

Northern Region - DJ Basin

Wells Ranch

BB Section 06

SLW Ranch State BB06-672

Original Drilling

Plan 1

Anticollision Summary Report

26 September, 2017

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well SLW Ranch State BB06-672
Project:	Wells Ranch	TVD Reference:	WELL @ 4640.0ft (Original Well Elev.)
Reference Site:	BB Section 06	MD Reference:	WELL @ 4640.0ft (Original Well Elev.)
Site Error:	0.0 ft	North Reference:	Grid
Reference Well:	SLW Ranch State BB06-672	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	EDMP
Reference Design:	Plan 1	Offset TVD Reference:	Offset Datum

Reference	Plan 1		
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 ft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	9/26/2017		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	12,492.6	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	7,236.9	11,314.1	1,147.3	1,016.5	8.773	CC
Lucci B01-69HNL - Original Drilling - Original Drilling - As	11,600.0	15,648.0	1,265.1	996.5	4.710	ES, SF
Lucci B01-99HZ - Original Drilling - Original Drilling - As	6,280.2	10,005.0	2,187.7	2,123.1	33.816	CC, ES
Lucci B01-99HZ - Original Drilling - Original Drilling - As	6,450.0	9,967.9	2,209.0	2,143.2	33.598	SF
Lucci B03-69HNL - Original Drilling - Original Drilling - As	6,284.5	5,803.4	4,546.7	4,505.5	110.240	CC, ES
Lucci B03-69HNL - Original Drilling - Original Drilling - As	6,500.0	5,910.0	4,583.9	4,541.5	108.059	SF
Lucci BC B1-16 - Wellbore #1 - Wellbore #1	2,017.3	2,004.8	2,365.4	2,351.5	171.095	CC
Lucci BC B1-16 - Wellbore #1 - Wellbore #1	2,100.0	2,067.7	2,365.7	2,351.3	164.954	ES
Lucci BC B1-16 - Wellbore #1 - Wellbore #1	6,850.0	6,510.2	3,536.3	3,488.7	74.282	SF
SLW Ranch B01-62-1HN - Original Drilling - As Drilled	2,104.0	2,121.6	2,253.7	2,240.1	166.519	CC
SLW Ranch B01-62-1HN - Original Drilling - As Drilled	2,300.0	2,360.1	2,254.7	2,239.2	144.787	ES
SLW Ranch B01-62-1HN - Original Drilling - As Drilled	8,300.0	6,398.0	4,001.0	3,943.3	69.340	SF
SLW Ranch B01-63-1HN - Original Drilling - As Drilled	2,838.1	3,154.9	2,149.3	2,129.0	106.221	CC, ES
SLW Ranch B01-63-1HN - Original Drilling - As Drilled	6,350.0	6,461.3	3,049.7	2,999.6	60.914	SF
SLW Ranch B01-64-1HN - Original Drilling - As Drilled	3,494.5	4,030.0	1,898.6	1,871.8	71.000	CC
SLW Ranch B01-64-1HN - Original Drilling - As Drilled	3,500.0	4,030.0	1,898.6	1,871.8	70.907	ES
SLW Ranch B01-64-1HN - Original Drilling - As Drilled	6,157.4	6,399.0	2,309.3	2,259.5	46.359	SF
SLW Ranch B01-66-1HN - Original Drilling - Original Drill	4,894.3	4,796.0	45.0	10.8	1.317	Level 3, CC, ES, SF
SLW Ranch B01-67-1HN - Original Drilling - As Drilled - S	5,013.4	4,896.5	93.9	58.9	2.684	CC, ES, SF
SLW Ranch B01-68-1HN - Original Drilling - Original Drill	6,751.0	6,510.4	156.5	109.9	3.360	CC, ES, SF
SLW Ranch B01-69-1HN - Original Drilling - As Drilled	6,700.0	6,303.0	560.4	515.1	12.369	SF
SLW Ranch B01-69-1HN - Original Drilling - As Drilled	6,718.0	6,303.0	560.1	515.0	12.400	CC, ES
SLW Ranch B12-69-1HN - Wellbore #1 - Wellbore #1- As	852.0	1,482.1	2,299.6	2,293.9	405.522	CC
SLW Ranch B12-69-1HN - Wellbore #1 - Wellbore #1- As	1,200.0	1,817.0	2,299.8	2,291.7	283.713	ES
SLW Ranch B12-69-1HN - Wellbore #1 - Wellbore #1- As	6,250.0	6,250.0	3,930.8	3,886.5	88.675	SF

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

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Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well SLW Ranch State BB06-672
Project:	Wells Ranch	TVD Reference:	WELL @ 4640.0ft (Original Well Elev.)
Reference Site:	BB Section 06	MD Reference:	WELL @ 4640.0ft (Original Well Elev.)
Site Error:	0.0 ft	North Reference:	Grid
Reference Well:	SLW Ranch State BB06-672	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	EDMP
Reference Design:	Plan 1	Offset TVD Reference:	Offset Datum

Summary						
Site Name Offset Well - Wellbore - Design	Reference	Offset	Distance		Separation Factor	Warning
	Measured	Measured	Between	Between		
	Depth	Depth	Centres	Ellipses		
(ft)						
BB Section 03						
Wells Ranch 12-03 - Original Drilling - Original Drilling - A						Out of range
Wells Ranch State BB05-613 - Original Drilling - APD - R	12,492.6	17,078.8	3,861.4	3,786.4	51.476	CC, ES, SF
Wells Ranch State BB05-617 - Original Drilling - APD - R	12,492.6	16,994.9	3,586.6	3,511.8	47.924	CC, ES, SF
Wells Ranch State BB05-625 - Original Drilling - APD - R	12,492.6	16,856.4	3,035.4	2,960.4	40.495	CC, ES, SF
Wells Ranch State BB05-630 - Original Drilling - APD - R	12,492.6	17,019.9	2,769.4	2,694.8	37.098	CC, ES, SF
Wells Ranch State BB05-635 - Original Drilling - APD - R	12,492.6	17,067.3	2,410.5	2,335.6	32.213	CC, ES, SF
Wells Ranch State BB05-644 - Original Drilling - APD - R	12,492.6	16,979.6	1,787.5	1,713.3	24.094	CC, ES, SF
Wells Ranch State BB05-650 - Original Drilling - APD - R	12,492.6	17,102.8	1,452.8	1,378.4	19.518	CC, ES, SF
Wells Ranch State BB05-656 - Original Drilling - APD - R	12,492.6	16,599.7	1,107.5	908.4	5.563	CC, ES, SF
Wells Ranch State BB05-665 - Original Drilling - APD - R	12,492.6	17,021.2	455.7	389.3	6.856	CC, ES, SF
Wells Ranch State BB05-669 - Original Drilling - APD - R	12,492.6	17,137.3	172.6	128.8	3.941	CC, ES, SF
Wells Ranch State BB05-678 - Original Drilling - APD - R	12,492.6	17,110.2	321.9	255.1	4.819	CC, ES, SF
Wells Ranch State BB05-685 - Original Drilling - APD - R	12,492.6	16,738.0	874.2	799.8	11.744	CC, ES, SF
Wells Ranch State BB05-690 - Original Drilling - APD - R	12,492.6	17,199.9	1,191.7	987.7	5.843	CC, ES, SF
Wells Ranch USX BB03-04 - Original Drilling - Original D						Out of range
Wells Ranch USX BB03-12 - Original Drilling - Original D						Out of range
Wells Ranch USX BB03-13 - Original Drilling - Original D						Out of range
Wells Ranch USX BB03-25 PA - Original Drilling - Gyro S						Out of range

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Site Error:	0.0 ft	North Reference:	Grid
Reference Well:	SLW Ranch State BB06-672	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	EDMP
Reference Design:	Plan 1	Offset TVD Reference:	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						
UPV 05-03H3 - Original Drilling - Original Drilling - As Dri	12,492.6	6,748.8	1,668.8	1,610.5	28.628	CC, ES, SF
UPV 05-04H3 - Original Drilling - Original Drilling - As Dri	12,492.6	6,684.1	505.3	434.1	7.098	CC, ES, SF
UPV 05-05H3 - Original Drilling - Original Drilling - As Dri	12,492.6	6,678.4	1,100.8	1,005.5	11.546	CC, ES, SF
UPV 05-06H3 - Original Drilling - Original Drilling - As Dri	12,492.6	6,733.0	1,844.8	1,778.5	27.854	CC, ES, SF
Well Ranch AA32-757 - Wellbore #1 - Plan 1	12,492.6	6,450.0	1,888.3	1,835.7	35.905	CC, ES, SF
Wells Ranch 31-05 - Original Drilling - Original Drilling - A	12,492.6	6,691.8	3,146.8	3,095.3	61.101	CC, ES, SF
Wells Ranch 32-05 - Original Drilling - Original Drilling - A	12,492.6	6,687.1	3,063.0	3,008.0	55.686	CC, ES, SF
Wells Ranch 41-05 - Original Drilling - Original Drilling - A	12,492.6	6,623.1	4,311.1	4,261.6	87.000	CC, ES, SF
Wells Ranch 42-05 - Original Drilling - Original Drilling - A	12,492.6	6,638.2	4,301.6	4,249.1	81.983	CC, ES, SF
Wells Ranch AA32-718 - Wellbore #1 - Plan 1	12,492.6	6,150.0	4,356.8	4,308.1	89.452	CC, ES, SF
Wells Ranch AA32-725 - Wellbore #1 - Plan 1	12,492.6	6,434.3	3,991.2	3,942.2	81.404	CC, ES, SF
Wells Ranch AA32-731 - Wellbore #1 - Plan 1	12,492.6	6,650.0	3,509.5	3,459.3	69.810	CC, ES, SF
Wells Ranch AA32-738 - Wellbore #1 - Plan 1	12,492.6	6,832.5	3,088.7	3,037.1	59.939	CC, ES, SF
Wells Ranch AA32-744 - Wellbore #1 - Plan 1	12,492.6	6,234.0	2,586.9	2,536.6	51.398	CC, ES, SF
Wells Ranch AA32-750 - Wellbore #1 - Plan 1	12,492.6	6,400.0	2,291.7	2,241.3	45.425	CC, ES, SF
Wells Ranch AA32-763 - Wellbore #1 - Plan 1	12,492.6	6,700.0	1,425.2	1,372.2	26.891	CC, ES, SF
Wells Ranch AA32-770 - Wellbore #1 - Plan 1	12,492.6	6,437.1	1,036.5	974.9	16.842	CC, ES, SF
Wells Ranch AA32-776 - Wellbore #1 - Plan 1	12,492.6	6,482.9	712.0	638.2	9.646	CC, ES, SF
Wells Ranch AA32-783 - Wellbore #1 - Plan 1	12,492.6	6,470.9	539.3	452.2	6.186	CC, ES, SF
Wells Ranch AA32-790 - Wellbore #1 - Plan 1	12,141.6	6,570.7	458.3	372.3	5.328	CC, ES
Wells Ranch AA32-790 - Wellbore #1 - Plan 1	12,200.0	6,565.1	462.0	375.2	5.324	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	12,492.6	6,675.2	4,833.9	4,770.9	76.771	CC, ES, SF
Wells Ranch USX BB05-10 - Original Drilling - Original D	12,492.6	6,634.4	3,758.2	3,685.7	51.864	CC, ES, SF
Wells Ranch USX BB05-11 - Original Drilling - Original D	12,492.6	6,748.1	2,561.4	2,477.6	30.579	CC, ES, SF
Wells Ranch USX BB05-12 - Original Drilling - Original D	12,492.6	6,780.4	2,247.0	2,148.6	22.843	CC, ES, SF
Wells Ranch USX BB05-13 - Original Drilling - Original D	12,492.6	6,769.5	3,451.0	3,352.3	34.947	CC, ES, SF
Wells Ranch USX BB05-14 - Original Drilling - Original D	12,492.6	6,819.7	3,684.1	3,591.0	39.607	CC, ES, SF
Wells Ranch USX BB05-15 - Original Drilling - Original D	12,492.6	6,614.8	4,474.5	4,391.5	53.941	CC, ES, SF
Wells Ranch USX BB05-16 - Original Drilling - Original D	12,492.6	6,657.0	5,362.9	5,288.2	71.754	CC, ES, SF
Wells Ranch USX BB05-23 - Original Drilling - Original D	12,492.6	6,702.5	4,663.2	4,590.5	64.105	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

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well SLW Ranch State BB06-672
Project:	Wells Ranch	TVD Reference:	WELL @ 4640.0ft (Original Well Elev.)
Reference Site:	BB Section 06	MD Reference:	WELL @ 4640.0ft (Original Well Elev.)
Site Error:	0.0 ft	North Reference:	Grid
Reference Well:	SLW Ranch State BB06-672	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	EDMP
Reference Design:	Plan 1	Offset TVD Reference:	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	12,492.6	6,772.5	2,855.4	2,758.7	29.534	CC, ES, SF

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Reference Site:	BB Section 06	MD Reference:	WELL @ 4640.0ft (Original Well Elev.)
Site Error:	0.0 ft	North Reference:	Grid
Reference Well:	SLW Ranch State BB06-672	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	EDMP
Reference Design:	Plan 1	Offset TVD Reference:	Offset Datum

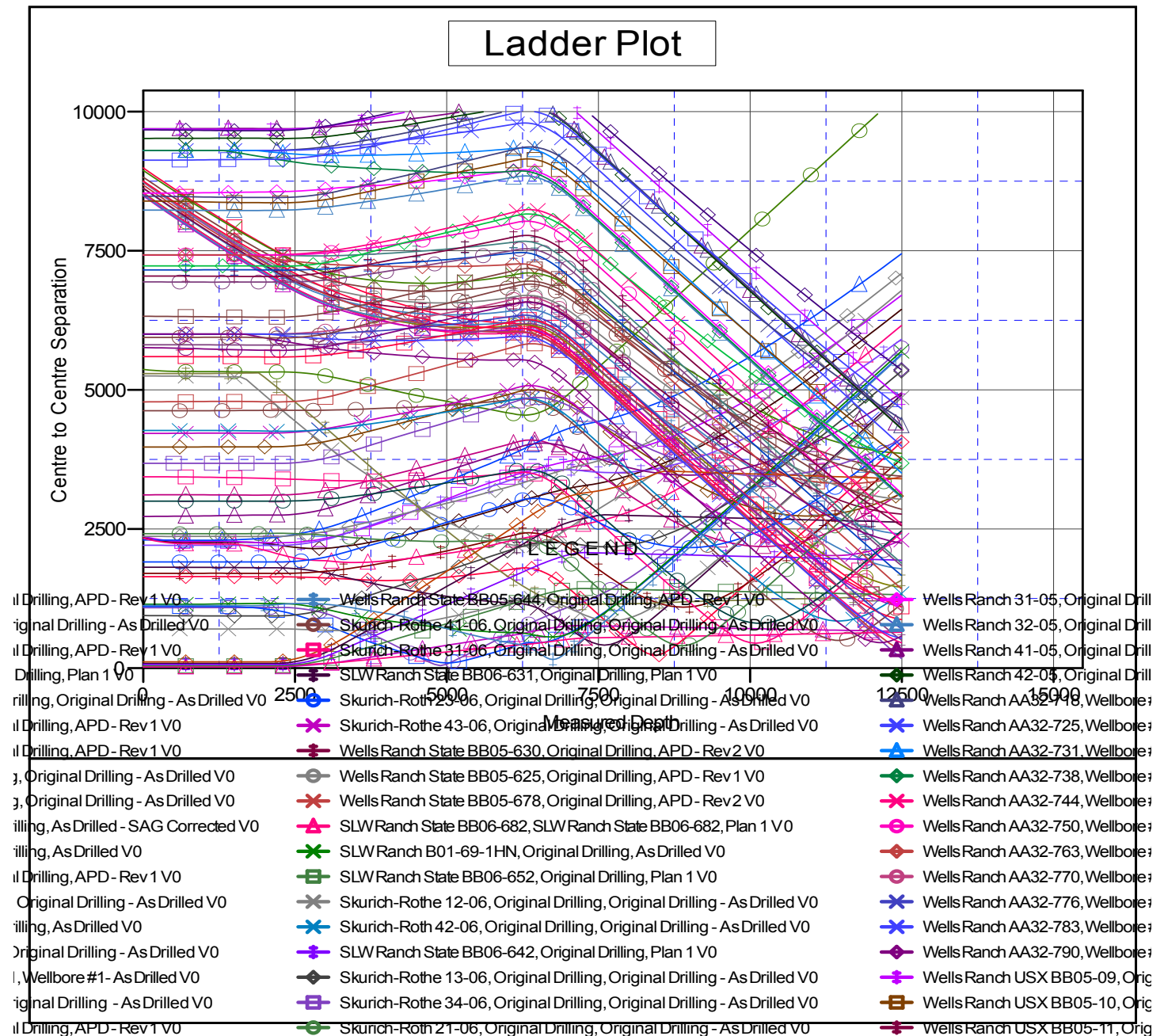
Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
BB Section 06						
Skurich-Roth 21-06 - Original Drilling - Original Drilling - A	8,876.1	6,634.1	402.2	343.2	6.808	CC, ES
Skurich-Roth 21-06 - Original Drilling - Original Drilling - A	8,900.0	6,634.0	403.0	343.6	6.785	SF
Skurich-Roth 23-06 - Original Drilling - Original Drilling - A	2,219.0	2,223.1	1,908.0	1,892.7	124.621	CC, ES
Skurich-Roth 23-06 - Original Drilling - Original Drilling - A	9,500.0	6,615.6	2,228.1	2,164.5	35.077	SF
Skurich-Roth 24-06 - Original Drilling - Original Drilling - A	0.0	3.4	2,726.6			
Skurich-Roth 24-06 - Original Drilling - Original Drilling - A	10,200.0	6,700.3	3,680.9	3,611.3	52.918	SF
Skurich-Roth 24-06 - Original Drilling - Original Drilling - A	10,217.9	6,618.4	2,186.0	2,113.8	30.277	CC, ES
Skurich-Roth 33-06 - Original Drilling - Original Drilling - A	10,600.0	6,607.4	2,219.1	2,143.9	29.536	SF
Skurich-Roth 42-06 - Original Drilling - Original Drilling - A	11,456.8	6,677.5	847.4	761.2	9.829	CC, ES
Skurich-Roth 42-06 - Original Drilling - Original Drilling - A	11,500.0	6,678.4	848.5	762.0	9.810	SF
Skurich-Roth 6D - Original Drilling - Original Drilling - As	8,436.0	6,636.2	230.9	175.2	4.150	CC, ES, SF
Skurich-Roth 11-06 - Original Drilling - Original Drilling -	7,599.0	6,633.6	415.0	352.5	6.645	CC
Skurich-Roth 11-06 - Original Drilling - Original Drilling -	7,600.0	6,633.6	415.0	352.5	6.645	ES, SF
Skurich-Roth 12-06 - Original Drilling - Original Drilling -	3,280.5	3,231.3	674.9	652.3	29.865	CC
Skurich-Roth 12-06 - Original Drilling - Original Drilling -	3,300.0	3,249.2	674.9	652.2	29.693	ES
Skurich-Roth 12-06 - Original Drilling - Original Drilling -	7,800.0	6,637.1	855.2	804.0	16.708	SF
Skurich-Roth 13-06 - Original Drilling - Original Drilling -	2,121.6	2,098.6	937.5	923.0	64.487	CC
Skurich-Roth 13-06 - Original Drilling - Original Drilling -	2,200.0	2,171.1	937.8	922.7	62.226	ES
Skurich-Roth 13-06 - Original Drilling - Original Drilling -	8,000.0	6,645.3	2,212.8	2,158.2	40.549	SF
Skurich-Roth 14-06 - Original Drilling - Original Drilling -	2,210.5	2,202.4	2,205.2	2,190.0	144.994	CC, ES
Skurich-Roth 14-06 - Original Drilling - Original Drilling -	9,100.0	6,715.9	3,768.1	3,708.7	63.529	SF
Skurich-Roth 22-06 - Original Drilling - Original Drilling -	8,896.4	6,686.1	1,096.2	1,036.5	18.349	CC
Skurich-Roth 22-06 - Original Drilling - Original Drilling -	8,900.0	6,686.1	1,096.2	1,036.4	18.341	ES
Skurich-Roth 22-06 - Original Drilling - Original Drilling -	9,000.0	6,685.1	1,101.1	1,040.7	18.242	SF
Skurich-Roth 31-06 - Original Drilling - Original Drilling -	10,094.7	6,685.7	448.3	377.5	6.326	CC
Skurich-Roth 31-06 - Original Drilling - Original Drilling -	10,100.0	6,685.6	448.4	377.4	6.319	ES, SF
Skurich-Roth 34-06 - Original Drilling - Original Drilling -	10,252.0	6,636.3	3,451.4	3,378.7	47.462	CC
Skurich-Roth 34-06 - Original Drilling - Original Drilling -	10,300.0	6,636.3	3,451.8	3,378.6	47.162	ES
Skurich-Roth 34-06 - Original Drilling - Original Drilling -	11,300.0	6,637.2	3,607.0	3,525.8	44.410	SF
Skurich-Roth 41-06 - Original Drilling - Original Drilling -	11,451.4	6,686.2	499.1	413.0	5.795	CC, ES
Skurich-Roth 41-06 - Original Drilling - Original Drilling -	11,500.0	6,688.4	501.5	414.8	5.784	SF
Skurich-Roth 43-06 - Original Drilling - Original Drilling -	11,392.1	6,651.3	2,022.7	1,937.3	23.701	CC
Skurich-Roth 43-06 - Original Drilling - Original Drilling -	11,400.0	6,651.4	2,022.7	1,937.3	23.680	ES
Skurich-Roth 43-06 - Original Drilling - Original Drilling -	11,700.0	6,656.4	2,046.0	1,958.2	23.306	SF
Skurich-Roth 44-06 - Original Drilling - Original Drilling -	11,561.0	6,715.4	3,315.2	3,227.5	37.795	CC
Skurich-Roth 44-06 - Original Drilling - Original Drilling -	11,600.0	6,715.4	3,315.4	3,227.3	37.624	ES
Skurich-Roth 44-06 - Original Drilling - Original Drilling -	12,300.0	6,714.6	3,396.6	3,302.6	36.132	SF
Skurich-Roth 6A - Original Drilling - Original Drilling - As	10,952.7	6,660.5	2,733.5	2,653.0	33.961	CC
Skurich-Roth 6A - Original Drilling - Original Drilling - As	11,000.0	6,660.5	2,733.9	2,652.9	33.770	ES
Skurich-Roth 6A - Original Drilling - Original Drilling - As	11,500.0	6,660.9	2,787.7	2,702.7	32.790	SF
Skurich-Roth 32-06 - Original Drilling - Original Drilling -	10,160.2	6,668.0	805.3	623.1	4.420	CC, ES
Skurich-Roth 32-06 - Original Drilling - Original Drilling -	10,200.0	6,668.0	806.3	623.8	4.420	SF
SLW Ranch State BB06-619 - Original Drilling - Prelim -	2,000.0	1,999.0	112.9	99.1	8.143	CC, ES
SLW Ranch State BB06-619 - Original Drilling - Prelim -	2,200.0	2,191.4	119.4	104.1	7.851	SF
SLW Ranch State BB06-631 - Original Drilling - Plan 1	2,200.0	2,199.0	87.4	72.1	5.713	CC, ES
SLW Ranch State BB06-631 - Original Drilling - Plan 1	2,300.0	2,296.2	90.5	74.5	5.661	SF
SLW Ranch State BB06-642 - Original Drilling - Plan 1	2,200.0	2,201.0	65.6	50.3	4.283	CC, ES
SLW Ranch State BB06-642 - Original Drilling - Plan 1	2,300.0	2,301.0	67.1	51.1	4.189	SF
SLW Ranch State BB06-652 - Original Drilling - Plan 1	2,200.0	2,201.0	43.7	28.4	2.855	CC, ES
SLW Ranch State BB06-652 - Original Drilling - Plan 1	2,300.0	2,301.0	45.3	29.3	2.826	SF
SLW Ranch State BB06-662 - 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	1,999.0	25.5	11.6	1.839	CC, ES, SF

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

Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well SLW Ranch State BB06-672
Project:	Wells Ranch	TVD Reference:	WELL @ 4640.0ft (Original Well Elev.)
Reference Site:	BB Section 06	MD Reference:	WELL @ 4640.0ft (Original Well Elev.)
Site Error:	0.0 ft	North Reference:	Grid
Reference Well:	SLW Ranch State BB06-672	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	EDMP
Reference Design:	Plan 1	Offset TVD Reference:	Offset Datum

Coordinates are relative to: SLW Ranch State BB06-672
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.65°



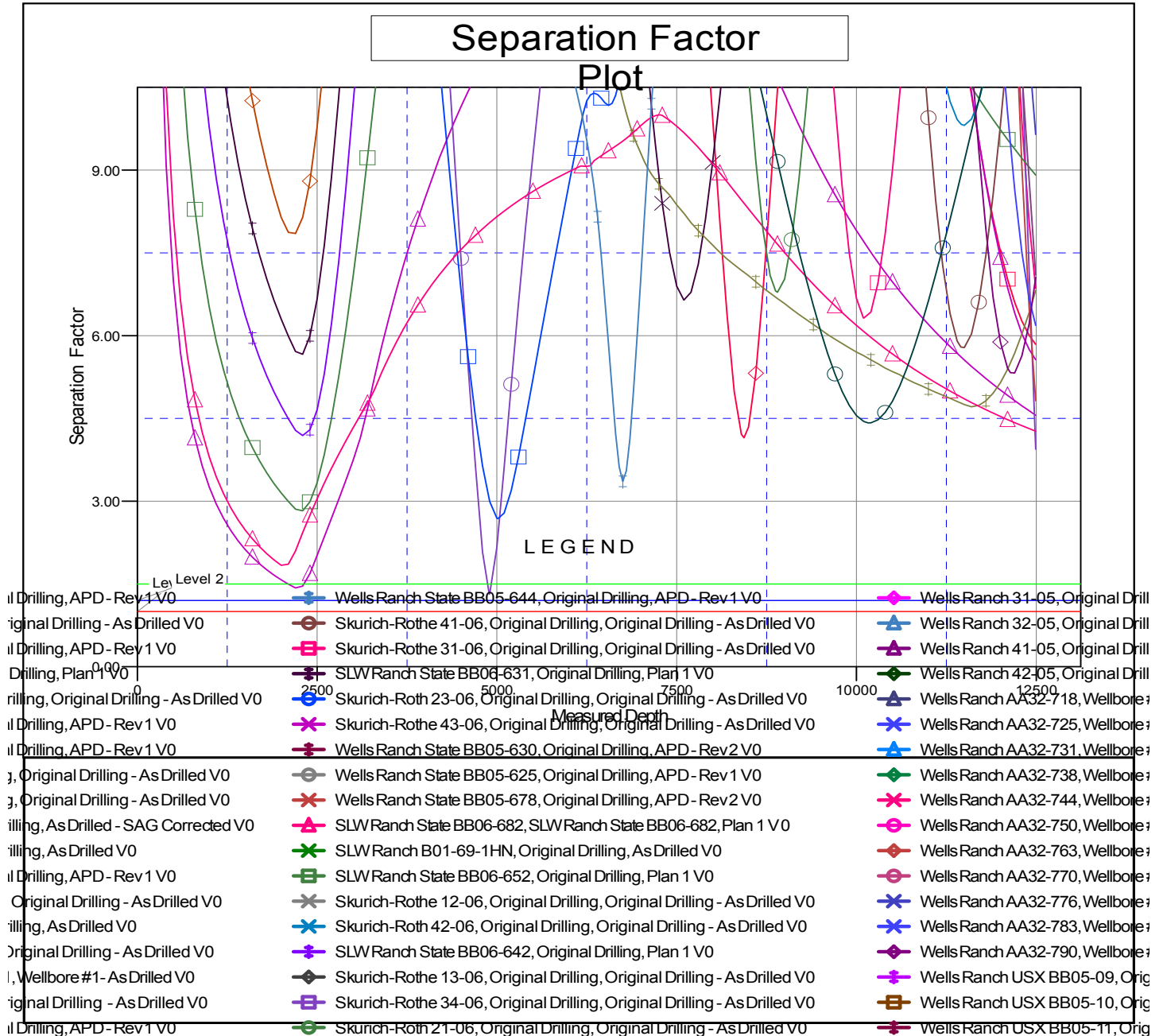
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well SLW Ranch State BB06-672
Project:	Wells Ranch	TVD Reference:	WELL @ 4640.0ft (Original Well Elev.)
Reference Site:	BB Section 06	MD Reference:	WELL @ 4640.0ft (Original Well Elev.)
Site Error:	0.0 ft	North Reference:	Grid
Reference Well:	SLW Ranch State BB06-672	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	EDMP
Reference Design:	Plan 1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4640.0ft (Original Well Elev.)
Offset Depths are relative to Offset Datum
Central Meridian is -105.5000000

Coordinates are relative to: SLW Ranch State BB06-672
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