

Project: Wells Ranch
Site: BB Section 03
Well: WELLS RANCH STATE BB03-643
Wellbore: Wellbore #1
Design: Plan #3

Northern Region - DJ Basin

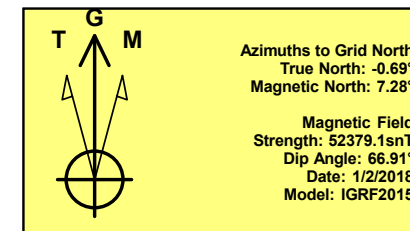
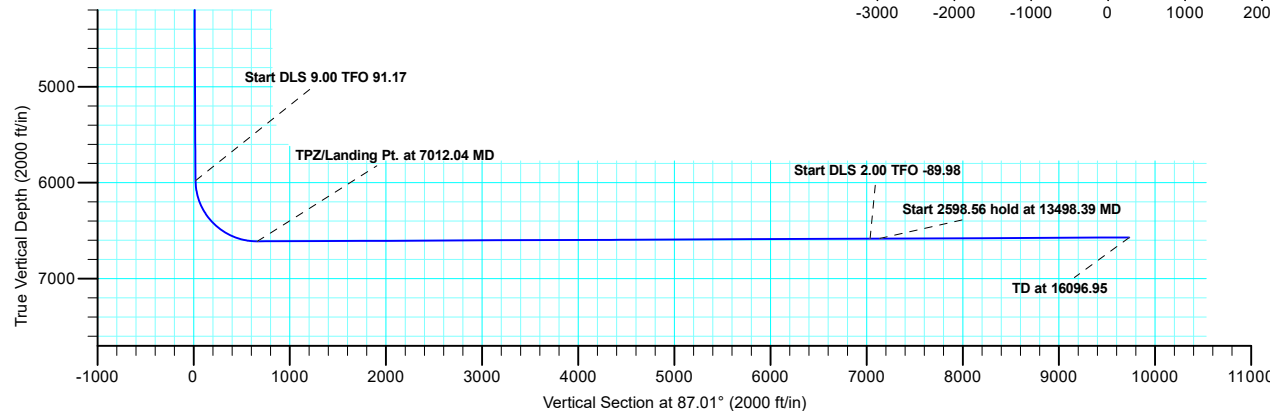
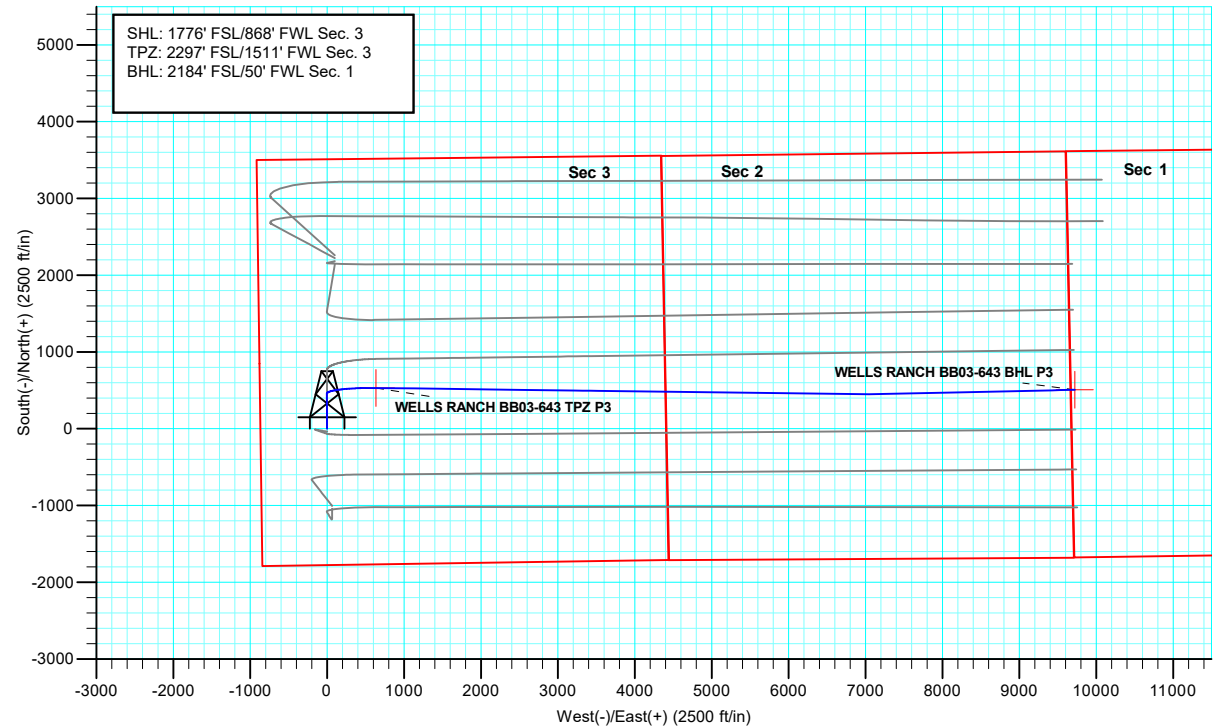
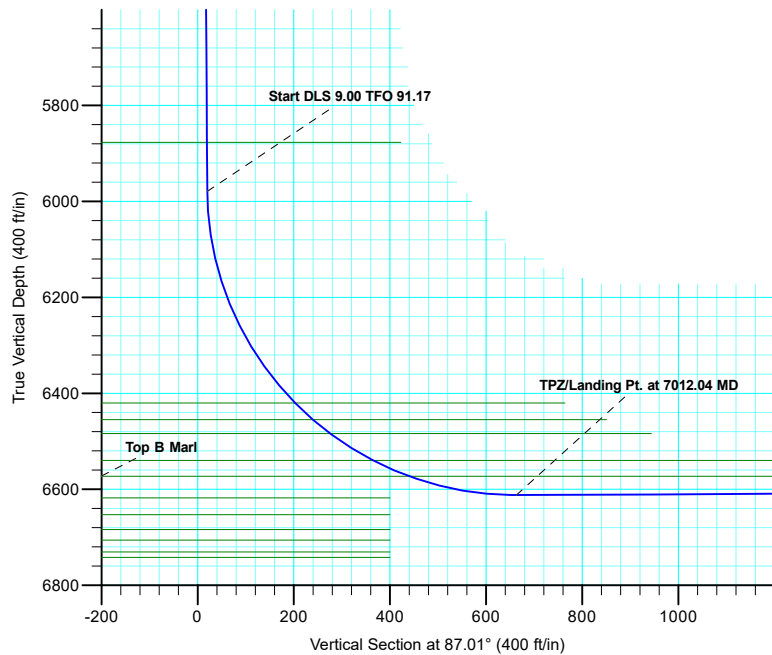
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	0.00	
3	2563.25	7.26	359.51	2562.28	23.00	-0.20	2.00	359.51	1.00	
4	6007.58	7.26	359.51	5978.96	458.55	-3.89	0.00	0.00	20.04	
5	7012.04	90.25	90.73	6612.11	531.47	636.46	9.00	91.17	663.31	WELLS RANCH BB03-643 TPZ P3
6	13399.18	90.25	90.73	6584.30	450.31	7023.03	0.00	0.00	7036.96	WELLS RANCH BB03-643 IP
7	13498.39	90.25	88.74	6583.87	450.77	7122.23	2.00	-89.98	7136.04	
8	16096.95	90.25	88.74	6572.53	507.74	9720.14	0.00	0.00	9733.39	WELLS RANCH BB03-643 BHL P3

WELL DETAILS: WELLS RANCH STATE BB03-643

		Ground Level:		4724.00				
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot		
0.00	0.00	1399838.60	3298045.94	40.4260199	-104.4294200			



Plan: Plan #3 (WELLS RANCH STATE BB03-643/Wellbore #1)

Created By: Shelly C. Peterkin Date: 14:43, June 05 2019

Northern Region - DJ Basin

Wells Ranch

BB Section 03

WELLS RANCH STATE BB03-643

Wellbore #1

Plan: Plan #3

Standard Planning Report

05 June, 2019

Noble Energy, Inc.

Planning Report

Database:	EDMP	Local Co-ordinate Reference:	Well WELLS RANCH STATE BB03-643
Company:	Northern Region - DJ Basin	TVD Reference:	Well @ 4754.00ft
Project:	Wells Ranch	MD Reference:	Well @ 4754.00ft
Site:	BB Section 03	North Reference:	Grid
Well:	WELLS RANCH STATE BB03-643	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

Project	Wells Ranch, Weld County Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		BB Section 03			
Site Position:		Northing:	11,793.94 usft	Latitude:	36.1509298
From:	Map	Easting:	1,597.09 usft	Longitude:	-115.6527898
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	-6.56 °

Well	WELLS RANCH STATE BB03-643					
Well Position	+N/-S	1,388,047.44 ft	Northing:	1,399,838.60 usft	Latitude:	40.4260200
	+E/-W	3,296,455.45 ft	Easting:	3,298,045.94 usft	Longitude:	-104.4294200
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,724.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	1/2/2018	7.98	66.91	52,379.05198724

Design	Plan #3			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	87.01

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,563.25	7.26	359.51	2,562.28	23.00	-0.20	2.00	2.00	0.00	359.51	
6,007.58	7.26	359.51	5,978.96	458.55	-3.89	0.00	0.00	0.00	0.00	
7,012.04	90.25	90.73	6,612.11	531.47	636.46	9.00	8.26	9.08	91.17	WELLS RANCH BB03
13,399.18	90.25	90.73	6,584.30	450.31	7,023.03	0.00	0.00	0.00	0.00	WELLS RANCH BB03
13,498.39	90.25	88.74	6,583.87	450.77	7,122.23	2.00	0.00	-2.00	-89.98	
16,096.95	90.25	88.74	6,572.53	507.74	9,720.14	0.00	0.00	0.00	0.00	WELLS RANCH BB03

Noble Energy, Inc.

Planning Report

Database:	EDMP	Local Co-ordinate Reference:	Well WELLS RANCH STATE BB03-643
Company:	Northern Region - DJ Basin	TVD Reference:	Well @ 4754.00ft
Project:	Wells Ranch	MD Reference:	Well @ 4754.00ft
Site:	BB Section 03	North Reference:	Grid
Well:	WELLS RANCH STATE BB03-643	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
490.00	0.00	0.00	490.00	0.00	0.00	0.00	0.00	0.00	0.00
Pierre									
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
540.00	0.00	0.00	540.00	0.00	0.00	0.00	0.00	0.00	0.00
Upper Pierre Aquifer Top									
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,598.00	0.00	0.00	1,598.00	0.00	0.00	0.00	0.00	0.00	0.00
Upper Pierre Aquifer Base									
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
2,300.00	2.00	359.51	2,299.98	1.75	-0.01	0.08	2.00	2.00	0.00
2,400.00	4.00	359.51	2,399.84	6.98	-0.06	0.30	2.00	2.00	0.00
2,500.00	6.00	359.51	2,499.45	15.69	-0.13	0.69	2.00	2.00	0.00
2,563.25	7.26	359.51	2,562.28	23.00	-0.20	1.00	2.00	2.00	0.00
Start 3444.33 hold at 2563.25 MD									
2,600.00	7.26	359.51	2,598.73	27.65	-0.23	1.21	0.00	0.00	0.00
2,700.00	7.26	359.51	2,697.93	40.29	-0.34	1.76	0.00	0.00	0.00
2,800.00	7.26	359.51	2,797.13	52.94	-0.45	2.31	0.00	0.00	0.00
2,900.00	7.26	359.51	2,896.32	65.58	-0.56	2.87	0.00	0.00	0.00
3,000.00	7.26	359.51	2,995.52	78.23	-0.66	3.42	0.00	0.00	0.00
3,100.00	7.26	359.51	3,094.72	90.87	-0.77	3.97	0.00	0.00	0.00
3,200.00	7.26	359.51	3,193.92	103.52	-0.88	4.52	0.00	0.00	0.00
3,300.00	7.26	359.51	3,293.11	116.16	-0.99	5.08	0.00	0.00	0.00
3,400.00	7.26	359.51	3,392.31	128.81	-1.09	5.63	0.00	0.00	0.00
3,500.00	7.26	359.51	3,491.51	141.45	-1.20	6.18	0.00	0.00	0.00
3,509.57	7.26	359.51	3,501.00	142.66	-1.21	6.23	0.00	0.00	0.00
Parkman									
3,600.00	7.26	359.51	3,590.70	154.10	-1.31	6.73	0.00	0.00	0.00
3,700.00	7.26	359.51	3,689.90	166.74	-1.41	7.29	0.00	0.00	0.00
3,800.00	7.26	359.51	3,789.10	179.39	-1.52	7.84	0.00	0.00	0.00
3,900.00	7.26	359.51	3,888.30	192.03	-1.63	8.39	0.00	0.00	0.00
4,000.00	7.26	359.51	3,987.49	204.68	-1.74	8.94	0.00	0.00	0.00
4,100.00	7.26	359.51	4,086.69	217.33	-1.84	9.50	0.00	0.00	0.00

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Project:	Wells Ranch	MD Reference:	Well @ 4754.00ft
Site:	BB Section 03	North Reference:	Grid
Well:	WELLS RANCH STATE BB03-643	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,200.00	7.26	359.51	4,185.89	229.97	-1.95	10.05	0.00	0.00	0.00
4,243.46	7.26	359.51	4,229.00	235.47	-2.00	10.29	0.00	0.00	0.00
Sussex									
4,300.00	7.26	359.51	4,285.08	242.62	-2.06	10.60	0.00	0.00	0.00
4,400.00	7.26	359.51	4,384.28	255.26	-2.17	11.15	0.00	0.00	0.00
4,500.00	7.26	359.51	4,483.48	267.91	-2.27	11.71	0.00	0.00	0.00
4,600.00	7.26	359.51	4,582.68	280.55	-2.38	12.26	0.00	0.00	0.00
4,700.00	7.26	359.51	4,681.87	293.20	-2.49	12.81	0.00	0.00	0.00
4,800.00	7.26	359.51	4,781.07	305.84	-2.59	13.36	0.00	0.00	0.00
4,861.42	7.26	359.51	4,842.00	313.61	-2.66	13.70	0.00	0.00	0.00
Shannon									
4,900.00	7.26	359.51	4,880.27	318.49	-2.70	13.92	0.00	0.00	0.00
5,000.00	7.26	359.51	4,979.47	331.13	-2.81	14.47	0.00	0.00	0.00
5,100.00	7.26	359.51	5,078.66	343.78	-2.92	15.02	0.00	0.00	0.00
5,200.00	7.26	359.51	5,177.86	356.42	-3.02	15.57	0.00	0.00	0.00
5,300.00	7.26	359.51	5,277.06	369.07	-3.13	16.13	0.00	0.00	0.00
5,400.00	7.26	359.51	5,376.25	381.72	-3.24	16.68	0.00	0.00	0.00
5,500.00	7.26	359.51	5,475.45	394.36	-3.35	17.23	0.00	0.00	0.00
5,600.00	7.26	359.51	5,574.65	407.01	-3.45	17.78	0.00	0.00	0.00
5,700.00	7.26	359.51	5,673.85	419.65	-3.56	18.34	0.00	0.00	0.00
5,800.00	7.26	359.51	5,773.04	432.30	-3.67	18.89	0.00	0.00	0.00
5,900.00	7.26	359.51	5,872.24	444.94	-3.77	19.44	0.00	0.00	0.00
5,904.80	7.26	359.51	5,877.00	445.55	-3.78	19.47	0.00	0.00	0.00
Teepee Buttes									
6,007.58	7.26	359.51	5,978.96	458.55	-3.89	20.04	0.00	0.00	0.00
Start DLS 9.00 TFO 91.17									
6,050.00	8.13	27.58	6,021.01	463.89	-2.52	21.68	9.00	2.05	66.17
6,100.00	10.91	49.32	6,070.33	470.11	2.71	27.23	9.00	5.56	43.47
6,150.00	14.57	61.34	6,119.10	476.22	11.82	36.65	9.00	7.32	24.04
6,200.00	18.60	68.44	6,167.01	482.17	24.76	49.88	9.00	8.05	14.20
6,250.00	22.80	73.04	6,213.78	487.93	41.45	66.85	9.00	8.40	9.21
6,300.00	27.09	76.27	6,259.11	493.46	61.79	87.45	9.00	8.58	6.45
6,350.00	31.43	78.66	6,302.72	498.73	85.64	111.54	9.00	8.69	4.79
6,400.00	35.82	80.52	6,344.34	503.70	112.87	138.99	9.00	8.76	3.73
6,450.00	40.22	82.03	6,383.72	508.35	143.30	169.63	9.00	8.81	3.01
6,499.13	44.56	83.26	6,420.00	512.58	176.14	202.64	9.00	8.84	2.51
Sharon Springs									
6,500.00	44.64	83.28	6,420.62	512.65	176.75	203.25	9.00	8.85	2.31
6,550.00	49.07	84.35	6,454.81	516.56	213.01	239.67	9.00	8.86	2.14
6,550.30	49.10	84.36	6,455.00	516.59	213.24	239.89	9.00	8.87	1.99
Top A Chalk									
6,596.54	53.20	85.23	6,484.00	519.85	249.09	275.87	9.00	8.88	1.88
Top A Marl									
6,600.00	53.51	85.29	6,486.07	520.08	251.86	278.65	9.00	8.89	1.77
6,650.00	57.96	86.12	6,514.21	523.16	293.06	319.95	9.00	8.89	1.67
6,700.00	62.41	86.88	6,539.06	525.81	336.35	363.32	9.00	8.90	1.51
6,702.03	62.59	86.91	6,540.00	525.90	338.14	365.11	9.00	8.91	1.45
Top B Chalk									
6,750.00	66.87	87.57	6,560.48	527.99	381.46	408.49	9.00	8.91	1.39
6,784.00	69.90	88.02	6,573.00	529.20	413.04	440.09	9.00	8.92	1.32
Top B Marl									
6,800.00	71.32	88.23	6,578.31	529.69	428.13	455.18	9.00	8.92	1.28
6,850.00	75.79	88.85	6,592.46	530.91	476.06	503.10	9.00	8.92	1.24

Noble Energy, Inc.

Planning Report

Database:	EDMP	Local Co-ordinate Reference:	Well WELLS RANCH STATE BB03-643
Company:	Northern Region - DJ Basin	TVD Reference:	Well @ 4754.00ft
Project:	Wells Ranch	MD Reference:	Well @ 4754.00ft
Site:	BB Section 03	North Reference:	Grid
Well:	WELLS RANCH STATE BB03-643	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
6,900.00	80.25	89.44	6,602.84	531.64	524.95	551.97	9.00	8.92	1.19
6,950.00	84.71	90.02	6,609.38	531.87	574.50	601.47	9.00	8.93	1.16
7,000.00	89.17	90.59	6,612.05	531.61	624.42	651.30	9.00	8.93	1.14
7,012.04	90.25	90.73	6,612.11	531.47	636.46	663.31	9.00	8.93	1.14
TPZ/Landing Pt. at 7012.04 MD									
7,100.00	90.25	90.73	6,611.73	530.35	724.41	751.09	0.00	0.00	0.00
7,200.00	90.25	90.73	6,611.29	529.08	824.40	850.88	0.00	0.00	0.00
7,300.00	90.25	90.73	6,610.86	527.81	924.39	950.67	0.00	0.00	0.00
7,400.00	90.25	90.73	6,610.42	526.54	1,024.38	1,050.46	0.00	0.00	0.00
7,500.00	90.25	90.73	6,609.99	525.27	1,124.38	1,150.24	0.00	0.00	0.00
7,600.00	90.25	90.73	6,609.55	524.00	1,224.37	1,250.03	0.00	0.00	0.00
7,700.00	90.25	90.73	6,609.11	522.73	1,324.36	1,349.82	0.00	0.00	0.00
7,800.00	90.25	90.73	6,608.68	521.46	1,424.35	1,449.61	0.00	0.00	0.00
7,900.00	90.25	90.73	6,608.24	520.19	1,524.34	1,549.40	0.00	0.00	0.00
8,000.00	90.25	90.73	6,607.81	518.92	1,624.33	1,649.19	0.00	0.00	0.00
8,100.00	90.25	90.73	6,607.37	517.65	1,724.32	1,748.98	0.00	0.00	0.00
8,200.00	90.25	90.73	6,606.94	516.37	1,824.31	1,848.76	0.00	0.00	0.00
8,300.00	90.25	90.73	6,606.50	515.10	1,924.30	1,948.55	0.00	0.00	0.00
8,400.00	90.25	90.73	6,606.07	513.83	2,024.29	2,048.34	0.00	0.00	0.00
8,500.00	90.25	90.73	6,605.63	512.56	2,124.28	2,148.13	0.00	0.00	0.00
8,600.00	90.25	90.73	6,605.20	511.29	2,224.28	2,247.92	0.00	0.00	0.00
8,700.00	90.25	90.73	6,604.76	510.02	2,324.27	2,347.71	0.00	0.00	0.00
8,800.00	90.25	90.73	6,604.33	508.75	2,424.26	2,447.50	0.00	0.00	0.00
8,900.00	90.25	90.73	6,603.89	507.48	2,524.25	2,547.28	0.00	0.00	0.00
9,000.00	90.25	90.73	6,603.45	506.21	2,624.24	2,647.07	0.00	0.00	0.00
9,100.00	90.25	90.73	6,603.02	504.94	2,724.23	2,746.86	0.00	0.00	0.00
9,200.00	90.25	90.73	6,602.58	503.67	2,824.22	2,846.65	0.00	0.00	0.00
9,300.00	90.25	90.73	6,602.15	502.40	2,924.21	2,946.44	0.00	0.00	0.00
9,400.00	90.25	90.73	6,601.71	501.13	3,024.20	3,046.23	0.00	0.00	0.00
9,500.00	90.25	90.73	6,601.28	499.86	3,124.19	3,146.02	0.00	0.00	0.00
9,600.00	90.25	90.73	6,600.84	498.59	3,224.19	3,245.80	0.00	0.00	0.00
9,700.00	90.25	90.73	6,600.41	497.32	3,324.18	3,345.59	0.00	0.00	0.00
9,800.00	90.25	90.73	6,599.97	496.05	3,424.17	3,445.38	0.00	0.00	0.00
9,900.00	90.25	90.73	6,599.54	494.77	3,524.16	3,545.17	0.00	0.00	0.00
10,000.00	90.25	90.73	6,599.10	493.50	3,624.15	3,644.96	0.00	0.00	0.00
10,100.00	90.25	90.73	6,598.66	492.23	3,724.14	3,744.75	0.00	0.00	0.00
10,200.00	90.25	90.73	6,598.23	490.96	3,824.13	3,844.54	0.00	0.00	0.00
10,300.00	90.25	90.73	6,597.79	489.69	3,924.12	3,944.32	0.00	0.00	0.00
10,400.00	90.25	90.73	6,597.36	488.42	4,024.11	4,044.11	0.00	0.00	0.00
10,500.00	90.25	90.73	6,596.92	487.15	4,124.10	4,143.90	0.00	0.00	0.00
10,600.00	90.25	90.73	6,596.49	485.88	4,224.10	4,243.69	0.00	0.00	0.00
10,700.00	90.25	90.73	6,596.05	484.61	4,324.09	4,343.48	0.00	0.00	0.00
10,800.00	90.25	90.73	6,595.62	483.34	4,424.08	4,443.27	0.00	0.00	0.00
10,900.00	90.25	90.73	6,595.18	482.07	4,524.07	4,543.06	0.00	0.00	0.00
11,000.00	90.25	90.73	6,594.75	480.80	4,624.06	4,642.84	0.00	0.00	0.00
11,100.00	90.25	90.73	6,594.31	479.53	4,724.05	4,742.63	0.00	0.00	0.00
11,200.00	90.25	90.73	6,593.88	478.26	4,824.04	4,842.42	0.00	0.00	0.00
11,300.00	90.25	90.73	6,593.44	476.99	4,924.03	4,942.21	0.00	0.00	0.00
11,400.00	90.25	90.73	6,593.00	475.72	5,024.02	5,042.00	0.00	0.00	0.00
11,500.00	90.25	90.73	6,592.57	474.45	5,124.01	5,141.79	0.00	0.00	0.00
11,600.00	90.25	90.73	6,592.13	473.17	5,224.01	5,241.58	0.00	0.00	0.00
11,700.00	90.25	90.73	6,591.70	471.90	5,324.00	5,341.36	0.00	0.00	0.00
11,800.00	90.25	90.73	6,591.26	470.63	5,423.99	5,441.15	0.00	0.00	0.00
11,900.00	90.25	90.73	6,590.83	469.36	5,523.98	5,540.94	0.00	0.00	0.00

Noble Energy, Inc.

Planning Report

Database:	EDMP	Local Co-ordinate Reference:	Well WELLS RANCH STATE BB03-643
Company:	Northern Region - DJ Basin	TVD Reference:	Well @ 4754.00ft
Project:	Wells Ranch	MD Reference:	Well @ 4754.00ft
Site:	BB Section 03	North Reference:	Grid
Well:	WELLS RANCH STATE BB03-643	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
12,000.00	90.25	90.73	6,590.39	468.09	5,623.97	5,640.73	0.00	0.00	0.00
12,100.00	90.25	90.73	6,589.96	466.82	5,723.96	5,740.52	0.00	0.00	0.00
12,200.00	90.25	90.73	6,589.52	465.55	5,823.95	5,840.31	0.00	0.00	0.00
12,300.00	90.25	90.73	6,589.09	464.28	5,923.94	5,940.10	0.00	0.00	0.00
12,400.00	90.25	90.73	6,588.65	463.01	6,023.93	6,039.88	0.00	0.00	0.00
12,500.00	90.25	90.73	6,588.22	461.74	6,123.92	6,139.67	0.00	0.00	0.00
12,600.00	90.25	90.73	6,587.78	460.47	6,223.92	6,239.46	0.00	0.00	0.00
12,700.00	90.25	90.73	6,587.34	459.20	6,323.91	6,339.25	0.00	0.00	0.00
12,800.00	90.25	90.73	6,586.91	457.93	6,423.90	6,439.04	0.00	0.00	0.00
12,900.00	90.25	90.73	6,586.47	456.66	6,523.89	6,538.83	0.00	0.00	0.00
13,000.00	90.25	90.73	6,586.04	455.39	6,623.88	6,638.62	0.00	0.00	0.00
13,100.00	90.25	90.73	6,585.60	454.12	6,723.87	6,738.40	0.00	0.00	0.00
13,200.00	90.25	90.73	6,585.17	452.85	6,823.86	6,838.19	0.00	0.00	0.00
13,300.00	90.25	90.73	6,584.73	451.58	6,923.85	6,937.98	0.00	0.00	0.00
13,399.18	90.25	90.73	6,584.30	450.31	7,023.03	7,036.96	0.00	0.00	0.00
Start DLS 2.00 TFO -89.98									
13,498.39	90.25	88.74	6,583.87	450.77	7,122.23	7,136.04	2.00	0.00	-2.00
Start 2598.56 hold at 13498.39 MD									
13,500.00	90.25	88.74	6,583.86	450.81	7,123.84	7,137.65	0.00	0.00	0.00
13,600.00	90.25	88.74	6,583.42	453.00	7,223.81	7,237.61	0.00	0.00	0.00
13,700.00	90.25	88.74	6,582.99	455.19	7,323.79	7,337.56	0.00	0.00	0.00
13,800.00	90.25	88.74	6,582.55	457.38	7,423.76	7,437.51	0.00	0.00	0.00
13,900.00	90.25	88.74	6,582.12	459.58	7,523.74	7,537.47	0.00	0.00	0.00
14,000.00	90.25	88.74	6,581.68	461.77	7,623.71	7,637.42	0.00	0.00	0.00
14,100.00	90.25	88.74	6,581.24	463.96	7,723.69	7,737.37	0.00	0.00	0.00
14,200.00	90.25	88.74	6,580.81	466.15	7,823.66	7,837.33	0.00	0.00	0.00
14,300.00	90.25	88.74	6,580.37	468.34	7,923.64	7,937.28	0.00	0.00	0.00
14,400.00	90.25	88.74	6,579.93	470.54	8,023.61	8,037.23	0.00	0.00	0.00
14,500.00	90.25	88.74	6,579.50	472.73	8,123.59	8,137.19	0.00	0.00	0.00
14,600.00	90.25	88.74	6,579.06	474.92	8,223.56	8,237.14	0.00	0.00	0.00
14,700.00	90.25	88.74	6,578.63	477.11	8,323.54	8,337.09	0.00	0.00	0.00
14,800.00	90.25	88.74	6,578.19	479.30	8,423.51	8,437.05	0.00	0.00	0.00
14,900.00	90.25	88.74	6,577.75	481.50	8,523.49	8,537.00	0.00	0.00	0.00
15,000.00	90.25	88.74	6,577.32	483.69	8,623.46	8,636.95	0.00	0.00	0.00
15,100.00	90.25	88.74	6,576.88	485.88	8,723.44	8,736.90	0.00	0.00	0.00
15,200.00	90.25	88.74	6,576.44	488.07	8,823.41	8,836.86	0.00	0.00	0.00
15,300.00	90.25	88.74	6,576.01	490.27	8,923.39	8,936.81	0.00	0.00	0.00
15,400.00	90.25	88.74	6,575.57	492.46	9,023.36	9,036.76	0.00	0.00	0.00
15,500.00	90.25	88.74	6,575.13	494.65	9,123.34	9,136.72	0.00	0.00	0.00
15,600.00	90.25	88.74	6,574.70	496.84	9,223.31	9,236.67	0.00	0.00	0.00
15,700.00	90.25	88.74	6,574.26	499.03	9,323.29	9,336.62	0.00	0.00	0.00
15,800.00	90.25	88.74	6,573.83	501.23	9,423.26	9,436.58	0.00	0.00	0.00
15,900.00	90.25	88.74	6,573.39	503.42	9,523.24	9,536.53	0.00	0.00	0.00
16,000.00	90.25	88.74	6,572.95	505.61	9,623.21	9,636.48	0.00	0.00	0.00
16,096.95	90.25	88.74	6,572.53	507.74	9,720.14	9,733.39	0.00	0.00	0.00
TD at 16096.95									

Noble Energy, Inc.

Planning Report

Database:	EDMP	Local Co-ordinate Reference:	Well WELLS RANCH STATE BB03-643
Company:	Northern Region - DJ Basin	TVD Reference:	Well @ 4754.00ft
Project:	Wells Ranch	MD Reference:	Well @ 4754.00ft
Site:	BB Section 03	North Reference:	Grid
Well:	WELLS RANCH STATE BB03-643	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
- Shape									
WELLS RANCH BB03-6	0.00	0.00	6,572.53	507.74	9,720.14	1,400,346.33	3,307,766.06	40.4270862	-104.3944862
- plan hits target center									
- Point									
WELLS RANCH BB03-6	0.00	0.00	6,612.11	531.47	636.46	1,400,370.07	3,298,682.39	40.4274576	-104.4271110
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
490.00	490.00	Pierre				
540.00	540.00	Upper Pierre Aquifer Top				
1,598.00	1,598.00	Upper Pierre Aquifer Base				
3,509.57	3,501.00	Parkman				
4,243.46	4,229.00	Sussex				
4,861.42	4,842.00	Shannon				
5,904.80	5,877.00	Teepee Buttes				
6,499.13	6,420.00	Sharon Springs				
6,550.30	6,455.00	Top A Chalk				
6,596.54	6,484.00	Top A Marl				
6,702.03	6,540.00	Top B Chalk				
6,784.00	6,573.00	Top B Marl				

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
2,200.00	2,200.00	0.00	0.00	Start Build 2.00
2,563.25	2,562.28	23.00	-0.20	Start 3444.33 hold at 2563.25 MD
6,007.58	5,978.96	458.55	-3.89	Start DLS 9.00 TFO 91.17
7,012.04	6,612.11	531.47	636.46	TPZ/Landing Pt. at 7012.04 MD
13,399.18	6,584.30	450.31	7,023.03	Start DLS 2.00 TFO -89.98
13,498.39	6,583.87	450.77	7,122.23	Start 2598.56 hold at 13498.39 MD
16,096.95	6,572.53	507.74	9,720.14	TD at 16096.95

Northern Region - DJ Basin

Wells Ranch

BB Section 03

WELLS RANCH STATE BB03-643

Wellbore #1

Plan #3

Anticollision Summary Report

05 June, 2019

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well WELLS RANCH STATE BB03-643
Project:	Wells Ranch	TVD Reference:	Well @ 4754.00ft
Reference Site:	BB Section 03	MD Reference:	Well @ 4754.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	WELLS RANCH STATE BB03-643	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMP
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Reference	Plan #3		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD + Stations Interval 100.00ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.00 ft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	6/5/2019		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	16,096.95	Plan #3 (Wellbore #1)	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						
AA Section 34						
Wells Ranch 34E-232 - Original Drilling - Original Drilling	116.57	166.58	7,622.18	7,621.63	10,000.000	CC
Wells Ranch 34E-232 - Original Drilling - Original Drilling	200.00	214.00	7,622.58	7,621.57	7,498.738	ES
Wells Ranch 34E-232 - Original Drilling - Original Drilling	12,400.00	11,175.00	8,446.89	8,246.69	42.193	SF
AA Section 35						
Wells Ranch 14-35 - Wellbore #1 - Wellbore #1- As Drille	11,322.59	6,620.27	3,743.85	3,656.47	42.847	CC
Wells Ranch 14-35 - Wellbore #1 - Wellbore #1- As Drille	11,400.00	6,620.37	3,744.65	3,656.36	42.414	ES
Wells Ranch 14-35 - Wellbore #1 - Wellbore #1- As Drille	12,400.00	6,615.78	3,895.81	3,798.14	39.889	SF
Wells Ranch USX AA35-01 - Wellbore #1 - Wellbore #1-	15,362.22	6,658.62	7,720.61	7,585.52	57.150	CC
Wells Ranch USX AA35-01 - Wellbore #1 - Wellbore #1-	15,500.00	6,659.03	7,721.84	7,585.13	56.483	ES
Wells Ranch USX AA35-01 - Wellbore #1 - Wellbore #1-	16,096.95	6,660.72	7,755.50	7,612.20	54.122	SF
Wells Ranch USX AA35-02 - Wellbore #1 - Wellbore #1-	14,106.60	6,770.25	7,663.98	7,543.53	63.631	CC
Wells Ranch USX AA35-02 - Wellbore #1 - Wellbore #1-	14,200.00	6,769.13	7,664.54	7,543.01	63.067	ES
Wells Ranch USX AA35-02 - Wellbore #1 - Wellbore #1-	16,096.95	6,746.33	7,918.17	7,777.95	56.468	SF
Wells Ranch USX AA35-03 - Wellbore #1 - Wellbore #1-	12,741.16	6,647.99	7,828.01	7,724.04	75.289	CC
Wells Ranch USX AA35-03 - Wellbore #1 - Wellbore #1-	12,800.00	6,646.07	7,828.24	7,723.56	74.788	ES
Wells Ranch USX AA35-03 - Wellbore #1 - Wellbore #1-	16,096.95	6,557.05	8,431.62	8,296.24	62.277	SF
Wells Ranch USX AA35-04 - Wellbore #1 - Wellbore #1-	11,161.19	6,727.13	7,680.38	7,594.49	89.422	CC
Wells Ranch USX AA35-04 - Wellbore #1 - Wellbore #1-	11,200.00	6,727.04	7,680.48	7,594.14	88.958	ES
Wells Ranch USX AA35-04 - Wellbore #1 - Wellbore #1-	15,100.00	6,717.53	8,580.19	8,458.26	70.368	SF
Wells Ranch USX AA35-05 - Wellbore #1 - Wellbore #1-	11,245.10	6,642.72	6,434.51	6,347.91	74.302	CC
Wells Ranch USX AA35-05 - Wellbore #1 - Wellbore #1-	11,300.00	6,642.85	6,434.75	6,347.51	73.760	ES
Wells Ranch USX AA35-05 - Wellbore #1 - Wellbore #1-	14,200.00	6,650.70	7,056.75	6,942.98	62.027	SF
Wells Ranch USX AA35-06 - Wellbore #1 - Wellbore #1-	12,623.58	6,597.53	6,450.67	6,348.27	62.996	CC
Wells Ranch USX AA35-06 - Wellbore #1 - Wellbore #1-	12,700.00	6,596.99	6,451.12	6,347.81	62.444	ES
Wells Ranch USX AA35-06 - Wellbore #1 - Wellbore #1-	15,200.00	6,578.83	6,889.47	6,763.11	54.522	SF
Wells Ranch USX AA35-07 - Wellbore #1 - Wellbore #1-	14,178.46	6,621.26	6,447.88	6,327.01	53.348	CC
Wells Ranch USX AA35-07 - Wellbore #1 - Wellbore #1-	14,300.00	6,620.72	6,449.02	6,326.75	52.743	ES
Wells Ranch USX AA35-07 - Wellbore #1 - Wellbore #1-	16,096.95	6,612.67	6,727.23	6,588.51	48.494	SF
Wells Ranch USX AA35-08 - Wellbore #1 - Wellbore #1-	15,486.56	6,615.32	6,386.76	6,250.32	46.812	CC
Wells Ranch USX AA35-08 - Wellbore #1 - Wellbore #1-	15,600.00	6,615.07	6,387.77	6,250.01	46.370	ES
Wells Ranch USX AA35-08 - Wellbore #1 - Wellbore #1-	16,096.95	6,614.02	6,415.86	6,272.73	44.824	SF
Wells Ranch USX AA35-09 - Wellbore #1 - Wellbore #1-	15,605.34	6,657.53	5,154.27	5,016.28	37.353	CC
Wells Ranch USX AA35-09 - Wellbore #1 - Wellbore #1-	15,700.00	6,657.26	5,155.14	5,016.05	37.065	ES
Wells Ranch USX AA35-09 - Wellbore #1 - Wellbore #1-	16,096.95	6,656.10	5,177.66	5,034.39	36.140	SF
Wells Ranch USX AA35-10 - Wellbore #1 - Wellbore #1-	14,117.96	6,556.89	5,131.40	5,011.46	42.784	CC
Wells Ranch USX AA35-10 - Wellbore #1 - Wellbore #1-	14,200.00	6,556.73	5,132.05	5,011.17	42.455	ES

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 WELLS RANCH STATE BB03-643
Project:	Wells Ranch	TVD Reference:	Well @ 4754.00ft
Reference Site:	BB Section 03	MD Reference:	Well @ 4754.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	WELLS RANCH STATE BB03-643	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMP
Reference Design:	Plan #3	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						
AA Section 35						
Wells Ranch USX AA35-10 - Wellbore #1 - Wellbore #1-	15,500.00	6,554.10	5,314.25	5,181.78	40.117	SF
Wells Ranch USX AA35-11 - Wellbore #1 - Wellbore #1- A	12,642.43	6,629.54	5,022.75	4,920.03	48.898	CC
Wells Ranch USX AA35-11 - Wellbore #1 - Wellbore #1- A	12,700.00	6,629.07	5,023.08	4,919.67	48.574	ES
Wells Ranch USX AA35-11 - Wellbore #1 - Wellbore #1- A	14,300.00	6,619.59	5,261.03	5,142.75	44.478	SF
Wells Ranch USX AA35-12 - Wellbore #1 - Wellbore #1-	11,232.92	6,661.52	5,325.33	5,238.70	61.474	CC
Wells Ranch USX AA35-12 - Wellbore #1 - Wellbore #1-	11,300.00	6,661.72	5,325.75	5,238.34	60.927	ES
Wells Ranch USX AA35-12 - Wellbore #1 - Wellbore #1-	13,300.00	6,667.73	5,712.43	5,606.45	53.901	SF
Wells Ranch USX AA35-15 - Wellbore #1 - Wellbore #1-	14,204.58	6,536.32	3,853.33	3,732.42	31.869	CC, ES
Wells Ranch USX AA35-15 - Wellbore #1 - Wellbore #1-	15,000.00	6,535.57	3,934.57	3,806.47	30.715	SF
Wells Ranch USX AA35-16 - Wellbore #1 - Wellbore #1-	15,541.68	6,553.54	3,760.33	3,623.44	27.471	CC
Wells Ranch USX AA35-16 - Wellbore #1 - Wellbore #1-	15,600.00	6,553.19	3,760.78	3,623.23	27.341	ES
Wells Ranch USX AA35-16 - Wellbore #1 - Wellbore #1-	16,096.95	6,550.14	3,801.10	3,658.94	26.738	SF
Wells Ranch USX AA35-19 - Wellbore #1 - Wellbore #1-	12,040.73	6,680.82	7,195.77	7,099.89	75.053	CC
Wells Ranch USX AA35-19 - Wellbore #1 - Wellbore #1-	12,100.00	6,680.25	7,196.01	7,099.44	74.512	ES
Wells Ranch USX AA35-19 - Wellbore #1 - Wellbore #1-	15,300.00	6,648.33	7,840.64	7,714.68	62.250	SF
Wells Ranch USX AA35-23 - Wellbore #1 - Wellbore #1-	14,890.33	6,580.92	4,485.22	4,355.99	34.706	CC
Wells Ranch USX AA35-23 - Wellbore #1 - Wellbore #1-	14,900.00	6,580.95	4,485.23	4,355.88	34.676	ES
Wells Ranch USX AA35-23 - Wellbore #1 - Wellbore #1-	15,900.00	6,583.41	4,597.46	4,459.10	33.229	SF
Wells Ranch USX AA35-65HN - Plan A - Original Drilling	11,326.90	6,963.01	5,791.17	5,700.45	63.835	CC
Wells Ranch USX AA35-65HN - Plan A - Original Drilling	13,100.00	13,100.00	5,834.43	5,586.14	23.499	ES, SF

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well WELLS RANCH STATE BB03-643
Project:	Wells Ranch	TVD Reference:	Well @ 4754.00ft
Reference Site:	BB Section 03	MD Reference:	Well @ 4754.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	WELLS RANCH STATE BB03-643	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMP
Reference Design:	Plan #3	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
AA Section 36						
Wells Ranch 11-36 - Wells Ranch 11-36 - Wells Ranch 11	16,096.95	6,591.87	7,787.24	7,644.00	54.363	CC, ES, SF
Wells Ranch 12-36 - Wells Ranch 12-36 - Wells Ranch 1	16,096.95	6,631.07	6,378.15	6,234.97	44.547	CC, ES, SF
Wells Ranch 13-36 - Wells Ranch 13-36 - Wells Ranch 1	16,096.95	6,586.71	5,155.50	5,012.66	36.093	CC, ES, SF
Wells Ranch 14-36 - Wells Ranch 14-36 - Wells Ranch 1	16,096.95	6,570.99	3,669.05	3,526.09	25.665	CC, ES, SF
Wells Ranch 21-36 - Wells Ranch 21-36 - Wells Ranch 2	16,096.95	6,601.57	8,055.46	7,915.58	57.589	CC, ES, SF
Wells Ranch 22-36 - Wells Ranch 22-36 - Wells Ranch 2	16,096.95	6,515.65	6,858.51	6,720.67	49.757	CC, ES, SF
Wells Ranch 23-36 - Wells Ranch 23-36 - Wells Ranch 2	16,096.95	6,575.68	5,471.00	5,334.04	39.947	CC, ES, SF
Wells Ranch 24-36 (SI) - Wells Ranch 24-36 - Wells Ran	16,096.95	6,571.66	4,093.81	3,965.45	31.891	CC, ES, SF
Wells Ranch 31-36 - Wells Ranch 31-36 - Wells Ranch 3	16,096.95	6,561.16	8,488.08	8,354.04	63.326	CC, ES, SF
Wells Ranch 32-36 - Wells Ranch 32-36 - Wells Ranch 3	16,096.95	6,601.06	7,274.95	7,145.11	56.029	CC, ES, SF
Wells Ranch 33-36 - Wells Ranch 33-36 - Wells Ranch 3	16,096.95	6,492.08	6,025.70	5,899.95	47.919	CC, ES, SF
Wells Ranch 34-36 - Original Drilling - Original Drilling - A	16,096.95	6,510.98	4,973.71	4,858.82	43.294	CC, ES, SF
Wells Ranch 36A - Wells Ranch 36A - Wells Ranch 36A -	16,096.95	6,536.33	7,169.24	7,027.07	50.427	CC, ES, SF
Wells Ranch 36B (SI) - Wells Ranch 36B - Wells Ranch 3	16,096.95	6,580.66	4,600.34	4,460.89	32.990	CC, ES, SF
Wells Ranch 36C - Wells Ranch 36C - Wells Ranch 36C	16,096.95	6,394.62	8,059.75	7,930.86	62.534	CC, ES, SF
Wells Ranch 36D - Wells Ranch 36D - Wells Ranch 36D	16,096.95	6,473.01	6,036.04	5,921.05	52.943	CC, ES, SF
Wells Ranch 36F - Wells Ranch 36F - Wells Ranch 36F -	16,096.95	6,686.12	7,018.11	6,874.12	48.743	CC, ES, SF
Wells Ranch 36H (SI) - Wells Ranch 36H - Wells Ranch 3	16,096.95	6,574.86	4,317.53	4,173.93	30.065	CC, ES, SF
Wells Ranch 36J - Original Drilling - As Drilled	16,096.95	6,487.09	8,353.76	8,212.81	59.267	CC, ES, SF
Wells Ranch 36K - Wells Ranch 36K - Wells Ranch 36K	16,096.95	6,552.34	5,942.22	5,802.55	42.544	CC, ES, SF
Wells Ranch 36L - Wells Ranch 36L - Wells Ranch 36L -	16,096.95	6,539.81	3,499.00	3,363.54	25.831	CC, ES, SF
Wells Ranch 36N - Wells Ranch 36N - Wells Ranch 36N	16,096.95	6,475.02	7,511.66	7,326.81	40.638	CC, ES, SF
Wells Ranch 36O - Wells Ranch 36O - Wells Ranch 36O	16,096.95	6,497.02	6,479.65	6,347.45	49.015	CC, ES, SF
Wells Ranch 36P (PR) - Wells Ranch 36P - Wells Ranch	16,096.95	6,591.91	5,217.48	5,092.83	41.859	CC, ES, SF
Wells Ranch 36R - Wells Ranch 36R - Wells Ranch 36R	16,096.95	6,679.02	9,180.71	9,048.58	69.481	CC, ES, SF
Wells Ranch 36S - Wells Ranch 36S - Wells Ranch 36S	16,096.95	6,442.41	6,926.96	6,804.15	56.404	CC, ES, SF
Wells Ranch 36T - Wells Ranch 36T - Wells Ranch 36T -	16,096.95	6,544.68	5,123.90	5,022.83	50.693	CC, ES, SF
Wells Ranch 36V - Wells Ranch 36V - Wells Ranch 36V	16,096.95	6,482.86	8,664.74	8,543.86	71.677	CC, ES, SF
Wells Ranch 41-36 - Wells Ranch 41-36 - Wells Ranch 4	16,096.95	6,572.95	8,993.04	8,865.46	70.489	CC, ES, SF
Wells Ranch 42-36 - Wells Ranch 42-36 - Wells Ranch 4	16,096.95	6,496.23	7,923.32	7,800.76	64.645	CC, ES, SF
Wells Ranch 43-36 - Wells Ranch 43-36 - Wells Ranch 4	16,096.95	6,496.22	6,875.20	6,760.28	59.826	CC, ES, SF
Wells Ranch 44-36 (PR) - Wells Ranch 44-36 - Wells Ran	16,096.95	6,500.00	5,945.65	5,846.72	60.100	CC, ES, SF
Wells Ranch AA35-62-1AHNC - Original Drilling - Origina	11,528.83	10,765.48	3,577.30	3,451.56	28.449	CC
Wells Ranch AA35-62-1AHNC - Original Drilling - Origina	15,900.00	15,900.00	3,608.95	3,412.63	18.384	ES, SF
Wells Ranch AA35-62-1BHNC - Original Drilling - Origina	11,214.39	11,192.00	3,233.57	3,108.01	25.754	CC, ES
Wells Ranch AA35-62-1BHNC - Original Drilling - Origina	16,000.00	6,656.00	3,297.28	3,155.69	23.288	SF
Wells Ranch AA35-62-1HNA - Original Drilling - Original D	11,208.36	10,975.00	3,416.15	3,231.03	18.454	CC, ES, SF
Wells Ranch AA35-63-1AHNA - Original Drilling - Origina	11,187.80	11,115.00	4,228.29	4,106.78	34.796	CC
Wells Ranch AA35-63-1AHNA - Original Drilling - Origina	14,200.00	14,200.00	4,279.02	4,104.72	24.551	ES, SF
Wells Ranch AA35-63-1BHNA - Original Drilling - Origina	14,700.00	14,700.00	3,934.02	3,777.33	25.106	SF
Wells Ranch AA35-63-1BHNA - Original Drilling - Origina	15,740.19	6,657.00	3,817.94	3,678.49	27.377	CC
Wells Ranch AA35-63-1BHNA - Original Drilling - Origina	15,800.00	6,657.00	3,818.41	3,678.26	27.245	ES
Wells Ranch AA35-63-1HNC - Original Drilling - Original	11,190.86	11,244.00	4,082.07	3,960.46	33.566	CC
Wells Ranch AA35-63-1HNC - Original Drilling - Original	13,700.00	13,700.00	4,123.23	3,954.42	24.424	SF
Wells Ranch AA35-63-1HNC - Original Drilling - Original	15,700.00	6,945.00	4,090.41	3,951.52	29.451	ES
Wells Ranch AA35-64-1AHNA - Original Drilling - Origina	11,169.87	11,056.00	4,823.22	4,702.36	39.907	CC
Wells Ranch AA35-64-1AHNA - Original Drilling - Origina	12,900.00	12,900.00	4,851.09	4,691.94	30.481	ES, SF
Wells Ranch AA35-64-1BHNC - Original Drilling - Origina	11,174.47	11,178.00	4,630.59	4,509.54	38.254	CC
Wells Ranch AA35-64-1BHNC - Original Drilling - Origina	11,200.00	11,178.00	4,630.66	4,509.30	38.157	ES
Wells Ranch AA35-64-1BHNC - Original Drilling - Origina	14,300.00	14,300.00	4,686.51	4,514.63	27.267	SF
Wells Ranch AA35-65-1AHNA - Original Drilling - Origina	11,154.17	11,065.00	5,477.16	5,355.50	45.019	CC
Wells Ranch AA35-65-1AHNA - Original Drilling - Origina	14,000.00	14,000.00	5,530.85	5,358.60	32.110	SF
Wells Ranch AA35-65-1AHNA - Original Drilling - Origina	14,500.00	14,500.00	5,512.86	5,341.86	32.238	ES

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 WELLS RANCH STATE BB03-643
Project:	Wells Ranch	TVD Reference:	Well @ 4754.00ft
Reference Site:	BB Section 03	MD Reference:	Well @ 4754.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	WELLS RANCH STATE BB03-643	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMP
Reference Design:	Plan #3	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						
AA Section 36						
Wells Ranch AA35-65-1BHNC - Original Drilling - Origina	11,371.35	10,946.00	5,315.97	5,195.15	44.001	CC
Wells Ranch AA35-65-1BHNC - Original Drilling - Origina	14,400.00	14,400.00	5,364.01	5,197.21	32.159	SF
Wells Ranch AA35-65-1BHNC - Original Drilling - Origina	16,096.95	6,401.41	5,329.76	5,188.61	37.760	ES
Wells Ranch AA35-66-1AHNC - Original Drilling - Origina	11,159.02	11,190.00	6,208.84	6,088.36	51.534	CC
Wells Ranch AA35-66-1AHNC - Original Drilling - Origina	11,200.00	11,190.00	6,208.98	6,088.01	51.328	ES
Wells Ranch AA35-66-1AHNC - Original Drilling - Origina	12,500.00	12,500.00	6,261.95	6,112.21	41.819	SF
Wells Ranch AA35-67-1AHNA - Original Drilling - Origina	11,593.81	10,620.76	6,863.94	6,743.30	56.897	CC
Wells Ranch AA35-67-1AHNA - Original Drilling - Origina	11,700.00	10,591.73	6,864.61	6,743.06	56.474	ES
Wells Ranch AA35-67-1AHNA - Original Drilling - Origina	13,300.00	13,300.00	6,974.95	6,809.00	42.031	SF
Wells Ranch AA35-67-1BHNA - Original Drilling - Origina	11,126.57	11,059.00	6,582.66	6,462.22	54.653	CC
Wells Ranch AA35-67-1BHNA - Original Drilling - Origina	15,900.00	6,561.03	6,584.50	6,445.32	47.310	ES
Wells Ranch AA35-67-1BHNA - Original Drilling - Origina	16,096.95	6,509.16	6,588.68	6,447.39	46.632	SF
Wells Ranch AA35-67-1HNC - Original Drilling - Original	11,414.97	10,912.09	6,745.08	6,624.27	55.834	CC
Wells Ranch AA35-67-1HNC - Original Drilling - Original	12,900.00	12,900.00	6,785.25	6,626.78	42.818	SF
Wells Ranch AA35-67-1HNC - Original Drilling - Original	16,096.95	6,493.00	6,750.64	6,609.13	47.705	ES
Wells Ranch AA35-68-1AHNA - Original Drilling - Origina	11,098.07	11,169.00	7,489.72	7,369.18	62.137	CC
Wells Ranch AA35-68-1AHNA - Original Drilling - Origina	14,300.00	14,300.00	7,526.48	7,354.10	43.661	SF
Wells Ranch AA35-68-1AHNA - Original Drilling - Origina	16,096.95	6,479.00	7,495.00	7,353.76	53.068	ES
Wells Ranch AA35-68-1BHNC - Original Drilling - Origina	14,400.00	14,400.00	7,354.47	7,184.85	43.359	SF
Wells Ranch AA35-68-1BHNC - Original Drilling - Origina	16,096.95	6,384.00	7,319.01	7,177.93	51.878	CC, ES
Wells Ranch AA35-69-1AHNC - Original Drilling - Origina	14,500.00	14,500.00	8,265.73	8,093.97	48.122	SF
Wells Ranch AA35-69-1AHNC - Original Drilling - Origina	16,054.78	6,527.00	8,230.76	8,089.57	58.294	CC
Wells Ranch AA35-69-1AHNC - Original Drilling - Origina	16,096.95	6,527.00	8,230.87	8,089.18	58.089	ES
Wells Ranch AA35-69-1BHNC - Original Drilling - Origina	11,084.41	11,322.00	7,898.29	7,777.39	65.330	CC
Wells Ranch AA35-69-1BHNC - Original Drilling - Origina	13,400.00	13,400.00	7,945.17	7,781.39	48.511	SF
Wells Ranch AA35-69-1BHNC - Original Drilling - Origina	16,096.95	6,623.00	7,909.43	7,767.64	55.783	ES
Wells Ranch AA35-69-1HNB - Original Drilling - Original D	11,080.51	11,250.00	8,074.13	7,953.41	66.880	CC
Wells Ranch AA35-69-1HNB - Original Drilling - Original D	12,800.00	12,800.00	8,095.15	7,938.91	51.813	SF
Wells Ranch AA35-69-1HNB - Original Drilling - Original D	16,096.95	6,385.00	8,074.49	7,933.39	57.225	ES
Wells Ranch USX AA35-14 - Wellbore #1 - Wellbore #1 -	12,643.95	6,523.33	3,697.64	3,595.20	36.096	CC
Wells Ranch USX AA35-14 - Wellbore #1 - Wellbore #1 -	12,700.00	6,522.94	3,698.06	3,594.95	35.864	ES
Wells Ranch USX AA35-14 - Wellbore #1 - Wellbore #1 -	13,600.00	6,516.77	3,814.14	3,702.63	34.203	SF
BB Section 01						
Wells Ranch 14-01 - Original Drilling - Original Drilling - A	16,096.95	6,489.46	1,591.81	1,460.05	12.081	CC, ES, SF
Wells Ranch 23-01 - Original Drilling - Original Drilling - A	16,096.95	6,531.10	1,964.46	1,911.32	36.967	CC, ES, SF
Wells Ranch 24-01 - Original Drilling - Original Drilling - A	16,096.95	6,481.05	2,458.34	2,357.57	24.396	CC, ES, SF
Wells Ranch USX BB01-01 - Original Drilling - Original D	16,096.95	6,454.90	5,236.24	5,153.23	63.076	CC, ES, SF
Wells Ranch USX BB01-02 - Original Drilling - Original D	16,096.95	6,549.37	4,070.73	3,971.81	41.155	CC, ES, SF
Wells Ranch USX BB01-03 - Original Drilling - Original D	16,096.95	6,628.63	3,052.26	2,934.77	25.979	CC, ES, SF
Wells Ranch USX BB01-04 - Original Drilling - Original D	16,096.95	6,656.85	2,436.02	2,298.40	17.700	CC, ES, SF
Wells Ranch USX BB01-05 - Original Drilling - Original D	16,096.95	6,557.32	1,350.51	1,217.98	10.191	CC, ES, SF
Wells Ranch USX BB01-06 - Original Drilling - Original D	16,096.95	6,528.50	2,211.77	2,129.56	26.904	CC, ES, SF
Wells Ranch USX BB01-07 - Original Drilling - Original D	16,096.95	6,529.23	3,531.58	3,456.55	47.067	CC, ES, SF
Wells Ranch USX BB01-08 - Original Drilling - Original D	16,096.95	6,541.90	4,852.85	4,790.87	78.302	CC, ES, SF
Wells Ranch USX BB01-09 - Original Drilling - Original D	16,096.95	6,495.83	4,689.90	4,639.36	92.806	CC, ES, SF
Wells Ranch USX BB01-10 - Original Drilling - Original D	16,096.95	6,455.42	3,268.36	3,215.07	61.322	CC, ES, SF
Wells Ranch USX BB01-12 - Original Drilling - Original D	16,096.95	6,510.97	682.06	613.74	9.983	CC, ES, SF
Wells Ranch USX BB01-15 - Original Drilling - Original D	16,096.95	6,473.57	3,595.87	3,518.37	46.403	CC, ES, SF
Wells Ranch USX BB01-16 - Original Drilling - Original D	16,096.95	6,528.80	4,729.08	4,659.30	67.771	CC, ES, SF
Wells Ranch USX BB01-17 - Original Drilling - Original D	16,096.95	6,566.12	4,450.42	4,375.71	59.573	CC, ES, SF
Wells Ranch USX BB01-19 - Original Drilling - Original D	16,096.95	6,592.18	2,353.70	2,233.86	19.640	CC, ES, SF
Wells Ranch USX BB01-23 - Original Drilling - Original D	16,096.95	6,507.56	4,261.81	4,204.36	74.185	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 WELLS RANCH STATE BB03-643
Project:	Wells Ranch	TVD Reference:	Well @ 4754.00ft
Reference Site:	BB Section 03	MD Reference:	Well @ 4754.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	WELLS RANCH STATE BB03-643	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMP
Reference Design:	Plan #3	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 02						
Wells Ranch 11-2 - Wellbore #1 - Gyro Surveys	11,567.86	6,560.89	2,246.10	2,156.10	24.956	CC
Wells Ranch 11-2 - Wellbore #1 - Gyro Surveys	11,600.00	6,560.64	2,246.33	2,155.94	24.851	ES
Wells Ranch 11-2 - Wellbore #1 - Gyro Surveys	12,000.00	6,557.54	2,287.29	2,193.11	24.286	SF
Wells Ranch 12-2 SI - Wellbore #1 - No Surveys	11,409.31	6,538.96	1,127.07	1,004.56	9.200	CC, ES
Wells Ranch 12-2 SI - Wellbore #1 - No Surveys	11,500.00	6,538.57	1,130.71	1,007.21	9.155	SF
Wells Ranch 13-2 - No Surveys - No Surveys	11,416.39	6,548.93	159.14	36.46	1.297	Level 3, CC, ES, SF
Wells Ranch 14-2 - Wellbore #1 - Gyro Surveys	11,443.53	6,456.62	1,519.47	1,431.51	17.274	CC, ES
Wells Ranch 14-2 - Wellbore #1 - Gyro Surveys	11,600.00	6,456.36	1,527.50	1,438.24	17.112	SF
Wells Ranch 21-2 SI - Wellbore #1 - Gyro Surveys	12,794.50	6,542.09	2,319.52	2,215.28	22.251	CC
Wells Ranch 21-2 SI - Wellbore #1 - Gyro Surveys	12,800.00	6,542.08	2,319.53	2,215.21	22.236	ES
Wells Ranch 21-2 SI - Wellbore #1 - Gyro Surveys	13,200.00	6,541.19	2,354.70	2,246.53	21.768	SF
Wells Ranch 22-2 SI - Wellbore #1 - No Surveys	12,910.37	6,532.43	1,346.83	1,206.91	9.626	CC, ES
Wells Ranch 22-2 SI - Wellbore #1 - No Surveys	13,000.00	6,532.04	1,349.81	1,208.88	9.578	SF
Wells Ranch 23-2 - Wellbore #1 - No Surveys	12,756.56	6,523.10	183.92	45.89	1.332	Level 3, CC, ES, SF
Wells Ranch 24-2 - Wellbore #1 - No Surveys	12,606.61	6,513.75	1,313.71	1,222.70	14.434	CC, ES
Wells Ranch 24-2 - Wellbore #1 - No Surveys	12,700.00	6,513.34	1,317.03	1,225.23	14.347	SF
Wells Ranch 31-2 - Wellbore #1 - Gyro Surveys	14,291.26	6,529.66	2,301.99	2,180.09	18.883	CC
Wells Ranch 31-2 - Wellbore #1 - Gyro Surveys	14,300.00	6,529.55	2,302.01	2,180.00	18.868	ES
Wells Ranch 31-2 - Wellbore #1 - Gyro Surveys	14,600.00	6,525.87	2,322.60	2,198.01	18.642	SF
Wells Ranch 32-2 - Wellbore #1 - No Surveys	14,077.70	6,541.34	1,200.94	1,047.12	7.808	CC
Wells Ranch 32-2 - Wellbore #1 - No Surveys	14,100.00	6,541.24	1,201.15	1,047.10	7.797	ES, SF
Wells Ranch 33-2 - Wellbore #1 - Gyro Surveys	14,259.26	6,100.00	574.84	480.85	6.116	CC, ES
Wells Ranch 33-2 - Wellbore #1 - Gyro Surveys	14,300.00	6,100.00	576.28	482.02	6.113	SF
Wells Ranch 34-2 SI - Wellbore #1 - No Surveys	14,262.49	6,516.53	1,318.25	1,162.46	8.461	CC, ES
Wells Ranch 34-2 SI - Wellbore #1 - No Surveys	14,400.00	6,515.93	1,325.40	1,168.38	8.441	SF
Wells Ranch 41-2 - Wellbore #1 - Gyro Surveys	15,220.84	6,563.37	2,245.84	2,112.81	16.882	CC, ES
Wells Ranch 41-2 - Wellbore #1 - Gyro Surveys	15,500.00	6,560.87	2,263.12	2,127.69	16.711	SF
Wells Ranch 42-2 SI - Wellbore #1 - No Surveys	15,200.80	6,522.44	1,321.40	1,154.38	7.911	CC, ES
Wells Ranch 42-2 SI - Wellbore #1 - No Surveys	15,300.00	6,522.01	1,325.12	1,157.28	7.895	SF
Wells Ranch 43-2 TA - Wellbore #1 - Gyro Surveys	15,170.60	6,507.78	413.55	281.47	3.131	CC, ES, SF
Wells Ranch 44-2 - Wellbore #1 - No Surveys	15,192.44	6,512.48	1,319.81	1,152.97	7.911	CC
Wells Ranch 44-2 - Wellbore #1 - No Surveys	15,200.00	6,512.44	1,319.83	1,152.89	7.906	ES
Wells Ranch 44-2 - Wellbore #1 - No Surveys	15,300.00	6,512.01	1,324.18	1,156.33	7.889	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 WELLS RANCH STATE BB03-643
Project:	Wells Ranch	TVD Reference:	Well @ 4754.00ft
Reference Site:	BB Section 03	MD Reference:	Well @ 4754.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	WELLS RANCH STATE BB03-643	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMP
Reference Design:	Plan #3	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 03						
UPRR Pan Am 1 (PA) - Original Drilling - Original Drilling	6,436.76	6,378.53	2,399.69	2,249.22	15.948	CC
UPRR Pan Am 1 (PA) - Original Drilling - Original Drilling	6,450.00	6,388.72	2,399.73	2,249.01	15.922	ES
UPRR Pan Am 1 (PA) - Original Drilling - Original Drilling	6,750.00	6,565.48	2,427.43	2,272.24	15.641	SF
Wells 43-3 PA - Wellbore #1 - No Surveys	10,236.68	6,544.07	124.45	15.07	1.138	Level 2, CC, ES, SF
Wells 34-3 - Wellbore #1 - Gyro Surveys	8,742.69	6,600.00	1,572.26	1,512.42	26.275	CC, ES
Wells 34-3 - Wellbore #1 - Gyro Surveys	9,100.00	9,100.00	1,612.33	1,541.28	22.693	SF
Wells Rach USX BB 3-14 - Wellbore #1 - Gyro Surveys	2,263.38	2,246.01	1,618.29	1,602.73	104.015	CC
Wells Rach USX BB 3-14 - Wellbore #1 - Gyro Surveys	2,300.00	2,281.20	1,618.48	1,602.67	102.353	ES
Wells Rach USX BB 3-14 - Wellbore #1 - Gyro Surveys	7,800.00	6,525.59	1,757.60	1,706.42	34.344	SF
Wells Ranch 12-03 - Original Drilling - Original Drilling - A	6,317.81	6,273.40	1,019.95	975.71	23.055	CC, ES
Wells Ranch 12-03 - Original Drilling - Original Drilling - A	6,500.00	6,422.80	1,032.19	986.85	22.768	SF
Wells Ranch 21-3 TA - Wellbore #1 - No Surveys	7,402.78	6,606.41	2,331.86	2,247.68	27.700	CC, ES
Wells Ranch 21-3 TA - Wellbore #1 - No Surveys	7,800.00	6,604.68	2,365.45	2,278.80	27.297	SF
Wells Ranch 32-3 SI - Wellbore #1 - No Surveys	8,887.89	6,559.94	1,064.19	968.68	11.142	CC
Wells Ranch 32-3 SI - Wellbore #1 - No Surveys	8,900.00	6,559.89	1,064.25	968.62	11.128	ES
Wells Ranch 32-3 SI - Wellbore #1 - No Surveys	9,000.00	6,559.45	1,070.07	973.47	11.077	SF
Wells Ranch 41-3 - Wellbore #1 - No Surveys	10,046.20	6,875.00	3,025.13	2,930.10	31.832	CC
Wells Ranch 41-3 - Wellbore #1 - No Surveys	10,100.00	6,875.00	3,025.61	2,930.04	31.656	ES
Wells Ranch 41-3 - Wellbore #1 - No Surveys	10,900.00	6,875.00	3,143.31	3,040.23	30.492	SF
WELLS RANCH BB03-627 - Wellbore #1 - Plan #2	13,456.01	13,641.56	997.94	817.69	5.536	CC
WELLS RANCH BB03-627 - Wellbore #1 - Plan #2	16,096.95	16,282.21	1,036.70	793.40	4.261	ES, SF
WELLS RANCH BB03-651 - Wellbore #1 - Plan #4	2,567.86	2,563.26	36.14	18.33	2.029	CC
WELLS RANCH BB03-651 - Wellbore #1 - Plan #4	2,600.00	2,594.99	36.32	18.30	2.016	ES, SF
WELLS RANCH STATE BB03-620 - Wellbore #1 - Plan #	2,200.00	2,210.00	1,043.23	1,027.89	67.996	CC, ES
WELLS RANCH STATE BB03-620 - Wellbore #1 - Plan #	16,096.95	16,014.39	1,532.59	1,291.78	6.364	SF
WELLS RANCH STATE BB03-636 - Wellbore #1 - Plan #	2,200.00	2,200.00	36.43	21.12	2.380	CC, ES
WELLS RANCH STATE BB03-636 - Wellbore #1 - Plan #	16,096.95	16,021.67	525.29	285.95	2.195	SF
WELLS RANCH STATE BB03-659 - Wellbore #1 - Plan #	6,953.53	7,015.17	885.61	836.82	18.153	CC
WELLS RANCH STATE BB03-659 - Wellbore #1 - Plan #	16,096.95	16,136.94	1,044.86	804.19	4.341	ES, SF
WELLS RANCH STATE BB03-668 - Wellbore #1 - Plan #	6,953.96	6,888.22	1,612.21	1,563.62	33.175	CC
WELLS RANCH STATE BB03-668 - Wellbore #1 - Plan #	16,096.95	15,989.62	1,641.46	1,400.51	6.813	ES, SF
WELLS RANCH STATE BB03-676 - Wellbore #1 - Plan #	3,206.35	2,958.85	2,184.41	2,162.90	101.573	CC
WELLS RANCH STATE BB03-676 - Wellbore #1 - Plan #	16,096.95	16,959.90	2,198.70	1,949.19	8.812	ES, SF
WELLS RANCH STATE BB03-684 - Wellbore #1 - Plan #	2,811.74	2,554.56	2,260.47	2,241.82	121.231	CC, ES
WELLS RANCH STATE BB03-684 - Wellbore #1 - Plan #	16,096.95	16,957.53	2,739.22	2,489.65	10.976	SF
Wells Ranch State BB05-613 - Original Drilling - Original	2,016.17	2,006.21	1,086.89	1,073.26	79.766	CC, ES
Wells Ranch State BB05-613 - Original Drilling - Original	6,300.00	6,045.26	2,066.66	2,028.10	53.602	SF
Wells Ranch State BB05-617 - Original Drilling - Original	2,224.52	2,222.45	1,047.66	1,033.24	72.671	CC, ES
Wells Ranch State BB05-617 - Original Drilling - Original	6,400.00	6,260.71	1,839.19	1,799.87	46.779	SF
Wells Ranch State BB05-625 - Original Drilling - Original	2,191.77	2,179.82	1,014.69	1,000.38	70.935	CC
Wells Ranch State BB05-625 - Original Drilling - Original	2,200.00	2,185.06	1,014.71	1,000.38	70.778	ES
Wells Ranch State BB05-625 - Original Drilling - Original	6,100.00	6,018.29	1,372.09	1,334.33	36.329	SF
Wells Ranch State BB05-630 - Original Drilling - Original	2,308.67	2,312.05	201.80	186.97	13.608	CC, ES
Wells Ranch State BB05-630 - Original Drilling - Original	2,500.00	2,498.27	206.86	191.19	13.199	SF
Wells Ranch State BB05-635 - Original Drilling - Original	0.00	13,215.43	200.46			
Wells Ranch State BB05-635 - Original Drilling - Original	115.31	115.31	200.30	199.91	507.423	CC
Wells Ranch State BB05-635 - Original Drilling - Original	2,600.00	2,595.75	209.06	192.79	12.850	SF
Wells Ranch State BB05-644 - Original Drilling - Original	696.98	695.99	201.92	197.41	44.734	CC
Wells Ranch State BB05-644 - Original Drilling - Original	2,600.00	2,593.20	205.36	189.27	12.762	ES
Wells Ranch State BB05-644 - Original Drilling - Original	5,500.00	5,484.50	242.70	208.93	7.186	SF
Wells Ranch State BB05-650 - Original Drilling - Original	2,108.27	2,107.43	205.22	191.05	14.482	CC, ES
Wells Ranch State BB05-650 - Original Drilling - Original	6,007.58	5,981.65	339.45	301.97	9.058	SF
Wells Ranch State BB05-656 - Original Drilling - Original	6,100.33	6,133.46	1,059.60	1,020.86	27.351	CC, ES

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 WELLS RANCH STATE BB03-643
Project:	Wells Ranch	TVD Reference:	Well @ 4754.00ft
Reference Site:	BB Section 03	MD Reference:	Well @ 4754.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	WELLS RANCH STATE BB03-643	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMP
Reference Design:	Plan #3	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 03						
Wells Ranch State BB05-656 - Original Drilling - Original	6,200.00	6,179.49	1,067.11	1,027.85	27.183	SF
Wells Ranch State BB05-665 - Original Drilling - Original	6,213.55	6,141.00	1,462.72	1,424.33	38.099	CC, ES
Wells Ranch State BB05-665 - Original Drilling - Original	6,350.00	6,181.45	1,470.94	1,431.99	37.763	SF
Wells Ranch State BB05-669 - Original Drilling - Original	5,072.24	4,875.54	1,731.12	1,700.71	56.939	CC
Wells Ranch State BB05-669 - Original Drilling - Original	6,007.58	5,803.61	1,732.13	1,695.31	47.042	ES
Wells Ranch State BB05-669 - Original Drilling - Original	6,450.00	6,193.63	1,764.89	1,725.26	44.535	SF
Wells Ranch State BB05-678 - Original Drilling - Original	6,394.90	6,449.84	2,125.74	2,085.99	53.477	CC
Wells Ranch State BB05-678 - Original Drilling - Original	6,400.00	6,450.87	2,125.75	2,085.97	53.448	ES
Wells Ranch State BB05-678 - Original Drilling - Original	6,600.00	6,472.66	2,143.14	2,102.63	52.905	SF
Wells Ranch State BB05-685 - Original Drilling - Original	3,766.91	3,491.00	2,718.66	2,696.93	125.120	CC, ES
Wells Ranch State BB05-685 - Original Drilling - Original	6,550.00	6,329.00	2,804.89	2,764.33	69.147	SF
Wells Ranch State BB05-690 - Original Drilling - Original	0.00	49.78	2,811.01			
Wells Ranch State BB05-690 - Original Drilling - Original	1,956.82	2,012.86	2,812.08	2,798.67	209.780	ES
Wells Ranch State BB05-690 - Original Drilling - Original	6,850.00	6,216.89	3,028.64	2,987.27	73.210	SF
Wells Ranch USX BB 3-10 - Wellbore #1 - Gyro Surveys	8,670.27	6,562.20	264.07	205.07	4.476	CC, ES, SF
Wells Ranch USX BB 3-11 SI - Wellbore #1 - Gyro Surve	7,571.94	6,568.60	361.60	311.30	7.189	CC, ES, SF
Wells Ranch USX BB 3-16 SI - Wellbore #1 - Gyro Surve	10,081.33	6,510.22	1,650.41	1,577.34	22.586	CC
Wells Ranch USX BB 3-16 SI - Wellbore #1 - Gyro Surve	10,100.00	6,510.29	1,650.51	1,577.26	22.531	ES
Wells Ranch USX BB 3-16 SI - Wellbore #1 - Gyro Surve	10,300.00	6,511.03	1,664.83	1,589.95	22.233	SF
Wells Ranch USX BB 3-2 SI - Wellbore #1 - No Surveys	8,622.73	6,570.10	2,487.90	2,394.80	26.722	CC, ES
Wells Ranch USX BB 3-2 SI - Wellbore #1 - No Surveys	9,200.00	6,567.58	2,554.00	2,455.73	25.991	SF
Wells Ranch USX BB 3-4 - Wellbore #1 - No Surveys	6,402.93	6,372.71	2,514.28	2,435.89	32.071	CC, ES
Wells Ranch USX BB 3-4 - Wellbore #1 - No Surveys	6,750.00	6,586.48	2,548.15	2,466.79	31.319	SF
Wells Ranch USX BB 3-6 SI - Wellbore #1 - Gyro Survey	4,681.75	6,600.00	1,761.58	1,722.21	44.744	CC, ES
Wells Ranch USX BB 3-6 SI - Wellbore #1 - Gyro Survey	4,800.00	6,600.00	1,765.55	1,725.97	44.610	SF
Wells Ranch USX BB 3-8 - Wellbore #1 - Gyro Surveys	9,954.88	6,562.80	1,040.01	968.08	14.458	CC, ES
Wells Ranch USX BB 3-8 - Wellbore #1 - Gyro Surveys	10,100.00	6,561.50	1,050.09	976.74	14.317	SF
Wells Ranch USX BB03-04 - Original Drilling - Original D	6,419.45	6,396.75	2,541.62	2,496.62	56.489	CC, ES
Wells Ranch USX BB03-04 - Original Drilling - Original D	6,800.00	6,623.22	2,582.48	2,535.51	54.971	SF
Wells Ranch USX BB03-12 - Original Drilling - Original D	4,421.84	4,372.42	342.08	311.41	11.151	CC
Wells Ranch USX BB03-12 - Original Drilling - Original D	4,500.00	4,449.48	342.30	311.07	10.962	ES
Wells Ranch USX BB03-12 - Original Drilling - Original D	6,007.58	5,951.73	392.93	350.95	9.360	SF
Wells Ranch USX BB03-13 - Original Drilling - Original D	2,215.55	2,178.49	945.74	930.54	62.220	CC, ES
Wells Ranch USX BB03-13 - Original Drilling - Original D	6,300.00	6,154.04	1,479.91	1,436.20	33.861	SF
Wells Ranch USX BB03-25 PA - Original Drilling - Gyro S	149.73	110.33	665.25	664.75	1,339.748	CC
Wells Ranch USX BB03-25 PA - Original Drilling - Gyro S	2,200.00	2,160.06	667.60	652.56	44.403	ES
Wells Ranch USX BB03-25 PA - Original Drilling - Gyro S	7,012.04	6,530.04	1,015.92	968.60	21.468	SF

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well WELLS RANCH STATE BB03-643
Project:	Wells Ranch	TVD Reference:	Well @ 4754.00ft
Reference Site:	BB Section 03	MD Reference:	Well @ 4754.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	WELLS RANCH STATE BB03-643	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMP
Reference Design:	Plan #3	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 04						
State 11-04 - Original Drilling - Original Drilling - As Drille	6,036.12	5,938.37	5,824.63	5,782.63	138.672	CC, ES
State 11-04 - Original Drilling - Original Drilling - As Drille	6,500.00	6,328.00	5,973.41	5,928.60	133.312	SF
State 12-04 - Original Drilling - Original Drilling - As Drille	6,046.16	6,200.00	5,428.75	5,385.77	126.303	CC
State 12-04 - Original Drilling - Original Drilling - As Drille	6,050.00	6,200.00	5,428.76	5,385.77	126.261	ES
State 12-04 - Original Drilling - Original Drilling - As Drille	6,400.00	6,400.00	5,527.40	5,482.56	123.266	SF
State 13-04 - Original Drilling - Original Drilling - As Drille	4,380.16	4,339.78	5,516.63	5,486.20	181.291	CC
State 13-04 - Original Drilling - Original Drilling - As Drille	5,800.00	5,729.40	5,524.19	5,483.79	136.720	ES
State 13-04 - Original Drilling - Original Drilling - As Drille	6,450.00	6,228.64	5,683.47	5,639.18	128.328	SF
State 21-04 - Original Drilling - Original Drilling - As Drille	6,062.18	6,056.63	4,837.55	4,795.04	113.781	CC, ES
State 21-04 - Original Drilling - Original Drilling - As Drille	6,500.00	6,505.89	4,963.36	4,917.91	109.203	SF
State 22-04 - Original Drilling - Original Drilling - As Drille	6,028.44	5,995.64	4,312.62	4,171.32	30.521	CC
State 22-04 - Original Drilling - Original Drilling - As Drille	6,050.00	6,017.01	4,312.97	4,171.17	30.415	ES
State 22-04 - Original Drilling - Original Drilling - As Drille	6,400.00	6,340.34	4,415.72	4,266.32	29.555	SF
State 23-04 - Original Drilling - Original Drilling - As Drille	3,182.54	3,175.09	4,086.82	4,064.76	185.308	CC
State 23-04 - Original Drilling - Original Drilling - As Drille	3,300.00	3,253.88	4,087.40	4,064.65	179.686	ES
State 23-04 - Original Drilling - Original Drilling - As Drille	6,350.00	6,336.35	4,249.07	4,204.64	95.643	SF
State 24-04 - Original Drilling - Original Drilling - As Drille	0.00	0.00	4,182.06			
State 24-04 - Original Drilling - Original Drilling - As Drille	100.00	56.64	4,182.17	4,181.94	10,000.000	ES
State 24-04 - Original Drilling - Original Drilling - As Drille	6,400.00	6,325.51	4,473.57	4,428.99	100.354	SF
State 31-04 (SI) - Original Drilling - Original Drilling - As D	6,083.02	6,083.59	3,707.29	3,664.57	86.784	CC, ES
State 31-04 (SI) - Original Drilling - Original Drilling - As D	6,450.00	6,398.67	3,788.91	3,743.91	84.191	SF
State 32-04 - Original Drilling - Original Drilling - As Drille	6,038.69	6,005.80	2,943.71	2,802.17	20.797	CC
State 32-04 - Original Drilling - Original Drilling - As Drille	6,050.00	6,017.01	2,943.80	2,802.00	20.759	ES
State 32-04 - Original Drilling - Original Drilling - As Drille	6,350.00	6,298.72	3,014.56	2,866.12	20.309	SF
State 33-04 - Original Drilling - Original Drilling - As Drille	4,232.43	4,199.06	2,829.42	2,730.53	28.612	CC
State 33-04 - Original Drilling - Original Drilling - As Drille	6,007.58	5,959.96	2,838.31	2,697.78	20.198	ES
State 33-04 - Original Drilling - Original Drilling - As Drille	6,300.00	6,240.11	2,906.93	2,759.81	19.758	SF
State 41-04 (SI) - Original Drilling - Original Drilling - As D	6,133.31	6,148.64	2,881.38	2,838.27	66.842	CC, ES
State 41-04 (SI) - Original Drilling - Original Drilling - As D	6,500.00	6,484.26	2,944.38	2,898.93	64.789	SF
State 42-04 (SI) - Original Drilling - Original Drilling - As D	6,065.25	6,022.09	1,970.54	1,828.56	13.879	CC
State 42-04 (SI) - Original Drilling - Original Drilling - As D	6,100.00	6,056.33	1,971.33	1,828.54	13.806	ES
State 42-04 (SI) - Original Drilling - Original Drilling - As D	6,300.00	6,245.11	2,006.64	1,859.41	13.629	SF
State Lease 34-04 (PA) - Original Drilling - Original Drillin	2,200.00	2,177.00	2,947.43	2,896.23	57.574	CC
State Lease 34-04 (PA) - Original Drilling - Original Drillin	2,400.00	2,376.84	2,949.87	2,893.97	52.766	ES
State Lease 34-04 (PA) - Original Drilling - Original Drillin	6,300.00	6,236.11	3,211.74	3,064.64	21.834	SF
State Wells 14-04 - Original Drilling - Original Drilling - As	2,200.00	2,183.00	5,415.26	5,363.95	105.533	CC
State Wells 14-04 - Original Drilling - Original Drilling - As	2,563.25	2,545.28	5,419.67	5,359.82	90.553	ES
State Wells 14-04 - Original Drilling - Original Drilling - As	6,450.00	6,366.72	5,675.91	5,525.81	37.814	SF
State Wells 44-04 - Original Drilling - Original Drilling - As	1,720.77	1,686.82	1,853.55	1,841.89	158.976	CC
State Wells 44-04 - Original Drilling - Original Drilling - As	2,200.00	2,155.34	1,855.44	1,840.44	123.638	ES
State Wells 44-04 - Original Drilling - Original Drilling - As	6,250.00	6,136.98	2,277.77	2,234.27	52.363	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 WELLS RANCH STATE BB03-643
Project:	Wells Ranch	TVD Reference:	Well @ 4754.00ft
Reference Site:	BB Section 03	MD Reference:	Well @ 4754.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	WELLS RANCH STATE BB03-643	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMP
Reference Design:	Plan #3	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
BB Section 05						
UPV 05-03H3 - Original Drilling - Original Drilling - As Dri	6,020.57	5,800.01	9,705.59	9,664.15	234.211	CC, ES
UPV 05-03H3 - Original Drilling - Original Drilling - As Dri	6,550.00	6,134.93	9,911.00	9,866.79	224.224	SF
UPV 05-04H3 - Original Drilling - Original Drilling - As Dri						Out of range
UPV 05-05H3 - Original Drilling - Original Drilling - As Dri						Out of range
UPV 05-06H3 - Original Drilling - Original Drilling - As Dri	6,027.59	6,100.00	9,390.07	9,347.57	220.927	CC, ES
UPV 05-06H3 - Original Drilling - Original Drilling - As Dri	6,700.00	6,514.59	9,713.52	9,667.58	211.414	SF
Wells Ranch 31-05 - Original Drilling - Original Drilling - A	6,054.17	6,259.21	8,275.08	8,231.89	191.600	CC, ES
Wells Ranch 31-05 - Original Drilling - Original Drilling - A	7,200.00	7,200.00	9,044.90	8,996.23	185.840	SF
Wells Ranch 32-05 - Original Drilling - Original Drilling - A	6,029.51	6,091.93	8,091.82	8,049.32	190.393	CC, ES
Wells Ranch 32-05 - Original Drilling - Original Drilling - A	6,650.00	6,620.60	8,370.58	8,324.48	181.580	SF
Wells Ranch 41-05 - Original Drilling - Original Drilling - A	6,039.77	6,039.62	7,117.95	7,075.62	168.119	CC, ES
Wells Ranch 41-05 - Original Drilling - Original Drilling - A	6,650.00	6,752.33	7,376.60	7,330.05	158.445	SF
Wells Ranch 42-05 - Original Drilling - Original Drilling - A	6,025.96	6,013.95	6,842.30	6,800.08	162.044	CC, ES
Wells Ranch 42-05 - Original Drilling - Original Drilling - A	6,700.00	6,703.26	7,162.61	7,116.15	154.167	SF
Wells Ranch BB01-611 - Original Drilling - Original Drilling	16,096.95	16,278.00	2,233.16	1,991.95	9.258	CC, ES, SF
Wells Ranch BB01-615 - Original Drilling - Original Drilling	16,096.95	16,386.00	1,785.29	1,545.17	7.435	CC, ES, SF
Wells Ranch BB01-624 - Original Drilling - Original Drilling	16,096.95	6,931.00	9,994.96	9,946.98	208.321	CC, ES, SF
Wells Ranch BB01-624 - Original Drilling - ST01 - ST01 -	16,096.95	16,377.00	1,153.64	959.75	5.950	CC, ES, SF
Wells Ranch BB01-638 - Original Drilling - Original Drilling	16,096.95	16,495.00	622.42	469.17	4.061	CC, ES, SF
Wells Ranch BB01-649 - Original Drilling - Original Drilling	16,096.95	16,403.00	562.93	433.22	4.340	CC, ES, SF
Wells Ranch BB01-655 - Original Drilling - Original Drilling	16,096.95	16,335.00	985.56	783.94	4.888	CC, ES, SF
Wells Ranch BB01-669 - Original Drilling - Original Drilling	16,096.95	16,351.00	1,587.91	1,361.59	7.016	CC, ES, SF
Wells Ranch BB01-675 - Original Drilling - Original Drilling	16,096.95	16,379.00	2,225.29	1,996.95	9.746	CC, ES, SF
Wells Ranch State AA32-717 - Wellbore #1 - Plan #3	6,067.27	6,461.70	7,405.30	7,359.62	162.130	CC, ES
Wells Ranch State AA32-717 - Wellbore #1 - Plan #3	6,350.00	6,500.00	7,465.34	7,418.55	159.564	SF
Wells Ranch State AA32-724 - Wellbore #1 - Plan #3	6,023.56	5,903.20	7,757.98	7,715.14	181.071	CC, ES
Wells Ranch State AA32-724 - Wellbore #1 - Plan #3	6,500.00	6,327.60	7,915.34	7,869.34	172.055	SF
Wells Ranch State AA32-731 - Wellbore #1 - Plan #3	2,891.17	2,537.32	7,900.42	7,881.47	416.994	CC
Wells Ranch State AA32-731 - Wellbore #1 - Plan #3	3,000.00	2,600.00	7,900.80	7,881.25	404.125	ES
Wells Ranch State AA32-731 - Wellbore #1 - Plan #3	6,600.00	5,590.73	8,357.66	8,314.49	193.610	SF
Wells Ranch State AA32-737 - Wellbore #1 - Plan #3	2,000.00	1,977.00	7,943.13	7,929.34	575.990	CC
Wells Ranch State AA32-737 - Wellbore #1 - Plan #3	2,100.00	2,000.00	7,943.50	7,929.27	558.191	ES
Wells Ranch State AA32-737 - Wellbore #1 - Plan #3	6,600.00	5,005.93	8,619.63	8,578.90	211.663	SF
Wells Ranch State AA32-745 - Wellbore #1 - Plan #3	6,056.53	6,322.07	9,045.25	9,000.98	204.343	CC, ES
Wells Ranch State AA32-745 - Wellbore #1 - Plan #3	6,400.00	6,350.00	9,135.62	9,090.15	200.915	SF
Wells Ranch State AA32-751 - Wellbore #1 - Plan #3	6,022.58	5,805.35	9,587.50	9,545.51	228.336	CC, ES
Wells Ranch State AA32-751 - Wellbore #1 - Plan #3	6,450.00	6,167.24	9,718.67	9,674.00	217.566	SF
Wells Ranch State AA32-763 - Wellbore #1 - Plan #2	2,008.70	1,967.70	9,742.98	9,729.19	706.615	CC
Wells Ranch State AA32-763 - Wellbore #1 - Plan #2	2,100.00	2,000.00	9,743.16	9,728.93	684.638	ES
Wells Ranch State AA32-763 - Wellbore #1 - Plan #2	5,800.00	4,376.15	9,998.11	9,962.17	278.223	SF
Wells Ranch State AA32-770 - Wellbore #1 - Plan #3						Out of range
Wells Ranch State AA32-775 - Wellbore #1 - Plan #3						Out of range
Wells Ranch State AA32-783 - Wellbore #1 - Plan #3						Out of range
Wells Ranch State AA32-789 - Wellbore #1 - Plan #3						Out of range
Wells Ranch State BB01-690 - Original Drilling - Original	16,096.95	16,119.00	3,195.46	2,955.27	13.304	CC, ES, SF
Wells Ranch USX BB05-09 - Original Drilling - Original D	6,012.96	6,017.86	6,555.95	6,513.76	155.391	CC, ES
Wells Ranch USX BB05-09 - Original Drilling - Original D	6,550.00	6,476.52	6,771.30	6,725.89	149.106	SF
Wells Ranch USX BB05-10 - Original Drilling - Original D	6,012.89	6,060.41	7,921.14	7,878.82	187.182	CC, ES
Wells Ranch USX BB05-10 - Original Drilling - Original D	6,600.00	6,621.04	8,171.50	8,125.51	177.668	SF
Wells Ranch USX BB05-11 - Original Drilling - Original Dr	4,234.98	4,152.64	9,254.24	9,224.99	316.478	CC
Wells Ranch USX BB05-11 - Original Drilling - Original Dr	4,300.00	4,200.01	9,254.40	9,224.76	312.220	ES
Wells Ranch USX BB05-11 - Original Drilling - Original Dr	6,350.00	6,350.00	9,362.24	9,317.78	210.575	SF
Wells Ranch USX BB05-12 - Original Drilling - Original D						Out of range

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 WELLS RANCH STATE BB03-643
Project:	Wells Ranch	TVD Reference:	Well @ 4754.00ft
Reference Site:	BB Section 03	MD Reference:	Well @ 4754.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	WELLS RANCH STATE BB03-643	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMP
Reference Design:	Plan #3	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 BB05-13 - Original Drilling - Original D						Out of range
Wells Ranch USX BB05-14 - Original Drilling - Original D	583.61	567.61	9,393.84	9,390.17	2,562.093	CC
Wells Ranch USX BB05-14 - Original Drilling - Original D	4,100.00	4,200.01	9,406.50	9,377.56	325.033	ES
Wells Ranch USX BB05-14 - Original Drilling - Original D	6,500.00	6,200.01	9,618.33	9,574.00	217.000	SF
Wells Ranch USX BB05-15 - Original Drilling - Original D	0.00	0.00	8,132.63			
Wells Ranch USX BB05-15 - Original Drilling - Original D	400.00	317.55	8,133.83	8,131.70	3,804.028	ES
Wells Ranch USX BB05-15 - Original Drilling - Original D	6,500.00	6,637.48	8,349.97	8,304.10	182.035	SF
Wells Ranch USX BB05-16 - Original Drilling - Original D	0.00	0.00	6,882.35			
Wells Ranch USX BB05-16 - Original Drilling - Original D	6,007.58	6,115.01	6,890.54	6,848.00	161.980	ES
Wells Ranch USX BB05-16 - Original Drilling - Original D	6,550.00	6,655.59	7,105.30	7,059.21	154.183	SF
Wells Ranch USX BB05-23 - Original Drilling - Original D	5,882.43	5,938.42	7,204.18	7,162.70	173.674	CC
Wells Ranch USX BB05-23 - Original Drilling - Original D	6,007.58	6,046.51	7,204.39	7,162.08	170.264	ES
Wells Ranch USX BB05-23 - Original Drilling - Original D	6,500.00	6,465.66	7,385.50	7,340.18	162.977	SF
Wells Ranch USX BB05-25 - Original Drilling - Original D						Out of range

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well WELLS RANCH STATE BB03-643
Project:	Wells Ranch	TVD Reference:	Well @ 4754.00ft
Reference Site:	BB Section 03	MD Reference:	Well @ 4754.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	WELLS RANCH STATE BB03-643	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMP
Reference Design:	Plan #3	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 10						
Wells Ranch 10A - Original Drilling - Original Drilling - As	100.00	30.19	3,126.46	3,126.28	10,000.000	CC
Wells Ranch 10A - Original Drilling - Original Drilling - As	2,231.16	2,200.87	3,126.47	3,111.19	204.664	ES
Wells Ranch 10A - Original Drilling - Original Drilling - As	8,500.00	6,643.54	3,959.46	3,904.20	71.647	SF
Wells Ranch 10B - Original Drilling - Original Drilling - As	2,212.38	2,163.78	5,879.51	5,864.42	389.518	CC, ES
Wells Ranch 10B - Original Drilling - Original Drilling - As	11,500.00	6,545.67	7,752.38	7,673.97	98.871	SF
Wells Ranch 10C - Original Drilling - Original Drilling - As	9,677.53	6,529.68	3,411.21	3,342.26	49.470	CC
Wells Ranch 10C - Original Drilling - Original Drilling - As	9,700.00	6,529.59	3,411.29	3,342.11	49.310	ES
Wells Ranch 10C - Original Drilling - Original Drilling - As	10,700.00	6,525.50	3,561.15	3,483.54	45.883	SF
Wells Ranch 10F - Original Drilling - Original Drilling - As	2,220.08	2,198.48	3,253.02	3,237.78	213.516	CC, ES
Wells Ranch 10F - Original Drilling - Original Drilling - As	6,850.00	6,744.92	3,863.16	3,815.57	81.163	SF
Wells Ranch 10H - Original Drilling - Original Drilling - As	2,211.14	2,169.77	5,810.00	5,794.88	384.350	CC, ES
Wells Ranch 10H - Original Drilling - Original Drilling - As	10,900.00	6,537.82	8,095.15	8,024.48	114.546	SF
Wells Ranch 10J - Original Drilling - Original Drilling - As	2,245.62	2,220.34	1,830.77	1,816.22	125.777	CC, ES
Wells Ranch 10J - Original Drilling - Original Drilling - As	7,200.00	6,571.03	2,349.85	2,302.52	49.647	SF
Wells Ranch 10K - Original Drilling - Original Drilling - As	218.97	154.97	4,578.97	4,578.05	4,982.233	CC
Wells Ranch 10K - Original Drilling - Original Drilling - As	600.00	518.35	4,579.98	4,576.43	1,288.616	ES
Wells Ranch 10K - Original Drilling - Original Drilling - As	10,300.00	6,542.69	5,977.11	5,908.36	86.934	SF
Wells Ranch 11-10 - Original Drilling - Original Drilling - A	100.00	42.48	2,453.87	2,453.67	10,000.000	CC
Wells Ranch 11-10 - Original Drilling - Original Drilling - A	2,229.23	2,200.33	2,461.34	2,446.07	161.137	ES
Wells Ranch 11-10 - Original Drilling - Original Drilling - A	6,900.00	6,563.99	3,065.68	3,018.58	65.097	SF
Wells Ranch 12-10 - Original Drilling - Original Drilling - A	100.00	45.24	3,935.72	3,935.51	10,000.000	CC
Wells Ranch 12-10 - Original Drilling - Original Drilling - A	2,240.09	2,241.43	3,947.13	3,931.68	255.432	ES
Wells Ranch 12-10 - Original Drilling - Original Drilling - A	9,100.00	6,200.00	5,283.33	5,226.27	92.580	SF
Wells Ranch 13-10 - Original Drilling - Original Drilling - A	100.00	27.07	5,176.96	5,176.78	10,000.000	CC
Wells Ranch 13-10 - Original Drilling - Original Drilling - A	500.00	400.00	5,178.99	5,176.20	1,859.166	ES
Wells Ranch 13-10 - Original Drilling - Original Drilling - A	10,400.00	6,424.50	7,141.23	7,073.81	105.922	SF
Wells Ranch 14-10 - Original Drilling - Original Drilling - A	2,230.53	2,220.67	6,364.70	6,349.33	414.049	CC, ES
Wells Ranch 14-10 - Original Drilling - Original Drilling - A	11,700.00	6,471.00	8,777.20	8,699.76	113.346	SF
Wells Ranch 21-10 - Original Drilling - Original Drilling - A	1,001.82	947.85	2,601.96	2,595.47	400.450	CC
Wells Ranch 21-10 - Original Drilling - Original Drilling - A	1,800.00	1,724.39	2,606.05	2,593.98	215.893	ES
Wells Ranch 21-10 - Original Drilling - Original Drilling - A	8,500.00	6,620.21	2,968.73	2,912.35	52.663	SF
Wells Ranch 22-10 - Original Drilling - Original Drilling - A	100.00	31.91	3,833.31	3,833.13	10,000.000	CC
Wells Ranch 22-10 - Original Drilling - Original Drilling - A	400.00	316.68	3,834.21	3,832.07	1,796.054	ES
Wells Ranch 22-10 - Original Drilling - Original Drilling - A	9,700.00	6,567.59	4,685.33	4,620.13	71.853	SF
Wells Ranch 23-10 - Original Drilling - Original Drilling - A	915.40	841.45	5,341.30	5,335.48	917.536	CC
Wells Ranch 23-10 - Original Drilling - Original Drilling - A	1,800.00	1,689.64	5,342.55	5,330.60	447.040	ES
Wells Ranch 23-10 - Original Drilling - Original Drilling - A	11,900.00	11,900.00	7,175.40	7,076.44	72.512	SF
Wells Ranch 24-10 - Original Drilling - Original Drilling - A	100.00	20.13	6,510.33	6,510.17	10,000.000	CC
Wells Ranch 24-10 - Original Drilling - Original Drilling - A	2,203.46	2,137.30	6,510.89	6,495.93	435.240	ES
Wells Ranch 24-10 - Original Drilling - Original Drilling - A	12,400.00	6,362.44	8,342.10	8,255.46	96.285	SF
Wells Ranch 31-10 - Original Drilling - Original Drilling - A	8,936.22	6,529.64	2,887.02	2,825.63	47.028	CC, ES
Wells Ranch 31-10 - Original Drilling - Original Drilling - A	9,800.00	6,529.49	3,013.47	2,945.19	44.135	SF
Wells Ranch 32-10 - Original Drilling - Original Drilling - A	9,192.29	6,526.18	4,235.01	4,168.78	63.941	CC
Wells Ranch 32-10 - Original Drilling - Original Drilling - A	9,200.00	6,526.22	4,235.02	4,168.71	63.869	ES
Wells Ranch 32-10 - Original Drilling - Original Drilling - A	10,900.00	6,535.84	4,566.34	4,485.83	56.716	SF
Wells Ranch 33-10 - Original Drilling - Original Drilling - A	8,974.24	6,566.14	5,605.14	5,543.26	90.576	CC
Wells Ranch 33-10 - Original Drilling - Original Drilling - A	9,000.00	6,566.70	5,605.20	5,543.07	90.218	ES
Wells Ranch 33-10 - Original Drilling - Original Drilling - A	11,800.00	6,630.60	6,276.85	6,191.16	73.256	SF
Wells Ranch 34-10 - Original Drilling - Original Drilling - A	9,258.58	6,526.84	6,694.34	6,628.67	101.937	CC
Wells Ranch 34-10 - Original Drilling - Original Drilling - A	9,300.00	6,527.18	6,694.47	6,628.39	101.304	ES
Wells Ranch 34-10 - Original Drilling - Original Drilling - A	12,900.00	6,556.72	7,620.58	7,523.76	78.709	SF
Wells Ranch 41-10 - Original Drilling - Original Drilling - A	10,241.65	6,508.12	2,911.16	2,836.24	38.855	CC
Wells Ranch 41-10 - Original Drilling - Original Drilling - A	10,300.00	6,507.80	2,911.75	2,836.23	38.556	ES

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 WELLS RANCH STATE BB03-643
Project:	Wells Ranch	TVD Reference:	Well @ 4754.00ft
Reference Site:	BB Section 03	MD Reference:	Well @ 4754.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	WELLS RANCH STATE BB03-643	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMP
Reference Design:	Plan #3	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 10						
Wells Ranch 41-10 - Original Drilling - Original Drilling - A	11,000.00	6,504.10	3,008.31	2,927.05	37.019	SF
Wells Ranch 42-10 - Original Drilling - Original Drilling - A	10,151.67	6,495.33	4,164.94	4,091.10	56.408	CC
Wells Ranch 42-10 - Original Drilling - Original Drilling - A	10,200.00	6,495.14	4,165.22	4,090.88	56.030	ES
Wells Ranch 42-10 - Original Drilling - Original Drilling - A	11,600.00	6,489.50	4,409.57	4,323.29	51.109	SF
Wells Ranch 43-10 - Original Drilling - Original Drilling - A	10,282.72	6,445.08	5,543.50	5,468.41	73.830	CC
Wells Ranch 43-10 - Original Drilling - Original Drilling - A	10,300.00	6,445.01	5,543.53	5,468.26	73.651	ES
Wells Ranch 43-10 - Original Drilling - Original Drilling - A	12,600.00	6,435.62	6,008.33	5,913.00	63.023	SF
Wells Ranch 44-10 - Original Drilling - Original Drilling - A	10,281.06	6,462.94	6,762.11	6,686.98	90.000	CC
Wells Ranch 44-10 - Original Drilling - Original Drilling - A	10,400.00	6,461.62	6,763.16	6,686.76	88.521	ES
Wells Ranch 44-10 - Original Drilling - Original Drilling - A	13,498.39	6,424.03	7,489.93	7,386.62	72.504	SF

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well WELLS RANCH STATE BB03-643
Project:	Wells Ranch	TVD Reference:	Well @ 4754.00ft
Reference Site:	BB Section 03	MD Reference:	Well @ 4754.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	WELLS RANCH STATE BB03-643	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMP
Reference Design:	Plan #3	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 11						
Wells 12-11 - Original Drilling - Original Drilling - As Drille	11,709.13	6,507.66	4,082.39	3,883.34	20.510	CC, ES
Wells 12-11 - Original Drilling - Original Drilling - As Drille	12,400.00	6,504.65	4,140.43	3,934.69	20.124	SF
Wells Ranch 13-11 - Original Drilling - Original Drilling - A	11,575.60	6,451.00	5,487.77	5,398.09	61.196	CC
Wells Ranch 13-11 - Original Drilling - Original Drilling - A	11,600.00	6,451.03	5,487.82	5,397.88	61.011	ES
Wells Ranch 13-11 - Original Drilling - Original Drilling - A	13,498.39	6,453.39	5,816.48	5,709.53	54.386	SF
Wells Ranch 14-11 - Original Drilling - Original Drilling - A	11,002.19	6,539.09	7,469.21	7,353.11	64.332	CC
Wells Ranch 14-11 - Original Drilling - Original Drilling - A	11,100.00	6,537.41	7,469.85	7,352.69	63.759	ES
Wells Ranch 14-11 - Original Drilling - Original Drilling - A	13,800.00	6,491.06	7,987.19	7,845.43	56.341	SF
Wells Ranch 23-11 - Original Drilling - Original Drilling - A	12,867.52	6,518.66	5,210.11	5,105.07	49.599	CC
Wells Ranch 23-11 - Original Drilling - Original Drilling - A	12,900.00	6,518.25	5,210.21	5,104.80	49.427	ES
Wells Ranch 23-11 - Original Drilling - Original Drilling - A	14,300.00	6,501.31	5,431.71	5,313.64	46.005	SF
Wells Ranch 24-11 - Original Drilling - Original Drilling - A	12,953.26	6,540.58	6,721.30	6,615.21	63.349	CC
Wells Ranch 24-11 - Original Drilling - Original Drilling - A	13,000.00	6,539.92	6,721.47	6,614.83	63.034	ES
Wells Ranch 24-11 - Original Drilling - Original Drilling - A	15,300.00	6,518.36	7,179.35	7,052.09	56.412	SF
Wells Ranch BB09-626 - Wells Ranch BB09-626 OH - As	11,488.55	6,268.95	6,459.32	6,376.75	78.224	CC, ES
Wells Ranch BB09-626 - Wells Ranch BB09-626 OH - As	14,200.00	6,139.00	7,019.08	6,912.84	66.065	SF
Wells Ranch BB09-639 - Wells Ranch BB09-639 OH - As	11,257.06	6,668.70	5,768.47	5,686.37	70.257	CC
Wells Ranch BB09-639 - Wells Ranch BB09-639 OH - As	11,300.00	6,661.47	5,768.61	5,686.05	69.874	ES
Wells Ranch BB09-639 - Wells Ranch BB09-639 OH - As	13,600.00	6,266.80	6,173.83	6,071.32	60.224	SF
Wells Ranch BB09-649 - Wells Ranch BB09-649 OH - As	10,858.93	7,034.20	5,203.20	5,124.97	66.519	CC, ES
Wells Ranch BB09-649 - Wells Ranch BB09-649 OH - As	11,900.00	11,900.00	5,256.13	5,154.63	51.787	SF
Wells Ranch BB09-650 - Wells Ranch BB09-650 OH - As	11,300.19	6,671.17	4,776.85	4,694.52	58.018	CC
Wells Ranch BB09-650 - Wells Ranch BB09-650 OH - As	11,400.00	6,641.77	4,777.63	4,694.29	57.326	ES
Wells Ranch BB09-650 - Wells Ranch BB09-650 OH - As	13,100.00	6,371.19	5,062.89	4,965.22	51.840	SF
Wells Ranch BB09-654 - Wells Ranch BB09-654 OH - As	11,244.04	6,612.00	4,321.14	4,239.24	52.765	CC
Wells Ranch BB09-654 - Wells Ranch BB09-654 OH - As	11,300.00	6,612.00	4,321.50	4,238.99	52.378	ES
Wells Ranch BB09-654 - Wells Ranch BB09-654 OH - As	12,700.00	6,423.00	4,537.89	4,443.57	48.115	SF
Wells Ranch BB09-665 - Wells Ranch BB09-665 OH - As	11,531.09	5,911.91	3,713.10	3,631.07	45.265	CC
Wells Ranch BB09-665 - Wells Ranch BB09-665 OH - As	11,600.00	5,923.27	3,713.72	3,630.87	44.824	ES
Wells Ranch BB09-665 - Wells Ranch BB09-665 OH - As	12,300.00	12,300.00	3,789.50	3,676.33	33.484	SF
Wells Ranch BB09-674 - Wells Ranch BB09-674 OH - As	11,184.76	6,580.73	3,180.68	3,100.33	39.584	CC
Wells Ranch BB09-674 - Wells Ranch BB09-674 OH - As	11,200.00	6,577.30	3,180.73	3,100.22	39.508	ES
Wells Ranch BB09-674 - Wells Ranch BB09-674 OH - As	12,100.00	6,235.00	3,277.51	3,189.77	37.352	SF
Wells Ranch BB11-618 - Original Drilling - Original Drillin	13,000.00	13,000.00	6,834.73	6,672.01	42.004	ES
Wells Ranch BB11-618 - Original Drilling - Original Drillin	13,339.01	8,919.00	6,828.83	6,705.27	55.268	CC
Wells Ranch BB11-618 - Original Drilling - Original Drillin	16,096.95	11,716.86	6,886.63	6,697.89	36.487	SF
Wells Ranch BB11-627 - Original Drilling - Original Drillin	13,416.40	9,035.61	6,313.66	6,187.91	50.211	CC
Wells Ranch BB11-627 - Original Drilling - Original Drillin	15,100.00	15,100.00	6,352.24	6,136.00	29.376	ES, SF
Wells Ranch BB11-635 - Original Drilling - Original Drillin	14,160.95	10,113.00	5,797.65	5,652.07	39.826	CC
Wells Ranch BB11-635 - Original Drilling - Original Drillin	15,300.00	15,300.00	5,863.10	5,643.25	26.669	ES, SF
Wells Ranch BB11-643 - Original Drilling - Original Drillin	13,504.61	9,326.00	5,289.95	5,160.17	40.763	CC
Wells Ranch BB11-643 - Original Drilling - Original Drillin	15,317.37	11,140.06	5,310.49	5,138.21	30.826	ES
Wells Ranch BB11-643 - Original Drilling - Original Drillin	16,096.95	11,312.00	5,356.19	5,173.47	29.315	SF
Wells Ranch BB11-650 - Original Drilling - Original Drillin	13,730.49	9,677.72	4,785.24	4,649.98	35.379	CC
Wells Ranch BB11-650 - Original Drilling - Original Drillin	16,096.95	12,188.00	4,808.67	4,616.01	24.960	ES, SF
Wells Ranch BB11-658 - Original Drilling - Original Drillin	15,339.12	11,243.00	4,316.86	4,143.74	24.935	CC
Wells Ranch BB11-658 - Original Drilling - Original Drillin	15,800.00	15,800.00	4,333.29	4,100.73	18.633	ES, SF
Wells Ranch BB11-667 - Original Drilling - Original Drillin	13,982.97	9,952.97	3,774.02	3,640.34	28.232	CC
Wells Ranch BB11-667 - Original Drilling - Original Drillin	16,096.95	12,253.88	3,799.82	3,621.48	21.306	ES, SF
Wells Ranch BB11-674 - Original Drilling - Original Drillin	13,951.00	9,754.78	3,246.95	3,107.17	23.229	CC
Wells Ranch BB11-674 - Original Drilling - Original Drillin	15,800.00	11,568.31	3,270.53	3,087.46	17.865	ES
Wells Ranch BB11-674 - Original Drilling - Original Drillin	16,096.95	11,823.49	3,277.71	3,088.04	17.281	SF
Wells Ranch BB11-682 - Original Drilling - Original Drillin	15,100.00	15,100.00	2,654.35	2,439.88	12.377	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 WELLS RANCH STATE BB03-643
Project:	Wells Ranch	TVD Reference:	Well @ 4754.00ft
Reference Site:	BB Section 03	MD Reference:	Well @ 4754.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	WELLS RANCH STATE BB03-643	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDMP
Reference Design:	Plan #3	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 11						
Wells Ranch BB11-682 - Original Drilling - Original Drilling	15,509.67	11,435.00	2,636.97	2,460.10	14.909	CC
Wells Ranch State BB09-617 - Wells Ranch State BB09-617	11,576.60	6,195.35	6,909.17	6,825.35	82.431	CC
Wells Ranch State BB09-617 - Wells Ranch State BB09-617	11,700.00	6,183.50	6,910.22	6,825.06	81.142	ES
Wells Ranch State BB09-617 - Wells Ranch State BB09-617	14,600.00	5,888.96	7,561.52	7,451.93	68.997	SF
Wells Ranch State BB09-683 - Wells Ranch State BB09-683	10,859.15	7,039.43	2,623.80	2,545.37	33.454	CC
Wells Ranch State BB09-683 - Wells Ranch State BB09-683	11,318.18	6,545.86	2,624.04	2,542.24	32.078	ES
Wells Ranch State BB09-683 - Wells Ranch State BB09-683	11,900.00	6,410.51	2,676.95	2,590.44	30.945	SF
Wells Ranch USX BB11-01 - Original Drilling - Original Drilling	15,276.41	6,531.03	2,780.53	2,646.85	20.801	CC
Wells Ranch USX BB11-01 - Original Drilling - Original Drilling	15,300.00	6,531.05	2,780.63	2,646.67	20.757	ES
Wells Ranch USX BB11-01 - Original Drilling - Original Drilling	15,700.00	6,531.42	2,812.61	2,674.97	20.434	SF
Wells Ranch USX BB11-02 - Original Drilling - Original Drilling	13,934.11	6,545.66	2,777.35	2,659.54	23.575	CC, ES
Wells Ranch USX BB11-02 - Original Drilling - Original Drilling	14,400.00	6,541.40	2,816.15	2,693.96	23.048	SF
Wells Ranch USX BB11-03 - Original Drilling - Original Drilling	12,801.79	6,520.31	2,713.96	2,609.68	26.026	CC, ES
Wells Ranch USX BB11-03 - Original Drilling - Original Drilling	13,300.00	6,519.07	2,759.29	2,650.78	25.430	SF
Wells Ranch USX BB11-04 - Original Drilling - Original Drilling	11,530.02	6,528.60	2,851.33	2,761.86	31.870	CC, ES
Wells Ranch USX BB11-04 - Original Drilling - Original Drilling	12,100.00	6,529.17	2,907.74	2,813.29	30.786	SF
Wells Ranch USX BB11-06 - Original Drilling - Original Drilling	12,774.20	6,511.06	3,993.82	3,889.94	38.445	CC
Wells Ranch USX BB11-06 - Original Drilling - Original Drilling	12,800.00	6,511.55	3,993.91	3,889.73	38.338	ES
Wells Ranch USX BB11-06 - Original Drilling - Original Drilling	13,700.00	6,528.76	4,108.13	3,995.86	36.592	SF
Wells Ranch USX BB11-07 - Original Drilling - Original Drilling	14,062.22	6,546.32	4,105.08	3,985.60	34.359	CC
Wells Ranch USX BB11-07 - Original Drilling - Original Drilling	14,100.00	6,545.82	4,105.25	3,985.33	34.232	ES
Wells Ranch USX BB11-07 - Original Drilling - Original Drilling	15,000.00	6,533.81	4,210.81	4,082.60	32.841	SF
Wells Ranch USX BB11-08 - Original Drilling - Original Drilling	15,338.79	6,552.33	4,162.97	4,028.44	30.946	CC
Wells Ranch USX BB11-08 - Original Drilling - Original Drilling	15,400.00	6,552.05	4,163.42	4,028.16	30.781	ES
Wells Ranch USX BB11-08 - Original Drilling - Original Drilling	16,096.95	6,548.75	4,231.44	4,089.52	29.815	SF
Wells Ranch USX BB11-09 - Original Drilling - Original Drilling	15,397.45	6,462.94	5,617.85	5,483.01	41.663	CC
Wells Ranch USX BB11-09 - Original Drilling - Original Drilling	15,500.00	6,463.19	5,618.79	5,482.72	41.294	ES
Wells Ranch USX BB11-09 - Original Drilling - Original Drilling	16,096.95	6,464.70	5,661.23	5,518.77	39.736	SF
Wells Ranch USX BB11-10 - Original Drilling - Original Drilling	13,993.44	6,431.61	5,529.27	5,411.29	46.869	CC
Wells Ranch USX BB11-10 - Original Drilling - Original Drilling	14,100.00	6,430.25	5,530.29	5,411.06	46.383	ES
Wells Ranch USX BB11-10 - Original Drilling - Original Drilling	15,600.00	6,411.01	5,757.90	5,624.90	43.293	SF
Wells Ranch USX BB11-15 - Original Drilling - Original Drilling	14,037.84	6,555.70	6,749.85	6,630.80	56.700	CC
Wells Ranch USX BB11-15 - Original Drilling - Original Drilling	14,100.00	6,555.16	6,750.14	6,630.35	56.352	ES
Wells Ranch USX BB11-15 - Original Drilling - Original Drilling	16,096.95	6,537.82	7,056.92	6,918.06	50.820	SF
Wells Ranch USX BB11-16 - Original Drilling - Original Drilling	15,401.49	6,657.13	6,740.89	6,605.21	49.683	CC
Wells Ranch USX BB11-16 - Original Drilling - Original Drilling	15,500.00	6,652.70	6,741.60	6,604.76	49.265	ES
Wells Ranch USX BB11-16 - Original Drilling - Original Drilling	16,096.95	6,625.84	6,776.59	6,633.20	47.258	SF
Wells Ranch USX BB11-17 - Original Drilling - Original Drilling	14,712.56	6,504.57	3,472.01	3,237.63	14.814	CC, ES
Wells Ranch USX BB11-17 - Original Drilling - Original Drilling	15,100.00	6,502.88	3,493.56	3,255.12	14.652	SF
Wells Ranch USX BB11-23 - Original Drilling - Original Drilling	14,686.34	6,557.69	6,098.90	5,972.16	48.119	CC
Wells Ranch USX BB11-23 - Original Drilling - Original Drilling	14,800.00	6,556.59	6,099.96	5,971.86	47.619	ES
Wells Ranch USX BB11-23 - Original Drilling - Original Drilling	16,096.95	6,555.90	6,259.89	6,119.00	44.429	SF