

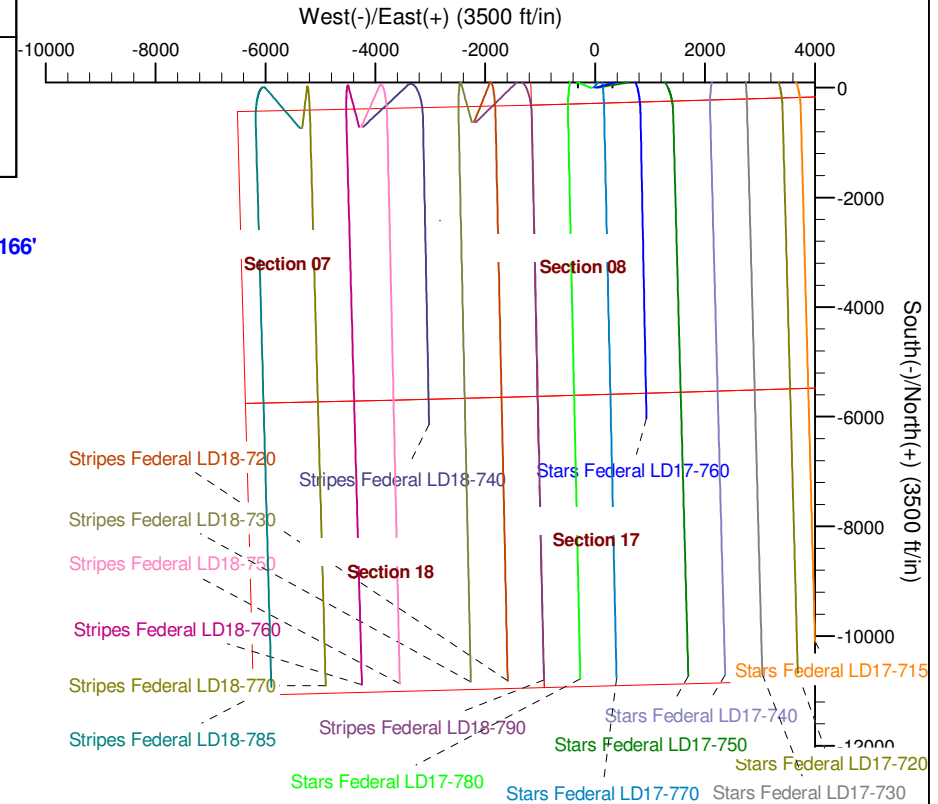
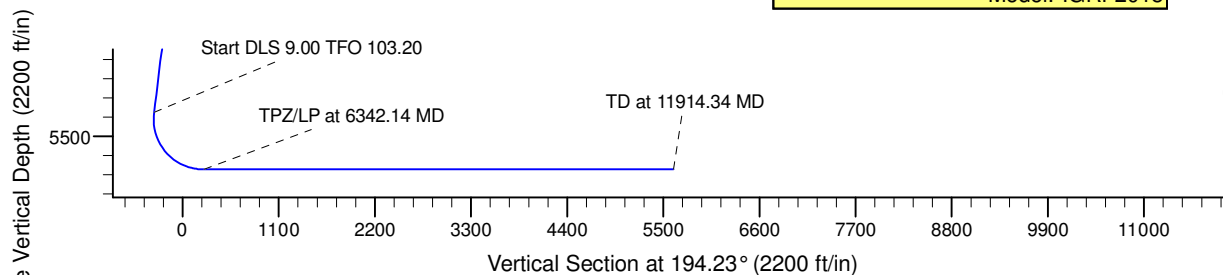
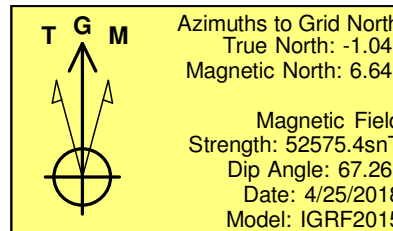
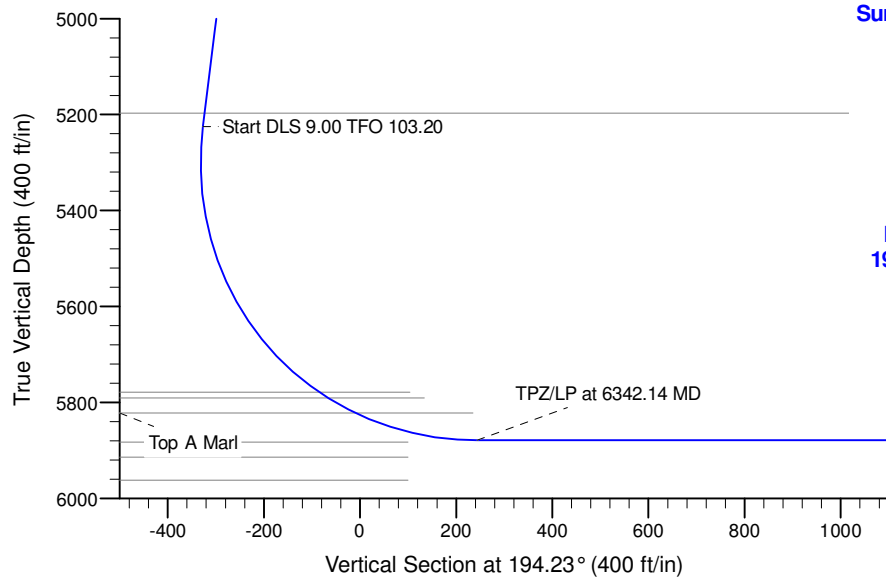
Project: East Pony  
Site: LD Section 05  
Well: Stars Federal LD17-760  
Wellbore: Wellbore #1  
Design: Plan #1

# 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	2909.31	14.19	75.28	2902.09	22.20	84.50	2.00	75.28	-42.29	
4	5305.45	14.19	75.28	5225.15	171.43	652.45	0.00	0.00	-326.56	
5	6342.14	90.00	178.87	5879.00	-460.85	825.55	9.00	103.20	243.77	Stars Federal LD17-760 TPZ/LP
6	11914.34	90.00	178.87	5879.00	-6031.97	935.01	0.00	0.00	5617.02	Stars Federal LD17-760 BHL



WELL DETAILS: Stars Federal LD17-760					
0.00	0.00	1528774.69	3444904.87	4834.00 Latitude 40.7738100	-103.8936100 Longitude
Plan: Plan #1 (Stars Federal LD17-760/Wellbore #1)					
Created By: Colby Baxter			Date: 8:21, June 26 2018		
Checked: _____			Date: _____		
Reviewed: _____			Date: _____		
Approved: _____			Date: _____		

# **Northern Region - DJ Basin**

**East Pony**

**LD Section 05**

**Stars Federal LD17-760**

**Wellbore #1**

**Plan: Plan #1**

## **Standard Survey Report**

**26 June, 2018**

# Noble Energy, Inc.

## Survey Report

<b>Company:</b>	Northern Region - DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Stars Federal LD17-760
<b>Project:</b>	East Pony	<b>TVD Reference:</b>	Well @ 4864.00ft
<b>Site:</b>	LD Section 05	<b>MD Reference:</b>	Well @ 4864.00ft
<b>Well:</b>	Stars Federal LD17-760	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan #1	<b>Database:</b>	EDMP

<b>Project</b>	East Pony, Weld County Colorado		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

Site	LD Section 05				
Site Position:		Northing:	1,528,825.19 usft	Latitude:	40.7739420
From:	Map	Easting:	3,445,036.42 usft	Longitude:	-103.8931318
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	1.04 °

Well	Stars Federal LD17-760					
Well Position	+N/-S	0.00 ft	Northing:	1,528,774.69 usft	Latitude:	40.7738100
	+E/-W	0.00 ft	Easting:	3,444,904.86 usft	Longitude:	-103.8936100
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,834.00 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	4/25/2018	7.67	67.26	52,575.43932831

<b>Design</b>	Plan #1				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00	
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	194.23	

<b>Survey Tool Program</b>	<b>Date</b>	6/26/2018			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
0.00	11,914.34	Plan #1 (Wellbore #1)	2_MWD+IFR1+MS	A008Mb: IFR dec & multi-station analysis	

<b>Planned Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	
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	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
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	

# Noble Energy, Inc.

## Survey Report

<b>Company:</b>	Northern Region - DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Stars Federal LD17-760
<b>Project:</b>	East Pony	<b>TVD Reference:</b>	Well @ 4864.00ft
<b>Site:</b>	LD Section 05	<b>MD Reference:</b>	Well @ 4864.00ft
<b>Well:</b>	Stars Federal LD17-760	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan #1	<b>Database:</b>	EDMP

### 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)
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
1,600.00	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
2,300.00	2.00	75.28	2,299.98	0.44	1.69	-0.84	2.00	2.00	0.00
2,400.00	4.00	75.28	2,399.84	1.77	6.75	-3.38	2.00	2.00	0.00
2,500.00	6.00	75.28	2,499.45	3.99	15.18	-7.60	2.00	2.00	0.00
2,600.00	8.00	75.28	2,598.70	7.08	26.96	-13.50	2.00	2.00	0.00
2,700.00	10.00	75.28	2,697.47	11.06	42.09	-21.07	2.00	2.00	0.00
2,800.00	12.00	75.28	2,795.62	15.91	60.55	-30.30	2.00	2.00	0.00
2,900.00	14.00	75.28	2,893.06	21.62	82.30	-41.19	2.00	2.00	0.00
2,909.31	14.19	75.28	2,902.09	22.20	84.50	-42.29	2.00	2.00	0.00
3,000.00	14.19	75.28	2,990.01	27.85	105.99	-53.05	0.00	0.00	0.00
3,100.00	14.19	75.28	3,086.96	34.08	129.69	-64.91	0.00	0.00	0.00
3,200.00	14.19	75.28	3,183.91	40.30	153.40	-76.78	0.00	0.00	0.00
3,300.00	14.19	75.28	3,280.86	46.53	177.10	-88.64	0.00	0.00	0.00
3,400.00	14.19	75.28	3,377.81	52.76	200.80	-100.50	0.00	0.00	0.00
3,500.00	14.19	75.28	3,474.76	58.99	224.51	-112.37	0.00	0.00	0.00
3,600.00	14.19	75.28	3,571.71	65.22	248.21	-124.23	0.00	0.00	0.00
3,700.00	14.19	75.28	3,668.66	71.44	271.91	-136.10	0.00	0.00	0.00
3,800.00	14.19	75.28	3,765.61	77.67	295.61	-147.96	0.00	0.00	0.00
3,900.00	14.19	75.28	3,862.56	83.90	319.32	-159.82	0.00	0.00	0.00
4,000.00	14.19	75.28	3,959.51	90.13	343.02	-171.69	0.00	0.00	0.00
4,100.00	14.19	75.28	4,056.46	96.36	366.72	-183.55	0.00	0.00	0.00
4,200.00	14.19	75.28	4,153.41	102.58	390.43	-195.41	0.00	0.00	0.00
4,300.00	14.19	75.28	4,250.36	108.81	414.13	-207.28	0.00	0.00	0.00
4,400.00	14.19	75.28	4,347.32	115.04	437.83	-219.14	0.00	0.00	0.00
4,500.00	14.19	75.28	4,444.27	121.27	461.54	-231.00	0.00	0.00	0.00
4,600.00	14.19	75.28	4,541.22	127.50	485.24	-242.87	0.00	0.00	0.00
4,700.00	14.19	75.28	4,638.17	133.72	508.94	-254.73	0.00	0.00	0.00
4,800.00	14.19	75.28	4,735.12	139.95	532.64	-266.60	0.00	0.00	0.00
4,900.00	14.19	75.28	4,832.07	146.18	556.35	-278.46	0.00	0.00	0.00
5,000.00	14.19	75.28	4,929.02	152.41	580.05	-290.32	0.00	0.00	0.00
5,100.00	14.19	75.28	5,025.97	158.63	603.75	-302.19	0.00	0.00	0.00
5,200.00	14.19	75.28	5,122.92	164.86	627.46	-314.05	0.00	0.00	0.00

# Noble Energy, Inc.

## Survey Report

<b>Company:</b>	Northern Region - DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Stars Federal LD17-760
<b>Project:</b>	East Pony	<b>TVD Reference:</b>	Well @ 4864.00ft
<b>Site:</b>	LD Section 05	<b>MD Reference:</b>	Well @ 4864.00ft
<b>Well:</b>	Stars Federal LD17-760	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan #1	<b>Database:</b>	EDMP

### 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)
5,300.00	14.19	75.28	5,219.87	171.09	651.16	-325.91	0.00	0.00	0.00
5,305.45	14.19	75.28	5,225.15	171.43	652.45	-326.56	0.00	0.00	0.00
5,400.00	14.74	109.78	5,316.88	170.30	675.01	-331.01	9.00	0.58	36.49
5,500.00	19.71	135.57	5,412.50	153.92	698.83	-320.99	9.00	4.97	25.79
5,600.00	26.81	149.78	5,504.38	122.33	722.04	-296.08	9.00	7.10	14.21
5,700.00	34.75	158.13	5,590.27	76.31	744.05	-256.88	9.00	7.94	8.35
5,800.00	43.06	163.63	5,668.05	16.99	764.32	-204.36	9.00	8.32	5.50
5,900.00	51.57	167.63	5,735.79	-54.18	782.37	-139.81	9.00	8.51	4.00
6,000.00	60.19	170.78	5,791.84	-135.43	797.74	-64.83	9.00	8.62	3.15
6,100.00	68.87	173.42	5,834.82	-224.77	810.06	18.73	9.00	8.68	2.64
6,200.00	77.58	175.77	5,863.65	-319.99	819.01	108.83	9.00	8.72	2.35
6,300.00	86.32	177.97	5,877.65	-418.76	824.39	203.25	9.00	8.73	2.19
6,342.14	90.00	178.87	5,879.00	-460.85	825.55	243.77	9.00	8.74	2.15
6,400.00	90.00	178.87	5,879.00	-518.70	826.69	299.56	0.00	0.00	0.00
6,500.00	90.00	178.87	5,879.00	-618.68	828.65	395.99	0.00	0.00	0.00
6,600.00	90.00	178.87	5,879.00	-718.66	830.62	492.42	0.00	0.00	0.00
6,700.00	90.00	178.87	5,879.00	-818.64	832.58	588.85	0.00	0.00	0.00
6,800.00	90.00	178.87	5,879.00	-918.62	834.55	685.28	0.00	0.00	0.00
6,900.00	90.00	178.87	5,879.00	-1,018.60	836.51	781.71	0.00	0.00	0.00
7,000.00	90.00	178.87	5,879.00	-1,118.58	838.48	878.14	0.00	0.00	0.00
7,100.00	90.00	178.87	5,879.00	-1,218.56	840.44	974.57	0.00	0.00	0.00
7,200.00	90.00	178.87	5,879.00	-1,318.54	842.40	1,071.00	0.00	0.00	0.00
7,300.00	90.00	178.87	5,879.00	-1,418.53	844.37	1,167.43	0.00	0.00	0.00
7,400.00	90.00	178.87	5,879.00	-1,518.51	846.33	1,263.86	0.00	0.00	0.00
7,500.00	90.00	178.87	5,879.00	-1,618.49	848.30	1,360.29	0.00	0.00	0.00
7,600.00	90.00	178.87	5,879.00	-1,718.47	850.26	1,456.72	0.00	0.00	0.00
7,700.00	90.00	178.87	5,879.00	-1,818.45	852.23	1,553.14	0.00	0.00	0.00
7,800.00	90.00	178.87	5,879.00	-1,918.43	854.19	1,649.57	0.00	0.00	0.00
7,900.00	90.00	178.87	5,879.00	-2,018.41	856.15	1,746.00	0.00	0.00	0.00
8,000.00	90.00	178.87	5,879.00	-2,118.39	858.12	1,842.43	0.00	0.00	0.00
8,100.00	90.00	178.87	5,879.00	-2,218.37	860.08	1,938.86	0.00	0.00	0.00
8,200.00	90.00	178.87	5,879.00	-2,318.35	862.05	2,035.29	0.00	0.00	0.00
8,300.00	90.00	178.87	5,879.00	-2,418.33	864.01	2,131.72	0.00	0.00	0.00
8,400.00	90.00	178.87	5,879.00	-2,518.31	865.98	2,228.15	0.00	0.00	0.00
8,500.00	90.00	178.87	5,879.00	-2,618.29	867.94	2,324.58	0.00	0.00	0.00
8,600.00	90.00	178.87	5,879.00	-2,718.27	869.90	2,421.01	0.00	0.00	0.00
8,700.00	90.00	178.87	5,879.00	-2,818.26	871.87	2,517.44	0.00	0.00	0.00
8,800.00	90.00	178.87	5,879.00	-2,918.24	873.83	2,613.87	0.00	0.00	0.00
8,900.00	90.00	178.87	5,879.00	-3,018.22	875.80	2,710.30	0.00	0.00	0.00
9,000.00	90.00	178.87	5,879.00	-3,118.20	877.76	2,806.73	0.00	0.00	0.00
9,100.00	90.00	178.87	5,879.00	-3,218.18	879.73	2,903.16	0.00	0.00	0.00
9,200.00	90.00	178.87	5,879.00	-3,318.16	881.69	2,999.59	0.00	0.00	0.00
9,300.00	90.00	178.87	5,879.00	-3,418.14	883.66	3,096.02	0.00	0.00	0.00

# Noble Energy, Inc.

## Survey Report

<b>Company:</b>	Northern Region - DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Stars Federal LD17-760
<b>Project:</b>	East Pony	<b>TVD Reference:</b>	Well @ 4864.00ft
<b>Site:</b>	LD Section 05	<b>MD Reference:</b>	Well @ 4864.00ft
<b>Well:</b>	Stars Federal LD17-760	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan #1	<b>Database:</b>	EDMP

### 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)
9,400.00	90.00	178.87	5,879.00	-3,518.12	885.62	3,192.45	0.00	0.00	0.00
9,500.00	90.00	178.87	5,879.00	-3,618.10	887.58	3,288.88	0.00	0.00	0.00
9,600.00	90.00	178.87	5,879.00	-3,718.08	889.55	3,385.31	0.00	0.00	0.00
9,700.00	90.00	178.87	5,879.00	-3,818.06	891.51	3,481.74	0.00	0.00	0.00
9,800.00	90.00	178.87	5,879.00	-3,918.04	893.48	3,578.17	0.00	0.00	0.00
9,900.00	90.00	178.87	5,879.00	-4,018.02	895.44	3,674.60	0.00	0.00	0.00
10,000.00	90.00	178.87	5,879.00	-4,118.00	897.41	3,771.03	0.00	0.00	0.00
10,100.00	90.00	178.87	5,879.00	-4,217.99	899.37	3,867.46	0.00	0.00	0.00
10,200.00	90.00	178.87	5,879.00	-4,317.97	901.33	3,963.89	0.00	0.00	0.00
10,300.00	90.00	178.87	5,879.00	-4,417.95	903.30	4,060.32	0.00	0.00	0.00
10,400.00	90.00	178.87	5,879.00	-4,517.93	905.26	4,156.75	0.00	0.00	0.00
10,500.00	90.00	178.87	5,879.00	-4,617.91	907.23	4,253.18	0.00	0.00	0.00
10,600.00	90.00	178.87	5,879.00	-4,717.89	909.19	4,349.61	0.00	0.00	0.00
10,700.00	90.00	178.87	5,879.00	-4,817.87	911.16	4,446.04	0.00	0.00	0.00
10,800.00	90.00	178.87	5,879.00	-4,917.85	913.12	4,542.47	0.00	0.00	0.00
10,900.00	90.00	178.87	5,879.00	-5,017.83	915.08	4,638.90	0.00	0.00	0.00
11,000.00	90.00	178.87	5,879.00	-5,117.81	917.05	4,735.33	0.00	0.00	0.00
11,100.00	90.00	178.87	5,879.00	-5,217.79	919.01	4,831.76	0.00	0.00	0.00
11,200.00	90.00	178.87	5,879.00	-5,317.77	920.98	4,928.19	0.00	0.00	0.00
11,300.00	90.00	178.87	5,879.00	-5,417.75	922.94	5,024.62	0.00	0.00	0.00
11,400.00	90.00	178.87	5,879.00	-5,517.73	924.91	5,121.05	0.00	0.00	0.00
11,500.00	90.00	178.87	5,879.00	-5,617.72	926.87	5,217.48	0.00	0.00	0.00
11,600.00	90.00	178.87	5,879.00	-5,717.70	928.83	5,313.91	0.00	0.00	0.00
11,700.00	90.00	178.87	5,879.00	-5,817.68	930.80	5,410.33	0.00	0.00	0.00
11,800.00	90.00	178.87	5,879.00	-5,917.66	932.76	5,506.76	0.00	0.00	0.00
11,900.00	90.00	178.87	5,879.00	-6,017.64	934.73	5,603.19	0.00	0.00	0.00
11,914.34	90.00	178.87	5,879.00	-6,031.97	935.01	5,617.02	0.00	0.00	0.00

### Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Stars Federal LD17-760 - hit/miss target - Shape - Point	0.00	0.00	5,879.00	-6,031.97	935.01	1,522,742.73	3,445,839.87	40.7572100	-103.8906300
Stars Federal LD17-760 - plan hits target center - Point	0.00	0.00	5,879.00	-460.85	825.55	1,528,313.84	3,445,730.42	40.7725042	-103.8906601

# Noble Energy, Inc.

## Survey Report

<b>Company:</b>	Northern Region - DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Stars Federal LD17-760
<b>Project:</b>	East Pony	<b>TVD Reference:</b>	Well @ 4864.00ft
<b>Site:</b>	LD Section 05	<b>MD Reference:</b>	Well @ 4864.00ft
<b>Well:</b>	Stars Federal LD17-760	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan #1	<b>Database:</b>	EDMP

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
524.00	524.00	Pierre				
891.00	891.00	Upper Pierre Aquifer Top				
1,515.00	1,515.00	Upper Pierre Aquifer Base				
3,395.04	3,373.00	Parkman				
3,981.94	3,942.00	Sussex				
4,528.61	4,472.00	Shannon				
5,276.41	5,197.00	Teepee Buttes				
5,974.98	5,779.00	Sharon Springs				
5,998.31	5,791.00	Top A Chalk				
6,066.63	5,822.00	Top A Marl				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
2200	2200	0	0	Start Build 2.00	
5305	5225	22	84	Start DLS 9.00 TFO 103.20	
6342	5879	171	652	TPZ/LP at 6342.14 MD	
11,914	5879	-461	826	TD at 11914.34 MD	

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

# **Northern Region - DJ Basin**

**East Pony**

**LD Section 05**

**Stars Federal LD17-760**

**Wellbore #1**

**Plan #1**

## **Anticollision Summary Report**

**26 June, 2018**



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

<b>Company:</b>	Northern Region - DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Stars Federal LD17-760
<b>Project:</b>	East Pony	<b>TVD Reference:</b>	Well @ 4864.00ft
<b>Reference Site:</b>	LD Section 05	<b>MD Reference:</b>	Well @ 4864.00ft
<b>Site Error:</b>	0.00 ft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Stars Federal LD17-760	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMP
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Reference	Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.00 ft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	6/26/2018		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.00	11,914.34	Plan #1 (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
LD Section 04						
Alice Nay 1 (Exist) - Original Drilling - As Drilled						Out of range
Rohn PC LD04-03 - Wellbore #1 - Wellbore #1- As Drille	5,539.22	5,364.18	6,892.66	6,854.28	179.570	CC
Rohn PC LD04-03 - Wellbore #1 - Wellbore #1- As Drille	5,550.00	5,374.70	6,892.72	6,854.27	179.224	ES
Rohn PC LD04-03 - Wellbore #1 - Wellbore #1- As Drille	6,150.00	5,701.55	7,079.97	7,038.66	171.384	SF
Rohn State LD03-62-1HN - Original Drilling - Original Dri	6,157.96	5,023.47	8,357.82	8,321.12	227.760	CC, ES
Rohn State LD03-62-1HN - Original Drilling - Original Dri	11,200.00	5,048.00	9,951.50	9,890.30	162.610	SF
Rohn State LD03-62HN - Original Drilling - Original Drillin	6,056.63	4,953.00	8,399.21	8,364.58	242.578	CC, ES
Rohn State LD03-62HN - Original Drilling - Original Drillin	10,900.00	4,953.00	9,983.02	9,925.49	173.539	SF
Rohn State LD03-63-1HN - Original Drilling - Original Dri	5,969.61	5,000.00	8,405.36	8,370.15	238.758	CC, ES
Rohn State LD03-63-1HN - Original Drilling - Original Dri	10,600.00	5,000.00	9,990.91	9,934.99	178.649	SF
Rohn State LD03-63HN - Original Drilling - Original Drillin	5,875.86	5,007.01	8,481.26	8,443.71	225.823	CC, ES
Rohn State LD03-63HN - Original Drilling - Original Drillin	10,100.00	5,102.01	9,966.57	9,910.27	177.024	SF
Rohn State LD03-64-1HN - Original Drilling - Original Dri	5,852.25	5,055.15	8,532.19	8,495.92	235.220	CC, ES
Rohn State LD03-64-1HN - Original Drilling - Original Dri	9,900.00	5,102.01	9,985.43	9,931.58	185.435	SF
Rohn State LD03-64HN - Original Drilling - Original Drillin	5,783.52	5,007.00	8,460.32	8,425.93	246.051	CC, ES
Rohn State LD03-64HN - Original Drilling - Original Drillin	9,700.00	5,007.00	9,969.33	9,918.92	197.765	SF
Rohn State LD03-65-1HN - Original Drilling - Original Dri	5,763.81	5,105.00	8,602.56	8,567.56	245.783	CC, ES
Rohn State LD03-65-1HN - Original Drilling - Original Dri	9,300.00	5,105.00	9,966.63	9,917.87	204.388	SF
Rohn State LD03-65HN - Original Drilling - Original Drillin	5,710.02	5,145.00	8,726.00	8,686.84	222.816	CC, ES
Rohn State LD03-65HN - Original Drilling - Original Drillin	8,800.00	5,240.00	9,951.27	9,900.48	195.902	SF
Rohn State LD03-66-1HN - Original Drilling - Original Dri	5,676.33	5,051.00	8,791.78	8,755.38	241.521	CC, ES
Rohn State LD03-66-1HN - Original Drilling - Original Dri	8,600.00	5,098.00	9,978.02	9,931.07	212.521	SF
Rohn State LD03-66HN - Original Drilling - Original Drillin	5,660.75	5,051.00	8,886.68	8,851.79	254.721	CC, ES
Rohn State LD03-66HN - Original Drilling - Original Drillin	8,300.00	5,051.00	9,960.86	9,916.80	226.076	SF
Rohn State LD04-62-1HN - Original Drilling - Original Dri	6,108.59	9,541.00	3,971.20	3,928.12	92.170	CC, ES
Rohn State LD04-62-1HN - Original Drilling - Original Dri	9,400.00	9,541.00	5,356.68	5,254.33	52.334	SF
Rohn State LD04-62HN - Original Drilling - Original Drillin	6,009.36	9,580.00	3,983.68	3,937.79	86.824	CC
Rohn State LD04-62HN - Original Drilling - Original Drillin	6,050.00	9,580.00	3,984.27	3,937.75	85.648	ES
Rohn State LD04-62HN - Original Drilling - Original Drillin	9,000.00	9,580.00	5,295.45	5,193.92	52.157	SF
Rohn State LD04-63-1HN - Original Drilling - Original Dri	5,950.73	9,834.00	4,024.89	3,973.87	78.894	CC, ES
Rohn State LD04-63-1HN - Original Drilling - Original Dri	8,800.00	9,834.00	5,338.33	5,233.65	50.996	SF
Rohn State LD04-63HN - Original Drilling - Original Drillin	5,849.30	9,758.00	4,087.01	4,035.50	79.349	CC
Rohn State LD04-63HN - Original Drilling - Original Drillin	5,850.00	9,758.00	4,087.01	4,035.49	79.332	ES
Rohn State LD04-63HN - Original Drilling - Original Drillin	8,600.00	9,758.00	5,427.20	5,326.28	53.779	SF
Rohn State LD04-64-1HN - Original Drilling - Original Dri	5,766.90	9,566.00	4,182.20	4,124.93	73.021	CC
Rohn State LD04-64-1HN - Original Drilling - Original Dri	5,800.00	9,566.00	4,182.69	4,124.89	72.355	ES
Rohn State LD04-64-1HN - Original Drilling - Original Dri	8,200.00	9,566.00	5,389.89	5,291.16	54.594	SF

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

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

<b>Company:</b>	Northern Region - DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Stars Federal LD17-760
<b>Project:</b>	East Pony	<b>TVD Reference:</b>	Well @ 4864.00ft
<b>Reference Site:</b>	LD Section 05	<b>MD Reference:</b>	Well @ 4864.00ft
<b>Site Error:</b>	0.00 ft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Stars Federal LD17-760	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMP
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
LD Section 04						
Rohn State LD04-64HN - Original Drilling - Original Drilling	5,724.86	9,476.00	4,304.76	4,241.40	67.947	CC
Rohn State LD04-64HN - Original Drilling - Original Drilling	5,750.00	9,476.00	4,305.07	4,241.33	67.542	ES
Rohn State LD04-64HN - Original Drilling - Original Drilling	7,800.00	9,476.00	5,346.23	5,249.60	55.325	SF
Rohn State LD04-65-1HN - Wellbore #1 - Wellbore #1- A	5,674.66	9,578.00	4,418.53	4,346.87	61.658	CC
Rohn State LD04-65-1HN - Wellbore #1 - Wellbore #1- A	5,700.00	9,578.00	4,418.86	4,346.83	61.348	ES
Rohn State LD04-65-1HN - Wellbore #1 - Wellbore #1- A	7,400.00	9,578.00	5,275.40	5,176.70	53.448	SF
Rohn State LD04-65HN - Wellbore #1 - Wellbore #1- As	5,655.51	9,648.02	4,587.69	4,517.66	65.511	CC, ES
Rohn State LD04-65HN - Wellbore #1 - Wellbore #1- As	7,300.00	9,648.02	5,442.09	5,348.98	58.452	SF
Rohn State LD04-66-1HN - Wellbore #1 - Wellbore #1- A	5,616.60	9,580.02	4,745.83	4,670.23	62.769	CC, ES
Rohn State LD04-66-1HN - Wellbore #1 - Wellbore #1- A	6,900.00	9,580.02	5,380.17	5,287.28	57.921	SF
Rohn State LD04-66HN - Original Drilling - Original Drilling	5,602.59	9,628.00	4,922.09	4,840.65	60.436	CC, ES
Rohn State LD04-66HN - Original Drilling - Original Drilling	6,500.00	9,628.00	5,317.39	5,224.23	57.080	SF
Rohn State LD04-67-1HN - Original Drilling - Original Drilling	5,570.35	9,583.02	5,120.27	5,032.21	58.147	CC, ES
Rohn State LD04-67-1HN - Original Drilling - Original Drilling	6,250.00	9,583.02	5,377.37	5,281.05	55.831	SF
Rohn State LD04-67HN - Original Drilling - As Drilled	5,465.68	5,155.01	5,257.46	5,218.61	135.314	CC, ES
Rohn State LD04-67HN - Original Drilling - As Drilled	5,750.00	5,155.01	5,308.05	5,268.37	133.779	SF
Rohn State LD04-68-1HN - Original Drilling - As Drilled	5,447.74	5,060.01	5,432.19	5,395.85	149.488	CC
Rohn State LD04-68-1HN - Original Drilling - As Drilled	5,450.00	5,060.01	5,432.19	5,395.84	149.454	ES
Rohn State LD04-68-1HN - Original Drilling - As Drilled	5,750.00	5,060.01	5,491.22	5,453.94	147.306	SF
Rohn State LD04-68HN - Wellbore #1 - Wellbore #1- As	5,447.71	5,062.01	5,649.37	5,613.82	158.935	CC
Rohn State LD04-68HN - Wellbore #1 - Wellbore #1- As	5,450.00	5,062.01	5,649.37	5,613.82	158.896	ES
Rohn State LD04-68HN - Wellbore #1 - Wellbore #1- As	5,800.00	5,062.01	5,729.96	5,693.28	156.197	SF
Rohn State LD09-69HN - Original Drilling - Original Drilling	6,272.88	9,710.00	3,927.66	3,882.56	87.081	CC, ES
Rohn State LD09-69HN - Original Drilling - Original Drilling	9,800.00	9,710.00	5,347.86	5,246.45	52.739	SF
Rohn State LD10-69HN - Original Drilling - Original Drilling	6,266.00	5,144.00	8,312.09	8,271.93	206.984	CC, ES
Rohn State LD10-69HN - Original Drilling - Original Drilling	11,600.00	5,144.00	9,961.53	9,895.37	150.573	SF

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

<b>Company:</b>	Northern Region - DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Stars Federal LD17-760
<b>Project:</b>	East Pony	<b>TVD Reference:</b>	Well @ 4864.00ft
<b>Reference Site:</b>	LD Section 05	<b>MD Reference:</b>	Well @ 4864.00ft
<b>Site Error:</b>	0.00 ft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Stars Federal LD17-760	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMP
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
LD Section 05						
Heston LD06-620 - Original Drilling - Original Drilling - As	5,929.35	9,280.29	249.26	197.83	4.847	CC
Heston LD06-620 - Original Drilling - Original Drilling - As	5,950.00	9,276.62	250.42	196.78	4.669	ES
Heston LD06-620 - Original Drilling - Original Drilling - As	6,000.00	9,268.20	262.47	204.17	4.502	SF
Heston LD06-620 - ST01 - Original Drilling - ST01 - As D	5,894.68	9,283.05	300.12	251.07	6.119	CC
Heston LD06-620 - ST01 - Original Drilling - ST01 - As D	5,900.00	9,282.24	300.19	250.65	6.060	ES
Heston LD06-620 - ST01 - Original Drilling - ST01 - As D	6,000.00	9,268.37	325.64	268.33	5.682	SF
Heston LD06-625 - Original Drilling - Original Drilling - As	5,667.93	9,253.13	711.44	643.96	10.543	CC, ES
Heston LD06-625 - Original Drilling - Original Drilling - As	5,800.00	9,226.41	736.25	663.71	10.150	SF
Heston LD06-630 - Original Drilling - Original Drilling - As	5,569.88	9,319.84	1,216.97	1,155.30	19.733	CC, ES
Heston LD06-630 - Original Drilling - Original Drilling - As	5,700.00	9,291.60	1,236.62	1,173.05	19.452	SF
Nugent LD06-655 - Original Drilling - Original Drilling - As	5,462.84	9,248.46	2,613.28	2,553.55	43.750	CC, ES
Nugent LD06-655 - Original Drilling - Original Drilling - As	5,550.00	9,229.43	2,620.59	2,560.49	43.605	SF
Nugent LD06-665 - Original Drilling - Original Drilling - As	5,446.28	9,189.64	3,271.43	3,212.99	55.977	CC, ES
Nugent LD06-665 - Original Drilling - Original Drilling - As	5,550.00	9,165.12	3,281.39	3,222.65	55.856	SF
Reagan LD06-675 - Original Drilling - Original Drilling - A	5,430.58	9,156.00	3,895.73	3,831.90	61.027	CC, ES
Reagan LD06-675 - Original Drilling - Original Drilling - A	5,500.00	9,141.59	3,900.09	3,836.08	60.930	SF
Reagan LD06-685 - Original Drilling - Original Drilling - A	5,425.11	9,232.75	4,514.10	4,455.11	76.533	CC, ES
Reagan LD06-685 - Original Drilling - Original Drilling - A	5,500.00	9,216.59	4,519.08	4,459.92	76.388	SF
Stars Federal LD17-715 - Wellbore #1 - Plan #1	3,783.92	3,100.00	2,564.92	2,541.30	108.600	CC, ES
Stars Federal LD17-715 - Wellbore #1 - Plan #1	11,914.34	11,950.34	2,957.43	2,847.36	26.870	SF
Stars Federal LD17-720 - Wellbore #1 - Plan #1	3,966.74	3,300.00	2,479.65	2,454.65	99.201	CC
Stars Federal LD17-720 - Wellbore #1 - Plan #1	4,000.00	3,315.95	2,479.78	2,454.63	98.610	ES
Stars Federal LD17-720 - Wellbore #1 - Plan #1	11,914.34	11,808.60	2,628.83	2,518.57	23.843	SF
Stars Federal LD17-730 - Wellbore #1 - Plan #1	6,319.54	6,198.67	1,941.20	1,898.75	45.733	CC
Stars Federal LD17-730 - Wellbore #1 - Plan #1	11,914.34	11,803.82	1,981.67	1,872.05	18.078	ES, SF
Stars Federal LD17-740 - Wellbore #1 - Plan #1	6,331.27	6,222.87	1,267.80	1,225.23	29.780	CC
Stars Federal LD17-740 - Wellbore #1 - Plan #1	11,914.34	11,789.03	1,306.98	1,197.36	11.923	ES, SF
Stars Federal LD17-750 - Wellbore #1 - Plan #1	2,727.79	2,689.11	9.85	-9.02	0.522	Level 1, CC, ES, SF
Stars Federal LD17-770 - Wellbore #1 - Plan #1	2,200.00	2,200.00	38.78	23.47	2.533	CC, ES
Stars Federal LD17-770 - Wellbore #1 - Plan #1	2,300.00	2,300.02	40.47	24.46	2.527	SF
Stars Federal LD17-780 - Wellbore #1 - Plan #1	2,200.00	2,201.00	74.78	59.47	4.885	CC, ES
Stars Federal LD17-780 - Wellbore #1 - Plan #1	2,300.00	2,300.98	76.48	60.46	4.774	SF
LD Section 06						
Timbro LD06-64HN - Wellbore #1 - Wellbore #1- As Drille	5,517.64	12,630.47	1,652.01	1,452.95	8.299	CC
Timbro LD06-64HN - Wellbore #1 - Wellbore #1- As Drille	5,550.00	12,644.00	1,653.16	1,452.60	8.243	ES
Timbro LD06-64HN - Wellbore #1 - Wellbore #1- As Drille	5,650.00	12,663.77	1,670.54	1,466.45	8.185	SF

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

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

<b>Company:</b>	Northern Region - DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Stars Federal LD17-760
<b>Project:</b>	East Pony	<b>TVD Reference:</b>	Well @ 4864.00ft
<b>Reference Site:</b>	LD Section 05	<b>MD Reference:</b>	Well @ 4864.00ft
<b>Site Error:</b>	0.00 ft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Stars Federal LD17-760	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMP
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
<b>Offset Well - Wellbore - Design</b>						
LD Section 07						
Stripes Federal LD18-720 - Wellbore #1 - Plan #1	2,682.05	3,106.44	2,281.66	2,261.69	114.256	CC
Stripes Federal LD18-720 - Wellbore #1 - Plan #1	2,700.00	3,123.92	2,281.72	2,261.62	113.543	ES
Stripes Federal LD18-720 - Wellbore #1 - Plan #1	11,914.34	12,023.00	2,630.47	2,523.06	24.488	SF
Stripes Federal LD18-730 - Wellbore #1 - Plan #1	2,200.00	2,231.00	2,329.16	2,313.74	151.069	CC, ES
Stripes Federal LD18-730 - Wellbore #1 - Plan #1	11,914.34	12,000.20	3,301.08	3,193.84	30.783	SF
Stripes Federal LD18-740 - Wellbore #1 - Plan #1	4,958.06	6,189.44	3,881.85	3,842.11	97.696	CC
Stripes Federal LD18-740 - Wellbore #1 - Plan #1	5,000.00	6,200.00	3,882.04	3,842.11	97.217	ES
Stripes Federal LD18-740 - Wellbore #1 - Plan #1	11,914.34	12,140.23	3,959.53	3,852.36	36.946	SF
Stripes Federal LD18-750 - Wellbore #1 - Plan #1	2,740.30	3,578.65	4,318.93	4,297.15	198.260	CC, ES
Stripes Federal LD18-750 - Wellbore #1 - Plan #1	11,914.34	12,014.88	4,597.23	4,490.13	42.924	SF
Stripes Federal LD18-760 - Wellbore #1 - Plan #1	2,200.00	2,208.00	4,356.04	4,340.71	284.051	CC, ES
Stripes Federal LD18-760 - Wellbore #1 - Plan #1	11,914.34	12,004.17	5,312.10	5,204.76	49.487	SF
Stripes Federal LD18-770 - Wellbore #1 - Plan #1	2,200.00	2,208.00	5,384.08	5,368.74	351.088	CC, ES
Stripes Federal LD18-770 - Wellbore #1 - Plan #1	11,914.34	11,964.80	5,971.52	5,864.25	55.669	SF
Stripes Federal LD18-785 - Wellbore #1 - Plan #1	2,200.00	2,208.00	5,421.32	5,405.98	353.516	CC, ES
Stripes Federal LD18-785 - Wellbore #1 - Plan #1	11,914.34	12,056.63	6,961.12	6,853.71	64.808	SF
Stripes Federal LD18-790 - Wellbore #1 - Plan #1	5,377.57	6,077.13	1,964.27	1,923.39	48.049	CC
Stripes Federal LD18-790 - Wellbore #1 - Plan #1	11,914.34	12,137.69	1,970.56	1,863.09	18.336	ES, SF
Timbro Federal LD07-78HN - Original Drilling - As Drilled	2,645.10	3,612.12	5,976.27	5,955.96	294.266	CC, ES
Timbro Federal LD07-78HN - Original Drilling - As Drilled	11,914.34	10,293.02	6,734.45	6,600.49	50.272	SF
LD Section 08						
Timbro Federal LD08-62HN - Original Drilling - As Drilled	10,793.01	8,786.55	0.79	-62.61	0.012	Level 1, CC, SF
Timbro Federal LD08-62HN - Original Drilling - As Drilled	10,800.00	8,787.03	7.02	-89.59	0.073	Level 1, ES
LD Section 16						
IGO Creek PC LD16-64HN - Original Drilling - Original D	11,914.34	10,059.02	4,909.99	4,801.52	45.265	CC, ES, SF
IGO Creek State PC LD16-62HN - Original Drilling - Orig	11,914.34	9,994.00	5,732.02	5,607.99	46.214	CC, ES, SF
IGO Creek State PC LD16-63HN - Original Drilling - Orig	11,914.34	9,973.00	5,329.18	5,211.26	45.194	CC, ES, SF
Rohn PC LD16-96HN - Wellbore #1 - Wellbore #1- As Dr	11,914.34	5,323.01	3,396.10	3,317.34	43.118	CC, ES, SF
Timbro PC LD16-17 - Wellbore #1 - Wellbore #1- As Drill	11,914.34	5,738.34	7,505.69	7,432.62	102.715	CC, ES, SF
Timbro State LD16-65HN - Original Drilling - Original Dril	11,914.34	9,702.00	4,495.22	4,387.45	41.712	CC, ES, SF
Timbro State LD16-66-1HN - Original Drilling - Original D	11,914.34	9,753.00	4,330.05	4,229.75	43.169	CC, ES, SF
Timbro State LD16-66HN - Original Drilling - Original Dril	11,900.00	9,790.02	4,220.08	4,126.28	44.989	SF
Timbro State LD16-66HN - Original Drilling - Original Dril	11,914.34	9,790.02	4,215.06	4,121.37	44.990	CC, ES
Timbro State LD16-67-1HN - Original Drilling - Original D	11,300.00	9,947.02	4,321.57	4,229.00	46.681	SF
Timbro State LD16-67-1HN - Original Drilling - Original D	11,914.34	9,947.02	4,110.43	4,023.30	47.174	CC, ES
Timbro State LD16-67HN - Original Drilling - Original Dril	11,100.00	9,917.00	4,280.27	4,185.43	45.129	SF
Timbro State LD16-67HN - Original Drilling - Original Dril	11,914.34	9,917.00	4,041.15	3,953.45	46.081	CC, ES
Timbro State LD16-68-1HN - Original Drilling - Original D	10,600.00	9,870.00	4,354.45	4,262.75	47.487	SF
Timbro State LD16-68-1HN - Original Drilling - Original D	11,914.34	9,870.00	3,991.93	3,911.84	49.843	CC, ES
LD Section 17						
Timbro Federal LD17-76HN - Wellbore #1 - Wellbore #1-	11,914.34	10,251.02	202.78	149.05	3.774	CC, ES, SF
LD Section 18						
Timbro Federal LD18-74HN - Original Drilling - As Drilled	11,914.34	10,271.02	3,954.36	3,821.42	29.747	CC, ES, SF

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

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

<b>Company:</b>	Northern Region - DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Stars Federal LD17-760
<b>Project:</b>	East Pony	<b>TVD Reference:</b>	Well @ 4864.00ft
<b>Reference Site:</b>	LD Section 05	<b>MD Reference:</b>	Well @ 4864.00ft
<b>Site Error:</b>	0.00 ft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Stars Federal LD17-760	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMP
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
LD Section 19						
Bennett LD19-758 - Original Drilling - Original Drilling - A	11,914.34	10,963.00	7,207.54	7,128.81	91.546	CC, ES, SF
Bennett LD19-765 - Original Drilling - Original Drilling - A	11,914.34	10,896.00	7,530.22	7,448.86	92.552	CC, ES, SF
Bennett LD19-771 - Original Drilling - Original Drilling - A	11,914.34	10,806.00	7,863.95	7,780.30	94.005	CC, ES, SF
Bennett LD19-777 - Original Drilling - Original Drilling - A	11,914.34	10,840.00	8,192.42	8,106.69	95.566	CC, ES, SF
Bennett LD19-781 - Original Drilling - Original Drilling - A	11,914.34	11,090.00	8,392.89	8,307.00	97.714	CC, ES, SF
Bennett LD19-785 - Original Drilling - Original Drilling - A	11,914.34	10,902.00	8,571.08	8,482.38	96.633	CC, ES, SF
Riley LD19-715 - Original Drilling - Original Drilling - As D	11,914.34	11,052.00	5,508.21	5,448.98	93.004	CC, ES, SF
Riley LD19-722 - Original Drilling - Original Drilling - As D	11,914.34	10,665.00	5,712.30	5,650.77	92.833	CC, ES, SF
Riley LD19-738 - Original Drilling - Original Drilling - As D	11,914.34	10,950.00	6,346.39	6,273.87	87.513	CC, ES, SF
Riley LD19-745 - Original Drilling - Original Drilling - As D	11,914.34	10,872.00	6,629.94	6,554.18	87.507	CC, ES, SF
Riley LD19-752 - Original Drilling - Original Drilling - As D	11,914.34	11,064.00	6,970.15	6,888.52	85.392	CC, ES, SF
Timbro Federal LD29-78HN - Original Drilling - Original D						Out of range
Timbro LD19-73HN - Wellbore #1 - Wellbore #1-As Drille	11,914.34	10,273.02	6,083.79	6,003.66	75.928	CC, ES, SF
LD Section 20						
Anni LD29-755 - Original Drilling - Original Drilling - As D	11,914.34	5,386.00	9,806.86	9,768.93	258.555	CC, ES, SF
Anni LD29-763 - Original Drilling - Original Drilling - As D	11,914.34	5,195.00	9,803.27	9,764.71	254.296	CC, ES, SF
Anni LD29-771 - Original Drilling - Original Drilling - As D	11,914.34	5,290.00	9,852.66	9,815.14	262.599	CC, ES, SF



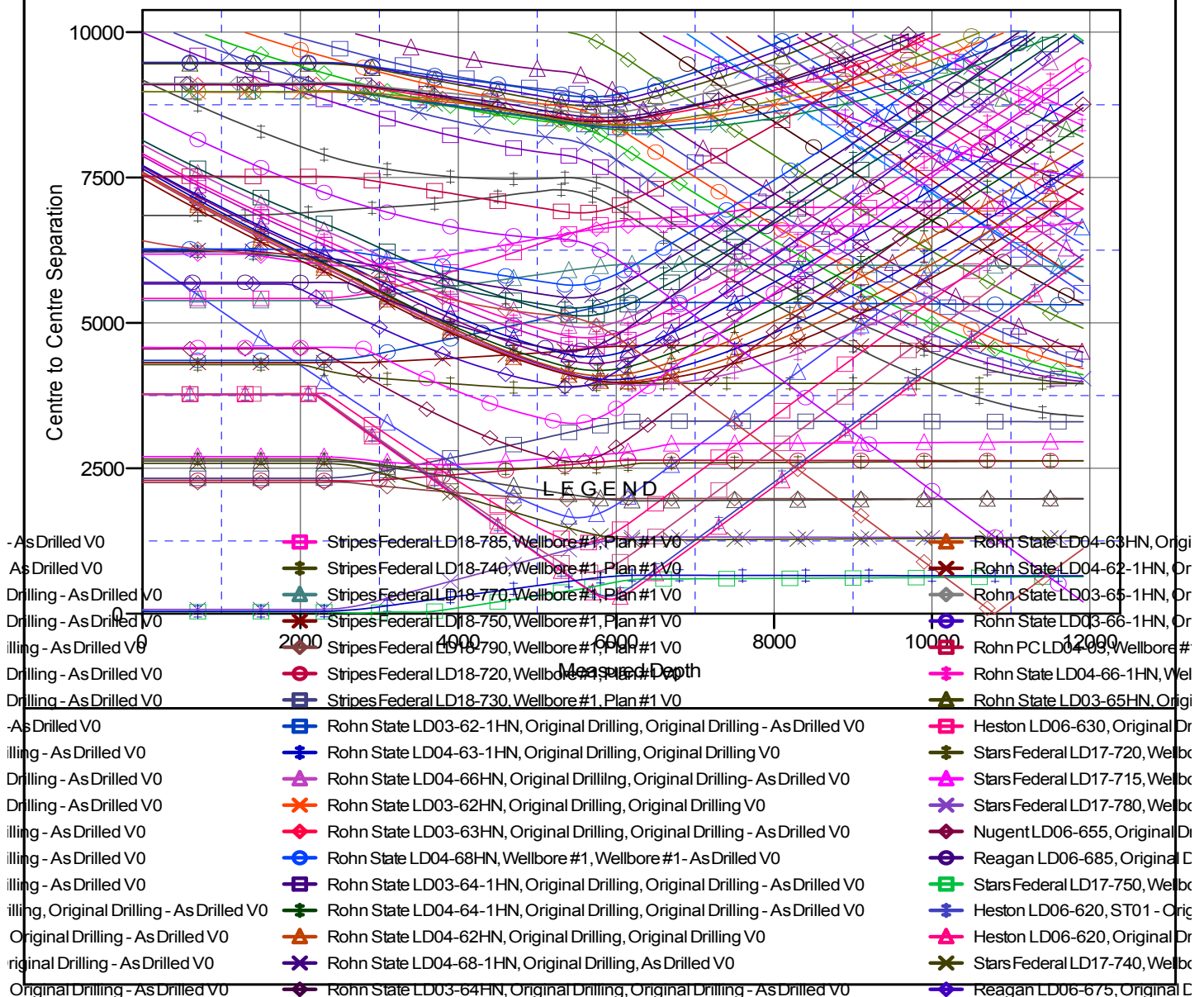
## Anticollision Summary Report

<b>Company:</b>	Northern Region - DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Stars Federal LD17-760
<b>Project:</b>	East Pony	<b>TVD Reference:</b>	Well @ 4864.00ft
<b>Reference Site:</b>	LD Section 05	<b>MD Reference:</b>	Well @ 4864.00ft
<b>Site Error:</b>	0.00 ft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Stars Federal LD17-760	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMP
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Coordinates are relative to: Stars Federal LD17-760

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 1.04°



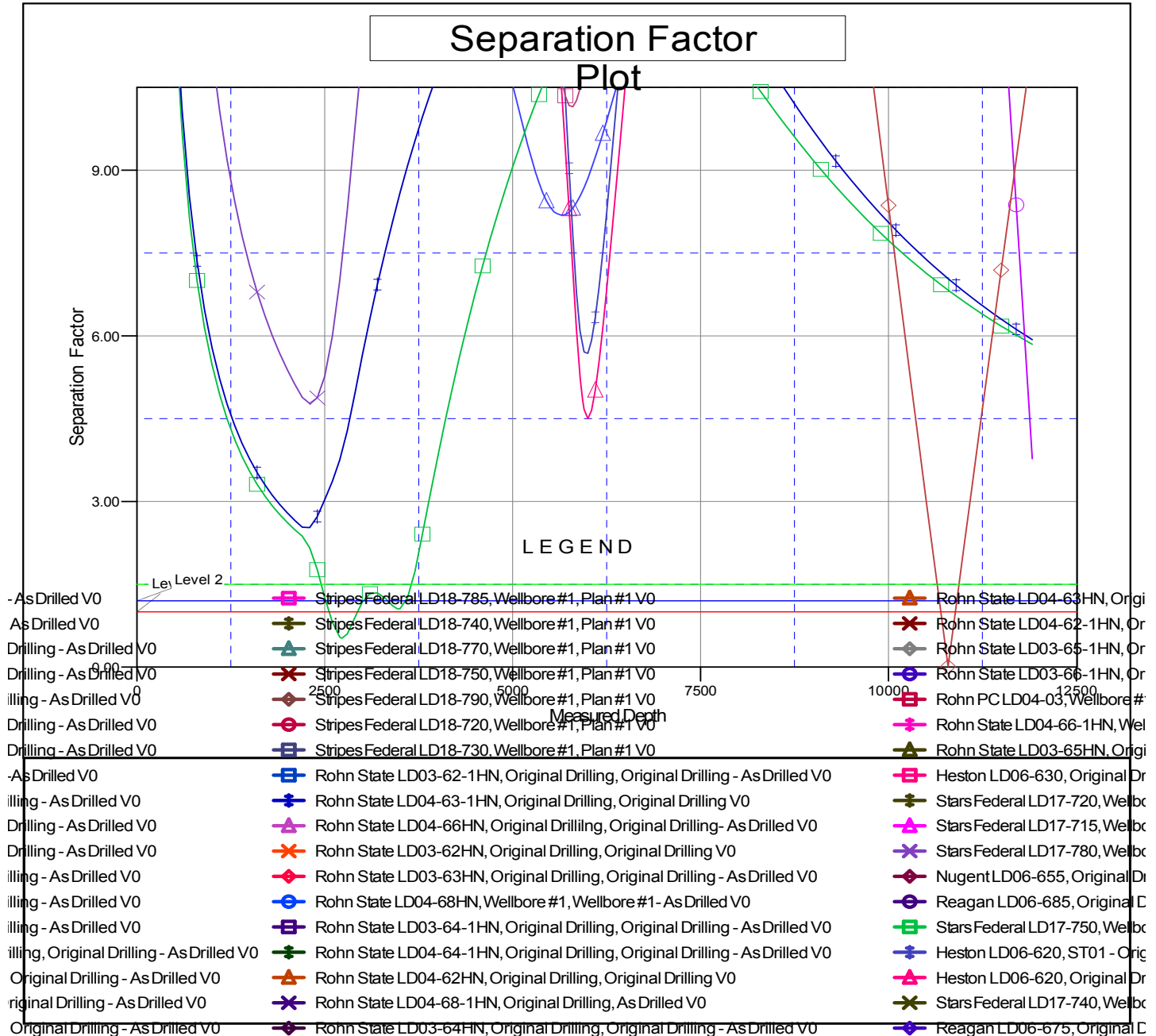
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

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

<b>Company:</b>	Northern Region - DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Stars Federal LD17-760
<b>Project:</b>	East Pony	<b>TVD Reference:</b>	Well @ 4864.00ft
<b>Reference Site:</b>	LD Section 05	<b>MD Reference:</b>	Well @ 4864.00ft
<b>Site Error:</b>	0.00 ft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Stars Federal LD17-760	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDMP
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to Well @ 4864.00ft  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.5000000

Coordinates are relative to: Stars Federal LD17-760  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 1.04°



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