

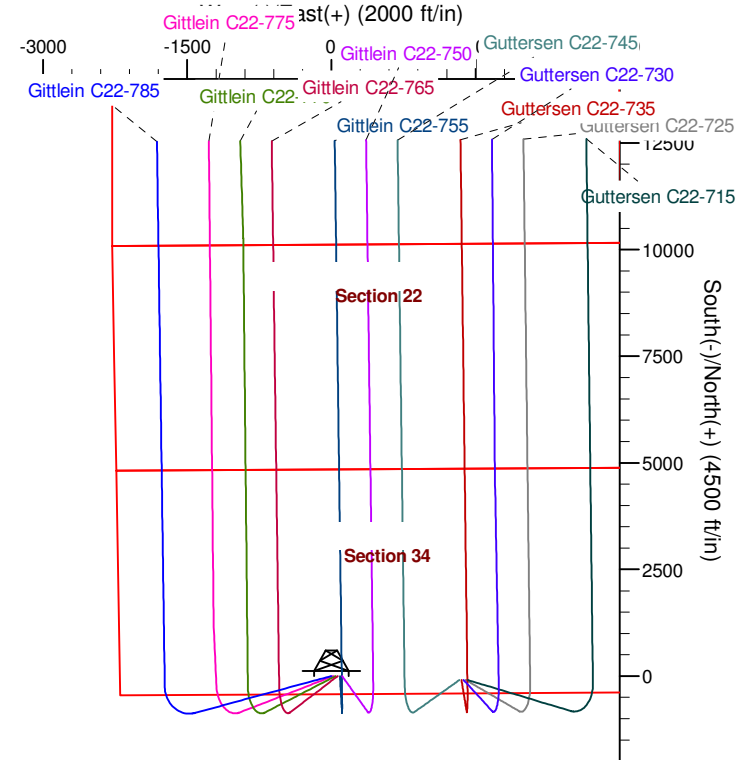
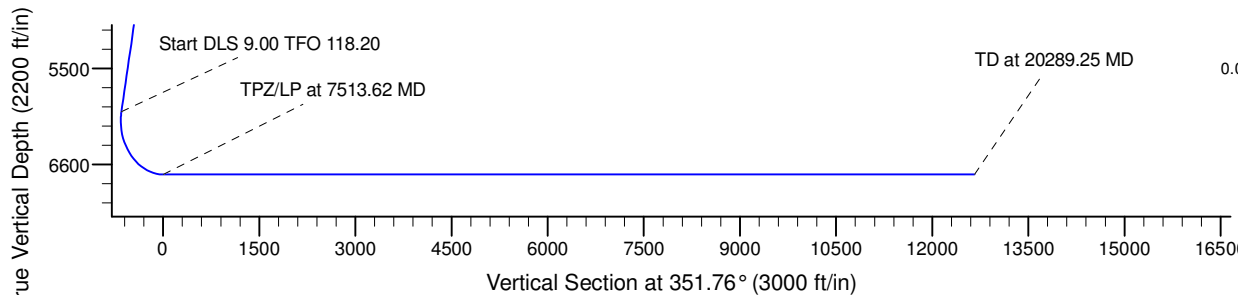
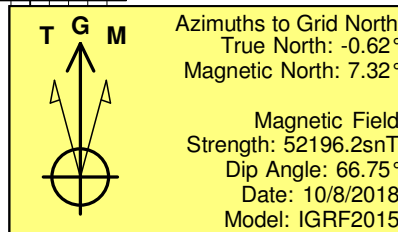
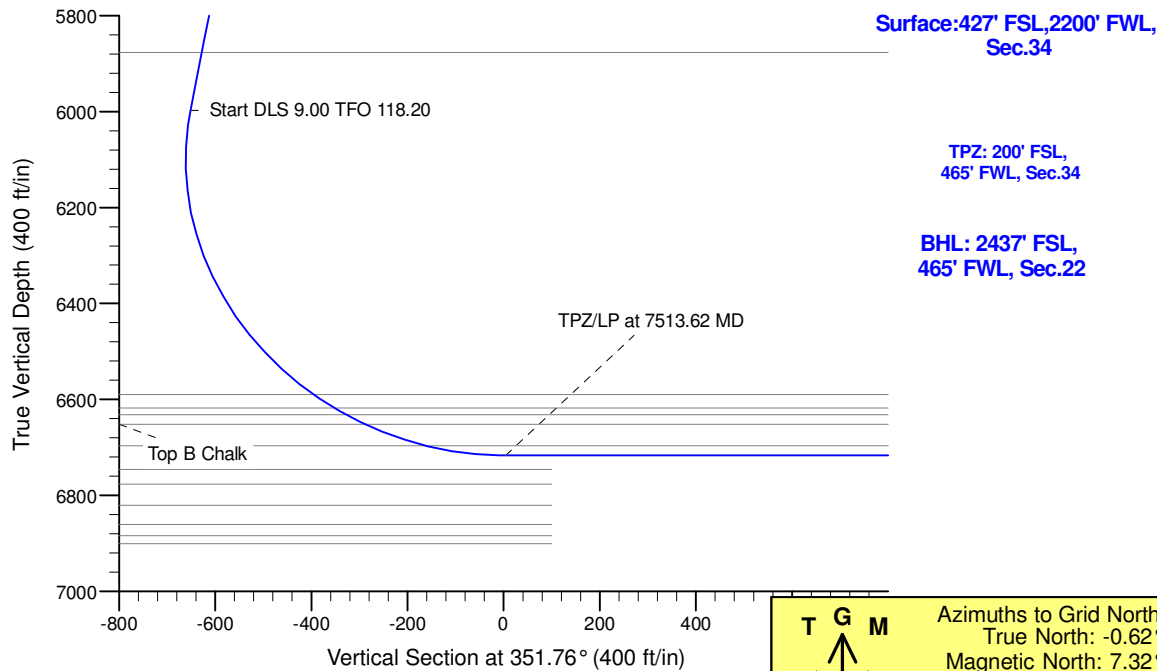
Project: Mustang
Site: C Section 34
Well: Gittlein C22-785
Wellbore: Wellbore #1
Design: Plan #1

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	2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	
3	3329.61	26.59	238.69	3282.38	-157.49	-258.91	2.00	238.69	-118.78	
4	6365.74	26.59	238.69	5997.34	-863.79	-1420.05	0.00	0.00	-651.46	
5	7513.62	90.00	359.64	6717.00	-246.23	-1732.91	9.00	118.20	4.55	TPZ Gittlein C22-785
6	20289.25	90.00	359.64	6717.00	12529.14	-1813.52	0.00	0.00	12659.71	BHL Gittlein C22-785



WELL DETAILS: Gittlein C22-785

	Northing	Easting	Latitude	Longitude
0.00	0.00	1340077.51	4700.00 40.2629200	-104.5386620

Plan: Plan #1 (Gittlein C22-785/Wellbore #1)

Created By: Colby Baxter Date: 16:00, October 08 2018

Checked: _____ Date: _____

Reviewed: _____ Date: _____

Approved: _____ Date: _____

Northern Region - DJ Basin

Mustang

C Section 34

Gittlein C22-785

Wellbore #1

Plan: Plan #1

Standard Survey Report

08 October, 2018

Noble Energy, Inc.

Survey Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Gittlein C22-785
Project:	Mustang	TVD Reference:	KB @ 4730.00ft
Site:	C Section 34	MD Reference:	KB @ 4730.00ft
Well:	Gittlein C22-785	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	EDMP

Project	Mustang, 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	C Section 34		
Site Position:		Northing:	1,341,626.72 usft
From:	Map	Easting:	3,270,704.36 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in
		Latitude:	40.2670999
		Longitude:	-104.5299100
		Grid Convergence:	0.63 °

Well	Gittlein C22-785		
Well Position	+N/-S	0.00 ft	Northing: 1,340,077.51 usft
	+E/-W	0.00 ft	Easting: 3,268,278.71 usft
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft
		Latitude:	40.2629200
		Longitude:	-104.5386620
		Ground Level:	4,700.00 ft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	10/8/2018	7.94
			Dip Angle (°)
			66.75
			Field Strength (nT)
			52,196.24844841

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)
	0.00	0.00	0.00
			Direction (°)
			351.76

Survey Tool Program	Date	10/8/2018		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	20,289.25	Plan #1 (Wellbore #1)	2_MWD+IFR1	A005Mb: IFR declination correction only

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 Gittlein C22-785
Project:	Mustang	TVD Reference:	KB @ 4730.00ft
Site:	C Section 34	MD Reference:	KB @ 4730.00ft
Well:	Gittlein C22-785	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	2.00	238.69	2,099.98	-0.91	-1.49	-0.68	2.00	2.00	0.00
2,200.00	4.00	238.69	2,199.84	-3.63	-5.96	-2.74	2.00	2.00	0.00
2,300.00	6.00	238.69	2,299.45	-8.16	-13.41	-6.15	2.00	2.00	0.00
2,400.00	8.00	238.69	2,398.70	-14.49	-23.82	-10.93	2.00	2.00	0.00
2,500.00	10.00	238.69	2,497.47	-22.62	-37.18	-17.06	2.00	2.00	0.00
2,600.00	12.00	238.69	2,595.62	-32.53	-53.48	-24.54	2.00	2.00	0.00
2,700.00	14.00	238.69	2,693.06	-44.22	-72.70	-33.35	2.00	2.00	0.00
2,800.00	16.00	238.69	2,789.64	-57.67	-94.81	-43.50	2.00	2.00	0.00
2,900.00	18.00	238.69	2,885.27	-72.87	-119.79	-54.96	2.00	2.00	0.00
3,000.00	20.00	238.69	2,979.82	-89.79	-147.61	-67.72	2.00	2.00	0.00
3,100.00	22.00	238.69	3,073.17	-108.41	-178.22	-81.76	2.00	2.00	0.00
3,200.00	24.00	238.69	3,165.21	-128.71	-211.60	-97.07	2.00	2.00	0.00
3,300.00	26.00	238.69	3,255.84	-150.68	-247.71	-113.64	2.00	2.00	0.00
3,329.61	26.59	238.69	3,282.38	-157.49	-258.91	-118.78	2.00	2.00	0.00
3,400.00	26.59	238.69	3,345.33	-173.87	-285.83	-131.13	0.00	0.00	0.00
3,500.00	26.59	238.69	3,434.75	-197.13	-324.08	-148.67	0.00	0.00	0.00
3,600.00	26.59	238.69	3,524.17	-220.39	-362.32	-166.22	0.00	0.00	0.00
3,700.00	26.59	238.69	3,613.60	-243.66	-400.57	-183.76	0.00	0.00	0.00
3,800.00	26.59	238.69	3,703.02	-266.92	-438.81	-201.31	0.00	0.00	0.00
3,900.00	26.59	238.69	3,792.44	-290.18	-477.05	-218.85	0.00	0.00	0.00
4,000.00	26.59	238.69	3,881.86	-313.45	-515.30	-236.40	0.00	0.00	0.00
4,100.00	26.59	238.69	3,971.28	-336.71	-553.54	-253.94	0.00	0.00	0.00
4,200.00	26.59	238.69	4,060.70	-359.97	-591.79	-271.49	0.00	0.00	0.00
4,300.00	26.59	238.69	4,150.12	-383.24	-630.03	-289.03	0.00	0.00	0.00
4,400.00	26.59	238.69	4,239.55	-406.50	-668.27	-306.58	0.00	0.00	0.00
4,500.00	26.59	238.69	4,328.97	-429.76	-706.52	-324.12	0.00	0.00	0.00
4,600.00	26.59	238.69	4,418.39	-453.03	-744.76	-341.67	0.00	0.00	0.00
4,700.00	26.59	238.69	4,507.81	-476.29	-783.01	-359.21	0.00	0.00	0.00
4,800.00	26.59	238.69	4,597.23	-499.55	-821.25	-376.75	0.00	0.00	0.00
4,900.00	26.59	238.69	4,686.65	-522.81	-859.49	-394.30	0.00	0.00	0.00
5,000.00	26.59	238.69	4,776.08	-546.08	-897.74	-411.84	0.00	0.00	0.00
5,100.00	26.59	238.69	4,865.50	-569.34	-935.98	-429.39	0.00	0.00	0.00
5,200.00	26.59	238.69	4,954.92	-592.60	-974.23	-446.93	0.00	0.00	0.00

Noble Energy, Inc.

Survey Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Gittlein C22-785
Project:	Mustang	TVD Reference:	KB @ 4730.00ft
Site:	C Section 34	MD Reference:	KB @ 4730.00ft
Well:	Gittlein C22-785	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	26.59	238.69	5,044.34	-615.87	-1,012.47	-464.48	0.00	0.00	0.00
5,400.00	26.59	238.69	5,133.76	-639.13	-1,050.71	-482.02	0.00	0.00	0.00
5,500.00	26.59	238.69	5,223.18	-662.39	-1,088.96	-499.57	0.00	0.00	0.00
5,600.00	26.59	238.69	5,312.61	-685.66	-1,127.20	-517.11	0.00	0.00	0.00
5,700.00	26.59	238.69	5,402.03	-708.92	-1,165.45	-534.66	0.00	0.00	0.00
5,800.00	26.59	238.69	5,491.45	-732.18	-1,203.69	-552.20	0.00	0.00	0.00
5,900.00	26.59	238.69	5,580.87	-755.45	-1,241.93	-569.75	0.00	0.00	0.00
6,000.00	26.59	238.69	5,670.29	-778.71	-1,280.18	-587.29	0.00	0.00	0.00
6,100.00	26.59	238.69	5,759.71	-801.97	-1,318.42	-604.84	0.00	0.00	0.00
6,200.00	26.59	238.69	5,849.14	-825.24	-1,356.67	-622.38	0.00	0.00	0.00
6,300.00	26.59	238.69	5,938.56	-848.50	-1,394.91	-639.93	0.00	0.00	0.00
6,365.74	26.59	238.69	5,997.34	-863.79	-1,420.05	-651.46	0.00	0.00	0.00
6,400.00	25.27	245.06	6,028.16	-870.86	-1,433.24	-656.57	9.00	-3.86	18.61
6,500.00	23.27	266.53	6,119.50	-881.08	-1,472.39	-661.07	9.00	-2.01	21.47
6,600.00	24.43	288.73	6,211.14	-875.62	-1,511.77	-650.03	9.00	1.17	22.19
6,700.00	28.38	307.02	6,300.84	-854.63	-1,550.41	-623.71	9.00	3.95	18.29
6,800.00	34.16	320.39	6,386.38	-818.61	-1,587.36	-582.78	9.00	5.78	13.37
6,900.00	40.99	330.04	6,465.65	-768.47	-1,621.71	-528.23	9.00	6.83	9.65
7,000.00	48.43	337.26	6,536.72	-705.42	-1,652.62	-461.41	9.00	7.44	7.22
7,100.00	56.23	342.95	6,597.81	-631.03	-1,679.32	-383.96	9.00	7.80	5.69
7,200.00	64.24	347.68	6,647.44	-547.13	-1,701.15	-297.79	9.00	8.01	4.73
7,300.00	72.39	351.81	6,684.37	-455.78	-1,717.58	-205.03	9.00	8.15	4.12
7,400.00	80.61	355.57	6,707.71	-359.23	-1,728.21	-107.95	9.00	8.22	3.76
7,500.00	88.87	359.15	6,716.87	-259.85	-1,732.77	-8.95	9.00	8.26	3.59
7,513.62	90.00	359.64	6,717.00	-246.23	-1,732.91	4.55	9.00	8.27	3.55
7,600.00	90.00	359.64	6,717.00	-159.86	-1,733.46	90.11	0.00	0.00	0.00
7,700.00	90.00	359.64	6,717.00	-59.86	-1,734.09	189.17	0.00	0.00	0.00
7,800.00	90.00	359.64	6,717.00	40.14	-1,734.72	288.23	0.00	0.00	0.00
7,900.00	90.00	359.64	6,717.00	140.14	-1,735.35	387.28	0.00	0.00	0.00
8,000.00	90.00	359.64	6,717.00	240.14	-1,735.98	486.34	0.00	0.00	0.00
8,100.00	90.00	359.64	6,717.00	340.13	-1,736.61	585.40	0.00	0.00	0.00
8,200.00	90.00	359.64	6,717.00	440.13	-1,737.24	684.45	0.00	0.00	0.00
8,300.00	90.00	359.64	6,717.00	540.13	-1,737.88	783.51	0.00	0.00	0.00
8,400.00	90.00	359.64	6,717.00	640.13	-1,738.51	882.57	0.00	0.00	0.00
8,500.00	90.00	359.64	6,717.00	740.13	-1,739.14	981.63	0.00	0.00	0.00
8,600.00	90.00	359.64	6,717.00	840.12	-1,739.77	1,080.68	0.00	0.00	0.00
8,700.00	90.00	359.64	6,717.00	940.12	-1,740.40	1,179.74	0.00	0.00	0.00
8,800.00	90.00	359.64	6,717.00	1,040.12	-1,741.03	1,278.80	0.00	0.00	0.00
8,900.00	90.00	359.64	6,717.00	1,140.12	-1,741.66	1,377.85	0.00	0.00	0.00
9,000.00	90.00	359.64	6,717.00	1,240.12	-1,742.29	1,476.91	0.00	0.00	0.00
9,100.00	90.00	359.64	6,717.00	1,340.11	-1,742.92	1,575.97	0.00	0.00	0.00
9,200.00	90.00	359.64	6,717.00	1,440.11	-1,743.55	1,675.02	0.00	0.00	0.00
9,300.00	90.00	359.64	6,717.00	1,540.11	-1,744.18	1,774.08	0.00	0.00	0.00

Noble Energy, Inc.

Survey Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Gittlein C22-785
Project:	Mustang	TVD Reference:	KB @ 4730.00ft
Site:	C Section 34	MD Reference:	KB @ 4730.00ft
Well:	Gittlein C22-785	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	359.64	6,717.00	1,640.11	-1,744.82	1,873.14	0.00	0.00	0.00
9,500.00	90.00	359.64	6,717.00	1,740.11	-1,745.45	1,972.20	0.00	0.00	0.00
9,600.00	90.00	359.64	6,717.00	1,840.10	-1,746.08	2,071.25	0.00	0.00	0.00
9,700.00	90.00	359.64	6,717.00	1,940.10	-1,746.71	2,170.31	0.00	0.00	0.00
9,800.00	90.00	359.64	6,717.00	2,040.10	-1,747.34	2,269.37	0.00	0.00	0.00
9,900.00	90.00	359.64	6,717.00	2,140.10	-1,747.97	2,368.42	0.00	0.00	0.00
10,000.00	90.00	359.64	6,717.00	2,240.10	-1,748.60	2,467.48	0.00	0.00	0.00
10,100.00	90.00	359.64	6,717.00	2,340.09	-1,749.23	2,566.54	0.00	0.00	0.00
10,200.00	90.00	359.64	6,717.00	2,440.09	-1,749.86	2,665.60	0.00	0.00	0.00
10,300.00	90.00	359.64	6,717.00	2,540.09	-1,750.49	2,764.65	0.00	0.00	0.00
10,400.00	90.00	359.64	6,717.00	2,640.09	-1,751.12	2,863.71	0.00	0.00	0.00
10,500.00	90.00	359.64	6,717.00	2,740.09	-1,751.76	2,962.77	0.00	0.00	0.00
10,600.00	90.00	359.64	6,717.00	2,840.08	-1,752.39	3,061.82	0.00	0.00	0.00
10,700.00	90.00	359.64	6,717.00	2,940.08	-1,753.02	3,160.88	0.00	0.00	0.00
10,800.00	90.00	359.64	6,717.00	3,040.08	-1,753.65	3,259.94	0.00	0.00	0.00
10,900.00	90.00	359.64	6,717.00	3,140.08	-1,754.28	3,358.99	0.00	0.00	0.00
11,000.00	90.00	359.64	6,717.00	3,240.08	-1,754.91	3,458.05	0.00	0.00	0.00
11,100.00	90.00	359.64	6,717.00	3,340.07	-1,755.54	3,557.11	0.00	0.00	0.00
11,200.00	90.00	359.64	6,717.00	3,440.07	-1,756.17	3,656.17	0.00	0.00	0.00
11,300.00	90.00	359.64	6,717.00	3,540.07	-1,756.80	3,755.22	0.00	0.00	0.00
11,400.00	90.00	359.64	6,717.00	3,640.07	-1,757.43	3,854.28	0.00	0.00	0.00
11,500.00	90.00	359.64	6,717.00	3,740.07	-1,758.07	3,953.34	0.00	0.00	0.00
11,600.00	90.00	359.64	6,717.00	3,840.06	-1,758.70	4,052.39	0.00	0.00	0.00
11,700.00	90.00	359.64	6,717.00	3,940.06	-1,759.33	4,151.45	0.00	0.00	0.00
11,800.00	90.00	359.64	6,717.00	4,040.06	-1,759.96	4,250.51	0.00	0.00	0.00
11,900.00	90.00	359.64	6,717.00	4,140.06	-1,760.59	4,349.57	0.00	0.00	0.00
12,000.00	90.00	359.64	6,717.00	4,240.06	-1,761.22	4,448.62	0.00	0.00	0.00
12,100.00	90.00	359.64	6,717.00	4,340.05	-1,761.85	4,547.68	0.00	0.00	0.00
12,200.00	90.00	359.64	6,717.00	4,440.05	-1,762.48	4,646.74	0.00	0.00	0.00
12,300.00	90.00	359.64	6,717.00	4,540.05	-1,763.11	4,745.79	0.00	0.00	0.00
12,400.00	90.00	359.64	6,717.00	4,640.05	-1,763.74	4,844.85	0.00	0.00	0.00
12,500.00	90.00	359.64	6,717.00	4,740.05	-1,764.37	4,943.91	0.00	0.00	0.00
12,600.00	90.00	359.64	6,717.00	4,840.04	-1,765.01	5,042.96	0.00	0.00	0.00
12,700.00	90.00	359.64	6,717.00	4,940.04	-1,765.64	5,142.02	0.00	0.00	0.00
12,800.00	90.00	359.64	6,717.00	5,040.04	-1,766.27	5,241.08	0.00	0.00	0.00
12,900.00	90.00	359.64	6,717.00	5,140.04	-1,766.90	5,340.14	0.00	0.00	0.00
13,000.00	90.00	359.64	6,717.00	5,240.04	-1,767.53	5,439.19	0.00	0.00	0.00
13,100.00	90.00	359.64	6,717.00	5,340.03	-1,768.16	5,538.25	0.00	0.00	0.00
13,200.00	90.00	359.64	6,717.00	5,440.03	-1,768.79	5,637.31	0.00	0.00	0.00
13,300.00	90.00	359.64	6,717.00	5,540.03	-1,769.42	5,736.36	0.00	0.00	0.00
13,400.00	90.00	359.64	6,717.00	5,640.03	-1,770.05	5,835.42	0.00	0.00	0.00
13,500.00	90.00	359.64	6,717.00	5,740.03	-1,770.68	5,934.48	0.00	0.00	0.00
13,600.00	90.00	359.64	6,717.00	5,840.02	-1,771.31	6,033.54	0.00	0.00	0.00

Noble Energy, Inc.

Survey Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Gittlein C22-785
Project:	Mustang	TVD Reference:	KB @ 4730.00ft
Site:	C Section 34	MD Reference:	KB @ 4730.00ft
Well:	Gittlein C22-785	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)
13,700.00	90.00	359.64	6,717.00	5,940.02	-1,771.95	6,132.59	0.00	0.00	0.00
13,800.00	90.00	359.64	6,717.00	6,040.02	-1,772.58	6,231.65	0.00	0.00	0.00
13,900.00	90.00	359.64	6,717.00	6,140.02	-1,773.21	6,330.71	0.00	0.00	0.00
14,000.00	90.00	359.64	6,717.00	6,240.02	-1,773.84	6,429.76	0.00	0.00	0.00
14,100.00	90.00	359.64	6,717.00	6,340.01	-1,774.47	6,528.82	0.00	0.00	0.00
14,200.00	90.00	359.64	6,717.00	6,440.01	-1,775.10	6,627.88	0.00	0.00	0.00
14,300.00	90.00	359.64	6,717.00	6,540.01	-1,775.73	6,726.93	0.00	0.00	0.00
14,400.00	90.00	359.64	6,717.00	6,640.01	-1,776.36	6,825.99	0.00	0.00	0.00
14,500.00	90.00	359.64	6,717.00	6,740.01	-1,776.99	6,925.05	0.00	0.00	0.00
14,600.00	90.00	359.64	6,717.00	6,840.00	-1,777.62	7,024.11	0.00	0.00	0.00
14,700.00	90.00	359.64	6,717.00	6,940.00	-1,778.26	7,123.16	0.00	0.00	0.00
14,800.00	90.00	359.64	6,717.00	7,040.00	-1,778.89	7,222.22	0.00	0.00	0.00
14,900.00	90.00	359.64	6,717.00	7,140.00	-1,779.52	7,321.28	0.00	0.00	0.00
15,000.00	90.00	359.64	6,717.00	7,240.00	-1,780.15	7,420.33	0.00	0.00	0.00
15,100.00	90.00	359.64	6,717.00	7,339.99	-1,780.78	7,519.39	0.00	0.00	0.00
15,200.00	90.00	359.64	6,717.00	7,439.99	-1,781.41	7,618.45	0.00	0.00	0.00
15,300.00	90.00	359.64	6,717.00	7,539.99	-1,782.04	7,717.50	0.00	0.00	0.00
15,400.00	90.00	359.64	6,717.00	7,639.99	-1,782.67	7,816.56	0.00	0.00	0.00
15,500.00	90.00	359.64	6,717.00	7,739.99	-1,783.30	7,915.62	0.00	0.00	0.00
15,600.00	90.00	359.64	6,717.00	7,839.98	-1,783.93	8,014.68	0.00	0.00	0.00
15,700.00	90.00	359.64	6,717.00	7,939.98	-1,784.56	8,113.73	0.00	0.00	0.00
15,800.00	90.00	359.64	6,717.00	8,039.98	-1,785.20	8,212.79	0.00	0.00	0.00
15,900.00	90.00	359.64	6,717.00	8,139.98	-1,785.83	8,311.85	0.00	0.00	0.00
16,000.00	90.00	359.64	6,717.00	8,239.98	-1,786.46	8,410.90	0.00	0.00	0.00
16,100.00	90.00	359.64	6,717.00	8,339.97	-1,787.09	8,509.96	0.00	0.00	0.00
16,200.00	90.00	359.64	6,717.00	8,439.97	-1,787.72	8,609.02	0.00	0.00	0.00
16,300.00	90.00	359.64	6,717.00	8,539.97	-1,788.35	8,708.08	0.00	0.00	0.00
16,400.00	90.00	359.64	6,717.00	8,639.97	-1,788.98	8,807.13	0.00	0.00	0.00
16,500.00	90.00	359.64	6,717.00	8,739.97	-1,789.61	8,906.19	0.00	0.00	0.00
16,600.00	90.00	359.64	6,717.00	8,839.96	-1,790.24	9,005.25	0.00	0.00	0.00
16,700.00	90.00	359.64	6,717.00	8,939.96	-1,790.87	9,104.30	0.00	0.00	0.00
16,800.00	90.00	359.64	6,717.00	9,039.96	-1,791.50	9,203.36	0.00	0.00	0.00
16,900.00	90.00	359.64	6,717.00	9,139.96	-1,792.14	9,302.42	0.00	0.00	0.00
17,000.00	90.00	359.64	6,717.00	9,239.96	-1,792.77	9,401.47	0.00	0.00	0.00
17,100.00	90.00	359.64	6,717.00	9,339.95	-1,793.40	9,500.53	0.00	0.00	0.00
17,200.00	90.00	359.64	6,717.00	9,439.95	-1,794.03	9,599.59	0.00	0.00	0.00
17,300.00	90.00	359.64	6,717.00	9,539.95	-1,794.66	9,698.65	0.00	0.00	0.00
17,400.00	90.00	359.64	6,717.00	9,639.95	-1,795.29	9,797.70	0.00	0.00	0.00
17,500.00	90.00	359.64	6,717.00	9,739.95	-1,795.92	9,896.76	0.00	0.00	0.00
17,600.00	90.00	359.64	6,717.00	9,839.94	-1,796.55	9,995.82	0.00	0.00	0.00
17,700.00	90.00	359.64	6,717.00	9,939.94	-1,797.18	10,094.87	0.00	0.00	0.00
17,800.00	90.00	359.64	6,717.00	10,039.94	-1,797.81	10,193.93	0.00	0.00	0.00
17,900.00	90.00	359.64	6,717.00	10,139.94	-1,798.45	10,292.99	0.00	0.00	0.00
18,000.00	90.00	359.64	6,717.00	10,239.94	-1,799.08	10,392.05	0.00	0.00	0.00

Noble Energy, Inc.

Survey Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Gittlein C22-785
Project:	Mustang	TVD Reference:	KB @ 4730.00ft
Site:	C Section 34	MD Reference:	KB @ 4730.00ft
Well:	Gittlein C22-785	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)
18,100.00	90.00	359.64	6,717.00	10,339.93	-1,799.71	10,491.10	0.00	0.00	0.00
18,200.00	90.00	359.64	6,717.00	10,439.93	-1,800.34	10,590.16	0.00	0.00	0.00
18,300.00	90.00	359.64	6,717.00	10,539.93	-1,800.97	10,689.22	0.00	0.00	0.00
18,400.00	90.00	359.64	6,717.00	10,639.93	-1,801.60	10,788.27	0.00	0.00	0.00
18,500.00	90.00	359.64	6,717.00	10,739.93	-1,802.23	10,887.33	0.00	0.00	0.00
18,600.00	90.00	359.64	6,717.00	10,839.92	-1,802.86	10,986.39	0.00	0.00	0.00
18,700.00	90.00	359.64	6,717.00	10,939.92	-1,803.49	11,085.44	0.00	0.00	0.00
18,800.00	90.00	359.64	6,717.00	11,039.92	-1,804.12	11,184.50	0.00	0.00	0.00
18,900.00	90.00	359.64	6,717.00	11,139.92	-1,804.75	11,283.56	0.00	0.00	0.00
19,000.00	90.00	359.64	6,717.00	11,239.92	-1,805.39	11,382.62	0.00	0.00	0.00
19,100.00	90.00	359.64	6,717.00	11,339.91	-1,806.02	11,481.67	0.00	0.00	0.00
19,200.00	90.00	359.64	6,717.00	11,439.91	-1,806.65	11,580.73	0.00	0.00	0.00
19,300.00	90.00	359.64	6,717.00	11,539.91	-1,807.28	11,679.79	0.00	0.00	0.00
19,400.00	90.00	359.64	6,717.00	11,639.91	-1,807.91	11,778.84	0.00	0.00	0.00
19,500.00	90.00	359.64	6,717.00	11,739.91	-1,808.54	11,877.90	0.00	0.00	0.00
19,600.00	90.00	359.64	6,717.00	11,839.90	-1,809.17	11,976.96	0.00	0.00	0.00
19,700.00	90.00	359.64	6,717.00	11,939.90	-1,809.80	12,076.02	0.00	0.00	0.00
19,800.00	90.00	359.64	6,717.00	12,039.90	-1,810.43	12,175.07	0.00	0.00	0.00
19,900.00	90.00	359.64	6,717.00	12,139.90	-1,811.06	12,274.13	0.00	0.00	0.00
20,000.00	90.00	359.64	6,717.00	12,239.90	-1,811.69	12,373.19	0.00	0.00	0.00
20,100.00	90.00	359.64	6,717.00	12,339.89	-1,812.33	12,472.24	0.00	0.00	0.00
20,200.00	90.00	359.64	6,717.00	12,439.89	-1,812.96	12,571.30	0.00	0.00	0.00
20,289.25	90.00	359.64	6,717.00	12,529.14	-1,813.52	12,659.71	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
SHL Gittlein C22-785 - hit/miss target - Shape	0.00	0.00	0.00	0.00	0.00	1,340,077.51	3,268,278.71	40.2629200	-104.5386620
KOP Gittlein C22-785 - plan hits target center - Point	0.00	0.00	5,997.34	-863.79	-1,420.05	1,339,213.72	3,266,858.66	40.2605911	-104.5437835
BHL Gittlein C22-785 - plan hits target center - Point	0.00	0.00	6,717.00	12,529.14	-1,813.52	1,352,606.62	3,266,465.20	40.2973652	-104.5446763
TPZ Gittlein C22-785 - plan hits target center - Point	0.00	0.00	6,717.00	-246.23	-1,732.91	1,339,831.27	3,266,545.80	40.2622955	-104.5448806

Noble Energy, Inc.

Survey Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Gittlein C22-785
Project:	Mustang	TVD Reference:	KB @ 4730.00ft
Site:	C Section 34	MD Reference:	KB @ 4730.00ft
Well:	Gittlein C22-785	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 (°)	
439.00	439.00	Pierre				
572.00	572.00	Upper Pierre Aquifer Top				
1,476.00	1,476.00	Upper Pierre Aquifer Base				
3,669.14	3,586.00	Parkman				
4,396.03	4,236.00	Sussex				
5,063.66	4,833.00	Shannon				
6,231.16	5,877.00	Teepee Buttes				
7,086.14	6,590.00	Sharon Springs				
7,137.82	6,618.00	Top A Chalk				
7,166.14	6,632.00	Top A Marl				
7,210.66	6,652.00	Top B Chalk				
7,346.67	6,697.00	Top B Marl				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
2000	2000	0	0	Start Build 2.00	
6366	5997	-864	-1420	Start DLS 9.00 TFO 118.20	
7514	6717	-246	-1733	TPZ/LP at 7513.62 MD	
20,289	6717	12,529	-1814	TD at 20289.25 MD	

Checked By: _____ Approved By: _____ Date: _____

Northern Region - DJ Basin

Mustang

C Section 34

Gittlein C22-785

Wellbore #1

Plan #1

Anticollision Summary Report

09 October, 2018

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Gittlein C22-785
Project:	Mustang	TVD Reference:	KB @ 4730.00ft
Reference Site:	C Section 34	MD Reference:	KB @ 4730.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Gittlein C22-785	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	10/9/2018		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	20,289.25	Plan #1 (Wellbore #1)	2_MWD+IFR1	A005Mb: IFR declination correction only

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						
C Section 22						
BORYS C #22-20(PR) - Wellbore #1 - No Surveys	20,289.25	6,653.00	1,095.11	896.98	5.527	CC, ES, SF
CANTRELL #1(PR) - Wellbore #1 - No Surveys	19,787.77	6,650.00	1,510.28	1,311.27	7.589	CC
CANTRELL #1(PR) - Wellbore #1 - No Surveys	19,800.00	6,650.00	1,510.33	1,311.23	7.586	ES, SF
CANTRELL #22-10(SI) - Wellbore #1 - No Surveys	19,860.18	6,644.00	2,932.55	2,732.81	14.682	CC
CANTRELL #22-10(SI) - Wellbore #1 - No Surveys	19,900.00	6,644.00	2,932.82	2,732.74	14.658	ES
CANTRELL #22-10(SI) - Wellbore #1 - No Surveys	20,100.00	6,644.00	2,942.34	2,740.91	14.608	SF
CANTRELL #22-12(SI) - Wellbore #1 - No Surveys	20,019.06	6,656.00	369.49	167.95	1.833	CC, ES, SF
COLEMAN #22-114(PR) - Wellbore #1 - No Surveys	20,289.25	6,637.00	4,872.39	4,680.80	25.431	CC, ES, SF
COLEMAN #22-714(PA) - Wellbore #1 - Gyro Surveys	20,289.25	6,609.24	3,126.20	2,961.43	18.974	CC, ES, SF
COLEMAN #22-814(PR) - Wellbore #1 - No Surveys	20,289.25	6,643.00	4,299.33	4,098.14	21.370	CC, ES, SF
Coleman #C22-18D(PR) - Wellbore #1 - MWD Surveys	20,289.25	6,770.05	2,543.79	2,394.85	17.079	CC, ES, SF
Coleman #C22-27 (PR) - Wellbore #1 - No Surveys	20,289.25	6,639.00	4,436.92	4,257.16	24.683	CC, ES, SF
Coleman C #22-17(PR) - Wellbore #1 - No Surveys	20,289.25	6,643.00	3,815.93	3,622.34	19.711	CC, ES, SF
COLEMAN C #23-32(PR) - Wellbore #1 - No Surveys	20,289.25	6,644.00	4,634.25	4,429.99	22.687	CC, ES, SF
Coleman C22-21D(SI) - Wellbore #1 - MWD Surveys	20,289.25	6,860.12	2,121.06	1,944.46	12.011	CC, ES, SF
CONRAD #1(PR) - Wellbore #1 - No Surveys	20,289.25	6,643.00	2,678.98	2,528.03	17.747	CC, ES, SF
DARLENE DINNEL #1(PR) - Wellbore #1 - No Surveys	18,512.68	6,652.00	1,496.52	1,311.13	8.072	CC, ES
DARLENE DINNEL #1(PR) - Wellbore #1 - No Surveys	18,600.00	6,652.00	1,499.07	1,313.24	8.067	SF
DINNEL #22-15(SI) - Wellbore #1 - No Surveys	18,726.41	6,652.00	2,831.74	2,644.06	15.088	CC, ES
DINNEL #22-15(SI) - Wellbore #1 - No Surveys	19,000.00	6,652.00	2,844.93	2,655.40	15.011	SF
DINNEL #C27-28D(SI) - Wellbore #1 - MWD Surveys	17,997.52	6,773.78	2,283.37	2,136.86	15.585	CC
DINNEL #C27-28D(SI) - Wellbore #1 - MWD Surveys	18,000.00	6,773.78	2,283.38	2,136.85	15.583	ES
DINNEL #C27-28D(SI) - Wellbore #1 - MWD Surveys	18,100.00	6,773.86	2,285.67	2,138.61	15.542	SF
DINNEL #C27-29D(PA) - Wellbore #1 - Gyro Surveys	17,984.14	6,756.76	854.02	706.26	5.780	CC, ES, SF
HERBST #1(SI) - Wellbore #1 - Gyro Surveys	18,520.85	6,663.18	169.92	19.40	1.129	Level 2, CC, ES, SF
HERBST #1-22-4-64(SI) - Wellbore #1 - No Surveys	19,912.45	6,645.00	4,156.02	3,955.71	20.748	CC, ES
HERBST #1-22-4-64(SI) - Wellbore #1 - No Surveys	20,289.25	6,645.00	4,173.06	3,969.76	20.526	SF
HERBST #22-16(PR) - Wellbore #1 - No Surveys	18,543.08	6,652.00	4,157.62	3,971.90	22.386	CC
HERBST #22-16(PR) - Wellbore #1 - No Surveys	18,600.00	6,652.00	4,158.01	3,971.76	22.325	ES
HERBST #22-16(PR) - Wellbore #1 - No Surveys	19,100.00	6,652.00	4,194.75	4,004.88	22.092	SF
HERBST #22-614(PR) - Wellbore #1 - No Surveys	20,289.25	6,647.00	1,623.93	1,507.46	13.944	CC, ES, SF
Herbst #C22-22D(PR) - Wellbore #1 - MWD Surveys	20,289.25	6,737.92	3,578.04	3,406.43	20.850	CC, ES, SF
HERBST C #22-24(SI) - Wellbore #1 - No Surveys	19,289.83	6,655.00	2,083.54	1,889.81	10.755	CC
HERBST C #22-24(SI) - Wellbore #1 - No Surveys	19,300.00	6,655.00	2,083.56	1,889.75	10.751	ES
HERBST C #22-24(SI) - Wellbore #1 - No Surveys	19,400.00	6,655.00	2,086.45	1,892.00	10.730	SF
HERBST C #22-25(SI) - Wellbore #1 - No Surveys	19,007.97	6,659.00	817.83	627.08	4.288	CC, ES, SF
JOHNSTON #22-4(SI) - Wellbore #1 - Gyro Surveys	20,289.25	6,669.47	2,004.59	1,936.23	29.327	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 Gittlein C22-785
Project:	Mustang	TVD Reference:	KB @ 4730.00ft
Reference Site:	C Section 34	MD Reference:	KB @ 4730.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Gittlein C22-785	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
Offset Well - Wellbore - Design						
C Section 22						
Lang #C22-28D(PR) - Wellbore #1 - MWD Surveys	20,289.25	6,771.65	3,589.65	3,466.97	29.260	CC, ES, SF
LYMAN #1(SI) - Wellbore #1 - Gyro Surveys	20,289.25	6,647.39	853.99	782.39	11.927	CC, ES, SF
VOLKENS #31-22(PR) - Wellbore #1 - No Surveys	20,289.25	6,640.00	3,625.56	3,446.43	20.240	CC, ES, SF
VROOMAN C #22-23(SI) - Wellbore #1 - No Surveys	19,164.23	6,652.00	3,533.80	3,341.45	18.371	CC
VROOMAN C #22-23(SI) - Wellbore #1 - No Surveys	19,200.00	6,652.00	3,533.98	3,341.30	18.341	ES
VROOMAN C #22-23(SI) - Wellbore #1 - No Surveys	19,500.00	6,652.00	3,549.72	3,354.84	18.215	SF

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Gittlein C22-785
Project:	Mustang	TVD Reference:	KB @ 4730.00ft
Reference Site:	C Section 34	MD Reference:	KB @ 4730.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Gittlein C22-785	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 Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Separation Factor	Warning
C Section 27						
Born Sitzman 3(PA) - Wellbore #1 - Gyro Surveys	15,908.53	6,600.00	2,827.92	2,705.53	23.106	CC, ES
Born Sitzman 3(PA) - Wellbore #1 - Gyro Surveys	16,300.00	6,608.09	2,854.87	2,729.83	22.831	SF
BORN SITZMAN C #27-17(SI) - Wellbore #1 - No Survey	16,562.60	6,660.00	3,488.32	3,323.56	21.172	CC
BORN SITZMAN C #27-17(SI) - Wellbore #1 - No Survey	16,600.00	6,660.00	3,488.52	3,323.42	21.130	ES
BORN SITZMAN C #27-17(SI) - Wellbore #1 - No Survey	17,000.00	6,660.00	3,515.63	3,347.65	20.928	SF
BORN SITZMAN C #27-23(PR) - Wellbore #1 - No Surve	14,090.86	6,670.00	3,484.63	3,345.59	25.062	CC
BORN SITZMAN C #27-23(PR) - Wellbore #1 - No Surve	14,100.00	6,670.00	3,484.64	3,345.52	25.047	ES
BORN SITZMAN C #27-23(PR) - Wellbore #1 - No Surve	14,600.00	6,670.00	3,521.63	3,378.75	24.647	SF
BORN-SITZMAN #1(SI) - Wellbore #1 - Gyro Surveys	17,268.79	6,599.58	4,153.86	4,016.99	30.350	CC
BORN-SITZMAN #1(SI) - Wellbore #1 - Gyro Surveys	17,300.00	6,598.99	4,153.98	4,016.82	30.287	ES
BORN-SITZMAN #1(SI) - Wellbore #1 - Gyro Surveys	17,900.00	6,588.45	4,201.53	4,060.03	29.693	SF
BORN-SITZMAN #2(PR) - Wellbore #1 - No Surveys	14,645.26	6,862.00	4,184.04	4,037.60	28.571	CC
BORN-SITZMAN #2(PR) - Wellbore #1 - No Surveys	14,700.00	6,862.00	4,184.40	4,037.46	28.476	ES
BORN-SITZMAN #2(PR) - Wellbore #1 - No Surveys	15,400.00	6,862.00	4,251.57	4,099.40	27.940	SF
BORN-SITZMAN #4(PR) - Wellbore #1 - No Surveys	17,207.28	6,655.00	2,827.54	2,656.00	16.483	CC, ES
BORN-SITZMAN #4(PR) - Wellbore #1 - No Surveys	17,500.00	6,655.00	2,842.65	2,669.09	16.378	SF
BORN-SITZMAN #5(SI) - Wellbore #1 - No Surveys	14,569.81	6,667.00	2,828.45	2,684.49	19.648	CC
BORN-SITZMAN #5(SI) - Wellbore #1 - No Surveys	14,600.00	6,667.00	2,828.61	2,684.39	19.613	ES
BORN-SITZMAN #5(SI) - Wellbore #1 - No Surveys	14,900.00	6,667.00	2,847.66	2,701.32	19.459	SF
CONRAD HERBST #2(SI) - Wellbore #1 - No Surveys	16,177.67	6,660.00	1,521.03	1,360.33	9.465	CC, ES
CONRAD HERBST #2(SI) - Wellbore #1 - No Surveys	16,200.00	6,660.00	1,521.20	1,360.34	9.457	SF
FOOS C #27-18(PR) - Wellbore #1 - No Surveys	16,599.36	6,660.00	2,287.99	2,122.84	13.854	CC
FOOS C #27-18(PR) - Wellbore #1 - No Surveys	16,600.00	6,660.00	2,287.99	2,122.83	13.854	ES
FOOS C #27-18(PR) - Wellbore #1 - No Surveys	16,800.00	6,660.00	2,296.77	2,130.30	13.797	SF
FOOS C #27-22(PR) - Wellbore #1 - No Surveys	15,175.24	6,663.00	3,460.11	3,309.89	23.034	CC
FOOS C #27-22(PR) - Wellbore #1 - No Surveys	15,200.00	6,663.00	3,460.20	3,309.76	23.000	ES
FOOS C #27-22(PR) - Wellbore #1 - No Surveys	15,600.00	6,663.00	3,486.08	3,332.63	22.717	SF
HERBST #C27-31D - HERBST #C27-31D - As-Drilled	16,400.48	7,090.53	543.58	399.96	3.785	CC, ES, SF
HERBST #C27-31D(PR) - Wellbore #1 - MWD Surveys	16,396.84	7,090.54	540.77	397.10	3.764	CC
HERBST #C27-31D(PR) - Wellbore #1 - MWD Surveys	16,400.00	7,090.58	540.78	396.99	3.761	ES, SF
Herbst #C27-32D(SI) - Wellbore #1 - MWD Surveys	15,139.34	6,792.93	399.95	283.34	3.430	CC, ES, SF
Herbst #C27-33D(SI) - Wellbore #1 - MWD Surveys	13,873.20	6,815.54	401.36	295.40	3.788	CC, ES, SF
HERBST C #27-19(SI) - Wellbore #1 - No Surveys	16,434.52	6,663.00	717.25	553.82	4.389	CC, ES, SF
HERBST C #27-20(PR) - Wellbore #1 - No Surveys	15,418.68	6,675.00	1,240.74	1,087.87	8.117	CC, ES
HERBST C #27-20(PR) - Wellbore #1 - No Surveys	15,500.00	6,675.00	1,243.40	1,090.17	8.114	SF
HERBST C #27-21(SI) - Wellbore #1 - No Surveys	15,570.42	6,666.00	2,008.39	1,854.01	13.010	CC
HERBST C #27-21(SI) - Wellbore #1 - No Surveys	15,600.00	6,666.00	2,008.60	1,854.00	12.992	ES
HERBST C #27-21(SI) - Wellbore #1 - No Surveys	15,700.00	6,666.00	2,012.56	1,857.31	12.963	SF
HERBST C #27-30(SI) - Wellbore #1 - No Surveys	17,668.98	6,870.00	289.22	110.91	1.622	CC, ES, SF
HERBST C #34-29(PR) - Wellbore #1 - No Surveys	12,782.37	6,692.00	854.75	728.81	6.787	CC, ES
HERBST C #34-29(PR) - Wellbore #1 - No Surveys	12,800.00	6,692.00	854.93	728.90	6.783	SF
HERBST, CONRAD #1(SI) - Wellbore #1 - No Surveys	17,186.76	6,655.00	1,519.26	1,347.94	8.868	CC
HERBST, CONRAD #1(SI) - Wellbore #1 - No Surveys	17,200.00	6,655.00	1,519.32	1,347.90	8.863	ES, SF
LEHFELDT #C 27-11(PA) - Wellbore #1 - Gyro Surveys	14,494.14	6,684.13	1,516.97	1,408.71	14.013	CC
LEHFELDT #C 27-11(PA) - Wellbore #1 - Gyro Surveys	14,500.00	6,684.11	1,516.98	1,408.68	14.008	ES
LEHFELDT #C 27-11(PA) - Wellbore #1 - Gyro Surveys	14,600.00	6,683.67	1,520.66	1,411.80	13.969	SF
LEHFELDT #C 27-12(SI) - Wellbore #1 - No Surveys	14,565.13	6,688.00	186.34	42.25	1.293	Level 3, CC, ES, SF
LEHFELDT #C 27-13(PR) - Wellbore #1 - No Surveys	13,239.12	6,695.00	189.48	58.91	1.451	Level 3, CC, ES, SF
LEHFELDT #C 27-14(PA) - Wellbore #1 - Gyro Surveys	13,241.45	6,683.77	1,481.45	1,386.08	15.533	CC, ES
LEHFELDT #C 27-14(PA) - Wellbore #1 - Gyro Surveys	13,300.00	6,684.26	1,482.60	1,386.84	15.482	SF
LEHFELDT #C 27-5(SI) - Wellbore #1 - No Surveys	15,886.95	6,692.00	57.68	-100.24	0.365	Level 1, CC, ES, SF
LEHFELDT #C27-04(SI) - Wellbore #1 - No Surveys	16,986.83	6,662.00	5.54	-163.73	0.033	Level 1, CC, ES, SF
LEHFELDT #C27-15(SI) - Wellbore #1 - No Surveys	13,232.75	6,671.00	2,806.67	2,676.38	21.541	CC, ES

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

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Gittlein C22-785
Project:	Mustang	TVD Reference:	KB @ 4730.00ft
Reference Site:	C Section 34	MD Reference:	KB @ 4730.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Gittlein C22-785	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
Offset Well - Wellbore - Design						
C Section 27						
LEHFELDT #C27-15(SI) - Wellbore #1 - No Surveys	13,600.00	6,671.00	2,830.59	2,697.63	21.288	SF
LEHFELDT C #27-16(SI) - Wellbore #1 - No Suveys	13,282.62	6,669.00	4,142.92	4,012.14	31.679	CC
LEHFELDT C #27-16(SI) - Wellbore #1 - No Suveys	13,300.00	6,669.00	4,142.96	4,012.02	31.641	ES
LEHFELDT C #27-16(SI) - Wellbore #1 - No Suveys	14,100.00	6,669.00	4,222.78	4,085.77	30.819	SF
LEHFELDT C #27-25(PR) - Wellbore #1 - No Surveys	13,939.45	6,686.00	629.13	491.51	4.571	CC, ES, SF
SITZMAN #27-8(PR) - Wellbore #1 - No Surveys	15,913.04	6,660.00	4,192.12	4,034.20	26.546	CC, ES
SITZMAN #27-8(PR) - Wellbore #1 - No Surveys	16,600.00	6,660.00	4,248.03	4,084.93	26.045	SF

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Gittlein C22-785
Project:	Mustang	TVD Reference:	KB @ 4730.00ft
Reference Site:	C Section 34	MD Reference:	KB @ 4730.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Gittlein C22-785	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
Offset Well - Wellbore - Design						
C Section 34						
ALOYSIOUS #C34-11(PA) - Wellbore #1 - Gyro Surveys	9,187.39	6,696.01	1,497.60	1,438.94	25.533	CC
ALOYSIOUS #C34-11(PA) - Wellbore #1 - Gyro Surveys	9,200.00	6,695.78	1,497.65	1,438.91	25.498	ES
ALOYSIOUS #C34-11(PA) - Wellbore #1 - Gyro Surveys	9,400.00	6,692.06	1,512.61	1,452.63	25.221	SF
ALOYSIOUS #C34-8(PR) - Wellbore #1 - No Surveys	10,605.26	6,680.00	184.51	79.46	1.756	CC, ES, SF
ALOYSIOUS #C34-9(SI) - Wellbore #1 - Gyro Surveys	2,093.84	2,146.64	2,859.01	2,844.41	195.806	CC
ALOYSIOUS #C34-9(SI) - Wellbore #1 - Gyro Surveys	2,100.00	2,154.21	2,859.02	2,844.37	195.170	ES
ALOYSIOUS #C34-9(SI) - Wellbore #1 - Gyro Surveys	10,800.00	6,716.75	4,366.52	4,297.06	62.866	SF
ALOYSIOUS #34-1(PR) - Wellbore #1 - No Surveys	11,927.66	6,710.00	186.97	69.30	1.589	CC, ES, SF
ALOYSIOUS #34-2(PR) - Wellbore #1 - No Surveys	2,000.00	1,962.00	2,350.78	2,326.72	97.712	CC, ES
ALOYSIOUS #34-2(PR) - Wellbore #1 - No Surveys	9,100.00	6,679.00	4,220.36	4,127.55	45.472	SF
ALOYSIOUS #34-3(PR) - Wellbore #1 - No Surveys	11,929.96	6,684.00	1,506.77	1,389.30	12.827	CC, ES
ALOYSIOUS #34-3(PR) - Wellbore #1 - No Surveys	12,000.00	6,684.00	1,508.40	1,390.45	12.789	SF
ALOYSIOUS #34-4(SI) - Wellbore #1 - No Surveys	10,607.36	6,677.00	1,459.74	1,354.69	13.896	CC, ES
ALOYSIOUS #34-4(SI) - Wellbore #1 - No Surveys	10,700.00	6,677.00	1,462.67	1,356.99	13.841	SF
ALOYSIOUS #34-5(PA) - Wellbore #1 - Gyro Surveys	2,031.66	2,013.43	1,940.09	1,926.18	139.480	CC, ES
ALOYSIOUS #34-5(PA) - Wellbore #1 - Gyro Surveys	10,100.00	6,649.32	2,943.64	2,879.32	45.766	SF
ALOYSIOUS #34-6(PR) - Wellbore #1 - Gyro Surveys	2,678.03	2,641.17	313.99	295.68	17.148	CC
ALOYSIOUS #34-6(PR) - Wellbore #1 - Gyro Surveys	2,700.00	2,662.89	314.02	295.56	17.006	ES
ALOYSIOUS #34-6(PR) - Wellbore #1 - Gyro Surveys	3,100.00	3,045.13	337.35	316.03	15.824	SF
ALOYSIOUS #34-7(PR) - Wellbore #1 - Gyro Surveys	7,926.40	6,684.71	165.25	113.58	3.198	CC, ES, SF
ALOYSIOUS #C34-15(PR) - Wellbore #1 - No Surveys	2,000.00	1,963.00	1,116.15	1,092.08	46.377	CC, ES
ALOYSIOUS #C34-15(PR) - Wellbore #1 - No Surveys	8,500.00	6,680.00	2,870.95	2,781.34	32.038	SF
Aloysius C #34-18(PA) - Wellbore #1 - Gyro Surveys	11,248.09	6,677.29	2,019.35	1,943.57	26.650	CC, ES
Aloysius C #34-18(PA) - Wellbore #1 - Gyro Surveys	11,500.00	6,672.60	2,034.99	1,957.54	26.273	SF
ALOYSIOUS C #34-19(PR) - Wellbore #1 - No Surveys	11,271.26	6,687.00	848.43	737.22	7.629	CC, ES
ALOYSIOUS C #34-19(PR) - Wellbore #1 - No Surveys	11,300.00	6,687.00	848.92	737.56	7.623	SF
Aloysius C #34-20D(PR) - Wellbore #1 - MWD Surveys	9,800.28	6,789.84	805.56	741.66	12.607	CC, ES, SF
Aloysius C #34-21D(SI) - Wellbore #1 - MWD Surveys	100.00	75.89	1,959.06	1,958.80	7,557.426	CC
Aloysius C #34-21D(SI) - Wellbore #1 - MWD Surveys	10,100.00	6,806.00	2,016.97	1,949.21	29.769	ES
Aloysius C #34-21D(SI) - Wellbore #1 - MWD Surveys	10,300.00	6,800.10	2,027.60	1,959.05	29.582	SF
ALOYSIOUS C #34-22D(PR) - Wellbore #1 - MWD Survey	2,029.99	2,074.60	2,871.03	2,856.51	197.791	CC, ES
ALOYSIOUS C #34-22D(PR) - Wellbore #1 - MWD Survey	11,000.00	6,805.23	3,669.97	3,596.59	50.018	SF
ALOYSIOUS C #34-23(PR) - Wellbore #1 - Gyro Surveys	2,037.75	2,033.61	1,944.77	1,930.76	138.777	CC, ES
ALOYSIOUS C #34-23(PR) - Wellbore #1 - Gyro Surveys	9,700.00	6,706.54	3,580.51	3,518.98	58.191	SF
Aloysius C #34-24(SI) - Wellbore #1 - No Surveys	2,000.00	1,965.00	1,050.68	1,026.59	43.625	CC, ES
Aloysius C #34-24(SI) - Wellbore #1 - No Surveys	9,000.00	6,682.00	2,343.22	2,250.88	25.377	SF
ALOYSIOUS C #34-27D(PR) - Wellbore #1 - MWD Survey	12,494.57	6,778.12	3,495.30	3,406.55	39.385	CC
ALOYSIOUS C #34-27D(PR) - Wellbore #1 - MWD Survey	12,500.00	6,778.13	3,495.30	3,406.51	39.366	ES
ALOYSIOUS C #34-27D(PR) - Wellbore #1 - MWD Survey	13,200.00	6,778.36	3,565.77	3,472.52	38.236	SF
ALOYSIOUS C #34-28D(PA) - Wellbore #1 - Gyro Surveys	12,505.88	6,795.74	2,346.01	2,253.08	25.244	CC, ES
ALOYSIOUS C #34-28D(PA) - Wellbore #1 - Gyro Surveys	13,000.00	6,798.13	2,397.48	2,298.96	24.334	SF
Aloysius C #34-31(PA) - Wellbore #1 - Gyro Surveys	11,304.39	6,708.11	312.31	235.91	4.088	CC, ES, SF
Aloysius C #34-32D(PR) - Wellbore #1 - MWD Surveys	9,819.02	6,886.17	386.19	319.18	5.763	CC, ES
Aloysius C #34-32D(PR) - Wellbore #1 - MWD Surveys	9,900.00	6,885.26	394.59	325.50	5.711	SF
Aloysius C34-33D(PR) - Wellbore #1 - MWD Surveys	8,638.73	6,797.78	403.22	346.21	7.073	CC, ES
Aloysius C34-33D(PR) - Wellbore #1 - MWD Surveys	8,700.00	6,798.01	407.85	350.11	7.064	SF
Aloysius C34-99HZ - Original Drilling - Original Drilling - A	8,473.03	10,570.00	92.31	38.46	1.714	CC
Aloysius C34-99HZ - Original Drilling - Original Drilling - A	8,500.00	10,570.00	96.16	21.67	1.291	Level 3, ES, SF
DONOVAN D #02-30(PR) - Wellbore #1 - No Surveys	2,000.00	1,966.00	2,895.31	2,871.22	120.172	CC, ES
DONOVAN D #02-30(PR) - Wellbore #1 - No Surveys	8,800.00	6,683.00	4,798.50	4,707.31	52.620	SF
Gittlein C22-750 - Wellbore #1 - Plan #1	2,000.00	2,001.00	112.47	98.60	8.105	CC, ES
Gittlein C22-750 - Wellbore #1 - Plan #1	20,289.25	20,121.61	2,181.77	1,886.10	7.379	SF
Gittlein C22-755 - Wellbore #1 - Plan #1	2,000.00	2,001.00	89.87	75.99	6.476	CC, ES

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

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Gittlein C22-785
Project:	Mustang	TVD Reference:	KB @ 4730.00ft
Reference Site:	C Section 34	MD Reference:	KB @ 4730.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Gittlein C22-785	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
C Section 34						
Gittlein C22-755 - Wellbore #1 - Plan #1	20,289.25	20,008.96	1,849.51	1,553.53	6.249	SF
Gittlein C22-765 - Wellbore #1 - Plan #1	2,000.00	1,999.00	67.26	53.39	4.850	CC
Gittlein C22-765 - Wellbore #1 - Plan #1	2,100.00	2,100.18	67.88	53.33	4.663	ES
Gittlein C22-765 - Wellbore #1 - Plan #1	20,289.25	19,987.90	1,193.95	899.04	4.048	SF
Gittlein C22-770 - Wellbore #1 - Plan #1	2,000.00	2,000.00	44.93	31.06	3.239	CC, ES
Gittlein C22-770 - Wellbore #1 - Plan #1	20,289.25	20,237.18	884.44	589.89	3.003	SF
Gittlein C22-775 - Wellbore #1 - Plan #1	2,000.00	2,000.00	22.33	8.45	1.609	CC, ES, SF
Guttersen C22-715 - Wellbore #1 - Plan #1	2,000.00	2,003.00	1,424.77	1,410.89	102.623	CC, ES
Guttersen C22-715 - Wellbore #1 - Plan #1	20,289.25	20,154.77	4,466.77	4,173.21	15.216	SF
Guttersen C22-725 - Wellbore #1 - Plan #1	2,000.00	1,997.00	1,402.21	1,388.35	101.154	CC, ES
Guttersen C22-725 - Wellbore #1 - Plan #1	20,289.25	19,950.85	3,811.85	3,517.52	12.951	SF
Guttersen C22-730 - Wellbore #1 - Plan #1	2,000.00	2,003.00	1,379.92	1,366.04	99.392	CC, ES
Guttersen C22-730 - Wellbore #1 - Plan #1	20,289.25	20,075.32	3,487.78	3,192.73	11.821	SF
Guttersen C22-735 - Wellbore #1 - Plan #1	2,000.00	2,003.00	1,357.39	1,343.51	97.769	CC, ES
Guttersen C22-735 - Wellbore #1 - Plan #1	20,289.25	19,973.61	3,158.01	2,862.50	10.687	SF
Guttersen C22-745 - Wellbore #1 - Plan #1	2,000.00	1,997.00	1,335.11	1,321.25	96.314	CC
Guttersen C22-745 - Wellbore #1 - Plan #1	2,100.00	2,124.06	1,335.55	1,320.91	91.262	ES
Guttersen C22-745 - Wellbore #1 - Plan #1	20,289.25	19,949.33	2,502.91	2,208.25	8.494	SF
GUTTERSEN D #03-27(PR) - Wellbore #1 - No Surveys	2,000.00	1,966.00	1,766.04	1,741.95	73.301	CC, ES
GUTTERSEN D #03-27(PR) - Wellbore #1 - No Surveys	8,100.00	6,683.00	3,534.59	3,446.60	40.169	SF
LANE #34-214(PR) - Wellbore #1 - No Surveys	11,759.09	6,676.00	3,023.80	2,908.05	26.124	CC
LANE #34-214(PR) - Wellbore #1 - No Surveys	11,800.00	6,676.00	3,024.08	2,907.98	26.048	ES
LANE #34-214(PR) - Wellbore #1 - No Surveys	12,200.00	6,676.00	3,055.78	2,936.71	25.665	SF
LANE #34-814(PR) - Wellbore #1 - No Surveys	2,000.00	1,959.00	3,903.43	3,879.40	162.426	CC, ES
LANE #34-814(PR) - Wellbore #1 - No Surveys	11,800.00	6,676.00	4,260.27	4,145.94	37.263	SF
LANE C #34-17(PR) - Wellbore #1 - No Surveys	11,299.27	6,674.00	3,560.82	3,449.47	31.977	CC
LANE C #34-17(PR) - Wellbore #1 - No Surveys	11,300.00	6,674.00	3,560.82	3,449.46	31.975	ES
LANE C #34-17(PR) - Wellbore #1 - No Surveys	12,000.00	6,674.00	3,629.12	3,512.50	31.119	SF
POLLOCK-HADDIX #2(PA) - Wellbore #1 - Gyro Surveys	11,993.68	6,609.45	4,174.23	4,091.74	50.601	CC
POLLOCK-HADDIX #2(PA) - Wellbore #1 - Gyro Surveys	12,000.00	6,609.46	4,174.24	4,091.69	50.566	ES
POLLOCK-HADDIX #2(PA) - Wellbore #1 - Gyro Surveys	13,100.00	6,611.77	4,318.35	4,227.70	47.637	SF
POLLOCK-HADDIX #34-1(SI) - Wellbore #1 - No Survey	10,617.55	6,677.00	2,896.77	2,791.63	27.552	CC, ES
POLLOCK-HADDIX #34-1(SI) - Wellbore #1 - No Survey	11,100.00	6,677.00	2,936.67	2,828.01	27.026	SF
TWO E RANCHES #1(PR) - Wellbore #1 - Gyro Surveys	8,960.64	6,674.50	547.46	490.71	9.646	CC, ES
TWO E RANCHES #1(PR) - Wellbore #1 - Gyro Surveys	9,000.00	6,674.13	548.87	491.86	9.627	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 Gittlein C22-785
Project:	Mustang	TVD Reference:	KB @ 4730.00ft
Reference Site:	C Section 34	MD Reference:	KB @ 4730.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Gittlein C22-785	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

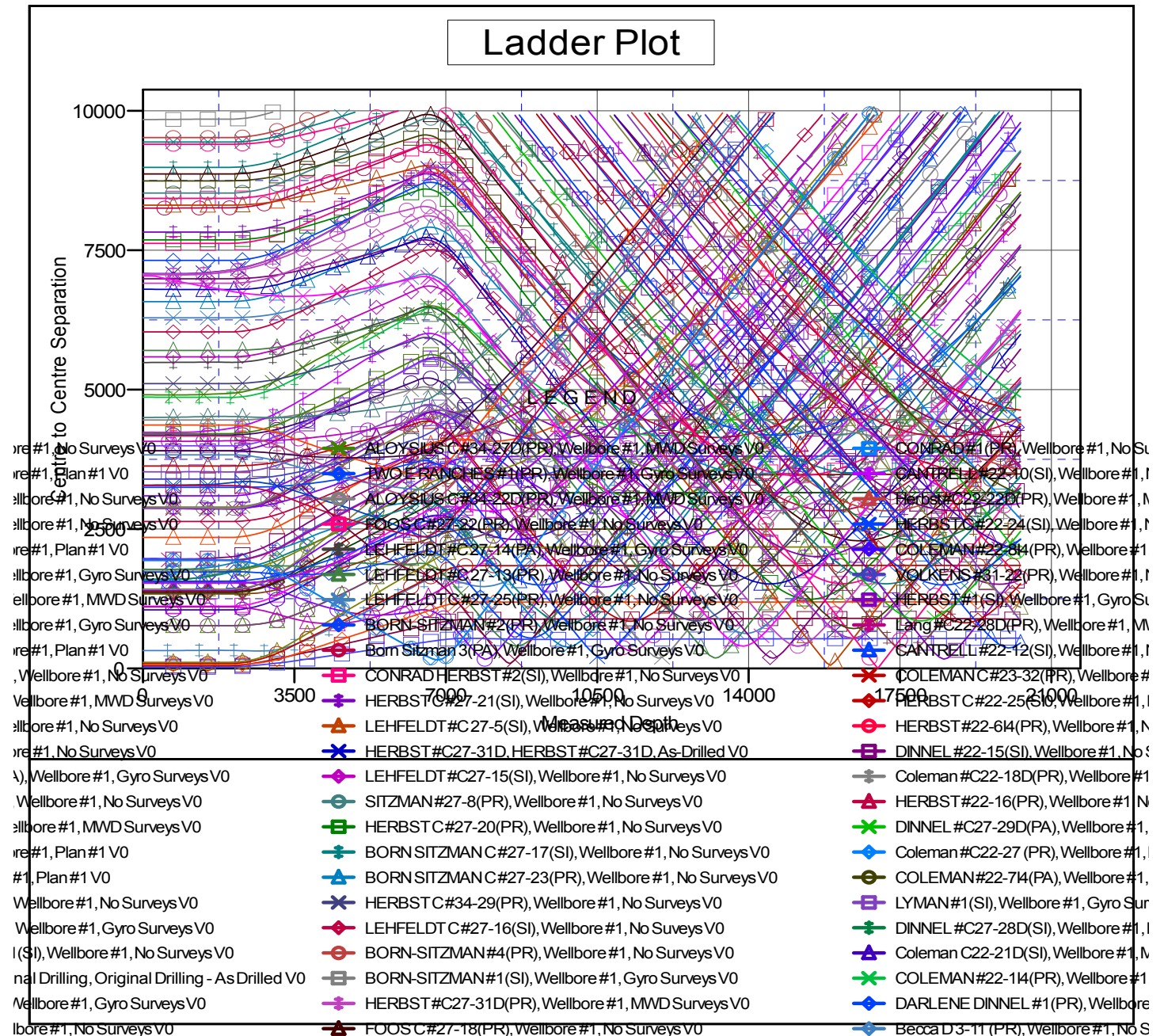
Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
D Section 03						
Becca D 3-11 (PR) - Wellbore #1 - No Surveys	6,410.80	6,030.94	3,205.15	2,936.11	11.913	CC
Becca D 3-11 (PR) - Wellbore #1 - No Surveys	6,450.00	6,066.65	3,206.32	2,935.60	11.844	ES
Becca D 3-11 (PR) - Wellbore #1 - No Surveys	6,700.00	6,306.16	3,267.06	2,985.47	11.602	SF
Becca D 3-12 (PR) - Wellbore #1 - No Surveys	6,518.62	6,125.61	2,997.14	2,725.36	11.028	CC
Becca D 3-12 (PR) - Wellbore #1 - No Surveys	6,550.00	6,154.42	2,997.94	2,724.81	10.976	ES
Becca D 3-12 (PR) - Wellbore #1 - No Surveys	6,800.00	6,375.38	3,060.23	2,776.91	10.801	SF
Becca D03-32D - Wellbore #1 - Wellbore #1 - As Drilled	6,590.83	6,354.12	2,356.09	2,278.29	30.284	CC
Becca D03-32D - Wellbore #1 - Wellbore #1 - As Drilled	6,600.00	6,360.35	2,356.16	2,278.27	30.250	ES
Becca D03-32D - Wellbore #1 - Wellbore #1 - As Drilled	6,750.00	6,464.39	2,376.97	2,297.66	29.969	SF
Cody D #03-28(SI) - Wellbore #1 - No Surveys	2,000.00	1,969.00	768.07	743.95	31.845	CC
Cody D #03-28(SI) - Wellbore #1 - No Surveys	2,100.00	2,068.98	768.63	743.30	30.337	ES
Cody D #03-28(SI) - Wellbore #1 - No Surveys	3,329.61	3,251.38	911.97	871.87	22.744	SF
Cody D 3-20 (PR) - Wellbore #1 - No Surveys	6,450.80	6,065.38	2,360.94	2,090.74	8.738	CC
Cody D 3-20 (PR) - Wellbore #1 - No Surveys	6,500.00	6,110.50	2,362.87	2,090.55	8.677	ES
Cody D 3-20 (PR) - Wellbore #1 - No Surveys	6,700.00	6,308.16	2,409.50	2,128.18	8.565	SF
Cody D 3-28 (SI) - Wellbore #1 - No Surveys	2,000.00	1,985.00	768.07	684.05	9.142	CC
Cody D 3-28 (SI) - Wellbore #1 - No Surveys	2,400.00	2,383.70	777.50	676.18	7.674	ES
Cody D 3-28 (SI) - Wellbore #1 - No Surveys	3,300.00	3,240.84	904.11	765.19	6.508	SF
CODY WHITE #D 3-2(PR) - Wellbore #1 - No Surveys	2,000.00	1,965.00	1,531.12	1,507.03	63.573	CC
CODY WHITE #D 3-2(PR) - Wellbore #1 - No Surveys	2,100.00	2,064.98	1,531.55	1,506.25	60.532	ES
CODY WHITE #D 3-2(PR) - Wellbore #1 - No Surveys	6,450.00	6,038.65	2,555.04	2,476.15	32.390	SF
Cody White D 3-1 (PR) - Wellbore #1 - No Surveys	2,000.00	1,974.00	2,635.73	2,552.04	31.492	CC
Cody White D 3-1 (PR) - Wellbore #1 - No Surveys	2,200.00	2,173.84	2,639.75	2,547.38	28.579	ES
Cody White D 3-1 (PR) - Wellbore #1 - No Surveys	7,150.00	6,601.86	4,132.26	3,842.69	14.270	SF
Cody White D 3-2 (PR) - Wellbore #1 - No Surveys	2,000.00	1,975.00	1,531.12	1,447.38	18.285	CC
Cody White D 3-2 (PR) - Wellbore #1 - No Surveys	2,500.00	2,472.47	1,542.48	1,437.15	14.644	ES
Cody White D 3-2 (PR) - Wellbore #1 - No Surveys	6,500.00	6,105.50	2,574.41	2,306.01	9.592	SF
Cody White D 3-8 (PR) - Wellbore #1 - No Surveys	2,000.00	1,976.00	3,395.68	3,311.91	40.533	CC
Cody White D 3-8 (PR) - Wellbore #1 - No Surveys	2,500.00	2,473.47	3,406.65	3,301.28	32.330	ES
Cody White D 3-8 (PR) - Wellbore #1 - No Surveys	6,850.00	6,402.93	4,328.64	4,045.40	15.283	SF
Guttersen D 03-25 (PR) - Wellbore #1 - No Surveys	6,470.50	6,085.42	3,456.65	3,185.87	12.765	CC
Guttersen D 03-25 (PR) - Wellbore #1 - No Surveys	6,500.00	6,112.50	3,457.34	3,185.29	12.708	ES
Guttersen D 03-25 (PR) - Wellbore #1 - No Surveys	6,700.00	6,306.16	3,498.07	3,217.18	12.453	SF
HSR-GITTLEIN, D #4-3(PR) - Wellbore #1 - No Surveys	6,814.56	6,370.36	154.72	74.07	1.918	CC, ES, SF
HSR-Gittlein, D 4-3 (PR) - Wellbore #1 - No Surveys	6,814.56	6,380.36	154.72	-123.35	0.556	Level 1, CC, ES, SF
HSR-Gittlein, L 3-3 (PR) - Wellbore #1 - No Surveys	4,352.81	4,176.35	802.20	619.92	4.401	CC
HSR-Gittlein, L 3-3 (PR) - Wellbore #1 - No Surveys	4,500.00	4,307.97	804.90	616.51	4.272	ES
HSR-Gittlein, L 3-3 (PR) - Wellbore #1 - No Surveys	5,100.00	4,844.50	869.13	656.13	4.080	SF
HSR-Guttersen "A" 9-3 (SI) - Wellbore #1 - Gyro Surveys	3,108.40	3,100.00	4,498.66	4,477.07	208.382	CC
HSR-Guttersen "A" 9-3 (SI) - Wellbore #1 - Gyro Surveys	3,200.00	3,150.12	4,499.20	4,477.05	203.072	ES
HSR-Guttersen "A" 9-3 (SI) - Wellbore #1 - Gyro Surveys	6,750.00	6,401.44	4,896.31	4,843.14	92.081	SF
HSR-Guttersen 10-3 (SI) - Wellbore #1 - No Surveys	4,839.76	4,620.79	3,777.93	3,574.97	18.614	CC
HSR-Guttersen 10-3 (SI) - Wellbore #1 - No Surveys	5,700.00	5,409.97	3,797.50	3,557.68	15.835	ES
HSR-Guttersen 10-3 (SI) - Wellbore #1 - No Surveys	6,750.00	6,332.26	3,958.20	3,675.67	14.010	SF

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

Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Gittlein C22-785
Project:	Mustang	TVD Reference:	KB @ 4730.00ft
Reference Site:	C Section 34	MD Reference:	KB @ 4730.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Gittlein C22-785	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

Grid Convergence at Surface is: 0.62°



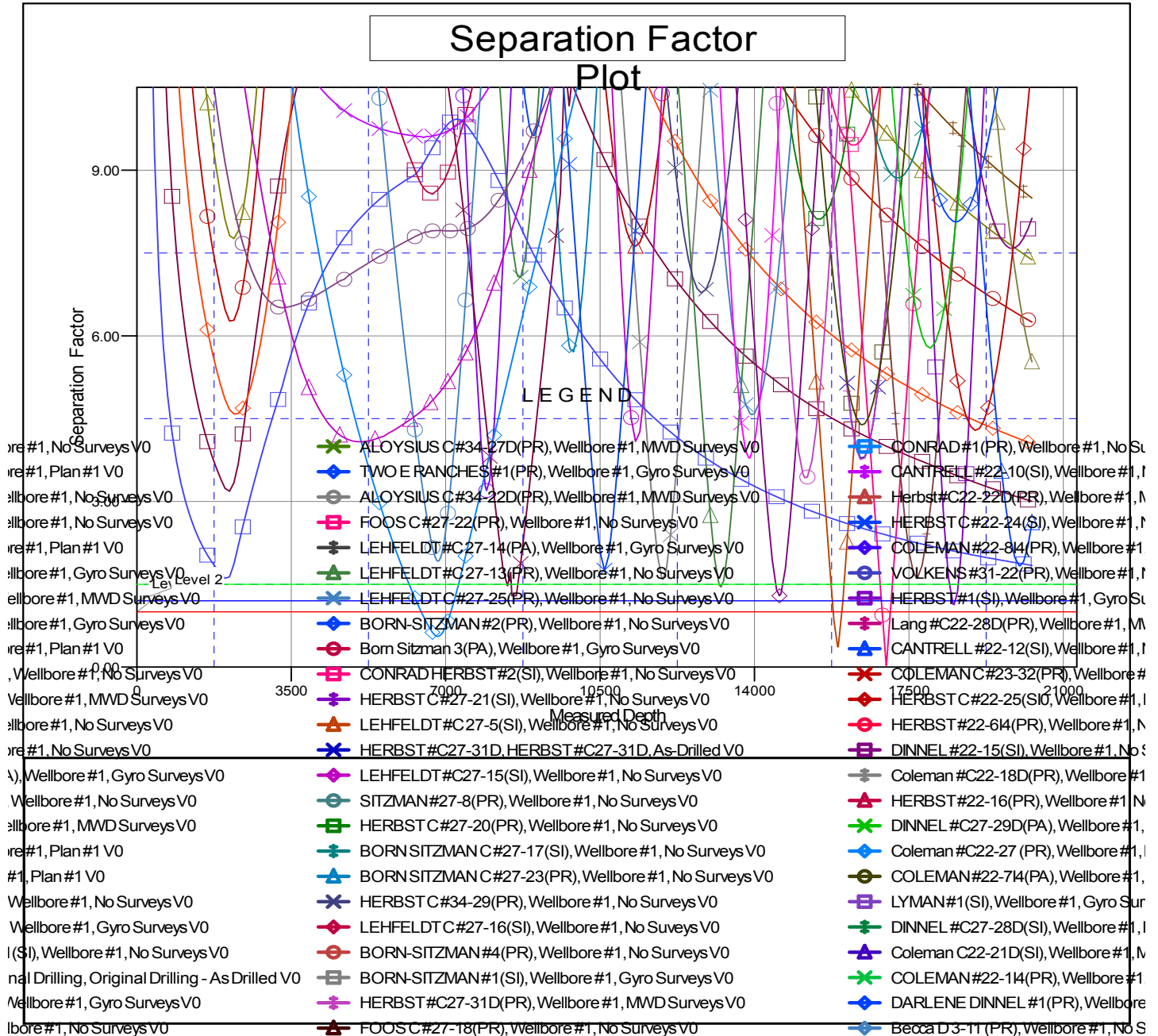
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Gittlein C22-785
Project:	Mustang	TVD Reference:	KB @ 4730.00ft
Reference Site:	C Section 34	MD Reference:	KB @ 4730.00ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Gittlein C22-785	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 KB @ 4730.00ft
Offset Depths are relative to Offset Datum
Central Meridian is -105.5000000

Coordinates are relative to: Gittlein C22-785
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