

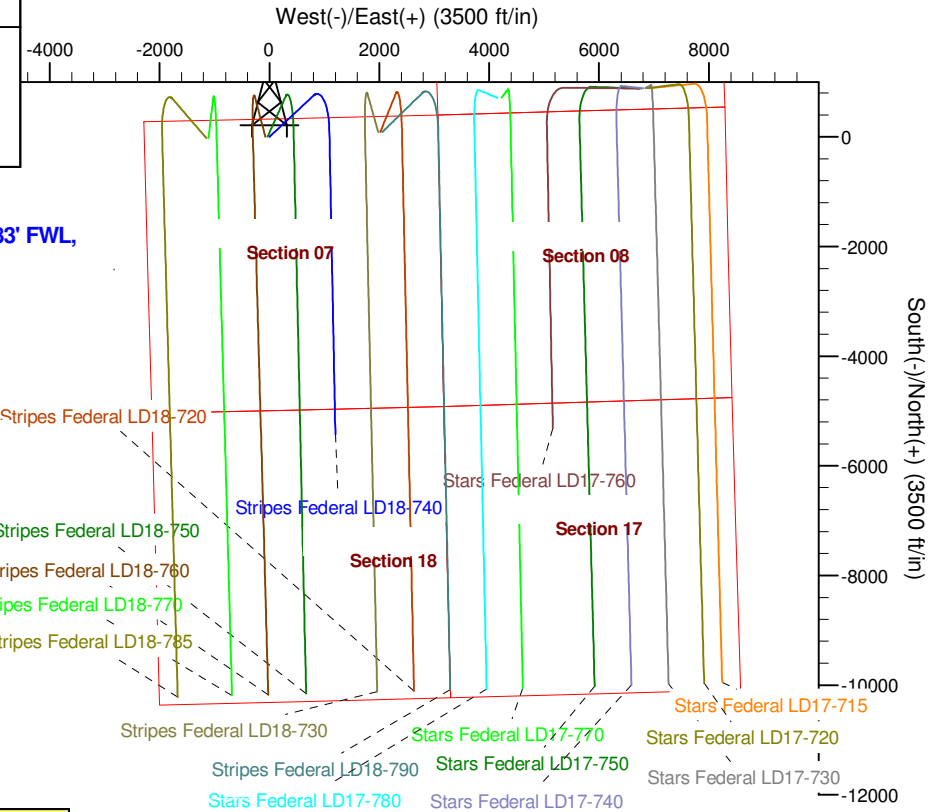
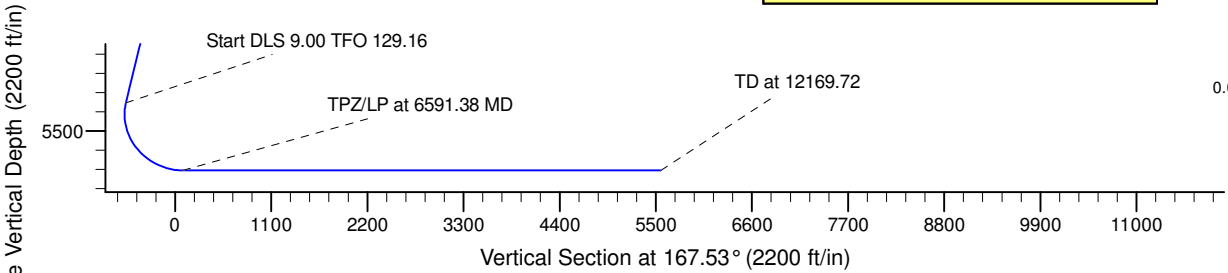
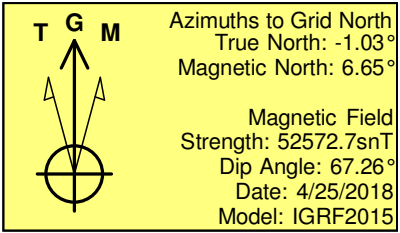
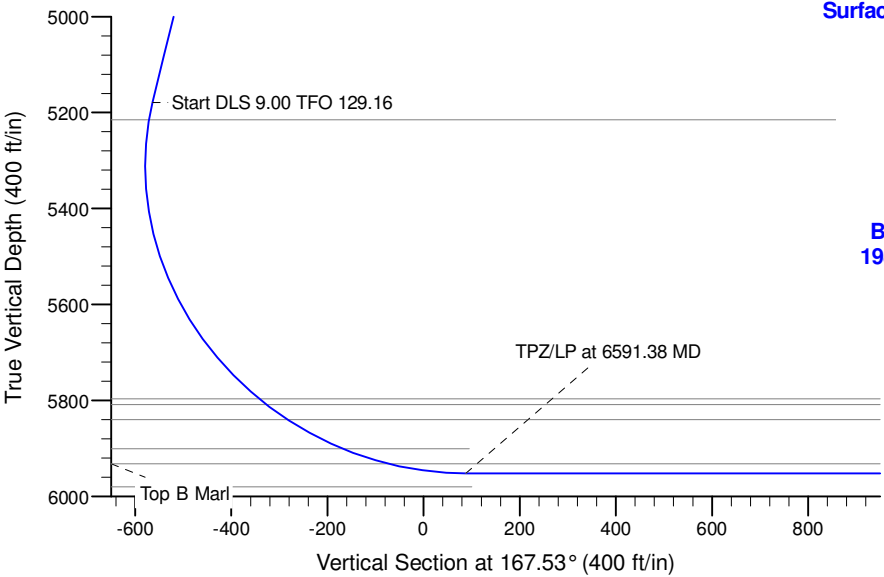
Project: East Pony
Site: LD Section 07
Well: Stripes Federal LD18-740
Wellbore: Wellbore #1
Design: Plan #1

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	3465.58	25.31	46.85	3424.82	188.09	200.66	2.00	46.85	-140.32	
4	5406.63	25.31	46.85	5179.52	755.64	806.13	0.00	0.00	-563.71	
5	6591.38	90.00	178.86	5952.00	151.14	1089.62	9.00	129.16	87.75	Stripes Federal LD18-740 TPZ/LP
6	12169.72	90.00	178.86	5952.00	-5426.10	1200.18	0.00	0.00	5557.25	Stripes Federal LD18-740 BHL



WELL DETAILS: Stripes Federal LD18-740

	Northing	Easting	Latitude	Longitude
0.00	0.00	1528060.86	4843.00 40.7720600	-103.9089000

Plan: Plan #1 (Stripes Federal LD18-740/Wellbore #1)

Created By: Colby Baxter Date: 13:54, May 16 2018

Checked: _____ Date: _____

Reviewed: _____ Date: _____

Approved: _____ Date: _____

Northern Region - DJ Basin

East Pony

LD Section 07

Stripes Federal LD18-740

Wellbore #1

Plan: Plan #1

Standard Survey Report

02 May, 2018

Noble Energy, Inc.

Survey Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Stripes Federal LD18-740
Project:	East Pony	TVD Reference:	Well @ 4873.00ft
Site:	LD Section 07	MD Reference:	Well @ 4873.00ft
Well:	Stripes Federal LD18-740	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	EDMP

Project	East Pony, 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		LD Section 07			
Site Position:		Northing:	1,528,089.59 usft	Latitude:	40.7722334
From:	Map	Easting:	3,438,758.52 usft	Longitude:	-103.9158416
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	1.02 °

Well		Stripes Federal LD18-740				
Well Position	+N/-S	0.00 ft	Northing:	1,528,060.86 usft	Latitude:	40.7720600
	+E/-W	0.00 ft	Easting:	3,440,682.05 usft	Longitude:	-103.9089000
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,843.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	4/25/2018	7.68	67.26	52,572.69060390

Design	Plan #1				
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	167.53	

Survey Tool Program	Date	5/2/2018			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.00	12,169.72	Plan #1 (Wellbore #1)	2_MWD+IFR1+MS	A008Mb: IFR dec & multi-station analysis	

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	
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

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Stripes Federal LD18-740
Project:	East Pony	TVD Reference:	Well @ 4873.00ft
Site:	LD Section 07	MD Reference:	Well @ 4873.00ft
Well:	Stripes Federal LD18-740	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	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	46.85	2,299.98	1.19	1.27	-0.89	2.00	2.00	0.00
2,400.00	4.00	46.85	2,399.84	4.77	5.09	-3.56	2.00	2.00	0.00
2,500.00	6.00	46.85	2,499.45	10.73	11.45	-8.01	2.00	2.00	0.00
2,600.00	8.00	46.85	2,598.70	19.07	20.34	-14.22	2.00	2.00	0.00
2,700.00	10.00	46.85	2,697.47	29.76	31.75	-22.20	2.00	2.00	0.00
2,800.00	12.00	46.85	2,795.62	42.81	45.67	-31.94	2.00	2.00	0.00
2,900.00	14.00	46.85	2,893.06	58.20	62.09	-43.41	2.00	2.00	0.00
3,000.00	16.00	46.85	2,989.64	75.90	80.97	-56.62	2.00	2.00	0.00
3,100.00	18.00	46.85	3,085.27	95.89	102.30	-71.53	2.00	2.00	0.00
3,200.00	20.00	46.85	3,179.82	118.15	126.05	-88.14	2.00	2.00	0.00
3,300.00	22.00	46.85	3,273.17	142.66	152.19	-106.43	2.00	2.00	0.00
3,400.00	24.00	46.85	3,365.21	169.38	180.70	-126.36	2.00	2.00	0.00
3,465.58	25.31	46.85	3,424.82	188.09	200.66	-140.32	2.00	2.00	0.00
3,500.00	25.31	46.85	3,455.93	198.15	211.40	-147.82	0.00	0.00	0.00
3,600.00	25.31	46.85	3,546.33	227.39	242.59	-169.64	0.00	0.00	0.00
3,700.00	25.31	46.85	3,636.73	256.63	273.78	-191.45	0.00	0.00	0.00
3,800.00	25.31	46.85	3,727.13	285.87	304.97	-213.26	0.00	0.00	0.00
3,900.00	25.31	46.85	3,817.53	315.11	336.17	-235.07	0.00	0.00	0.00
4,000.00	25.31	46.85	3,907.93	344.35	367.36	-256.89	0.00	0.00	0.00
4,100.00	25.31	46.85	3,998.33	373.59	398.55	-278.70	0.00	0.00	0.00
4,200.00	25.31	46.85	4,088.73	402.83	429.75	-300.51	0.00	0.00	0.00
4,300.00	25.31	46.85	4,179.13	432.07	460.94	-322.32	0.00	0.00	0.00
4,400.00	25.31	46.85	4,269.53	461.31	492.13	-344.14	0.00	0.00	0.00
4,500.00	25.31	46.85	4,359.93	490.55	523.32	-365.95	0.00	0.00	0.00
4,600.00	25.31	46.85	4,450.32	519.79	554.52	-387.76	0.00	0.00	0.00
4,700.00	25.31	46.85	4,540.72	549.02	585.71	-409.57	0.00	0.00	0.00
4,800.00	25.31	46.85	4,631.12	578.26	616.90	-431.39	0.00	0.00	0.00
4,900.00	25.31	46.85	4,721.52	607.50	648.10	-453.20	0.00	0.00	0.00
5,000.00	25.31	46.85	4,811.92	636.74	679.29	-475.01	0.00	0.00	0.00
5,100.00	25.31	46.85	4,902.32	665.98	710.48	-496.82	0.00	0.00	0.00
5,200.00	25.31	46.85	4,992.72	695.22	741.67	-518.64	0.00	0.00	0.00

Noble Energy, Inc.

Survey Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Stripes Federal LD18-740
Project:	East Pony	TVD Reference:	Well @ 4873.00ft
Site:	LD Section 07	MD Reference:	Well @ 4873.00ft
Well:	Stripes Federal LD18-740	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	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	25.31	46.85	5,083.12	724.46	772.87	-540.45	0.00	0.00	0.00
5,400.00	25.31	46.85	5,173.52	753.70	804.06	-562.26	0.00	0.00	0.00
5,406.63	25.31	46.85	5,179.52	755.64	806.13	-563.71	0.00	0.00	0.00
5,500.00	20.97	65.31	5,265.46	776.31	835.93	-577.45	9.00	-4.65	19.77
5,600.00	19.38	91.20	5,359.51	783.45	868.84	-577.32	9.00	-1.60	25.89
5,700.00	21.60	116.32	5,453.36	774.92	901.99	-561.83	9.00	2.23	25.12
5,800.00	26.72	134.58	5,544.70	750.93	934.57	-531.37	9.00	5.11	18.26
5,900.00	33.41	146.68	5,631.28	712.06	965.77	-486.68	9.00	6.69	12.09
6,000.00	40.91	154.94	5,710.96	659.29	994.83	-428.88	9.00	7.50	8.27
6,100.00	48.85	160.98	5,781.79	593.89	1,021.02	-359.37	9.00	7.94	6.04
6,200.00	57.03	165.69	5,842.03	517.49	1,043.70	-279.87	9.00	8.18	4.71
6,300.00	65.36	169.59	5,890.18	431.97	1,062.32	-192.35	9.00	8.33	3.90
6,400.00	73.78	173.00	5,925.06	339.43	1,076.42	-98.95	9.00	8.42	3.41
6,500.00	82.24	176.12	5,945.82	242.15	1,085.64	-1.97	9.00	8.47	3.12
6,591.38	90.00	178.86	5,952.00	151.14	1,089.62	87.75	9.00	8.49	3.00
6,600.00	90.00	178.86	5,952.00	142.53	1,089.79	96.20	0.00	0.00	0.00
6,700.00	90.00	178.86	5,952.00	42.54	1,091.77	194.25	0.00	0.00	0.00
6,800.00	90.00	178.86	5,952.00	-57.44	1,093.75	292.29	0.00	0.00	0.00
6,900.00	90.00	178.86	5,952.00	-157.42	1,095.73	390.34	0.00	0.00	0.00
7,000.00	90.00	178.86	5,952.00	-257.40	1,097.72	488.39	0.00	0.00	0.00
7,100.00	90.00	178.86	5,952.00	-357.38	1,099.70	586.44	0.00	0.00	0.00
7,200.00	90.00	178.86	5,952.00	-457.36	1,101.68	684.49	0.00	0.00	0.00
7,300.00	90.00	178.86	5,952.00	-557.34	1,103.66	782.54	0.00	0.00	0.00
7,400.00	90.00	178.86	5,952.00	-657.32	1,105.64	880.59	0.00	0.00	0.00
7,500.00	90.00	178.86	5,952.00	-757.30	1,107.63	978.64	0.00	0.00	0.00
7,600.00	90.00	178.86	5,952.00	-857.28	1,109.61	1,076.69	0.00	0.00	0.00
7,700.00	90.00	178.86	5,952.00	-957.26	1,111.59	1,174.74	0.00	0.00	0.00
7,800.00	90.00	178.86	5,952.00	-1,057.24	1,113.57	1,272.78	0.00	0.00	0.00
7,900.00	90.00	178.86	5,952.00	-1,157.22	1,115.55	1,370.83	0.00	0.00	0.00
8,000.00	90.00	178.86	5,952.00	-1,257.20	1,117.54	1,468.88	0.00	0.00	0.00
8,100.00	90.00	178.86	5,952.00	-1,357.18	1,119.52	1,566.93	0.00	0.00	0.00
8,200.00	90.00	178.86	5,952.00	-1,457.16	1,121.50	1,664.98	0.00	0.00	0.00
8,300.00	90.00	178.86	5,952.00	-1,557.14	1,123.48	1,763.03	0.00	0.00	0.00
8,400.00	90.00	178.86	5,952.00	-1,657.12	1,125.46	1,861.08	0.00	0.00	0.00
8,500.00	90.00	178.86	5,952.00	-1,757.10	1,127.45	1,959.13	0.00	0.00	0.00
8,600.00	90.00	178.86	5,952.00	-1,857.08	1,129.43	2,057.18	0.00	0.00	0.00
8,700.00	90.00	178.86	5,952.00	-1,957.06	1,131.41	2,155.22	0.00	0.00	0.00
8,800.00	90.00	178.86	5,952.00	-2,057.04	1,133.39	2,253.27	0.00	0.00	0.00
8,900.00	90.00	178.86	5,952.00	-2,157.02	1,135.38	2,351.32	0.00	0.00	0.00
9,000.00	90.00	178.86	5,952.00	-2,257.00	1,137.36	2,449.37	0.00	0.00	0.00
9,100.00	90.00	178.86	5,952.00	-2,356.98	1,139.34	2,547.42	0.00	0.00	0.00
9,200.00	90.00	178.86	5,952.00	-2,456.96	1,141.32	2,645.47	0.00	0.00	0.00
9,300.00	90.00	178.86	5,952.00	-2,556.94	1,143.30	2,743.52	0.00	0.00	0.00

Noble Energy, Inc.

Survey Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Stripes Federal LD18-740
Project:	East Pony	TVD Reference:	Well @ 4873.00ft
Site:	LD Section 07	MD Reference:	Well @ 4873.00ft
Well:	Stripes Federal LD18-740	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	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	178.86	5,952.00	-2,656.92	1,145.29	2,841.57	0.00	0.00	0.00
9,500.00	90.00	178.86	5,952.00	-2,756.91	1,147.27	2,939.62	0.00	0.00	0.00
9,600.00	90.00	178.86	5,952.00	-2,856.89	1,149.25	3,037.67	0.00	0.00	0.00
9,700.00	90.00	178.86	5,952.00	-2,956.87	1,151.23	3,135.71	0.00	0.00	0.00
9,800.00	90.00	178.86	5,952.00	-3,056.85	1,153.21	3,233.76	0.00	0.00	0.00
9,900.00	90.00	178.86	5,952.00	-3,156.83	1,155.20	3,331.81	0.00	0.00	0.00
10,000.00	90.00	178.86	5,952.00	-3,256.81	1,157.18	3,429.86	0.00	0.00	0.00
10,100.00	90.00	178.86	5,952.00	-3,356.79	1,159.16	3,527.91	0.00	0.00	0.00
10,200.00	90.00	178.86	5,952.00	-3,456.77	1,161.14	3,625.96	0.00	0.00	0.00
10,300.00	90.00	178.86	5,952.00	-3,556.75	1,163.12	3,724.01	0.00	0.00	0.00
10,400.00	90.00	178.86	5,952.00	-3,656.73	1,165.11	3,822.06	0.00	0.00	0.00
10,500.00	90.00	178.86	5,952.00	-3,756.71	1,167.09	3,920.11	0.00	0.00	0.00
10,600.00	90.00	178.86	5,952.00	-3,856.69	1,169.07	4,018.15	0.00	0.00	0.00
10,700.00	90.00	178.86	5,952.00	-3,956.67	1,171.05	4,116.20	0.00	0.00	0.00
10,800.00	90.00	178.86	5,952.00	-4,056.65	1,173.03	4,214.25	0.00	0.00	0.00
10,900.00	90.00	178.86	5,952.00	-4,156.63	1,175.02	4,312.30	0.00	0.00	0.00
11,000.00	90.00	178.86	5,952.00	-4,256.61	1,177.00	4,410.35	0.00	0.00	0.00
11,100.00	90.00	178.86	5,952.00	-4,356.59	1,178.98	4,508.40	0.00	0.00	0.00
11,200.00	90.00	178.86	5,952.00	-4,456.57	1,180.96	4,606.45	0.00	0.00	0.00
11,300.00	90.00	178.86	5,952.00	-4,556.55	1,182.94	4,704.50	0.00	0.00	0.00
11,400.00	90.00	178.86	5,952.00	-4,656.53	1,184.93	4,802.55	0.00	0.00	0.00
11,500.00	90.00	178.86	5,952.00	-4,756.51	1,186.91	4,900.60	0.00	0.00	0.00
11,600.00	90.00	178.86	5,952.00	-4,856.49	1,188.89	4,998.64	0.00	0.00	0.00
11,700.00	90.00	178.86	5,952.00	-4,956.47	1,190.87	5,096.69	0.00	0.00	0.00
11,800.00	90.00	178.86	5,952.00	-5,056.45	1,192.86	5,194.74	0.00	0.00	0.00
11,900.00	90.00	178.86	5,952.00	-5,156.43	1,194.84	5,292.79	0.00	0.00	0.00
12,000.00	90.00	178.86	5,952.00	-5,256.41	1,196.82	5,390.84	0.00	0.00	0.00
12,100.00	90.00	178.86	5,952.00	-5,356.39	1,198.80	5,488.89	0.00	0.00	0.00
12,169.72	90.00	178.86	5,952.00	-5,426.10	1,200.18	5,557.25	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
- hit/miss target									
- Shape									
Stripes Federal LD18-74	0.00	0.00	5,952.00	151.14	1,089.62	1,528,212.00	3,441,771.66	40.7724210	-103.9049569
- plan hits target center									
- Point									
Stripes Federal LD18-74	0.00	0.00	5,952.00	-5,426.10	1,200.18	1,522,634.77	3,441,882.23	40.7571100	-103.9049200
- plan hits target center									
- Point									

Noble Energy, Inc.

Survey Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Stripes Federal LD18-740
Project:	East Pony	TVD Reference:	Well @ 4873.00ft
Site:	LD Section 07	MD Reference:	Well @ 4873.00ft
Well:	Stripes Federal LD18-740	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	EDMP

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
542.00	542.00	Pierre				
900.00	900.00	Upper Pierre Aquifer Top				
1,524.00	1,524.00	Upper Pierre Aquifer Base				
3,428.29	3,391.00	Parkman				
4,057.60	3,960.00	Sussex				
4,643.89	4,490.00	Shannon				
5,445.55	5,215.00	Teepee Buttes				
6,123.56	5,797.00	Sharon Springs				
6,142.86	5,809.00	Top A Chalk				
6,196.29	5,840.00	Top A Marl				
6,327.14	5,901.00	Top B Chalk				
6,426.63	5,932.00	Top B 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	
5407	5180	188	201	Start DLS 9.00 TFO 129.16	
6591	5952	756	806	TPZ/LP at 6591.38 MD	
12,170	5952	151	1090	TD at 12169.72	

Checked By: _____ Approved By: _____ Date: _____

Northern Region - DJ Basin

East Pony

LD Section 07

Stripes Federal LD18-740

Wellbore #1

Plan #1

Anticollision Summary Report

02 May, 2018

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Stripes Federal LD18-740
Project:	East Pony	TVD Reference:	Well @ 4873.00ft
Reference Site:	LD Section 07	MD Reference:	Well @ 4873.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Stripes Federal LD18-740	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 #1	Offset TVD Reference:	Offset Datum

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

Survey Tool Program	Date	5/2/2018		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	12,169.72	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 05						
Heston LD06-620 - Original Drilling - Original Drilling - As	6,123.92	13,266.09	173.30	82.05	1.899	CC
Heston LD06-620 - Original Drilling - Original Drilling - As	6,150.00	13,260.36	175.68	78.05	1.800	ES, SF
Heston LD06-620 - ST01 - Original Drilling - ST01 - As D	6,096.77	13,271.12	240.45	151.00	2.688	CC
Heston LD06-620 - ST01 - Original Drilling - ST01 - As D	6,150.00	13,259.77	248.10	149.49	2.516	ES, SF
Heston LD06-625 - Original Drilling - Original Drilling - As	5,871.10	13,256.79	635.88	535.60	6.341	CC
Heston LD06-625 - Original Drilling - Original Drilling - As	5,900.00	13,248.86	637.12	535.13	6.247	ES
Heston LD06-625 - Original Drilling - Original Drilling - As	5,950.00	13,233.65	645.09	540.53	6.169	SF
Heston LD06-630 - Original Drilling - Original Drilling - As	5,774.62	13,352.60	1,171.75	1,064.99	10.975	CC, ES
Heston LD06-630 - Original Drilling - Original Drilling - As	5,850.00	13,326.31	1,178.31	1,070.15	10.894	SF
Nugent LD06-655 - Original Drilling - Original Drilling - As	5,688.32	13,259.91	2,613.98	2,505.31	24.055	CC, ES
Nugent LD06-655 - Original Drilling - Original Drilling - As	5,750.00	13,239.94	2,617.61	2,508.65	24.024	SF
Nugent LD06-665 - Original Drilling - Original Drilling - As	5,672.15	13,298.00	3,278.23	3,169.23	30.077	CC, ES
Nugent LD06-665 - Original Drilling - Original Drilling - As	5,750.00	13,273.83	3,283.77	3,174.52	30.058	SF
Reagan LD06-675 - Original Drilling - Original Drilling - A	5,659.90	5,659.90	3,907.51	3,881.39	149.603	CC
Reagan LD06-675 - Original Drilling - Original Drilling - A	5,700.00	13,231.01	3,909.02	3,794.75	34.208	ES, SF
Reagan LD06-685 - Original Drilling - Original Drilling - A	5,646.13	13,618.84	4,550.11	4,445.39	43.452	CC
Reagan LD06-685 - Original Drilling - Original Drilling - A	5,650.00	13,617.62	4,550.12	4,445.39	43.444	ES
Reagan LD06-685 - Original Drilling - Original Drilling - A	5,750.00	13,586.83	4,559.59	4,454.44	43.360	SF
Stars Federal LD17-715 - Wellbore #1 - Plan #1	5,817.17	3,382.70	6,509.56	6,477.05	200.281	CC
Stars Federal LD17-715 - Wellbore #1 - Plan #1	5,950.00	3,500.02	6,509.93	6,476.63	195.454	ES
Stars Federal LD17-715 - Wellbore #1 - Plan #1	12,169.72	11,952.13	6,916.79	6,808.76	64.025	SF
Stars Federal LD17-720 - Wellbore #1 - Plan #1	6,229.01	4,200.36	6,375.66	6,338.91	173.464	CC
Stars Federal LD17-720 - Wellbore #1 - Plan #1	6,250.00	4,210.12	6,375.72	6,338.89	173.102	ES
Stars Federal LD17-720 - Wellbore #1 - Plan #1	12,169.72	11,806.90	6,588.29	6,480.30	61.010	SF
Stars Federal LD17-730 - Wellbore #1 - Plan #1	6,575.55	6,197.90	5,901.45	5,858.38	137.024	CC
Stars Federal LD17-730 - Wellbore #1 - Plan #1	12,169.72	11,802.33	5,940.95	5,833.42	55.247	ES, SF
Stars Federal LD17-740 - Wellbore #1 - Plan #1	6,580.38	6,209.63	5,228.36	5,185.25	121.295	CC
Stars Federal LD17-740 - Wellbore #1 - Plan #1	12,169.72	11,808.59	5,266.58	5,158.99	48.950	ES, SF
Stars Federal LD17-750 - Wellbore #1 - Plan #1	6,582.94	6,446.37	4,554.53	4,510.38	103.145	CC
Stars Federal LD17-750 - Wellbore #1 - Plan #1	12,169.72	12,020.47	4,594.05	4,486.38	42.666	ES, SF
Stars Federal LD17-760 - Wellbore #1 - Plan #1	12,148.34	12,301.43	3,959.17	3,851.16	36.656	CC, ES
Stars Federal LD17-760 - Wellbore #1 - Plan #1	12,169.72	12,292.61	3,959.28	3,851.21	36.634	SF
Stars Federal LD17-770 - Wellbore #1 - Plan #1	6,587.71	6,304.78	3,311.07	3,267.81	76.541	CC
Stars Federal LD17-770 - Wellbore #1 - Plan #1	12,169.72	11,886.79	3,321.60	3,214.52	31.021	ES, SF
Stars Federal LD17-780 - Wellbore #1 - Plan #1	6,587.39	6,287.19	2,640.89	2,597.56	60.947	CC
Stars Federal LD17-780 - Wellbore #1 - Plan #1	12,169.72	11,869.51	2,651.64	2,544.48	24.744	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 Stripes Federal LD18-740
Project:	East Pony	TVD Reference:	Well @ 4873.00ft
Reference Site:	LD Section 07	MD Reference:	Well @ 4873.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Stripes Federal LD18-740	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 #1	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
LD Section 06						
Timbro LD06-64HN - Wellbore #1 - Wellbore #1- As Drille	5,749.45	8,576.96	1,642.62	1,547.93	17.348	CC
Timbro LD06-64HN - Wellbore #1 - Wellbore #1- As Drille	5,750.00	8,577.10	1,642.62	1,547.91	17.345	ES
Timbro LD06-64HN - Wellbore #1 - Wellbore #1- As Drille	6,000.00	8,685.09	1,706.77	1,605.55	16.862	SF
LD Section 07						
Stripes Federal LD18-720 - Wellbore #1 - Plan #1	6,587.45	6,462.78	1,320.10	1,276.65	30.378	CC
Stripes Federal LD18-720 - Wellbore #1 - Plan #1	12,169.72	12,045.53	1,329.90	1,224.95	12.672	ES, SF
Stripes Federal LD18-730 - Wellbore #1 - Plan #1	6,587.72	6,444.75	648.00	604.57	14.918	CC
Stripes Federal LD18-730 - Wellbore #1 - Plan #1	12,169.72	12,021.79	658.57	553.44	6.265	ES, SF
Stripes Federal LD18-750 - Wellbore #1 - Plan #1	2,200.00	2,201.00	36.76	21.45	2.401	CC, ES
Stripes Federal LD18-750 - Wellbore #1 - Plan #1	2,300.00	2,301.02	38.05	22.03	2.375	SF
Stripes Federal LD18-760 - Wellbore #1 - Plan #1	2,200.00	2,199.00	74.21	58.90	4.849	CC, ES
Stripes Federal LD18-760 - Wellbore #1 - Plan #1	2,300.00	2,298.35	75.91	59.89	4.740	SF
Stripes Federal LD18-770 - Wellbore #1 - Plan #1	2,200.00	2,201.00	1,110.79	1,095.48	72.552	CC, ES
Stripes Federal LD18-770 - Wellbore #1 - Plan #1	12,169.72	11,963.79	2,013.17	1,908.41	19.217	SF
Stripes Federal LD18-785 - Wellbore #1 - Plan #1	2,200.00	2,199.00	1,148.26	1,132.96	75.034	CC, ES
Stripes Federal LD18-785 - Wellbore #1 - Plan #1	12,169.72	12,055.34	3,002.48	2,897.33	28.556	SF
Stripes Federal LD18-790 - Wellbore #1 - Plan #1	5,900.90	5,227.43	1,873.14	1,833.08	46.763	CC, ES
Stripes Federal LD18-790 - Wellbore #1 - Plan #1	12,169.72	12,160.04	1,989.14	1,883.93	18.905	SF
Timbro Federal LD07-78HN - Original Drilling - As Drilled	2,815.04	3,110.29	1,781.28	1,762.23	93.498	CC, ES
Timbro Federal LD07-78HN - Original Drilling - As Drilled	11,200.00	10,293.02	2,691.42	2,564.60	21.222	SF
LD Section 08						
Timbro Federal LD08-62HN - Original Drilling - As Drilled	11,027.15	9,213.02	3,533.67	3,470.42	55.868	CC, ES
Timbro Federal LD08-62HN - Original Drilling - As Drilled	12,169.72	9,213.02	3,713.80	3,629.63	44.125	SF
LD Section 17						
Timbro Federal LD17-76HN - Wellbore #1 - Wellbore #1-	12,169.72	10,251.02	3,935.53	3,807.93	30.843	CC, ES, SF
LD Section 18						
Timbro Federal LD18-74HN - Original Drilling - As Drilled	12,169.72	10,271.02	196.68	151.61	4.363	CC, ES, SF
LD Section 19						
Bennett LD19-758 - Original Drilling - Original Drilling - A	12,169.72	10,963.00	5,143.43	5,095.64	107.616	CC, ES, SF
Bennett LD19-765 - Original Drilling - Original Drilling - A	12,169.72	10,896.00	5,266.84	5,215.11	101.813	CC, ES, SF
Bennett LD19-771 - Original Drilling - Original Drilling - A	12,169.72	10,806.00	5,422.13	5,365.88	96.389	CC, ES, SF
Bennett LD19-777 - Original Drilling - Original Drilling - A	12,169.72	10,840.00	5,606.31	5,545.18	91.701	CC, ES, SF
Bennett LD19-781 - Original Drilling - Original Drilling - A	12,169.72	11,090.00	5,723.20	5,656.85	86.253	CC, ES, SF
Bennett LD19-785 - Original Drilling - Original Drilling - A	12,169.72	10,902.00	5,830.07	5,762.70	86.542	CC, ES, SF
Riley LD19-715 - Original Drilling - Original Drilling - As D	12,169.72	11,052.00	5,241.06	5,188.39	99.503	CC, ES, SF
Riley LD19-722 - Original Drilling - Original Drilling - As D	12,169.72	10,665.00	5,153.51	5,107.02	110.841	CC, ES, SF
Riley LD19-738 - Original Drilling - Original Drilling - As D	12,169.72	10,950.00	5,005.68	4,964.94	122.865	CC, ES, SF
Riley LD19-745 - Original Drilling - Original Drilling - As D	12,169.72	10,872.00	5,037.68	4,995.29	118.849	CC, ES, SF
Riley LD19-752 - Original Drilling - Original Drilling - As D	12,169.72	11,064.00	5,103.39	5,053.46	102.210	CC, ES, SF
Timbro Federal LD29-78HN - Original Drilling - Original D						Out of range
Timbro LD19-73HN - Wellbore #1 - Wellbore #1-As Drille	12,169.72	10,273.02	5,567.85	5,514.96	105.275	CC, ES, SF
LD Section 20						
Anni LD29-755 - Original Drilling - Original Drilling - As D						Out of range
Anni LD29-763 - Original Drilling - Original Drilling - As D						Out of range
Anni LD29-771 - Original Drilling - Original Drilling - As D						Out of range

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

Noble Energy, Inc.

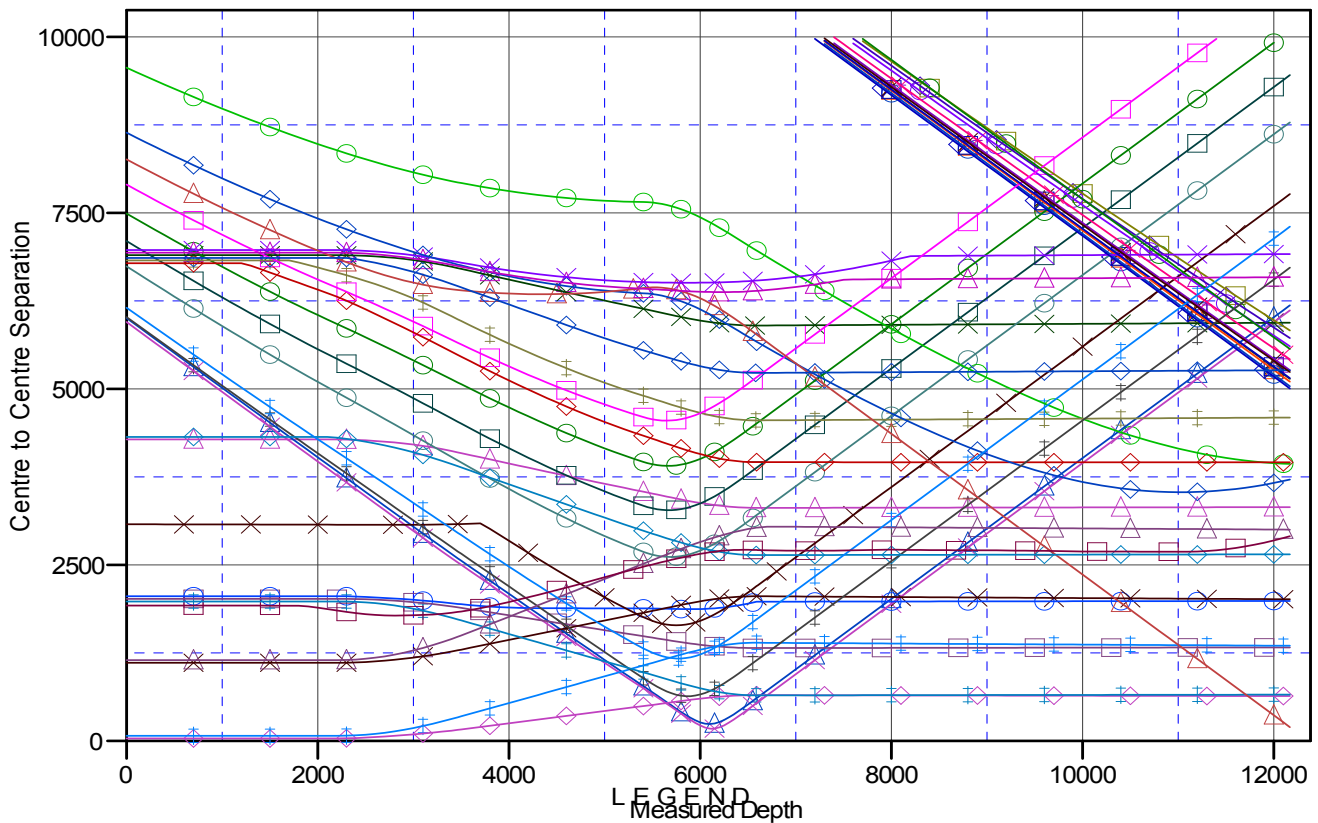
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Stripes Federal LD18-740
Project:	East Pony	TVD Reference:	Well @ 4873.00ft
Reference Site:	LD Section 07	MD Reference:	Well @ 4873.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Stripes Federal LD18-740	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 #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to Well @ 4873.00ft
Offset Depths are relative to Offset Datum
Central Meridian is -105.5000000

Coordinates are relative to: Stripes Federal LD18-740
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 1.03°

Ladder Plot



inal Drilling, Original Drilling - As Drilled V0	Stripes Federal LD18-760, Wellbore #1, Plan #1 V0	Bennett LD19-765, Original Drilling, C
Wellbore #1, Plan #1 V0	Timbro LD06-64HN, Wellbore #1, Wellbore #1- As Drilled V0	Timbro LD19-73HN, Wellbore #1, Well
l - Original Drilling, ST01 - As Drilled V0	Riley LD19-745, Original Drilling, Original Drilling - As Drilled V0	Heston LD06-625, Original Drilling, C
inal Drilling, Original Drilling - As Drilled V0	Reagan LD06-675, Original Drilling, Original Drilling - As Drilled V0	Stripes Federal LD18-730, Wellbore #1
Wellbore #1, Plan #1 V0	Bennett LD19-777, Original Drilling, Original Drilling - As Drilled V0	Timbro Federal LD18-74HN, Original
inal Drilling, Original Drilling - As Drilled V0	Bennett LD19-771, Original Drilling, Original Drilling - As Drilled V0	Stripes Federal LD18-785, Wellbore #1
Wellbore #1, Plan #1 V0	Stripes Federal LD18-770, Wellbore #1, Plan #1 V0	Stars Federal LD17-720, Wellbore #1, F
inal Drilling - As Drilled V0	Stars Federal LD17-715, Wellbore #1, Plan #1 V0	Stars Federal LD17-720, Wellbore #1, F
Wellbore #1, Plan #1 V0	Stars Federal LD17-750, Wellbore #1, Plan #1 V0	Stars Federal LD17-780, Wellbore #1, F
Wellbore #1, Plan #1 V0	Riley LD19-738, Original Drilling, Original Drilling - As Drilled V0	Heston LD06-630, Original Drilling, C
inal Drilling, Original Drilling - As Drilled V0	Stars Federal LD17-760, Wellbore #1, Plan #1 V0	Riley LD19-715, Original Drilling, Ori

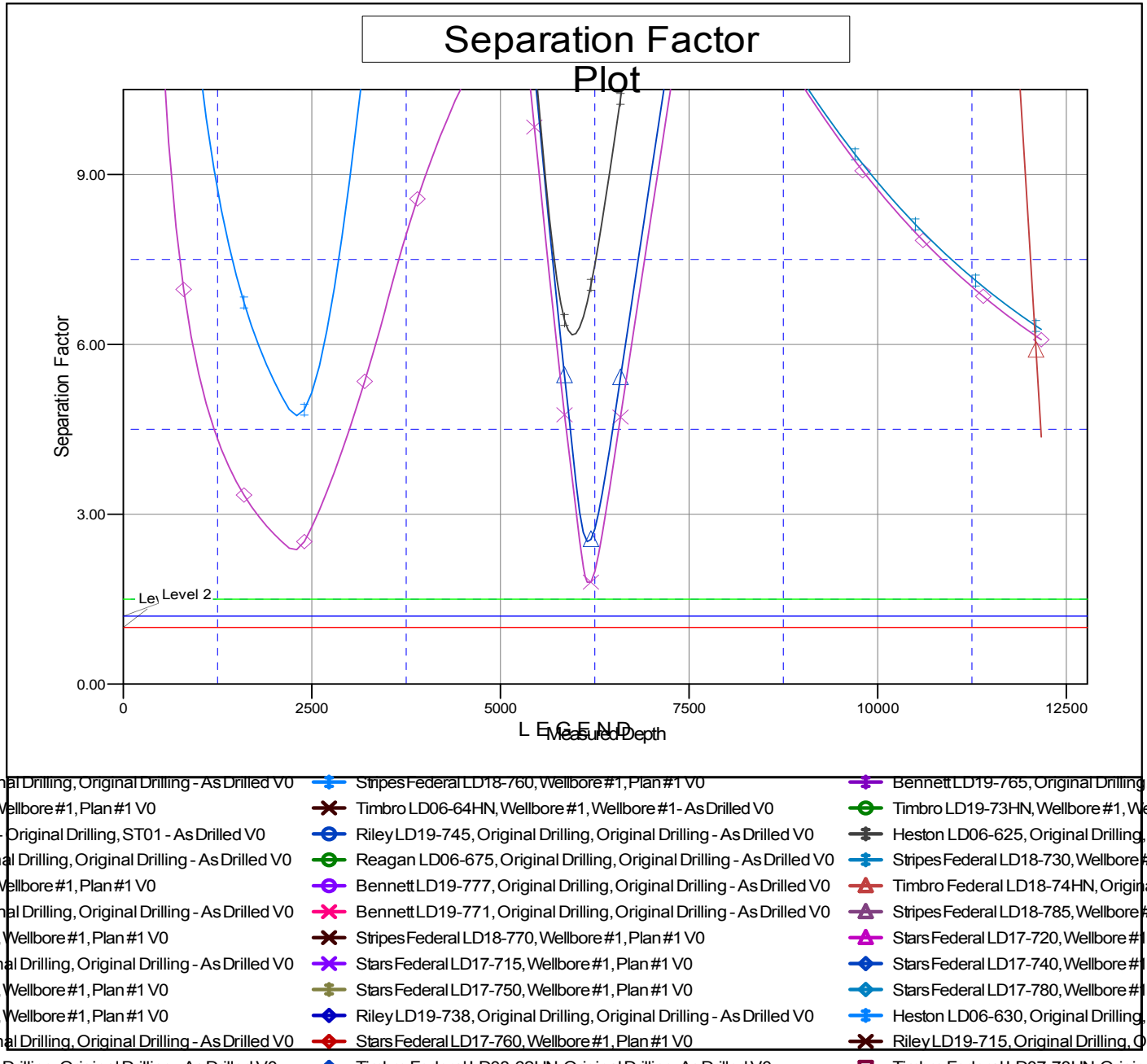
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Stripes Federal LD18-740
Project:	East Pony	TVD Reference:	Well @ 4873.00ft
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Reference Wellbore	Wellbore #1	Database:	EDMP
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

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Offset Depths are relative to Offset Datum
Central Meridian is -105.5000000

Coordinates are relative to: Stripes Federal LD18-740
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 1.03°



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