CC
SLW Ranch B12-69-1HN - Wellbore #1 - Wellbore #1- As	1,200.0	1,817.9	2,282.0	2,273.9	281.412	ES
SLW Ranch B12-69-1HN - Wellbore #1 - Wellbore #1- As	6,000.0	6,020.0	3,284.6	3,242.0	77.199	SF

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

**Noble Energy, Inc.**  
Anticollision Summary Report

<b>Company:</b>	Northern Region - DJ Basin	<b>Local Co-ordinate Reference:</b>	Well SLW Ranch State BB06-662
<b>Project:</b>	Wells Ranch	<b>TVD Reference:</b>	WELL @ 4639.0ft (Original Well Elev.)
<b>Reference Site:</b>	BB Section 06	<b>MD Reference:</b>	WELL @ 4639.0ft (Original Well Elev.)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	SLW Ranch State BB06-662	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	EDMP
<b>Reference Design:</b>	Plan 1	<b>Offset TVD Reference:</b>	Offset Datum

**Summary**

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
<b>Offset Well - Wellbore - Design</b>						
BB Section 05						
UPV 05-03H3 - Original Drilling - Original Drilling - As Dri	12,150.2	6,620.2	1,995.9	1,924.6	27.966	CC, ES, SF
UPV 05-04H3 - Original Drilling - Original Drilling - As Dri	12,150.2	6,589.0	1,027.7	936.3	11.241	CC, ES, SF
UPV 05-05H3 - Original Drilling - Original Drilling - As Dri	12,150.2	6,551.2	525.8	444.7	6.480	CC, ES, SF
UPV 05-06H3 - Original Drilling - Original Drilling - As Dri	12,150.2	6,574.6	1,662.6	1,613.6	33.993	CC, ES, SF
Well Ranch AA32-757 - Wellbore #1 - Plan 1	12,150.2	6,250.0	2,082.4	2,020.9	33.887	CC, ES, SF
Wells Ranch 31-05 - Original Drilling - Original Drilling - A	12,150.2	6,586.9	3,330.0	3,272.7	58.127	CC, ES, SF
Wells Ranch 32-05 - Original Drilling - Original Drilling - A	12,150.2	6,555.3	2,976.0	2,928.9	63.218	CC, ES, SF
Wells Ranch 41-05 - Original Drilling - Original Drilling - A	12,150.2	6,539.1	4,432.1	4,380.1	85.297	CC, ES, SF
Wells Ranch 42-05 - Original Drilling - Original Drilling - A	12,150.2	6,535.6	4,235.0	4,188.0	90.135	CC, ES, SF
Wells Ranch AA32-718 - Wellbore #1 - Plan 1	12,150.2	6,100.0	4,414.1	4,364.4	88.830	CC, ES, SF
Wells Ranch AA32-725 - Wellbore #1 - Plan 1	12,150.2	6,300.0	4,078.6	4,027.9	80.523	CC, ES, SF
Wells Ranch AA32-731 - Wellbore #1 - Plan 1	12,150.2	6,450.0	3,625.5	3,573.2	69.251	CC, ES, SF
Wells Ranch AA32-738 - Wellbore #1 - Plan 1	12,150.2	6,650.0	3,231.7	3,176.9	58.983	CC, ES, SF
Wells Ranch AA32-744 - Wellbore #1 - Plan 1	12,150.2	6,122.4	2,695.6	2,639.6	48.111	CC, ES, SF
Wells Ranch AA32-750 - Wellbore #1 - Plan 1	12,150.2	6,250.0	2,431.1	2,373.6	42.286	CC, ES, SF
Wells Ranch AA32-763 - Wellbore #1 - Plan 1	12,150.2	6,475.7	1,639.2	1,574.8	25.462	CC, ES, SF
Wells Ranch AA32-770 - Wellbore #1 - Plan 1	12,150.2	6,270.4	1,348.4	1,270.1	17.230	CC, ES, SF
Wells Ranch AA32-776 - Wellbore #1 - Plan 1	12,150.2	6,325.5	1,157.1	1,069.6	13.216	CC, ES, SF
Wells Ranch AA32-783 - Wellbore #1 - Plan 1	12,150.2	6,284.5	1,043.6	951.3	11.305	CC, ES, SF
Wells Ranch AA32-790 - Wellbore #1 - Plan 1	11,841.1	6,367.5	979.4	888.7	10.804	CC, ES
Wells Ranch AA32-790 - Wellbore #1 - Plan 1	11,900.0	6,363.2	981.1	889.8	10.737	SF
Wells Ranch BB01-611 - Original Drilling - APD - Rev 2						Out of range
Wells Ranch BB01-611 - Original Drilling - Original Drillin						Out of range
Wells Ranch BB01-615 - Original Drilling - APD - Rev 2						Out of range
Wells Ranch BB01-615 - Original Drilling - Option 2						Out of range
Wells Ranch BB01-615 - Original Drilling - Original Drillin						Out of range
Wells Ranch BB01-624 - Original Drilling - APD - Rev 2						Out of range
Wells Ranch BB01-624 - Original Drilling - As Drilled - 1						Out of range
Wells Ranch BB01-624 - Original Drilling - New Plan						Out of range
Wells Ranch BB01-624 - Original Drilling - Original Drillin						Out of range
Wells Ranch BB01-624 - Original Drilling - Original Plan						Out of range
Wells Ranch BB01-624 - Original Drilling - ST01 - ST01 -						Out of range
Wells Ranch BB01-638 - Original Drilling - APD - Rev 2						Out of range
Wells Ranch BB01-638 - Original Drilling - Original Drillin						Out of range
Wells Ranch BB01-649 - Original Drilling - APD - Rev 2						Out of range
Wells Ranch BB01-649 - Original Drilling - Original Drillin						Out of range
Wells Ranch BB01-655 - Original Drilling - APD - Rev 2						Out of range
Wells Ranch BB01-655 - Original Drilling - Original Drillin						Out of range
Wells Ranch BB01-669 - Original Drilling - APD - Rev 2						Out of range
Wells Ranch BB01-669 - Original Drilling - Original Drillin						Out of range
Wells Ranch BB01-675 - Original Drilling - APD - Rev 2						Out of range
Wells Ranch BB01-675 - Original Drilling - Original Drillin						Out of range
Wells Ranch State BB01-690 - Original Drilling - APD - R						Out of range
Wells Ranch State BB01-690 - Original Drilling - Original						Out of range
Wells Ranch USX BB05-09 - Original Drilling - Original D	12,150.2	6,554.2	4,609.0	4,554.0	83.892	CC, ES, SF
Wells Ranch USX BB05-10 - Original Drilling - Original D	12,150.2	6,535.0	3,421.7	3,358.6	54.229	CC, ES, SF
Wells Ranch USX BB05-11 - Original Drilling - Original D	12,150.2	6,641.2	2,119.7	2,046.8	29.064	CC, ES, SF
Wells Ranch USX BB05-12 - Original Drilling - Original D	12,150.2	6,622.8	1,614.3	1,518.6	16.861	CC, ES, SF
Wells Ranch USX BB05-13 - Original Drilling - Original D	12,150.2	6,625.9	2,804.9	2,707.9	28.923	CC, ES, SF
Wells Ranch USX BB05-14 - Original Drilling - Original D	12,150.2	6,715.6	3,118.3	3,029.9	35.243	CC, ES, SF
Wells Ranch USX BB05-15 - Original Drilling - Original D	12,150.2	6,384.3	4,003.7	3,927.6	52.578	CC, ES, SF
Wells Ranch USX BB05-16 - Original Drilling - Original D	12,150.2	6,534.3	4,989.3	4,921.4	73.419	CC, ES, SF
Wells Ranch USX BB05-23 - Original Drilling - Original D	12,150.2	6,603.1	4,322.7	4,257.8	66.580	CC, 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

<b>Company:</b>	Northern Region - DJ Basin	<b>Local Co-ordinate Reference:</b>	Well SLW Ranch State BB06-662
<b>Project:</b>	Wells Ranch	<b>TVD Reference:</b>	WELL @ 4639.0ft (Original Well Elev.)
<b>Reference Site:</b>	BB Section 06	<b>MD Reference:</b>	WELL @ 4639.0ft (Original Well Elev.)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	SLW Ranch State BB06-662	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	EDMP
<b>Reference Design:</b>	Plan 1	<b>Offset TVD Reference:</b>	Offset Datum

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
BB Section 05						
Wells Ranch USX BB05-25 - Original Drilling - Original D	12,150.2	6,591.3	2,242.6	2,149.6	24.121	CC, ES, SF
BB Section 06						
Skurich-Roth 21-06 - Original Drilling - Original Drilling - A	8,542.5	6,502.9	1,123.8	1,066.5	19.635	CC, ES
Skurich-Roth 21-06 - Original Drilling - Original Drilling - A	8,700.0	6,503.7	1,134.7	1,076.1	19.353	SF
Skurich-Roth 23-06 - Original Drilling - Original Drilling - A	8,586.8	6,480.9	1,443.2	1,385.8	25.116	CC
Skurich-Roth 23-06 - Original Drilling - Original Drilling - A	8,600.0	6,481.5	1,443.3	1,385.7	25.068	ES
Skurich-Roth 23-06 - Original Drilling - Original Drilling - A	8,800.0	6,490.9	1,458.9	1,399.8	24.685	SF
Skurich-Roth 24-06 - Original Drilling - Original Drilling - A	0.0	4.3	2,709.7			
Skurich-Roth 24-06 - Original Drilling - Original Drilling - A	8,600.0	6,539.9	2,751.8	2,693.9	47.524	ES
Skurich-Roth 24-06 - Original Drilling - Original Drilling - A	9,400.0	6,550.1	2,876.8	2,812.7	44.886	SF
Skurich-Roth 33-06 - Original Drilling - Original Drilling - A	9,835.6	6,516.4	1,489.4	1,419.2	21.214	CC, ES
Skurich-Roth 33-06 - Original Drilling - Original Drilling - A	10,000.0	6,513.0	1,498.5	1,426.9	20.936	SF
Skurich-Roth 42-06 - Original Drilling - Original Drilling - A	11,095.4	6,554.1	176.6	92.2	2.093	CC, ES, SF
Skurich-Roth 6D - Original Drilling - Original Drilling - As	8,091.6	6,492.8	496.3	442.8	9.289	CC
Skurich-Roth 6D - Original Drilling - Original Drilling - As	8,100.0	6,492.6	496.3	442.8	9.276	ES, SF
Skurich-Roth 11-06 - Original Drilling - Original Drilling -	7,266.0	6,507.7	1,161.4	1,102.2	19.614	CC, ES
Skurich-Roth 11-06 - Original Drilling - Original Drilling -	7,400.0	6,507.7	1,169.2	1,109.3	19.526	SF
Skurich-Roth 12-06 - Original Drilling - Original Drilling -	7,349.6	6,503.4	106.8	58.3	2.200	CC, ES, SF
Skurich-Roth 13-06 - Original Drilling - Original Drilling -	2,118.0	2,096.0	917.9	903.4	63.233	CC
Skurich-Roth 13-06 - Original Drilling - Original Drilling -	2,200.0	2,172.1	918.2	903.1	60.909	ES
Skurich-Roth 13-06 - Original Drilling - Original Drilling -	7,400.0	6,513.0	1,444.2	1,393.6	28.568	SF
Skurich-Roth 14-06 - Original Drilling - Original Drilling -	2,418.3	2,415.2	2,183.2	2,166.5	130.756	CC, ES
Skurich-Roth 14-06 - Original Drilling - Original Drilling -	8,300.0	6,531.2	2,936.5	2,882.5	54.403	SF
Skurich-Roth 22-06 - Original Drilling - Original Drilling -	8,534.4	6,535.8	378.1	320.7	6.589	CC, ES, SF
Skurich-Roth 31-06 - Original Drilling - Original Drilling -	9,762.4	6,615.3	1,151.2	1,081.8	16.579	CC, ES
Skurich-Roth 31-06 - Original Drilling - Original Drilling -	9,900.0	6,614.6	1,159.4	1,088.6	16.373	SF
Skurich-Roth 34-06 - Original Drilling - Original Drilling -	9,841.5	6,494.9	2,755.8	2,685.6	39.270	CC, ES
Skurich-Roth 34-06 - Original Drilling - Original Drilling -	10,500.0	6,497.4	2,833.4	2,757.5	37.353	SF
Skurich-Roth 41-06 - Original Drilling - Original Drilling -	11,114.6	6,568.1	1,170.6	1,086.0	13.832	CC, ES
Skurich-Roth 41-06 - Original Drilling - Original Drilling -	11,200.0	6,571.5	1,173.7	1,088.2	13.715	SF
Skurich-Roth 43-06 - Original Drilling - Original Drilling -	11,007.8	6,526.4	1,349.3	1,266.1	16.206	CC, ES
Skurich-Roth 43-06 - Original Drilling - Original Drilling -	11,100.0	6,528.1	1,352.5	1,268.4	16.082	SF
Skurich-Roth 44-06 - Original Drilling - Original Drilling -	11,152.9	6,576.1	2,648.3	2,563.1	31.088	CC
Skurich-Roth 44-06 - Original Drilling - Original Drilling -	11,200.0	6,576.3	2,648.7	2,563.0	30.910	ES
Skurich-Roth 44-06 - Original Drilling - Original Drilling -	11,700.0	6,577.7	2,704.2	2,614.2	30.065	SF
Skurich-Roth 6A - Original Drilling - Original Drilling - As	10,556.8	6,534.3	2,052.8	1,974.6	26.243	CC, ES
Skurich-Roth 6A - Original Drilling - Original Drilling - As	10,900.0	6,534.1	2,081.3	2,000.1	25.643	SF
Skurich-Roth 32-06 - Original Drilling - Original Drilling -	9,802.6	6,538.0	110.0	-68.1	0.618	Level 1, CC, ES, SF
SLW Ranch State BB06-619 - Original Drilling - Prelim -	2,000.0	2,000.0	91.1	77.2	6.565	CC, ES
SLW Ranch State BB06-619 - Original Drilling - Prelim -	2,100.0	2,097.0	92.7	78.2	6.369	SF
SLW Ranch State BB06-631 - Original Drilling - Plan 1	2,200.0	2,200.0	65.6	50.3	4.284	CC, ES
SLW Ranch State BB06-631 - Original Drilling - Plan 1	2,300.0	2,297.9	67.1	51.1	4.198	SF
SLW Ranch State BB06-642 - Original Drilling - Plan 1	2,400.0	2,400.0	43.7	27.0	2.611	CC, ES, SF
SLW Ranch State BB06-652 - Original Drilling - Plan 1	2,400.0	2,400.0	21.9	5.1	1.306	Level 3, CC, ES, SF
SLW Ranch State BB06-672 - Original Drilling - Plan 1	2,200.0	2,201.0	21.9	6.5	1.428	Level 3, CC, ES, SF
SLW Ranch State BB06-682 - SLW Ranch State BB06-6	2,000.0	2,000.0	47.4	33.5	3.414	CC, ES
SLW Ranch State BB06-682 - SLW Ranch State BB06-6	2,100.0	2,098.4	49.0	34.4	3.360	SF

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

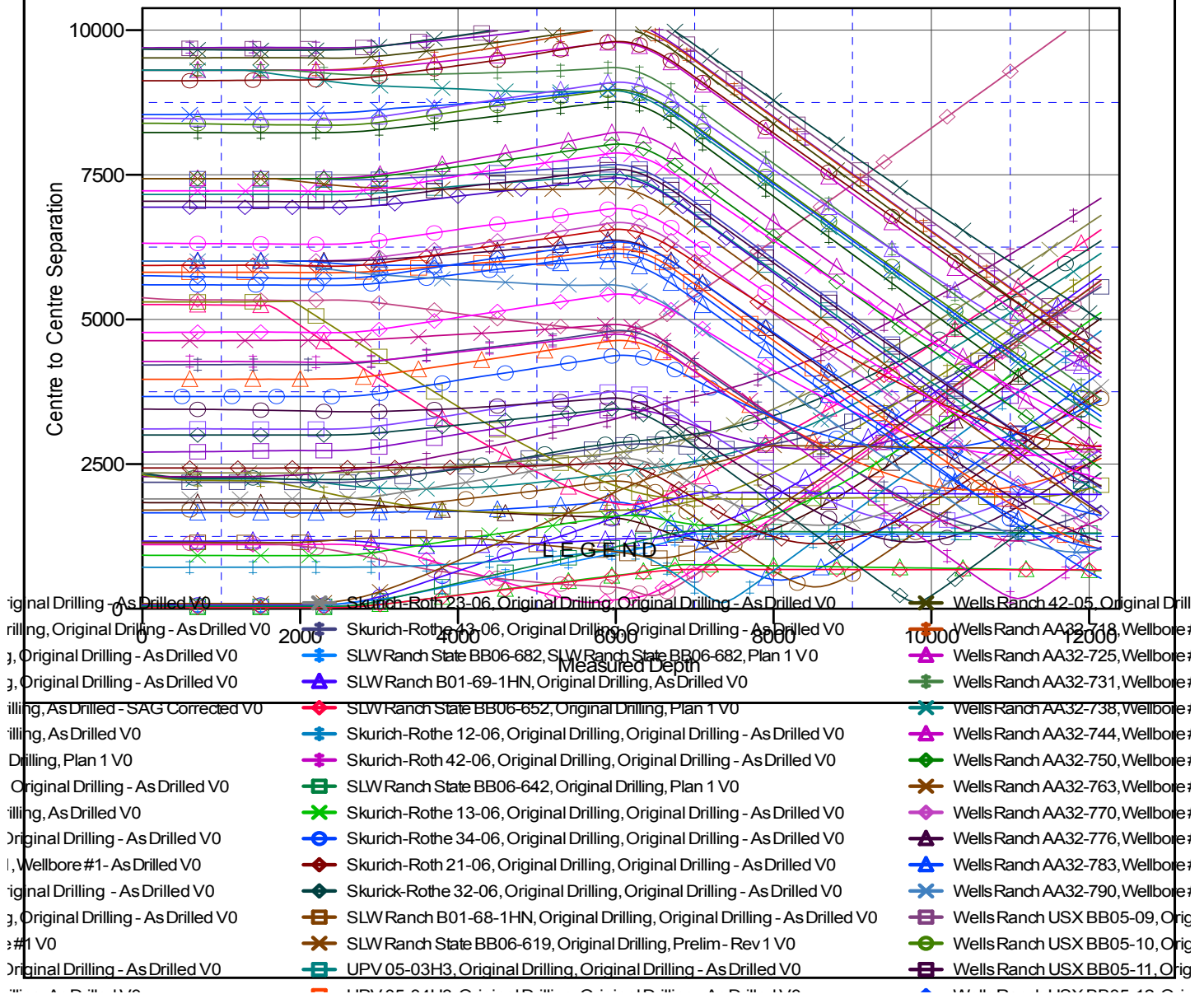
**Noble Energy, Inc.**  
**Anticollision Summary Report**

<b>Company:</b>	Northern Region - DJ Basin	<b>Local Co-ordinate Reference:</b>	Well SLW Ranch State BB06-662
<b>Project:</b>	Wells Ranch	<b>TVD Reference:</b>	WELL @ 4639.0ft (Original Well Elev.)
<b>Reference Site:</b>	BB Section 06	<b>MD Reference:</b>	WELL @ 4639.0ft (Original Well Elev.)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	SLW Ranch State BB06-662	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	EDMP
<b>Reference Design:</b>	Plan 1	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 4639.0ft (Original Well Elev.)  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.5000000

Coordinates are relative to: SLW Ranch State BB06-662  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.65°

## Ladder Plot



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



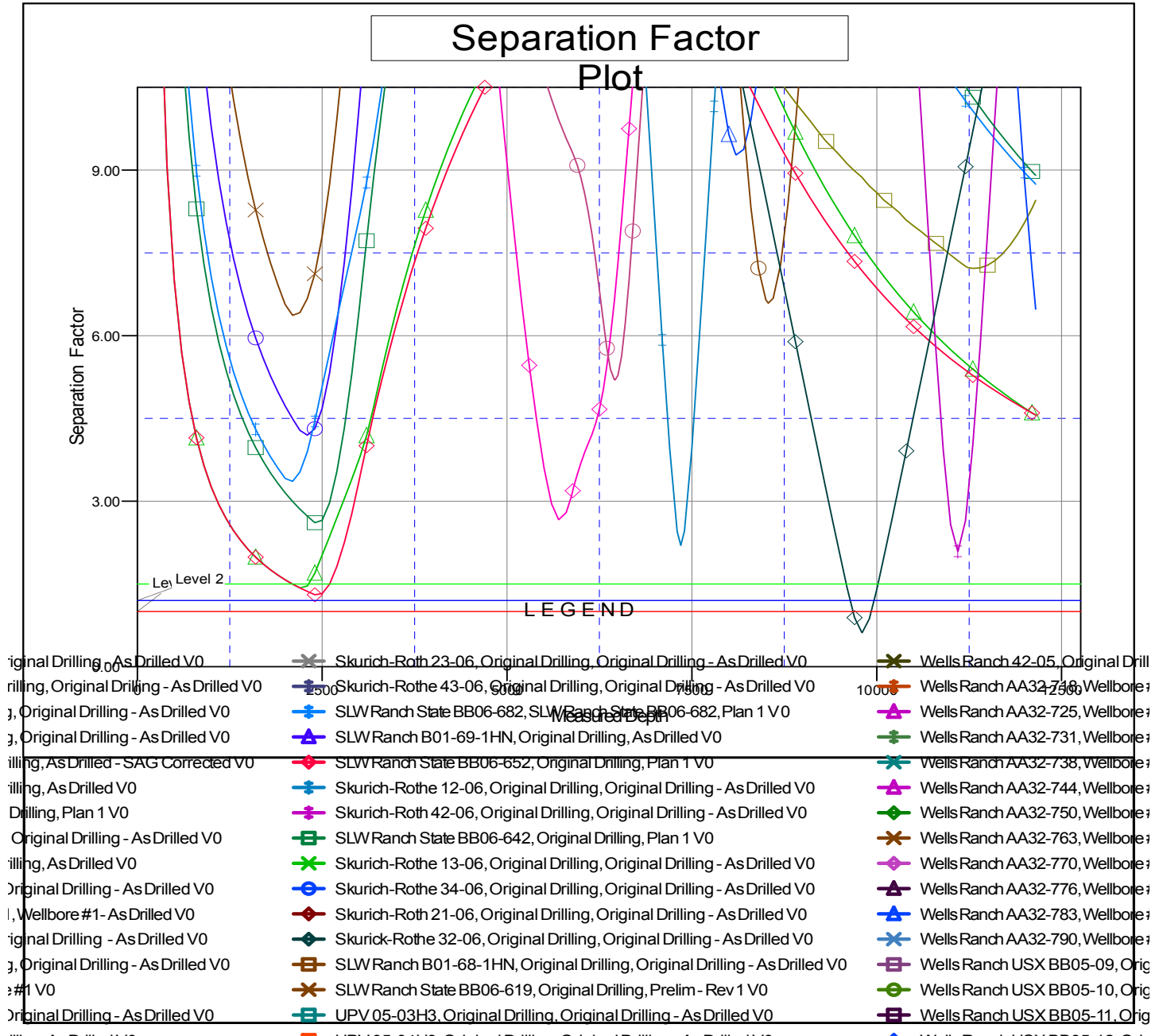
# Noble Energy, Inc.

## Anticollision Summary Report

<b>Company:</b>	Northern Region - DJ Basin	<b>Local Co-ordinate Reference:</b>	Well SLW Ranch State BB06-662
<b>Project:</b>	Wells Ranch	<b>TVD Reference:</b>	WELL @ 4639.0ft (Original Well Elev.)
<b>Reference Site:</b>	BB Section 06	<b>MD Reference:</b>	WELL @ 4639.0ft (Original Well Elev.)
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	SLW Ranch State BB06-662	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original Drilling	<b>Database:</b>	EDMP
<b>Reference Design:</b>	Plan 1	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 4639.0ft (Original Well Elev.)  
 Offset Depths are relative to Offset Datum  
 Central Meridian is -105.5000000

Coordinates are relative to: SLW Ranch State BB06-662  
 Coordinate System is US State Plane 1983, Colorado Northern Zone  
 Grid Convergence at Surface is: 0.65°



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