

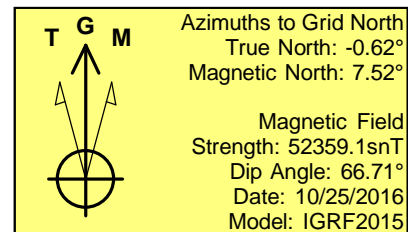
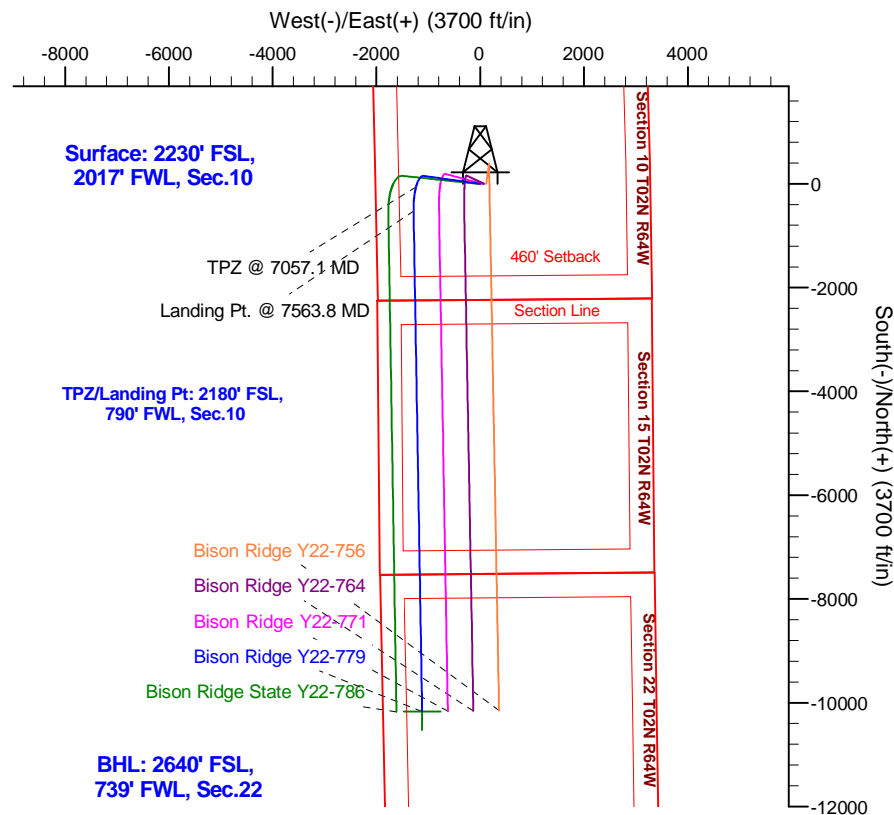
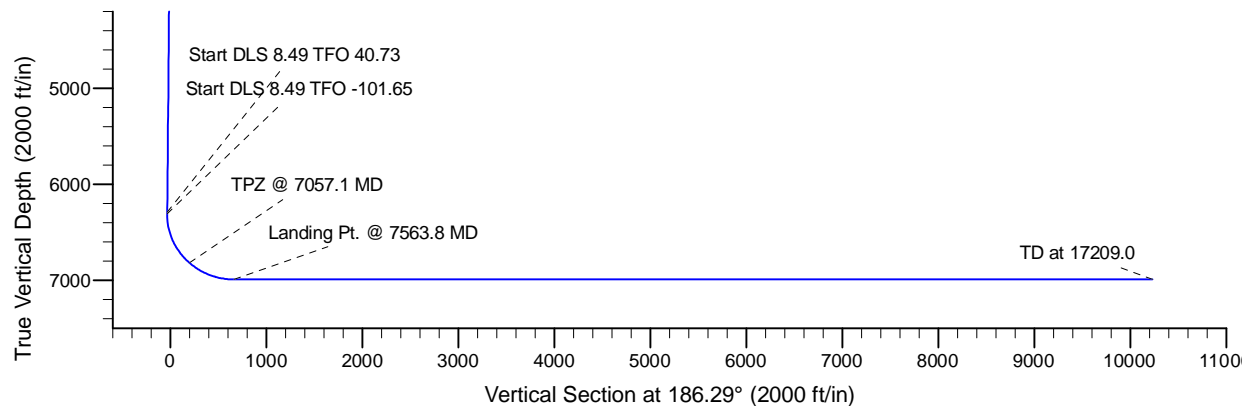
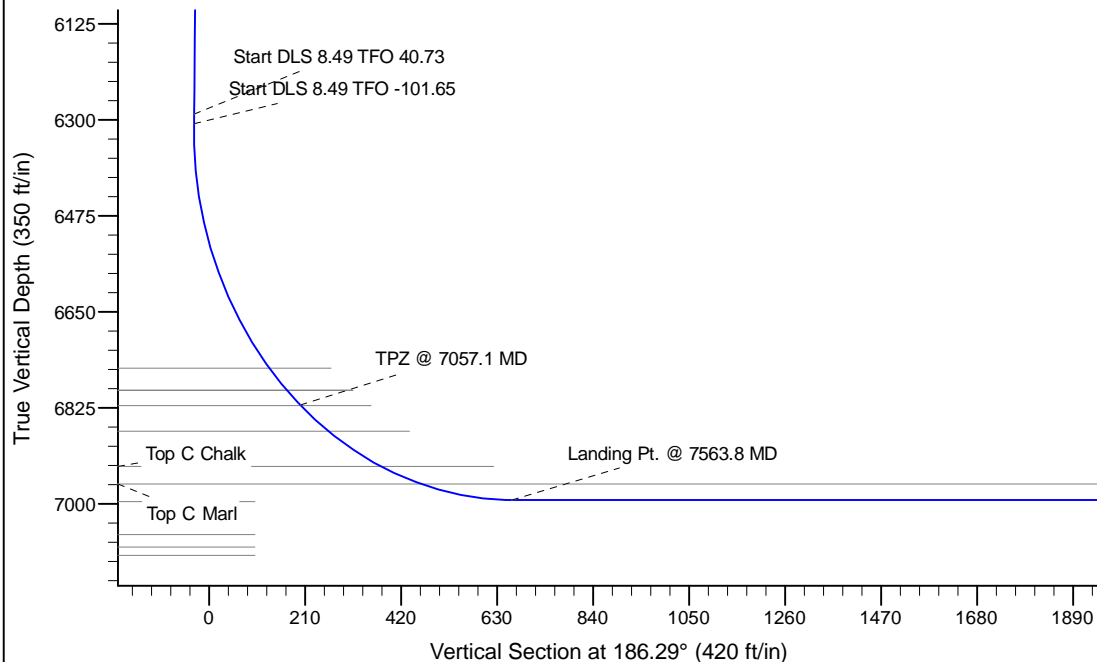
Project: Mustang
 Site: Y Section 10-T2N-R64W Weld County, CO
 Well: Bison Ridge Y22-779
 Wellbore: Original Drilling
 Design: APD - Rev 0

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	VSec	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	3025.0	16.50	278.00	3013.6	16.4	-116.8	2.00	278.00	-3.5	
4	6442.1	16.50	278.00	6290.0	151.5	-1077.9	0.00	0.00	-32.5	
5	6459.8	17.67	281.23	6306.9	152.4	-1083.0	8.49	40.73	-32.8	
6	7563.8	90.00	179.02	6993.0	-525.0	-1285.0	8.49	-101.65	662.6	
7	17209.0	90.00	179.02	6993.0	-10168.8	-1120.4	0.00	0.00	10230.4	Bison Ridge Y22-779 BHL 2640 FSL, 739'FWL



WELL DETAILS: Bison Ridge Y22-779

North	East	Ground Elevation: 4930.0	Longitude
0.00.0	1299608.0217326385.3625115	Latitude 40.1518300	-104.5398500

Plan: APD - Rev 0 (Bison Ridge Y22-779/Original Drilling)

Created By: Shailey Jewell Date: 15:41, April 26 2017

**OK to submit with 2A as per Noble Drilling
 4/26/2017 3:43**

Northern Region - DJ Basin

Mustang

Y Section 10

Bison Ridge Y22-779

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 Y22-779
Project:	Mustang	TVD Reference:	WELL @ 4960.0ft (Original Well Elev.)
Reference Site:	Y Section 10	MD Reference:	WELL @ 4960.0ft (Original Well Elev.)
Site Error:	0.0 ft	North Reference:	Grid
Reference Well:	Bison Ridge Y22-779	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	17,209.0	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	2,000.0	36.3	22.5	2.619	CC, ES
Bison Ridge State Y22-786 - Original Drilling - APD - Rev	2,100.0	2,098.7	38.1	23.5	2.612	SF
Bison Ridge Y22-711 - Original Drilling - APD - Rev 0	2,000.0	1,993.0	1,339.0	1,332.0	193.027	CC, ES
Bison Ridge Y22-711 - Original Drilling - APD - Rev 0	2,900.0	2,585.6	1,513.2	1,503.3	153.284	SF
Bison Ridge Y22-719 - Original Drilling - Prelim - Rev 1	2,200.0	2,193.0	1,299.8	1,292.2	169.832	CC, ES
Bison Ridge Y22-719 - Original Drilling - Prelim - Rev 1	3,000.0	2,721.4	1,480.0	1,469.8	144.555	SF
Bison Ridge Y22-726 - Original Drilling - Prelim - Rev 1	2,200.0	2,194.0	1,263.5	1,255.8	165.084	CC, ES
Bison Ridge Y22-726 - Original Drilling - Prelim - Rev 1	3,000.0	2,795.9	1,412.5	1,402.2	137.022	SF
Bison Ridge Y22-734 - Original Drilling - Prelim - Rev 1	2,200.0	2,194.0	1,227.1	1,219.5	160.336	CC, ES
Bison Ridge Y22-734 - Original Drilling - Prelim - Rev 1	4,500.0	4,235.4	1,920.6	1,905.1	123.591	SF
Bison Ridge Y22-741 - Original Drilling - Prelim - Rev 1	2,200.0	2,194.0	1,188.0	1,180.4	155.223	CC, ES
Bison Ridge Y22-741 - Original Drilling - Prelim - Rev 1	5,200.0	5,096.3	1,933.0	1,914.6	104.911	SF
Bison Ridge Y22-749 - Original Drilling - Prelim - Rev 1	2,550.8	2,684.0	1,122.6	1,113.8	127.344	CC, ES
Bison Ridge Y22-749 - Original Drilling - Prelim - Rev 1	6,600.0	6,486.2	1,857.5	1,833.7	78.050	SF
Bison Ridge Y22-756 - Original Drilling - Prelim - Rev 1	2,200.0	2,201.0	114.6	107.0	14.974	CC, ES
Bison Ridge Y22-756 - Original Drilling - Prelim - Rev 1	2,300.0	2,300.3	116.6	108.6	14.568	SF
Bison Ridge Y22-764 - Original Drilling - Prelim - Rev 1	2,200.0	2,201.0	75.5	67.8	9.861	CC, ES
Bison Ridge Y22-764 - Original Drilling - Prelim - Rev 1	2,300.0	2,301.0	77.2	69.2	9.645	SF
Bison Ridge Y22-771 - Original Drilling - APD - Rev 0	2,200.0	2,201.0	39.1	23.8	2.556	CC, ES
Bison Ridge Y22-771 - Original Drilling - APD - Rev 0	2,300.0	2,301.0	40.9	24.8	2.551	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						Out of range
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						Out of range
Oscar Y10-73HN - Original Drilling - Original Drilling - As						Out of range
Oscar Y10-74-1HC - Original Drilling - APD - Rev 1	1,500.0	1,478.0	1,269.1	1,263.9	246.696	CC, ES
Oscar Y10-74-1HC - Original Drilling - APD - Rev 1	4,300.0	4,233.1	1,912.7	1,897.6	127.052	SF
Oscar Y10-74-1HC - Original Drilling - Original Drilling- A	1,509.5	1,495.5	1,261.2	1,252.1	138.254	CC
Oscar Y10-74-1HC - Original Drilling - Original Drilling- A	1,600.0	1,578.5	1,261.4	1,251.9	132.460	ES
Oscar Y10-74-1HC - Original Drilling - Original Drilling- A	4,500.0	4,487.5	1,909.0	1,880.9	68.168	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 Y22-779
Project:	Mustang	TVD Reference:	WELL @ 4960.0ft (Original Well Elev.)
Reference Site:	Y Section 10	MD Reference:	WELL @ 4960.0ft (Original Well Elev.)
Site Error:	0.0 ft	North Reference:	Grid
Reference Well:	Bison Ridge Y22-779	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
Y Section 10						
Oscar Y10-74-1HC - Original Drilling - Target Change	1,509.5	1,495.5	1,261.2	1,252.1	138.254	CC
Oscar Y10-74-1HC - Original Drilling - Target Change	1,600.0	1,578.5	1,261.4	1,251.9	132.460	ES
Oscar Y10-74-1HC - Original Drilling - Target Change	4,500.0	4,487.5	1,909.0	1,880.9	68.168	SF
Oscar Y10-74-1HN - Original Drilling - APD - Rev 0	1,000.0	975.0	1,344.1	1,340.7	400.987	CC, ES
Oscar Y10-74-1HN - Original Drilling - APD - Rev 0	3,600.0	3,578.0	1,933.2	1,920.7	154.480	SF
Oscar Y10-74-1HN - Original Drilling - Baxter	1,097.8	1,083.8	1,341.5	1,337.8	362.324	CC
Oscar Y10-74-1HN - Original Drilling - Baxter	1,200.0	1,180.2	1,341.7	1,337.6	329.752	ES
Oscar Y10-74-1HN - Original Drilling - Baxter	3,900.0	3,713.9	1,933.5	1,920.0	143.384	SF
Oscar Y10-74-1HN - Original Drilling - Original Drilling - A	1,097.8	1,083.8	1,341.5	1,334.5	191.790	CC
Oscar Y10-74-1HN - Original Drilling - Original Drilling - A	1,200.0	1,180.2	1,341.8	1,334.2	177.825	ES
Oscar Y10-74-1HN - Original Drilling - Original Drilling - A	3,900.0	3,713.9	1,933.5	1,910.0	82.305	SF
Oscar Y10-74HN - Original Drilling - APD - Rev 1	1,800.0	1,779.0	1,269.1	1,262.8	204.041	CC
Oscar Y10-74HN - Original Drilling - APD - Rev 1	1,900.0	1,868.5	1,269.4	1,262.8	192.976	ES
Oscar Y10-74HN - Original Drilling - APD - Rev 1	4,800.0	4,707.4	1,925.9	1,909.0	113.858	SF
Oscar Y10-74HN - Original Drilling - Original Drilling - As	912.5	899.5	1,266.0	1,260.2	218.482	CC
Oscar Y10-74HN - Original Drilling - Original Drilling - As	1,800.0	1,774.0	1,267.0	1,256.5	120.966	ES
Oscar Y10-74HN - Original Drilling - Original Drilling - As	4,800.0	4,718.2	1,908.3	1,878.3	63.621	SF
Oscar Y10-75-1HC - Original Drilling - APD - Rev 1	2,673.0	2,838.5	1,028.6	1,019.4	111.726	CC, ES
Oscar Y10-75-1HC - Original Drilling - APD - Rev 1	6,400.0	6,252.9	1,875.0	1,852.0	81.635	SF
Oscar Y10-75-1HC - Original Drilling - Original Drilling - A	2,511.9	2,624.2	1,134.5	1,119.5	75.692	CC, ES
Oscar Y10-75-1HC - Original Drilling - Original Drilling - A	6,400.0	6,259.6	1,864.1	1,822.7	44.998	SF
Oscar Y10-75-1HN - Original Drilling - APD - Rev 1	2,558.0	2,688.1	1,153.3	1,144.5	130.388	CC, ES
Oscar Y10-75-1HN - Original Drilling - APD - Rev 1	5,900.0	5,786.0	1,908.4	1,887.3	90.471	SF
Oscar Y10-75-1HN - Original Drilling - Original Drilling - A	2,430.6	2,513.5	1,204.2	1,189.7	83.188	CC, ES
Oscar Y10-75-1HN - Original Drilling - Original Drilling - A	5,900.0	5,795.7	1,922.3	1,884.1	50.345	SF
Oscar Y10-75HN - Original Drilling - APD - Rev 0	2,880.4	3,099.9	863.7	853.8	87.733	CC, ES
Oscar Y10-75HN - Original Drilling - APD - Rev 0	6,400.0	6,298.5	1,702.3	1,679.3	74.006	SF
Oscar Y10-75HN - Original Drilling - Original Drilling - As	2,568.1	2,692.7	1,014.1	998.6	65.535	CC, ES
Oscar Y10-75HN - Original Drilling - Original Drilling - As	6,000.0	5,934.2	1,578.0	1,538.8	40.273	SF
Oscar Y10-76-1HC - Original Drilling - APD - Rev 0	1,500.0	1,481.0	184.9	179.8	35.942	CC, ES
Oscar Y10-76-1HC - Original Drilling - APD - Rev 0	1,900.0	1,856.5	208.2	201.7	31.840	SF
Oscar Y10-76-1HN - Original Drilling - APD - Rev 2	1,500.0	1,484.0	166.1	160.9	32.282	CC, ES
Oscar Y10-76-1HN - Original Drilling - APD - Rev 2	1,800.0	1,768.2	178.9	172.7	28.858	SF
Oscar Y10-76-1HN - Original Drilling - Original Drilling - A	100.0	83.7	166.2	165.9	616.248	CC
Oscar Y10-76-1HN - Original Drilling - Original Drilling - A	200.0	183.3	166.5	165.7	208.206	ES
Oscar Y10-76-1HN - Original Drilling - Original Drilling - A	1,700.0	1,658.7	208.9	199.4	22.001	SF
Oscar Y10-76HN - Original Drilling - APD - Rev 2	1,800.0	1,785.0	153.7	147.5	24.710	CC, ES
Oscar Y10-76HN - Original Drilling - APD - Rev 2	2,100.0	2,073.0	164.3	157.0	22.569	SF
Oscar Y10-76HN - Original Drilling - Original Drilling - As	100.0	84.7	153.8	153.5	566.626	CC
Oscar Y10-76HN - Original Drilling - Original Drilling - As	1,406.5	1,391.5	154.0	145.6	18.360	ES
Oscar Y10-76HN - Original Drilling - Original Drilling - As	3,500.0	3,470.8	338.6	317.5	16.037	SF
Oscar Y10-77-1HC - Original Drilling - APD - Rev 2	1,200.0	1,185.0	149.3	145.3	36.705	CC, ES
Oscar Y10-77-1HC - Original Drilling - APD - Rev 2	4,300.0	4,264.4	254.1	238.7	16.511	SF
Oscar Y10-77-1HC - Original Drilling - Original Drilling - A	100.0	84.1	149.6	149.3	555.151	CC
Oscar Y10-77-1HC - Original Drilling - Original Drilling - A	3,500.0	3,471.1	164.0	142.1	7.508	ES
Oscar Y10-77-1HC - Original Drilling - Original Drilling - A	3,700.0	3,664.7	169.9	146.7	7.315	SF
Oscar Y10-77-1HN - Original Drilling - APD 0 Rev 0	1,500.0	1,482.0	153.7	148.6	29.878	CC, ES
Oscar Y10-77-1HN - Original Drilling - APD 0 Rev 0	4,500.0	4,462.4	363.8	347.6	22.520	SF
Oscar Y10-77HN - Original Drilling - APD - Rev 2	1,000.0	986.0	154.4	151.0	46.054	CC, ES
Oscar Y10-77HN - Original Drilling - APD - Rev 2	5,300.0	5,267.7	204.4	185.0	10.527	SF
Oscar Y10-77HN - Original Drilling - Original Drilling - As	1,203.9	1,189.9	153.0	145.5	20.494	CC, ES
Oscar Y10-77HN - Original Drilling - Original Drilling - As	4,900.0	4,845.9	193.3	161.5	6.079	SF
Oscar Y10-78-1HC - Original Drilling - APD - Rev 2	6,402.4	6,289.9	137.9	114.0	5.763	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 Bison Ridge Y22-779
Project:	Mustang	TVD Reference:	WELL @ 4960.0ft (Original Well Elev.)
Reference Site:	Y Section 10	MD Reference:	WELL @ 4960.0ft (Original Well Elev.)
Site Error:	0.0 ft	North Reference:	Grid
Reference Well:	Bison Ridge Y22-779	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 Y10-78-1HC - Original Drilling - Original Drilling - A	6,305.1	6,186.6	148.6	106.6	3.539	CC, ES, SF
Oscar Y10-78-1HN - Original Drilling - APD - Rev 2	6,311.4	6,205.9	240.0	216.4	10.176	CC, ES, SF
Oscar Y10-78-1HN - Original Drilling - Original Drilling - As	6,350.7	6,251.7	238.7	195.6	5.546	CC, ES, SF
Oscar Y10-78HN - Original Drilling - APD - Rev 2	6,609.1	6,429.8	297.1	272.7	12.149	CC, ES, SF
Oscar Y10-78HN - Original Drilling - Original Drilling - As	6,609.4	6,431.0	288.4	245.2	6.672	CC, ES, SF
Oscar Y10-79-1HC - Original Drilling - APD - Rev 2	6,775.8	6,583.3	578.8	553.9	23.256	CC, ES
Oscar Y10-79-1HC - Original Drilling - APD - Rev 2	6,800.0	6,594.5	579.3	554.3	23.155	SF
Oscar Y10-79-1HC - Original Drilling - Original Drilling - A	6,755.6	6,547.0	576.4	532.5	13.125	CC, ES
Oscar Y10-79-1HC - Original Drilling - Original Drilling - A	6,800.0	6,573.2	577.9	533.7	13.079	SF
Oscar Y10-79-1HN - Original Drilling - APD - Rev 2	6,644.4	6,433.1	647.2	622.7	26.409	CC, ES
Oscar Y10-79-1HN - Original Drilling - APD - Rev 2	6,700.0	6,462.5	649.7	625.0	26.255	SF
Oscar Y10-79-1HN - Original Drilling - Original Drilling - A	6,659.5	6,457.7	643.7	600.1	14.772	CC, ES
Oscar Y10-79-1HN - Original Drilling - Original Drilling - A	6,700.0	6,477.6	645.1	601.3	14.729	SF
Oscar Y10-79HN - Original Drilling - APD - Rev 2	6,790.7	6,582.5	831.7	806.7	33.361	CC, ES
Oscar Y10-79HN - Original Drilling - APD - Rev 2	6,900.0	6,623.4	840.4	815.1	33.104	SF
Oscar Y10-79HN - Original Drilling - Original Drilling - As	6,763.5	6,547.0	837.9	793.8	18.992	CC, ES
Oscar Y10-79HN - Original Drilling - Original Drilling - As	6,800.0	6,565.3	838.8	794.4	18.921	SF
Oscar Y10-79HN - Original Drilling - ST01 - ST01 - As Dr	6,763.5	6,547.0	837.9	793.8	18.992	CC, ES
Oscar Y10-79HN - Original Drilling - ST01 - ST01 - As Dr	6,800.0	6,565.3	838.8	794.4	18.921	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						Out of range
UPRR 62 Pan Am B1 - Original Drilling - Original Drilling						Out of range
Y Section 22						
Acco-Terra-Bodeker 40 - Original Drilling - Original Drilling	17,209.0	7,025.0	1,423.6	1,233.4	7.485	CC, ES, SF
Goetz #1 (PA) - Original Drilling - Original Drilling - As Dr						Out of range
Goetz #2 (PA) - Original Drilling - Original Drilling - As Dr	15,545.7	7,017.0	231.1	16.2	1.075	Level 2, CC, ES, SF
Goetz Y22-06 - Original Drilling - Original Drilling - As Dri	16,592.0	7,035.7	1,010.4	870.9	7.244	CC, ES
Goetz Y22-06 - Original Drilling - Original Drilling - As Dri	16,600.0	7,035.7	1,010.4	870.9	7.244	SF

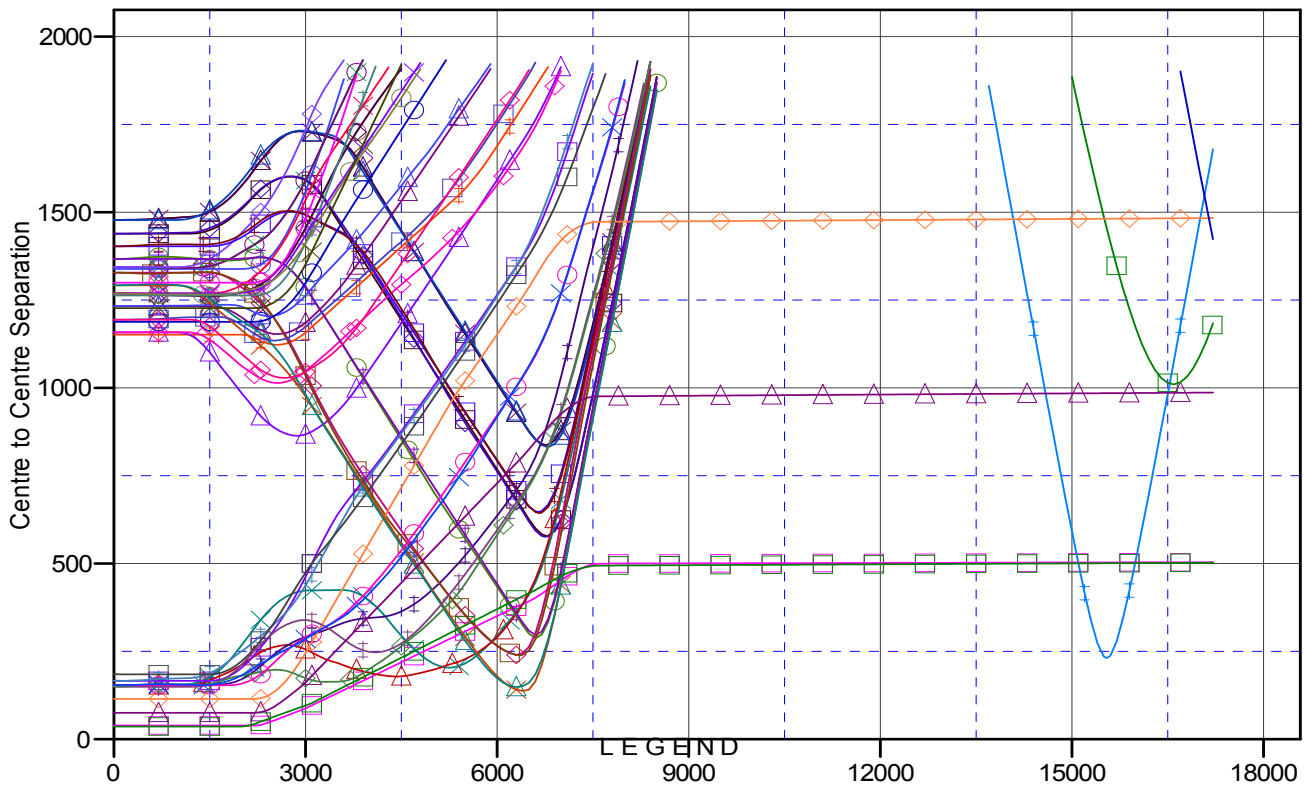
Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Bison Ridge Y22-779
Project:	Mustang	TVD Reference:	WELL @ 4960.0ft (Original Well Elev.)
Reference Site:	Y Section 10	MD Reference:	WELL @ 4960.0ft (Original Well Elev.)
Site Error:	0.0 ft	North Reference:	Grid
Reference Well:	Bison Ridge Y22-779	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 @ 4960.0ft (Original Well Elev.)
Offset Depths are relative to Offset Datum
Central Meridian is -105.5000000

Coordinates are relative to: Bison Ridge Y22-779
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.62°

Ladder Plot



Drilling, APD - Rev0 V0	Oscar Y10-74-1HN, Original Drilling, APD - Rev0 V0	Acco-Terra-Bodeker 40, Original C
Drilling, APD - Rev2 V0	Oscar Y10-77HN, Original Drilling, APD - Rev2 V0	Oscar Y10-78-1HC, Original Drilling
Drilling, Original Drilling - As Drilled V0	Oscar Y10-77HN, Original Drilling, Original Drilling - As Drilled V0	Oscar Y10-78-1HC, Original Drilling
Drilling, Original Drilling - As Drilled V0	Oscar Y10-77-1HN, Original Drilling, APD0 Rev0 V0	Bison Ridge State Y22-786, Original
Drilling - ST01, ST01 - As Drilled V0	Oscar Y10-79-1HN, Original Drilling, APD - Rev2 V0	Bison Ridge Y22-726, Original Drilling
Drilling, Original Drilling - As Drilled V0	Oscar Y10-79-1HN, Original Drilling, Original Drilling - As Drilled V0	Oscar Y10-75-1HC, Original Drilling
Drilling, APD - Rev2 V0	Oscar Y10-78HN, Original Drilling, Original Drilling - As Drilled V0	Oscar Y10-75-1HC, Original Drilling
Drilling, Prelim - Rev1 V0	Oscar Y10-78HN, Original Drilling, APD - Rev2 V0	Oscar Y10-74HN, Original Drilling
Drilling, APD - Rev0 V0	Oscar Y10-75-1HN, Original Drilling, APD - Rev1 V0	Oscar Y10-74HN, Original Drilling
Drilling, Original Drilling - As Drilled V0	Oscar Y10-75-1HN, Original Drilling, Original Drilling - As Drilled V0	Oscar Y10-77-1HC, Original Drilling
Drilling, Target Change V0	Oscar Y10-76-1HN, Original Drilling, APD - Rev2 V0	Oscar Y10-77-1HC, Original Drilling
Drilling, APD - Rev1 V0	Oscar Y10-76-1HN, Original Drilling, Original Drilling - As Drilled V0	Oscar Y10-76HN, Original Drilling
Drilling, APD - Rev0 V0	Oscar Y10-78-1HN, Original Drilling, APD - Rev2 V0	Oscar Y10-76HN, Original Drilling

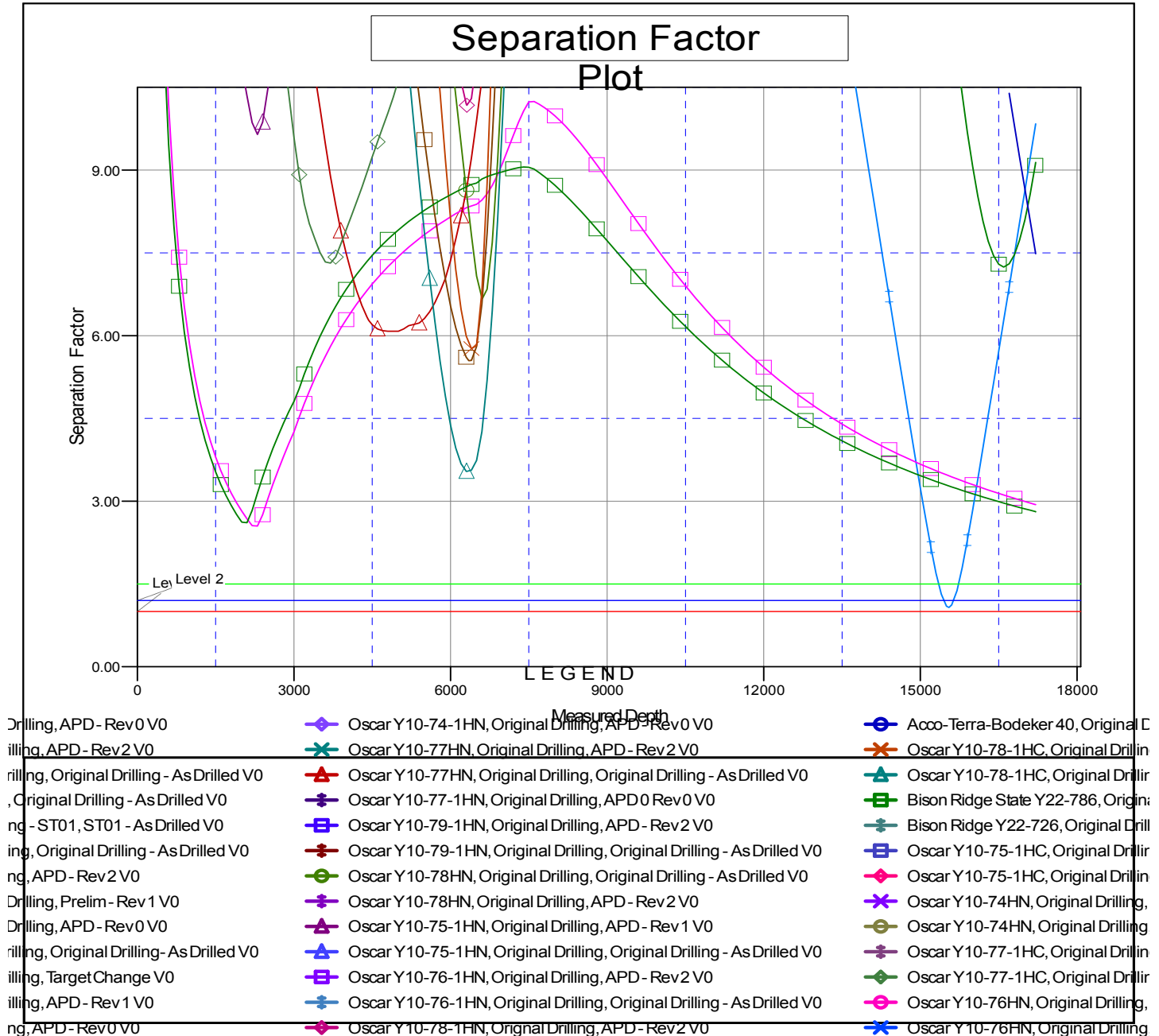
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Bison Ridge Y22-779
Project:	Mustang	TVD Reference:	WELL @ 4960.0ft (Original Well Elev.)
Reference Site:	Y Section 10	MD Reference:	WELL @ 4960.0ft (Original Well Elev.)
Site Error:	0.0 ft	North Reference:	Grid
Reference Well:	Bison Ridge Y22-779	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 @ 4960.0ft (Original Well Elev.)
Offset Depths are relative to Offset Datum
Central Meridian is -105.5000000

Coordinates are relative to: Bison Ridge Y22-779
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