

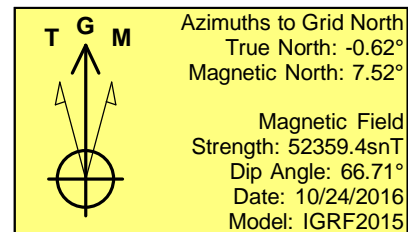
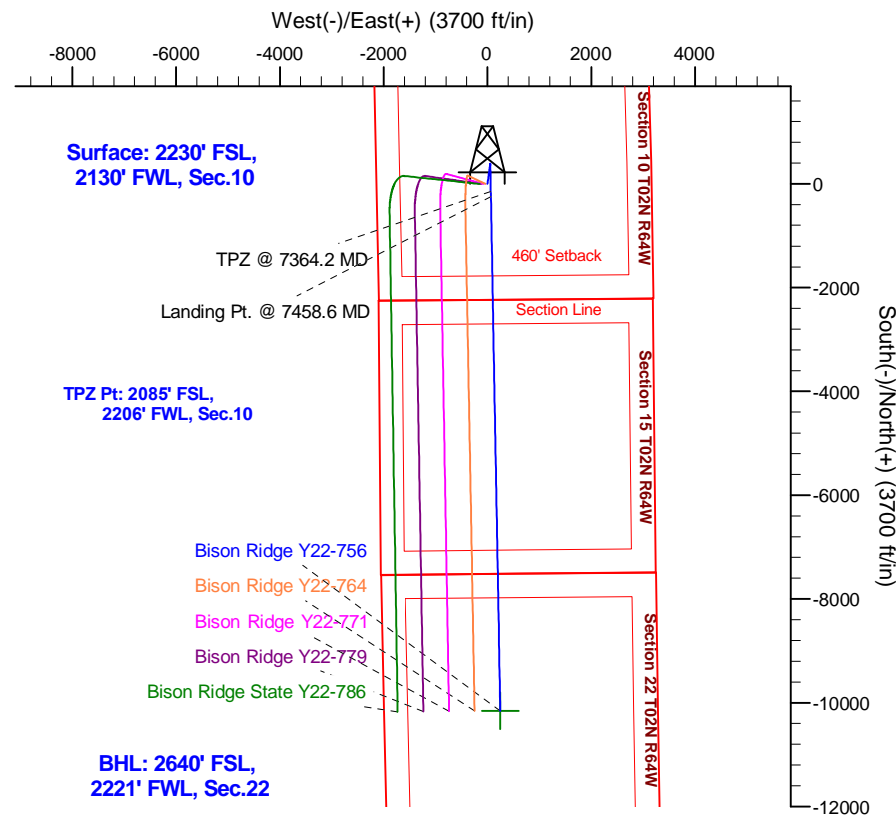
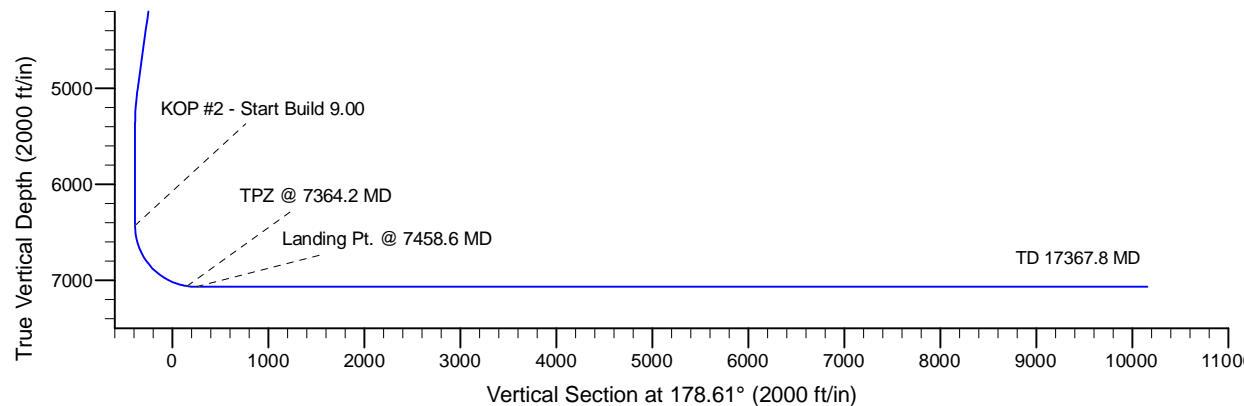
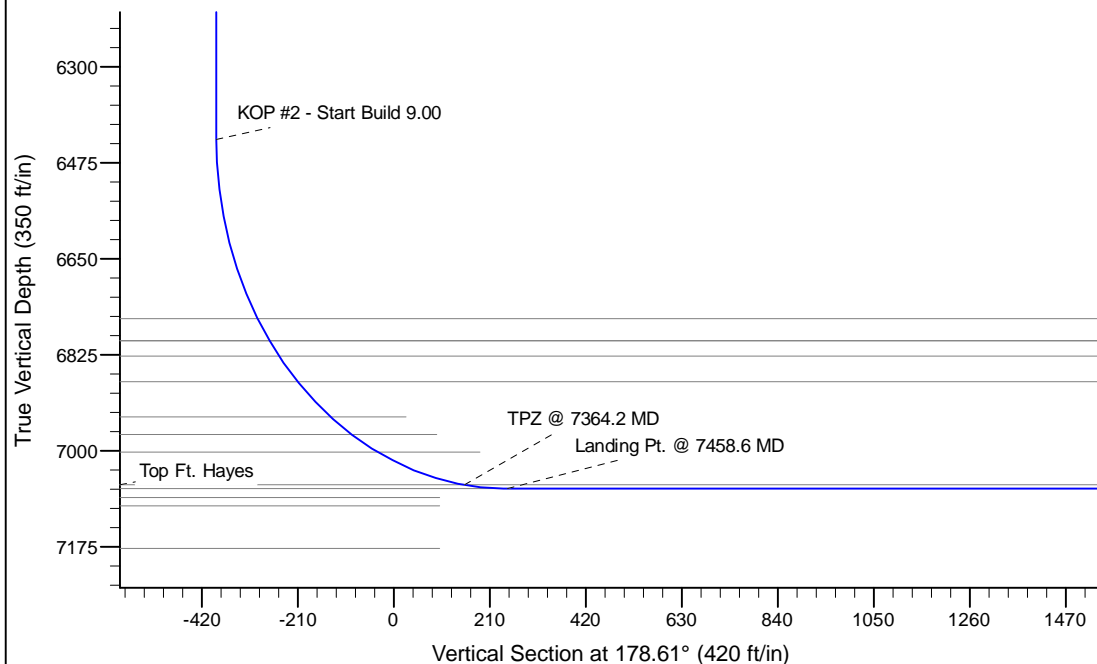
Project: Mustang
 Site: Y Section 10-T2N-R64W Weld County, CO
 Well: Bison Ridge Y22-756
 Wellbore: Original Drilling
 Design: APD - Rev 0

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	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2200.0	0.00	0.00	2200.0	0.0	0.0	0.00	0.00	0.0	
3	2600.5	8.01	8.03	2599.2	27.7	3.9	2.00	8.03	-27.6	
4	5025.8	8.01	8.03	5000.8	362.3	51.1	0.00	0.00	-361.0	
5	5426.3	0.00	0.00	5400.0	390.0	55.0	2.00	180.00	-388.5	
6	6458.6	0.00	0.00	6432.4	390.0	55.0	0.00	0.00	-388.5	
7	7458.6	90.00	178.96	7069.0	-246.5	66.6	9.00	178.96	248.1	
8	17367.8	90.00	178.96	7069.0	-10154.0	247.0	0.00	0.00	10157.0	Buffalo Ridge Y22-756 BHL 2640'FSL, 2221'FWL



WELL DETAILS: Bison Ridge Y22-756

Original Elevation: 4931.0	Latitude	Longitude
0.00.0	1299609.2504546	3268499.9631733
	40.1518300	-104.5394400

Plan: APD - Rev 0 (Bison Ridge Y22-756/Original Drilling)

Created By: Shailey Jewell Date: 15:58, April 26 2017

OK to submit with 2A as per Noble Drilling
 4/27/2017 12:23

Northern Region - DJ Basin

Mustang

Y Section 10

Bison Ridge Y22-756

Original Drilling

APD - Rev 0

Anticollision Summary Report

26 April, 2017

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Bison Ridge Y22-756
Project:	Mustang	TVD Reference:	WELL @ 4961.0ft (Original Well Elev.)
Reference Site:	Y Section 10	MD Reference:	WELL @ 4961.0ft (Original Well Elev.)
Site Error:	0.0 ft	North Reference:	Grid
Reference Well:	Bison Ridge Y22-756	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:	APD - Rev 0	Offset TVD Reference:	Offset Datum

Reference	APD - Rev 0		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,933.6 ft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	4/26/2017		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	17,366.9	APD - Rev 0 (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						
Y Section 10						
Bison Ridge State Y22-786 - Original Drilling - APD - Rev	2,000.0	1,999.0	150.9	137.1	10.884	CC, ES
Bison Ridge State Y22-786 - Original Drilling - APD - Rev	2,200.0	2,188.8	157.5	142.2	10.347	SF
Bison Ridge Y22-711 - Original Drilling - APD - Rev 0	2,000.0	1,992.0	1,224.3	1,217.4	176.505	CC, ES
Bison Ridge Y22-711 - Original Drilling - APD - Rev 0	4,800.0	4,174.3	1,929.8	1,913.8	120.628	SF
Bison Ridge Y22-719 - Original Drilling - Prelim - Rev 1	2,200.0	2,192.0	1,185.2	1,177.6	154.858	CC, ES
Bison Ridge Y22-719 - Original Drilling - Prelim - Rev 1	5,400.0	4,910.0	1,913.1	1,894.6	103.802	SF
Bison Ridge Y22-726 - Original Drilling - Prelim - Rev 1	2,458.3	2,436.7	1,147.5	1,139.0	133.860	CC, ES
Bison Ridge Y22-726 - Original Drilling - Prelim - Rev 1	6,600.0	6,284.3	1,847.4	1,824.4	80.425	SF
Bison Ridge Y22-734 - Original Drilling - Prelim - Rev 1	2,684.1	2,657.5	1,108.0	1,098.6	118.265	CC
Bison Ridge Y22-734 - Original Drilling - Prelim - Rev 1	2,700.0	2,669.7	1,108.0	1,098.6	117.570	ES
Bison Ridge Y22-734 - Original Drilling - Prelim - Rev 1	17,367.8	17,044.2	1,493.0	1,405.0	16.959	SF
Bison Ridge Y22-741 - Original Drilling - Prelim - Rev 1	17,367.8	16,766.7	990.4	902.3	11.247	CC, ES, SF
Bison Ridge Y22-749 - Original Drilling - Prelim - Rev 1	17,367.8	17,014.0	531.3	443.7	6.066	CC, ES, SF
Bison Ridge Y22-764 - Original Drilling - APD - Rev 0	2,200.0	2,200.0	39.1	23.8	2.557	CC
Bison Ridge Y22-764 - Original Drilling - APD - Rev 0	2,300.0	2,300.0	39.4	23.4	2.461	ES
Bison Ridge Y22-764 - Original Drilling - APD - Rev 0	2,400.0	2,400.2	40.8	24.0	2.436	SF
Bison Ridge Y22-771 - Original Drilling - APD - Rev 0	2,200.0	2,200.0	75.5	60.2	4.931	CC
Bison Ridge Y22-771 - Original Drilling - APD - Rev 0	2,300.0	2,300.0	75.8	59.7	4.728	ES
Bison Ridge Y22-771 - Original Drilling - APD - Rev 0	2,400.0	2,399.8	76.8	60.1	4.591	SF
Bison Ridge Y22-779 - Original Drilling - APD - Rev 0	2,200.0	2,199.0	114.6	99.3	7.489	CC, ES
Bison Ridge Y22-779 - Original Drilling - APD - Rev 0	2,300.0	2,295.2	116.5	100.5	7.286	SF
Oscar Y10-72-1HC - Original Drilling - APD - Rev 1						Out of range
Oscar Y10-72-1HC - Original Drilling - Original Drilling - A						Out of range
Oscar Y10-72-1HN - Original Drilling - APD - Rev 0						Out of range
Oscar Y10-72-1HN - Original Drilling - Original Drilling - A						Out of range
Oscar Y10-72HN - Original Drilling - APD - Rev 1						Out of range
Oscar Y10-72HN - Original Drilling - Original Drilling - As						Out of range
Oscar Y10-73-1HC - Original Drilling - APD - Rev 1						Out of range
Oscar Y10-73-1HC - Original Drilling - Original Drilling - A	6,320.2	6,311.5	1,924.5	1,883.4	46.843	CC
Oscar Y10-73-1HC - Original Drilling - Original Drilling - A	6,400.0	6,375.8	1,925.1	1,883.4	46.236	ES
Oscar Y10-73-1HC - Original Drilling - Original Drilling - A	6,600.0	6,535.6	1,929.5	1,886.4	44.839	SF
Oscar Y10-73-1HN - Original Drilling - APD - Rev 1						Out of range
Oscar Y10-73-1HN - Original Drilling - Original Drilling - A						Out of range
Oscar Y10-73HN - Original Drilling - APD - Rev 0	6,531.1	6,546.3	1,778.4	1,755.3	76.986	CC, ES
Oscar Y10-73HN - Original Drilling - APD - Rev 0	6,900.0	6,724.0	1,801.6	1,777.5	74.980	SF
Oscar Y10-73HN - Original Drilling - Original Drilling - As	5,036.9	5,004.7	1,756.3	1,723.8	53.989	CC
Oscar Y10-73HN - Original Drilling - Original Drilling - As	6,400.0	6,405.6	1,760.7	1,719.0	42.238	ES

CC - Min centre to center distance or covergent 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 Bison Ridge Y22-756
Project:	Mustang	TVD Reference:	WELL @ 4961.0ft (Original Well Elev.)
Reference Site:	Y Section 10	MD Reference:	WELL @ 4961.0ft (Original Well Elev.)
Site Error:	0.0 ft	North Reference:	Grid
Reference Well:	Bison Ridge Y22-756	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:	APD - Rev 0	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						
Y Section 10						
Oscar Y10-73HN - Original Drilling - Original Drilling - As	6,800.0	6,800.0	1,778.3	1,733.5	39.758	SF
Oscar Y10-74-1HC - Original Drilling - APD - Rev 1	1,500.0	1,477.0	1,155.3	1,150.2	224.579	CC, ES
Oscar Y10-74-1HC - Original Drilling - APD - Rev 1	6,800.0	6,710.3	1,255.1	1,231.2	52.617	SF
Oscar Y10-74-1HC - Original Drilling - Original Drilling- A	1,509.0	1,494.1	1,147.5	1,138.3	125.822	CC
Oscar Y10-74-1HC - Original Drilling - Original Drilling- A	1,600.0	1,578.1	1,147.7	1,138.1	120.521	ES
Oscar Y10-74-1HC - Original Drilling - Original Drilling- A	6,800.0	6,704.6	1,194.1	1,150.5	27.419	SF
Oscar Y10-74-1HC - Original Drilling - Target Change	1,509.0	1,494.1	1,147.5	1,138.3	125.822	CC
Oscar Y10-74-1HC - Original Drilling - Target Change	1,600.0	1,578.1	1,147.7	1,138.1	120.521	ES
Oscar Y10-74-1HC - Original Drilling - Target Change	6,800.0	6,745.7	1,191.6	1,147.9	27.267	SF
Oscar Y10-74-1HN - Original Drilling - APD - Rev 0	1,000.0	974.0	1,230.2	1,226.9	367.016	CC, ES
Oscar Y10-74-1HN - Original Drilling - APD - Rev 0	6,700.0	6,578.3	1,464.6	1,441.1	62.172	SF
Oscar Y10-74-1HN - Original Drilling - Baxter	1,099.0	1,084.0	1,227.6	1,223.9	331.164	CC
Oscar Y10-74-1HN - Original Drilling - Baxter	1,200.0	1,179.7	1,227.8	1,223.7	301.761	ES
Oscar Y10-74-1HN - Original Drilling - Baxter	6,800.0	6,633.3	1,481.7	1,457.9	62.283	SF
Oscar Y10-74-1HN - Original Drilling - Original Drilling - A	1,099.0	1,084.0	1,227.7	1,220.7	175.384	CC
Oscar Y10-74-1HN - Original Drilling - Original Drilling - A	1,200.0	1,179.7	1,227.9	1,220.3	162.751	ES
Oscar Y10-74-1HN - Original Drilling - Original Drilling - A	6,800.0	6,633.2	1,481.8	1,438.2	34.022	SF
Oscar Y10-74HN - Original Drilling - APD - Rev 1	6,567.1	6,539.5	1,125.9	1,102.6	48.503	CC, ES
Oscar Y10-74HN - Original Drilling - APD - Rev 1	6,800.0	6,668.2	1,139.8	1,116.0	47.885	SF
Oscar Y10-74HN - Original Drilling - Original Drilling - As	5,276.8	5,246.2	1,100.9	1,067.4	32.860	CC
Oscar Y10-74HN - Original Drilling - Original Drilling - As	6,300.0	6,271.1	1,106.7	1,066.1	27.243	ES
Oscar Y10-74HN - Original Drilling - Original Drilling - As	6,700.0	6,561.6	1,138.2	1,095.5	26.612	SF
Oscar Y10-75-1HC - Original Drilling - APD - Rev 1	6,473.7	6,481.0	630.5	607.6	27.518	CC, ES
Oscar Y10-75-1HC - Original Drilling - APD - Rev 1	6,600.0	6,578.4	634.7	611.4	27.248	SF
Oscar Y10-75-1HC - Original Drilling - Original Drilling - A	5,745.4	5,739.5	609.1	572.0	16.436	CC
Oscar Y10-75-1HC - Original Drilling - Original Drilling - A	6,322.9	6,318.0	610.5	569.5	14.881	ES
Oscar Y10-75-1HC - Original Drilling - Original Drilling - A	6,500.0	6,458.8	615.6	573.6	14.658	SF
Oscar Y10-75-1HN - Original Drilling - APD - Rev 1	5,495.6	5,484.1	791.5	772.0	40.687	CC
Oscar Y10-75-1HN - Original Drilling - APD - Rev 1	6,200.0	6,187.3	791.6	769.6	36.063	ES
Oscar Y10-75-1HN - Original Drilling - APD - Rev 1	6,600.0	6,526.4	806.1	782.8	34.648	SF
Oscar Y10-75-1HN - Original Drilling - Original Drilling - A	6,321.6	6,309.6	797.1	755.9	19.339	CC, ES
Oscar Y10-75-1HN - Original Drilling - Original Drilling - A	6,600.0	6,570.3	803.1	760.0	18.648	SF
Oscar Y10-75HN - Original Drilling - APD - Rev 0	6,579.9	6,613.7	458.9	435.7	19.738	CC, ES
Oscar Y10-75HN - Original Drilling - APD - Rev 0	6,600.0	6,629.3	459.1	435.8	19.692	SF
Oscar Y10-75HN - Original Drilling - Original Drilling - As	6,408.9	6,411.5	430.4	388.5	10.269	CC, ES
Oscar Y10-75HN - Original Drilling - Original Drilling - As	6,500.0	6,496.4	431.5	389.1	10.162	SF
Oscar Y10-76-1HC - Original Drilling - APD - Rev 0	6,669.1	6,644.5	104.2	80.7	4.432	CC, ES, SF
Oscar Y10-76-1HN - Original Drilling - APD - Rev 2	5,495.6	5,482.3	114.3	94.8	5.876	CC
Oscar Y10-76-1HN - Original Drilling - APD - Rev 2	6,200.0	6,186.6	114.4	92.4	5.211	ES
Oscar Y10-76-1HN - Original Drilling - APD - Rev 2	6,300.0	6,284.8	115.2	92.9	5.163	SF
Oscar Y10-76-1HN - Original Drilling - Original Drilling - A	5,360.7	5,336.5	103.3	68.7	2.984	CC
Oscar Y10-76-1HN - Original Drilling - Original Drilling - A	5,500.0	5,475.8	103.9	68.4	2.921	ES
Oscar Y10-76-1HN - Original Drilling - Original Drilling - A	6,100.0	6,075.1	112.1	72.3	2.818	SF
Oscar Y10-76HN - Original Drilling - APD - Rev 2	1,800.0	1,784.0	168.6	162.4	27.109	CC, ES
Oscar Y10-76HN - Original Drilling - APD - Rev 2	6,600.0	6,578.5	218.3	195.0	9.366	SF
Oscar Y10-76HN - Original Drilling - Original Drilling - As	100.0	83.7	168.7	168.4	625.561	CC
Oscar Y10-76HN - Original Drilling - Original Drilling - As	1,400.0	1,383.1	170.8	162.5	20.436	ES
Oscar Y10-76HN - Original Drilling - Original Drilling - As	6,600.0	6,571.3	218.3	175.9	5.152	SF
Oscar Y10-77-1HC - Original Drilling - APD - Rev 2	1,200.0	1,184.0	190.0	185.9	46.686	CC, ES
Oscar Y10-77-1HC - Original Drilling - APD - Rev 2	6,700.0	6,699.1	553.0	529.4	23.434	SF
Oscar Y10-77-1HC - Original Drilling - Original Drilling - A	100.0	83.4	190.1	189.8	709.740	CC
Oscar Y10-77-1HC - Original Drilling - Original Drilling - A	1,400.0	1,383.2	191.7	183.1	22.372	ES
Oscar Y10-77-1HC - Original Drilling - Original Drilling - A	6,700.0	6,680.1	551.8	508.3	12.668	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 Bison Ridge Y22-756
Project:	Mustang	TVD Reference:	WELL @ 4961.0ft (Original Well Elev.)
Reference Site:	Y Section 10	MD Reference:	WELL @ 4961.0ft (Original Well Elev.)
Site Error:	0.0 ft	North Reference:	Grid
Reference Well:	Bison Ridge Y22-756	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:	APD - Rev 0	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						
Y Section 10						
Oscar Y10-77-1HN - Original Drilling - APD 0 Rev 0	1,500.0	1,481.0	168.6	163.5	32.778	CC, ES
Oscar Y10-77-1HN - Original Drilling - APD 0 Rev 0	6,500.0	6,486.4	552.1	529.1	24.023	SF
Oscar Y10-77HN - Original Drilling - APD - Rev 2	1,000.0	985.0	214.3	211.0	63.943	CC, ES
Oscar Y10-77HN - Original Drilling - APD - Rev 2	6,700.0	6,725.8	886.4	862.8	37.588	SF
Oscar Y10-77HN - Original Drilling - Original Drilling - As	1,193.0	1,178.0	211.3	203.9	28.523	CC
Oscar Y10-77HN - Original Drilling - Original Drilling - As	1,200.0	1,184.6	211.3	203.9	28.384	ES
Oscar Y10-77HN - Original Drilling - Original Drilling - As	6,700.0	6,669.5	895.8	851.9	20.405	SF
Oscar Y10-78-1HC - Original Drilling - APD - Rev 2	3,262.2	3,291.4	1,191.0	1,179.6	104.277	CC
Oscar Y10-78-1HC - Original Drilling - APD - Rev 2	3,500.0	3,526.9	1,191.5	1,179.2	97.091	ES
Oscar Y10-78-1HC - Original Drilling - APD - Rev 2	6,800.0	6,765.3	1,222.6	1,198.8	51.283	SF
Oscar Y10-78-1HC - Original Drilling - Original Drilling - A	3,345.9	3,371.1	1,188.6	1,167.8	57.194	CC
Oscar Y10-78-1HC - Original Drilling - Original Drilling - A	6,525.3	6,524.9	1,199.2	1,156.9	28.306	ES
Oscar Y10-78-1HC - Original Drilling - Original Drilling - A	6,900.0	6,830.7	1,217.1	1,172.4	27.237	SF
Oscar Y10-78-1HN - Original Drilling - APD - Rev 2	3,976.2	4,010.7	1,195.2	1,181.2	85.483	CC
Oscar Y10-78-1HN - Original Drilling - APD - Rev 2	4,200.0	4,232.3	1,195.6	1,180.8	80.852	ES
Oscar Y10-78-1HN - Original Drilling - APD - Rev 2	6,700.0	6,625.2	1,226.3	1,202.8	52.170	SF
Oscar Y10-78-1HN - Original Drilling - Original Drilling - As	4,108.0	4,147.5	1,165.2	1,138.1	43.012	CC, ES
Oscar Y10-78-1HN - Original Drilling - Original Drilling - As	6,700.0	6,645.0	1,225.4	1,181.0	27.619	SF
Oscar Y10-78HN - Original Drilling - APD - Rev 2	1,800.0	1,812.0	1,481.0	1,474.8	238.122	CC
Oscar Y10-78HN - Original Drilling - APD - Rev 2	1,900.0	1,905.0	1,481.3	1,474.7	225.183	ES
Oscar Y10-78HN - Original Drilling - APD - Rev 2	6,800.0	6,714.0	1,548.3	1,524.5	65.017	SF
Oscar Y10-78HN - Original Drilling - Original Drilling - As	1,776.7	1,789.0	1,476.7	1,466.5	144.578	CC
Oscar Y10-78HN - Original Drilling - Original Drilling - As	1,800.0	1,809.1	1,476.7	1,466.4	142.839	ES
Oscar Y10-78HN - Original Drilling - Original Drilling - As	6,800.0	6,715.9	1,540.4	1,496.4	34.987	SF
Oscar Y10-79-1HC - Original Drilling - APD - Rev 2	1,200.0	1,212.0	1,553.3	1,549.3	381.766	CC, ES
Oscar Y10-79-1HC - Original Drilling - APD - Rev 2	6,900.0	6,802.1	1,887.5	1,863.5	78.445	SF
Oscar Y10-79-1HC - Original Drilling - Original Drilling - A	0.0	11.9	1,553.3			
Oscar Y10-79-1HC - Original Drilling - Original Drilling - A	1,200.0	1,199.0	1,556.2	1,548.8	208.351	ES
Oscar Y10-79-1HC - Original Drilling - Original Drilling - A	6,900.0	6,855.2	1,885.6	1,840.9	42.238	SF
Oscar Y10-79-1HN - Original Drilling - APD - Rev 2	1,500.0	1,512.0	1,517.2	1,512.0	294.929	CC, ES
Oscar Y10-79-1HN - Original Drilling - APD - Rev 2	6,800.0	6,661.5	1,898.4	1,874.6	79.875	SF
Oscar Y10-79-1HN - Original Drilling - Original Drilling - A	0.0	11.5	1,517.2			
Oscar Y10-79-1HN - Original Drilling - Original Drilling - A	1,400.0	1,408.0	1,521.7	1,513.4	183.520	ES
Oscar Y10-79-1HN - Original Drilling - Original Drilling - A	6,700.0	6,588.0	1,880.6	1,837.0	43.177	SF
Oscar Y10-79HN - Original Drilling - APD - Rev 2	1,000.0	1,012.0	1,592.3	1,588.9	475.042	CC, ES
Oscar Y10-79HN - Original Drilling - APD - Rev 2	2,900.0	2,468.7	1,927.9	1,918.0	195.553	SF
Oscar Y10-79HN - Original Drilling - Original Drilling - As	0.0	11.8	1,592.3			
Oscar Y10-79HN - Original Drilling - Original Drilling - As	500.0	501.3	1,594.0	1,591.4	611.169	ES
Oscar Y10-79HN - Original Drilling - Original Drilling - As	2,900.0	2,475.9	1,926.5	1,910.5	120.640	SF
Oscar Y10-79HN - Original Drilling - ST01 - ST01 - As Dr	0.0	11.8	1,592.3			
Oscar Y10-79HN - Original Drilling - ST01 - ST01 - As Dr	500.0	501.3	1,594.0	1,591.4	611.169	ES
Oscar Y10-79HN - Original Drilling - ST01 - ST01 - As Dr	2,900.0	2,475.9	1,926.5	1,910.5	120.640	SF
Oscar Y11-79HN - Original Drilling - APD - Rev 1						Out of range
Oscar Y11-79HN - Original Drilling - Original Drilling - As						Out of range
Oscar Y11-79HN - ST01 Original Drilling - ST01 Original						Out of range
Y Section 15						
Feather 31-15 - Original Drilling - Original Drilling - As Dr	9,844.4	7,078.0	1,252.2	1,194.2	21.573	CC, ES
Feather 31-15 - Original Drilling - Original Drilling - As Dr	10,000.0	7,078.7	1,261.9	1,203.0	21.451	SF
UPRR 62 Pan Am B1 - Original Drilling - Original Drilling	13,074.9	7,121.6	1,409.4	1,329.7	17.680	CC, ES
UPRR 62 Pan Am B1 - Original Drilling - Original Drilling	13,200.0	7,121.6	1,415.0	1,334.5	17.578	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 Bison Ridge Y22-756
Project:	Mustang	TVD Reference:	WELL @ 4961.0ft (Original Well Elev.)
Reference Site:	Y Section 10	MD Reference:	WELL @ 4961.0ft (Original Well Elev.)
Site Error:	0.0 ft	North Reference:	Grid
Reference Well:	Bison Ridge Y22-756	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:	APD - Rev 0	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						
Y Section 22						
Acco-Terra-Bodeker 40 - Original Drilling - Original Drilling	17,367.8	7,100.0	1,586.4	1,388.0	7.996	CC, ES, SF
Goetz #1 (PA) - Original Drilling - Original Drilling - As Dr						Out of range
Goetz #2 (PA) - Original Drilling - Original Drilling - As Dr	15,693.8	7,092.0	1,248.8	1,032.1	5.762	CC
Goetz #2 (PA) - Original Drilling - Original Drilling - As Dr	15,700.0	7,092.0	1,248.8	1,032.0	5.761	ES, SF
Goetz Y22-06 - Original Drilling - Original Drilling - As Dri	16,740.7	7,107.7	470.8	329.8	3.339	CC, ES, SF

Noble Energy, Inc.

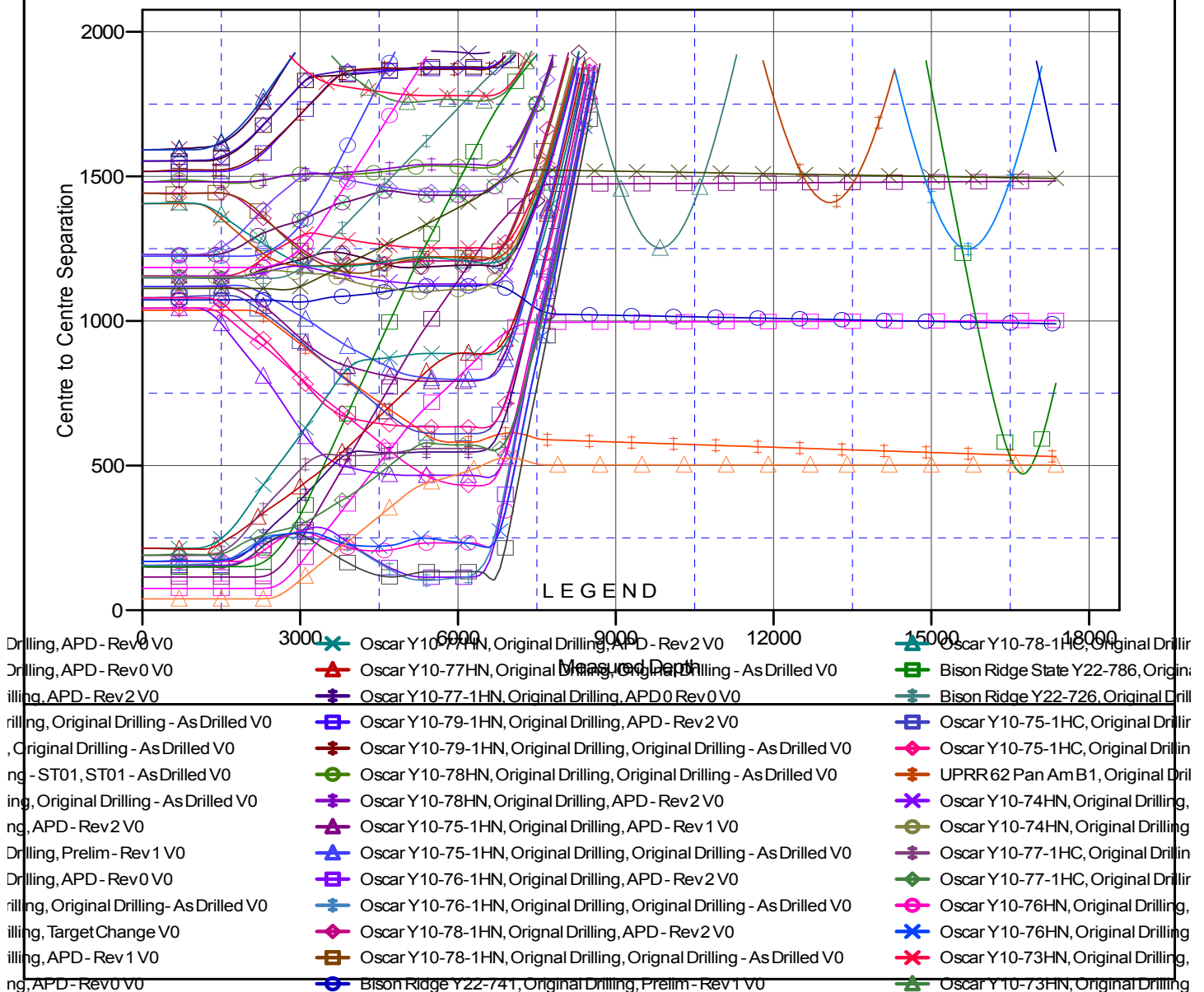
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Bison Ridge Y22-756
Project:	Mustang	TVD Reference:	WELL @ 4961.0ft (Original Well Elev.)
Reference Site:	Y Section 10	MD Reference:	WELL @ 4961.0ft (Original Well Elev.)
Site Error:	0.0 ft	North Reference:	Grid
Reference Well:	Bison Ridge Y22-756	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:	APD - Rev 0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4961.0ft (Original Well Elev.)
Offset Depths are relative to Offset Datum
Central Meridian is -105.5000000

Coordinates are relative to: Bison Ridge Y22-756
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.62°

Ladder Plot



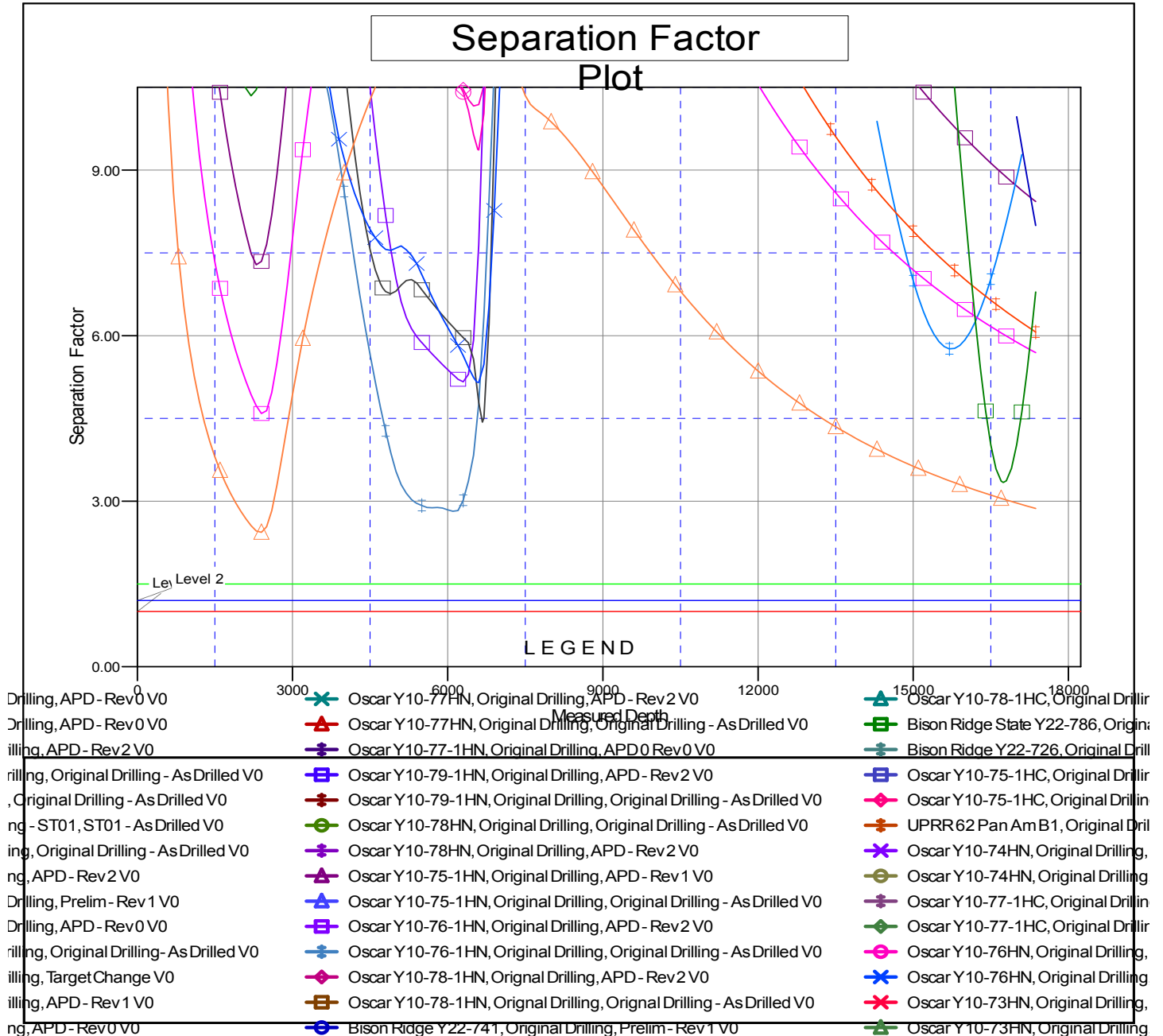
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Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Bison Ridge Y22-756
Project:	Mustang	TVD Reference:	WELL @ 4961.0ft (Original Well Elev.)
Reference Site:	Y Section 10	MD Reference:	WELL @ 4961.0ft (Original Well Elev.)
Site Error:	0.0 ft	North Reference:	Grid
Reference Well:	Bison Ridge Y22-756	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:	APD - Rev 0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4961.0ft (Original Well Elev.)
Offset Depths are relative to Offset Datum
Central Meridian is -105.5000000

Coordinates are relative to: Bison Ridge Y22-756
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.62°



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