

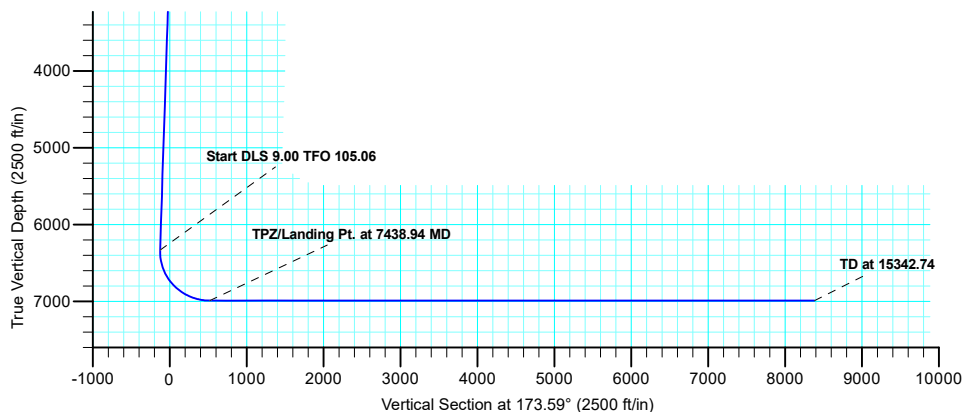
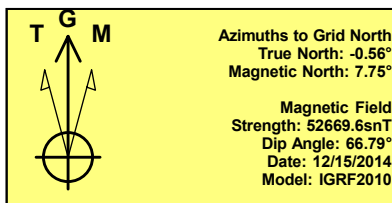
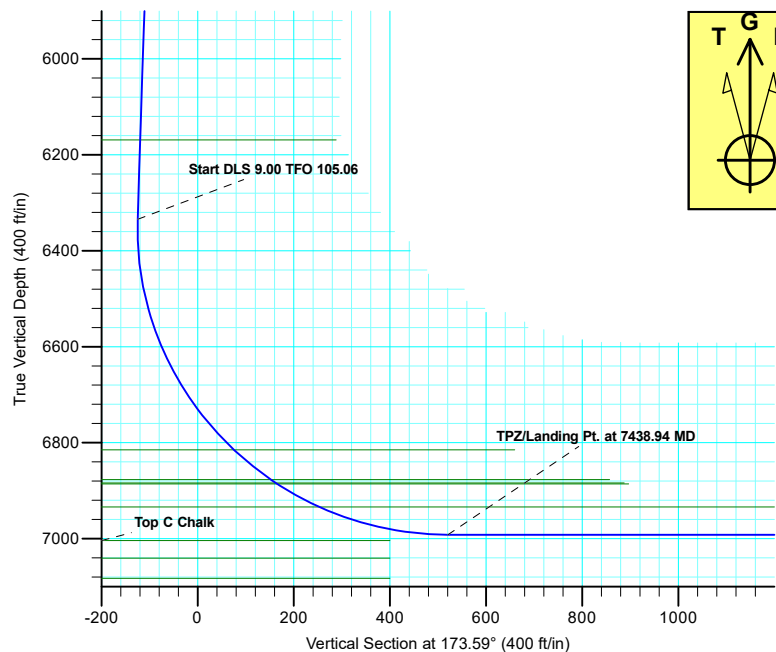
Project: Mustang
Site: H Section 26
Well: Hurley H35-755
Wellbore: Wellbore #1
Design: Plan #2

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

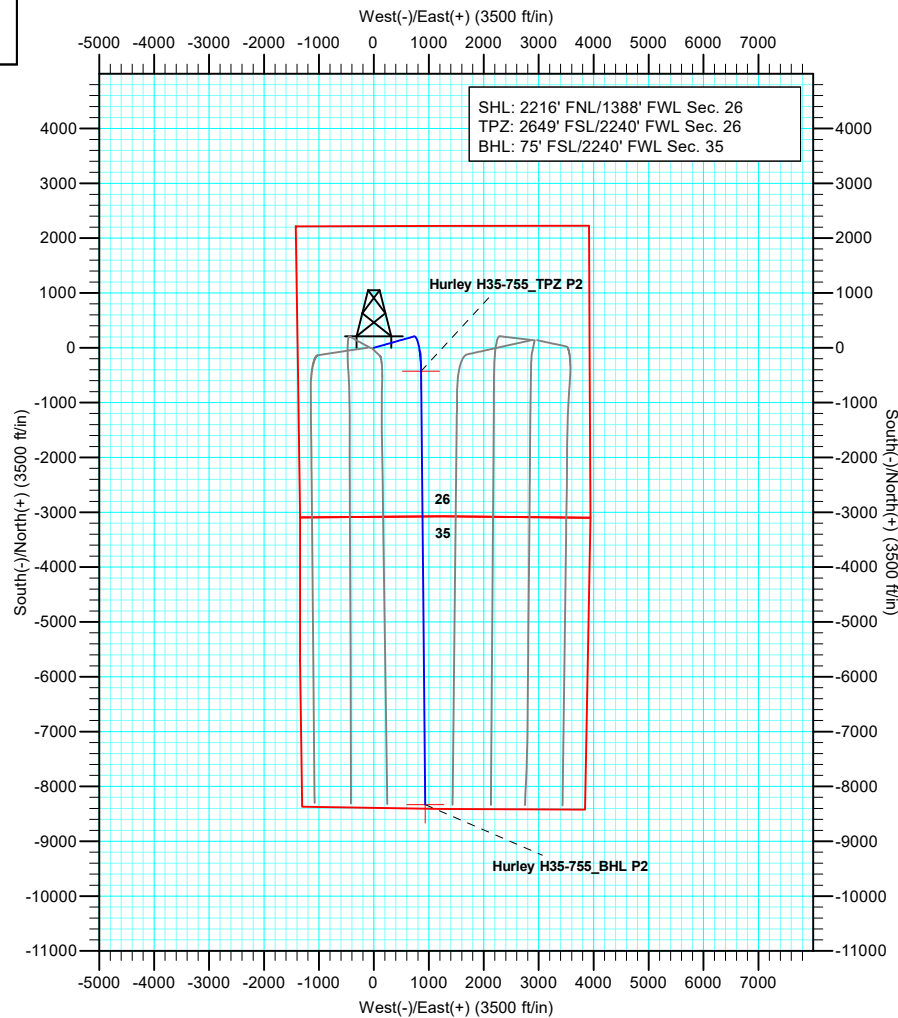
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
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	2755.37	11.11	74.11	2751.90	14.69	51.61	2.00	74.11	-8.84
4	6406.49	11.11	74.11	6334.63	207.24	728.13	0.00	0.00	-124.72
5	7438.94	90.00	179.45	6992.00	-427.32	858.74	9.00	105.06	520.45
6	15342.74	90.00	179.45	6992.00	-8330.75	935.22	0.00	0.00	8383.08



WELL DETAILS: Hurley H35-755

+N/-S	+E/-W	Ground Level: Northing	Ground Level: Easting	Ground Level: Latitude	Ground Level: Longitude	Slot
0.00	0.00	1315973.24	3241560.15	40.1975099	-104.6352400	



Plan: Plan #2 (Hurley H35-755/Wellbore #1)

Created By: Shelly C. Peterkin Date: 15:46, May 28 2019

Northern Region - DJ Basin

Mustang

H Section 26

Hurley H35-755

Wellbore #1

Plan: Plan #2

Standard Planning Report

28 May, 2019

Noble Energy, Inc.

Planning Report

Database:	EDMP	Local Co-ordinate Reference:	Well Hurley H35-755
Company:	Northern Region - DJ Basin	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Project:	Mustang	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site:	H Section 26	North Reference:	Grid
Well:	Hurley H35-755	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

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		H Section 26			
Site Position:		Northing:	1,313,365.35 usft	Latitude:	40.1903751
From:	Map	Easting:	3,240,670.89 usft	Longitude:	-104.6385139
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.56 °

Well	Hurley H35-755					
Well Position	+N/-S	2,607.89 ft	Northing:	1,315,973.24 usft	Latitude:	40.1975100
	+E/-W	889.26 ft	Easting:	3,241,560.15 usft	Longitude:	-104.6352400
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	4,822.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/15/2014	8.31	66.79	52,669.64029546

Design	Plan #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	173.59

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	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	
2,755.37	11.11	74.11	2,751.90	14.69	51.61	2.00	2.00	0.00	74.11	
6,406.49	11.11	74.11	6,334.63	207.24	728.13	0.00	0.00	0.00	0.00	
7,438.94	90.00	179.45	6,992.00	-427.32	858.74	9.00	7.64	10.20	105.06	Hurley H35-755_TPZ
15,342.74	90.00	179.45	6,992.00	-8,330.75	935.22	0.00	0.00	0.00	0.00	Hurley H35-755_BHL

Noble Energy, Inc.

Planning Report

Database:	EDMP	Local Co-ordinate Reference:	Well Hurley H35-755
Company:	Northern Region - DJ Basin	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Project:	Mustang	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site:	H Section 26	North Reference:	Grid
Well:	Hurley H35-755	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

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
618.00	0.00	0.00	618.00	0.00	0.00	0.00	0.00	0.00	0.00
Pierre									
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
770.00	0.00	0.00	770.00	0.00	0.00	0.00	0.00	0.00	0.00
Upper Pierre Aquifer Top									
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
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
1,658.00	0.00	0.00	1,658.00	0.00	0.00	0.00	0.00	0.00	0.00
Upper Pierre Aquifer Base									
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
Start Build 2.00									
2,300.00	2.00	74.11	2,299.98	0.48	1.68	-0.29	2.00	2.00	0.00
2,400.00	4.00	74.11	2,399.84	1.91	6.71	-1.15	2.00	2.00	0.00
2,500.00	6.00	74.11	2,499.45	4.30	15.09	-2.59	2.00	2.00	0.00
2,600.00	8.00	74.11	2,598.70	7.63	26.81	-4.59	2.00	2.00	0.00
2,700.00	10.00	74.11	2,697.47	11.91	41.86	-7.17	2.00	2.00	0.00
2,755.37	11.11	74.11	2,751.90	14.69	51.61	-8.84	2.00	2.00	0.00
Start 3651.12 hold at 2755.37 MD									
2,800.00	11.11	74.11	2,795.69	17.04	59.88	-10.26	0.00	0.00	0.00
2,900.00	11.11	74.11	2,893.82	22.32	78.41	-13.43	0.00	0.00	0.00
3,000.00	11.11	74.11	2,991.95	27.59	96.94	-16.60	0.00	0.00	0.00
3,100.00	11.11	74.11	3,090.07	32.87	115.47	-19.78	0.00	0.00	0.00
3,200.00	11.11	74.11	3,188.20	38.14	134.00	-22.95	0.00	0.00	0.00
3,300.00	11.11	74.11	3,286.33	43.41	152.53	-26.13	0.00	0.00	0.00
3,400.00	11.11	74.11	3,384.45	48.69	171.06	-29.30	0.00	0.00	0.00
3,500.00	11.11	74.11	3,482.58	53.96	189.59	-32.47	0.00	0.00	0.00
3,600.00	11.11	74.11	3,580.71	59.24	208.11	-35.65	0.00	0.00	0.00
3,700.00	11.11	74.11	3,678.83	64.51	226.64	-38.82	0.00	0.00	0.00
3,800.00	11.11	74.11	3,776.96	69.78	245.17	-42.00	0.00	0.00	0.00
3,900.00	11.11	74.11	3,875.09	75.06	263.70	-45.17	0.00	0.00	0.00
3,950.87	11.11	74.11	3,925.00	77.74	273.13	-46.78	0.00	0.00	0.00
Parkman									
4,000.00	11.11	74.11	3,973.21	80.33	282.23	-48.34	0.00	0.00	0.00
4,100.00	11.11	74.11	4,071.34	85.60	300.76	-51.52	0.00	0.00	0.00

Noble Energy, Inc.

Planning Report

Database:	EDMP	Local Co-ordinate Reference:	Well Hurley H35-755
Company:	Northern Region - DJ Basin	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Project:	Mustang	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site:	H Section 26	North Reference:	Grid
Well:	Hurley H35-755	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

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)
4,200.00	11.11	74.11	4,169.47	90.88	319.29	-54.69	0.00	0.00	0.00
4,300.00	11.11	74.11	4,267.59	96.15	337.82	-57.86	0.00	0.00	0.00
4,400.00	11.11	74.11	4,365.72	101.43	356.35	-61.04	0.00	0.00	0.00
4,500.00	11.11	74.11	4,463.85	106.70	374.87	-64.21	0.00	0.00	0.00
4,553.15	11.11	74.11	4,516.00	109.50	384.72	-65.90	0.00	0.00	0.00
Sussex									
4,600.00	11.11	74.11	4,561.97	111.97	393.40	-67.39	0.00	0.00	0.00
4,700.00	11.11	74.11	4,660.10	117.25	411.93	-70.56	0.00	0.00	0.00
4,800.00	11.11	74.11	4,758.23	122.52	430.46	-73.73	0.00	0.00	0.00
4,900.00	11.11	74.11	4,856.35	127.79	448.99	-76.91	0.00	0.00	0.00
5,000.00	11.11	74.11	4,954.48	133.07	467.52	-80.08	0.00	0.00	0.00
5,100.00	11.11	74.11	5,052.61	138.34	486.05	-83.25	0.00	0.00	0.00
5,200.00	11.11	74.11	5,150.74	143.62	504.58	-86.43	0.00	0.00	0.00
5,248.17	11.11	74.11	5,198.00	146.16	513.50	-87.96	0.00	0.00	0.00
Shannon									
5,300.00	11.11	74.11	5,248.86	148.89	523.11	-89.60	0.00	0.00	0.00
5,400.00	11.11	74.11	5,346.99	154.16	541.63	-92.78	0.00	0.00	0.00
5,500.00	11.11	74.11	5,445.12	159.44	560.16	-95.95	0.00	0.00	0.00
5,600.00	11.11	74.11	5,543.24	164.71	578.69	-99.12	0.00	0.00	0.00
5,700.00	11.11	74.11	5,641.37	169.99	597.22	-102.30	0.00	0.00	0.00
5,800.00	11.11	74.11	5,739.50	175.26	615.75	-105.47	0.00	0.00	0.00
5,900.00	11.11	74.11	5,837.62	180.53	634.28	-108.65	0.00	0.00	0.00
6,000.00	11.11	74.11	5,935.75	185.81	652.81	-111.82	0.00	0.00	0.00
6,100.00	11.11	74.11	6,033.88	191.08	671.34	-114.99	0.00	0.00	0.00
6,200.00	11.11	74.11	6,132.00	196.35	689.87	-118.17	0.00	0.00	0.00
6,237.70	11.11	74.11	6,169.00	198.34	696.85	-119.36	0.00	0.00	0.00
Teepee Buttes									
6,300.00	11.11	74.11	6,230.13	201.63	708.39	-121.34	0.00	0.00	0.00
6,406.49	11.11	74.11	6,334.63	207.24	728.13	-124.72	0.00	0.00	0.00
Start DLS 9.00 TFO 105.06									
6,450.00	10.77	94.78	6,377.36	208.05	736.21	-124.62	9.00	-0.78	47.51
6,500.00	12.03	116.79	6,426.40	205.31	745.52	-120.86	9.00	2.53	44.02
6,550.00	14.62	132.90	6,475.06	198.67	754.80	-113.22	9.00	5.17	32.21
6,600.00	17.96	143.71	6,523.06	188.15	763.99	-101.75	9.00	6.69	21.62
6,650.00	21.71	151.06	6,570.09	173.84	773.03	-86.51	9.00	7.51	14.70
6,700.00	25.70	156.28	6,615.87	155.81	781.88	-67.61	9.00	7.97	10.44
6,750.00	29.82	160.16	6,660.11	134.18	790.46	-45.15	9.00	8.25	7.76
6,800.00	34.03	163.16	6,702.54	109.08	798.74	-19.29	9.00	8.42	6.01
6,850.00	38.30	165.58	6,742.89	80.66	806.65	9.83	9.00	8.54	4.82
6,900.00	42.61	167.57	6,780.93	49.11	814.16	42.03	9.00	8.62	3.99
6,947.94	46.77	169.19	6,815.00	16.09	820.93	75.59	9.00	8.68	3.39
Sharon Springs									
6,950.00	46.95	169.26	6,816.41	14.61	821.21	77.09	9.00	8.70	3.14
7,000.00	51.32	170.73	6,849.12	-22.62	827.77	114.82	9.00	8.72	2.93
7,046.73	55.41	171.94	6,877.00	-59.68	833.41	152.28	9.00	8.75	2.60
Top A Chalk									
7,050.00	55.69	172.02	6,878.85	-62.35	833.78	154.98	9.00	8.77	2.46
7,059.23	56.50	172.25	6,884.00	-69.94	834.83	162.64	9.00	8.77	2.43
Top A Marl									
7,062.87	56.82	172.33	6,886.00	-72.95	835.24	165.68	9.00	8.77	2.40
Top B Chalk									
7,100.00	60.08	173.19	6,905.42	-104.34	839.22	197.31	9.00	8.78	2.31
7,150.00	64.48	174.26	6,928.67	-148.32	844.05	241.56	9.00	8.80	2.14

Noble Energy, Inc.

Planning Report

Database:	EDMP	Local Co-ordinate Reference:	Well Hurley H35-755
Company:	Northern Region - DJ Basin	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Project:	Mustang	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site:	H Section 26	North Reference:	Grid
Well:	Hurley H35-755	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

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)
7,162.62	65.59	174.52	6,934.00	-159.71	845.17	253.00	9.00	8.81	2.04
Top B Marl									
7,200.00	68.89	175.25	6,948.46	-194.04	848.24	287.46	9.00	8.81	1.97
7,250.00	73.30	176.19	6,964.65	-241.20	851.76	334.71	9.00	8.82	1.87
7,300.00	77.72	177.08	6,977.16	-289.51	854.59	383.04	9.00	8.83	1.79
7,350.00	82.14	177.95	6,985.91	-338.68	856.73	432.14	9.00	8.84	1.73
7,400.00	86.56	178.79	6,990.83	-388.40	858.14	481.71	9.00	8.84	1.69
7,438.94	90.00	179.45	6,992.00	-427.32	858.74	520.45	9.00	8.84	1.68
TPZ/Landing Pt. at 7438.94 MD									
7,500.00	90.00	179.45	6,992.00	-488.37	859.33	581.19	0.00	0.00	0.00
7,600.00	90.00	179.45	6,992.00	-588.37	860.30	680.67	0.00	0.00	0.00
7,700.00	90.00	179.45	6,992.00	-688.36	861.26	780.15	0.00	0.00	0.00
7,800.00	90.00	179.45	6,992.00	-788.36	862.23	879.63	0.00	0.00	0.00
7,900.00	90.00	179.45	6,992.00	-888.35	863.20	979.11	0.00	0.00	0.00
8,000.00	90.00	179.45	6,992.00	-988.35	864.17	1,078.59	0.00	0.00	0.00
8,100.00	90.00	179.45	6,992.00	-1,088.35	865.13	1,178.07	0.00	0.00	0.00
8,200.00	90.00	179.45	6,992.00	-1,188.34	866.10	1,277.55	0.00	0.00	0.00
8,300.00	90.00	179.45	6,992.00	-1,288.34	867.07	1,377.02	0.00	0.00	0.00
8,400.00	90.00	179.45	6,992.00	-1,388.33	868.04	1,476.50	0.00	0.00	0.00
8,500.00	90.00	179.45	6,992.00	-1,488.33	869.01	1,575.98	0.00	0.00	0.00
8,600.00	90.00	179.45	6,992.00	-1,588.32	869.97	1,675.46	0.00	0.00	0.00
8,700.00	90.00	179.45	6,992.00	-1,688.32	870.94	1,774.94	0.00	0.00	0.00
8,800.00	90.00	179.45	6,992.00	-1,788.31	871.91	1,874.42	0.00	0.00	0.00
8,900.00	90.00	179.45	6,992.00	-1,888.31	872.88	1,973.90	0.00	0.00	0.00
9,000.00	90.00	179.45	6,992.00	-1,988.30	873.84	2,073.38	0.00	0.00	0.00
9,100.00	90.00	179.45	6,992.00	-2,088.30	874.81	2,172.86	0.00	0.00	0.00
9,200.00	90.00	179.45	6,992.00	-2,188.29	875.78	2,272.34	0.00	0.00	0.00
9,300.00	90.00	179.45	6,992.00	-2,288.29	876.75	2,371.82	0.00	0.00	0.00
9,400.00	90.00	179.45	6,992.00	-2,388.28	877.71	2,471.29	0.00	0.00	0.00
9,500.00	90.00	179.45	6,992.00	-2,488.28	878.68	2,570.77	0.00	0.00	0.00
9,600.00	90.00	179.45	6,992.00	-2,588.28	879.65	2,670.25	0.00	0.00	0.00
9,700.00	90.00	179.45	6,992.00	-2,688.27	880.62	2,769.73	0.00	0.00	0.00
9,800.00	90.00	179.45	6,992.00	-2,788.27	881.59	2,869.21	0.00	0.00	0.00
9,900.00	90.00	179.45	6,992.00	-2,888.26	882.55	2,968.69	0.00	0.00	0.00
10,000.00	90.00	179.45	6,992.00	-2,988.26	883.52	3,068.17	0.00	0.00	0.00
10,100.00	90.00	179.45	6,992.00	-3,088.25	884.49	3,167.65	0.00	0.00	0.00
10,200.00	90.00	179.45	6,992.00	-3,188.25	885.46	3,267.13	0.00	0.00	0.00
10,300.00	90.00	179.45	6,992.00	-3,288.24	886.42	3,366.61	0.00	0.00	0.00
10,400.00	90.00	179.45	6,992.00	-3,388.24	887.39	3,466.09	0.00	0.00	0.00
10,500.00	90.00	179.45	6,992.00	-3,488.23	888.36	3,565.56	0.00	0.00	0.00
10,600.00	90.00	179.45	6,992.00	-3,588.23	889.33	3,665.04	0.00	0.00	0.00
10,700.00	90.00	179.45	6,992.00	-3,688.22	890.30	3,764.52	0.00	0.00	0.00
10,800.00	90.00	179.45	6,992.00	-3,788.22	891.26	3,864.00	0.00	0.00	0.00
10,900.00	90.00	179.45	6,992.00	-3,888.21	892.23	3,963.48	0.00	0.00	0.00
11,000.00	90.00	179.45	6,992.00	-3,988.21	893.20	4,062.96	0.00	0.00	0.00
11,100.00	90.00	179.45	6,992.00	-4,088.20	894.17	4,162.44	0.00	0.00	0.00
11,200.00	90.00	179.45	6,992.00	-4,188.20	895.13	4,261.92	0.00	0.00	0.00
11,300.00	90.00	179.45	6,992.00	-4,288.20	896.10	4,361.40	0.00	0.00	0.00
11,400.00	90.00	179.45	6,992.00	-4,388.19	897.07	4,460.88	0.00	0.00	0.00
11,500.00	90.00	179.45	6,992.00	-4,488.19	898.04	4,560.35	0.00	0.00	0.00
11,600.00	90.00	179.45	6,992.00	-4,588.18	899.00	4,659.83	0.00	0.00	0.00
11,700.00	90.00	179.45	6,992.00	-4,688.18	899.97	4,759.31	0.00	0.00	0.00
11,800.00	90.00	179.45	6,992.00	-4,788.17	900.94	4,858.79	0.00	0.00	0.00
11,900.00	90.00	179.45	6,992.00	-4,888.17	901.91	4,958.27	0.00	0.00	0.00

Noble Energy, Inc.

Planning Report

Database:	EDMP	Local Co-ordinate Reference:	Well Hurley H35-755
Company:	Northern Region - DJ Basin	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Project:	Mustang	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site:	H Section 26	North Reference:	Grid
Well:	Hurley H35-755	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

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)
12,000.00	90.00	179.45	6,992.00	-4,988.16	902.88	5,057.75	0.00	0.00	0.00
12,100.00	90.00	179.45	6,992.00	-5,088.16	903.84	5,157.23	0.00	0.00	0.00
12,200.00	90.00	179.45	6,992.00	-5,188.15	904.81	5,256.71	0.00	0.00	0.00
12,300.00	90.00	179.45	6,992.00	-5,288.15	905.78	5,356.19	0.00	0.00	0.00
12,400.00	90.00	179.45	6,992.00	-5,388.14	906.75	5,455.67	0.00	0.00	0.00
12,500.00	90.00	179.45	6,992.00	-5,488.14	907.71	5,555.15	0.00	0.00	0.00
12,600.00	90.00	179.45	6,992.00	-5,588.13	908.68	5,654.62	0.00	0.00	0.00
12,700.00	90.00	179.45	6,992.00	-5,688.13	909.65	5,754.10	0.00	0.00	0.00
12,800.00	90.00	179.45	6,992.00	-5,788.13	910.62	5,853.58	0.00	0.00	0.00
12,900.00	90.00	179.45	6,992.00	-5,888.12	911.58	5,953.06	0.00	0.00	0.00
13,000.00	90.00	179.45	6,992.00	-5,988.12	912.55	6,052.54	0.00	0.00	0.00
13,100.00	90.00	179.45	6,992.00	-6,088.11	913.52	6,152.02	0.00	0.00	0.00
13,200.00	90.00	179.45	6,992.00	-6,188.11	914.49	6,251.50	0.00	0.00	0.00
13,300.00	90.00	179.45	6,992.00	-6,288.10	915.46	6,350.98	0.00	0.00	0.00
13,400.00	90.00	179.45	6,992.00	-6,388.10	916.42	6,450.46	0.00	0.00	0.00
13,500.00	90.00	179.45	6,992.00	-6,488.09	917.39	6,549.94	0.00	0.00	0.00
13,600.00	90.00	179.45	6,992.00	-6,588.09	918.36	6,649.42	0.00	0.00	0.00
13,700.00	90.00	179.45	6,992.00	-6,688.08	919.33	6,748.89	0.00	0.00	0.00
13,800.00	90.00	179.45	6,992.00	-6,788.08	920.29	6,848.37	0.00	0.00	0.00
13,900.00	90.00	179.45	6,992.00	-6,888.07	921.26	6,947.85	0.00	0.00	0.00
14,000.00	90.00	179.45	6,992.00	-6,988.07	922.23	7,047.33	0.00	0.00	0.00
14,100.00	90.00	179.45	6,992.00	-7,088.06	923.20	7,146.81	0.00	0.00	0.00
14,200.00	90.00	179.45	6,992.00	-7,188.06	924.16	7,246.29	0.00	0.00	0.00
14,300.00	90.00	179.45	6,992.00	-7,288.06	925.13	7,345.77	0.00	0.00	0.00
14,400.00	90.00	179.45	6,992.00	-7,388.05	926.10	7,445.25	0.00	0.00	0.00
14,500.00	90.00	179.45	6,992.00	-7,488.05	927.07	7,544.73	0.00	0.00	0.00
14,600.00	90.00	179.45	6,992.00	-7,588.04	928.04	7,644.21	0.00	0.00	0.00
14,700.00	90.00	179.45	6,992.00	-7,688.04	929.00	7,743.69	0.00	0.00	0.00
14,800.00	90.00	179.45	6,992.00	-7,788.03	929.97	7,843.16	0.00	0.00	0.00
14,900.00	90.00	179.45	6,992.00	-7,888.03	930.94	7,942.64	0.00	0.00	0.00
15,000.00	90.00	179.45	6,992.00	-7,988.02	931.91	8,042.12	0.00	0.00	0.00
15,100.00	90.00	179.45	6,992.00	-8,088.02	932.87	8,141.60	0.00	0.00	0.00
15,200.00	90.00	179.45	6,992.00	-8,188.01	933.84	8,241.08	0.00	0.00	0.00
15,300.00	90.00	179.45	6,992.00	-8,288.01	934.81	8,340.56	0.00	0.00	0.00
15,342.74	90.00	179.45	6,992.00	-8,330.75	935.22	8,383.08	0.00	0.00	0.00
TD at 15342.74									

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									
Hurley H35-755_TPZ P2	0.00	0.00	6,992.00	-427.32	858.74	1,315,545.92	3,242,418.88	40.1963140	-104.6321810
- plan hits target center									
- Point									
Hurley H35-755_BHL P2	0.00	0.00	6,992.00	-8,330.75	935.22	1,307,642.51	3,242,495.37	40.1746171	-104.6321841
- plan hits target center									
- Point									

Noble Energy, Inc.

Planning Report

Database:	EDMP	Local Co-ordinate Reference:	Well Hurley H35-755
Company:	Northern Region - DJ Basin	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Project:	Mustang	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site:	H Section 26	North Reference:	Grid
Well:	Hurley H35-755	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
618.00	618.00	Pierre				
770.00	770.00	Upper Pierre Aquifer Top				
1,658.00	1,658.00	Upper Pierre Aquifer Base				
3,950.87	3,925.00	Parkman				
4,553.15	4,516.00	Sussex				
5,248.17	5,198.00	Shannon				
6,237.70	6,169.00	Teepee Buttes				
6,947.94	6,815.00	Sharon Springs				
7,046.73	6,877.00	Top A Chalk				
7,059.23	6,884.00	Top A Marl				
7,062.87	6,886.00	Top B Chalk				
7,162.62	6,934.00	Top B Marl				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
2,200.00	2,200.00	0.00	0.00	Start Build 2.00	
2,755.37	2,751.90	14.69	51.61	Start 3651.12 hold at 2755.37 MD	
6,406.49	6,334.63	207.24	728.13	Start DLS 9.00 TFO 105.06	
7,438.94	6,992.00	-427.32	858.74	TPZ/Landing Pt. at 7438.94 MD	
15,342.74	6,992.00	-8,330.75	935.22	TD at 15342.74	

Northern Region - DJ Basin

Mustang

H Section 26

Hurley H35-755

Wellbore #1

Plan #2

Anticollision Summary Report

29 May, 2019

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Hurley H35-755
Project:	Mustang	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Reference Site:	H Section 26	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Hurley H35-755	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 #2	Offset TVD Reference:	Offset Datum

Reference	Plan #2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD + Stations Interval 100.00ft	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	5/29/2019		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	15,342.74	Plan #2 (Wellbore #1)	OWSG MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction

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						
H Section 23						
Eachus 32-23 - Original Drilling - Original Drilling - As Dri	6,449.60	6,200.01	5,443.51	5,398.64	121.321	CC
Eachus 32-23 - Original Drilling - Original Drilling - As Dri	6,450.00	6,200.01	5,443.51	5,398.64	121.316	ES
Eachus 32-23 - Original Drilling - Original Drilling - As Dri	6,850.00	6,770.00	5,551.51	5,503.42	115.442	SF
Eachus 41-23 (PA) - Original Drilling - Original Drilling - A	6,484.92	6,398.63	6,961.79	6,810.37	45.977	CC
Eachus 41-23 (PA) - Original Drilling - Original Drilling - A	6,500.00	6,413.40	6,961.95	6,810.18	45.872	ES
Eachus 41-23 (PA) - Original Drilling - Original Drilling - A	7,000.00	6,836.12	7,147.90	6,986.25	44.217	SF
Eachus UPRR 31-23 - Original Drilling - Original Drilling -	6,458.50	6,318.34	6,726.23	6,643.14	80.955	CC
Eachus UPRR 31-23 - Original Drilling - Original Drilling -	6,500.00	6,359.13	6,727.56	6,642.91	79.476	ES
Eachus UPRR 31-23 - Original Drilling - Original Drilling -	7,200.00	6,881.55	7,106.74	7,002.36	68.085	SF
Eachus UPRR 42-23 (PA) - Original Drilling - Original Dri	6,497.11	6,420.57	5,763.76	5,611.87	37.948	CC
Eachus UPRR 42-23 (PA) - Original Drilling - Original Dri	6,500.00	6,423.40	5,763.77	5,611.81	37.931	ES
Eachus UPRR 42-23 (PA) - Original Drilling - Original Dri	6,950.00	6,813.41	5,904.80	5,743.70	36.653	SF
HSR Alberstein 16-23 - Original Drilling - Original Drilling	6,532.98	6,436.05	3,737.79	3,691.93	81.491	CC, ES
HSR Alberstein 16-23 - Original Drilling - Original Drilling	6,850.00	6,753.73	3,797.42	3,749.44	79.147	SF
HSR Ashley 15-23A - Original Drilling - Original Drilling - A	6,470.18	6,320.52	3,119.86	3,074.48	68.747	CC, ES
HSR Ashley 15-23A - Original Drilling - Original Drilling - A	6,750.00	6,600.20	3,177.32	3,130.03	67.187	SF
HSR Benirschke 10-23 - Original Drilling - Original Drilling	6,458.45	6,230.48	4,136.33	4,091.36	91.982	CC, ES
HSR Benirschke 10-23 - Original Drilling - Original Drilling	6,750.00	6,441.59	4,200.12	4,153.44	89.984	SF
HSR Eachus 03-23 - Original Drilling - Original Drilling - A	2,924.84	2,400.00	6,079.31	6,060.94	330.802	CC, ES
HSR Eachus 03-23 - Original Drilling - Original Drilling - A	6,800.00	6,882.27	6,728.52	6,677.60	132.137	SF
HSR Eachus 04-23 - Original Drilling - Original Drilling - A	100.00	55.64	6,058.33	6,058.10	10,000.000	CC
HSR Eachus 04-23 - Original Drilling - Original Drilling - A	1,000.00	935.25	6,060.82	6,054.35	937.500	ES
HSR Eachus 04-23 - Original Drilling - Original Drilling - A	5,000.00	5,000.00	6,638.11	6,524.46	58.405	SF
HSR Eachus 05-23 - Original Drilling - Original Drilling - A	4,723.00	5,055.73	5,460.17	5,333.51	43.107	CC
HSR Eachus 05-23 - Original Drilling - Original Drilling - A	4,800.00	5,100.01	5,460.39	5,333.40	42.998	ES
HSR Eachus 05-23 - Original Drilling - Original Drilling - A	6,700.00	6,912.17	5,573.48	5,431.77	39.332	SF
HSR Fruman 06-23 - Original Drilling - Original Drilling - A	6,434.46	6,441.67	5,703.03	5,650.07	107.695	CC, ES
HSR Fruman 06-23 - Original Drilling - Original Drilling - A	6,750.00	6,663.74	5,781.51	5,726.91	105.896	SF
HSR Grasshopper 09-23 - Original Drilling - Original Drilli	6,500.00	6,500.00	4,342.62	4,296.55	94.259	ES
HSR Grasshopper 09-23 - Original Drilling - Original Drilli	6,508.51	6,422.79	4,342.58	4,296.76	94.775	CC
HSR Grasshopper 09-23 - Original Drilling - Original Drilli	6,850.00	6,839.53	4,415.58	4,367.28	91.413	SF
Ritchey 06-23 - Original Drilling - Original Drilling - As Dri	6,438.22	6,368.18	5,175.80	5,129.97	112.947	CC, ES
Ritchey 06-23 - Original Drilling - Original Drilling - As Dri	6,850.00	6,920.25	5,299.53	5,250.52	108.113	SF
Ritchey 21-23 - Original Drilling - Original Drilling - As Dri	6,456.32	6,385.41	6,064.70	6,019.18	133.232	CC, ES
Ritchey 21-23 - Original Drilling - Original Drilling - As Dri	6,900.00	6,798.80	6,212.11	6,163.81	128.604	SF
Ritchey 24-23 - Original Drilling - Original Drilling - As Dri	1,041.87	1,027.87	4,622.49	4,615.57	667.573	CC
Ritchey 24-23 - Original Drilling - Original Drilling - As Dri	1,600.00	1,556.85	4,625.20	4,614.43	429.511	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 Hurley H35-755
Project:	Mustang	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Reference Site:	H Section 26	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Hurley H35-755	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 #2	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						
H Section 23						
Ritchey 24-23 - Original Drilling - Original Drilling - As Dri	6,850.00	6,771.89	4,997.05	4,948.60	103.145	SF
Ritchey 31-24 - Original Drilling - Original Drilling - As Dri	1,402.98	1,400.00	6,522.95	6,513.44	685.893	CC
Ritchey 31-24 - Original Drilling - Original Drilling - As Dri	1,500.00	1,448.59	6,523.22	6,513.19	650.508	ES
Ritchey 31-24 - Original Drilling - Original Drilling - As Dri	6,900.00	6,896.42	6,813.84	6,755.03	115.859	SF
UPRC 23-11J - Original Drilling - Original Drilling - As Dri	6,430.25	6,321.39	3,949.29	3,904.11	87.417	CC, ES
UPRC 23-11J - Original Drilling - Original Drilling - As Dri	6,750.00	6,635.32	4,027.98	3,980.65	85.107	SF
UPRC 23-12J - Original Drilling - Original Drilling - As Dri	995.83	949.85	4,108.16	4,101.68	634.022	CC
UPRC 23-12J - Original Drilling - Original Drilling - As Dri	1,900.00	1,826.59	4,111.37	4,098.58	321.645	ES
UPRC 23-12J - Original Drilling - Original Drilling - As Dri	6,700.00	6,624.52	4,326.51	4,279.44	91.921	SF
UPRC H23-13 - Wellbore #1 - Wellbore #1 - As Drilled	271.60	231.60	2,915.86	2,914.48	2,119.472	CC
UPRC H23-13 - Wellbore #1 - Wellbore #1 - As Drilled	500.00	440.66	2,916.77	2,913.85	997.645	ES
UPRC H23-13 - Wellbore #1 - Wellbore #1 - As Drilled	6,650.00	6,476.72	3,266.24	3,219.80	70.325	SF
UPRC H23-14J - Original Drilling - Original Drilling - As D	6,427.10	6,252.83	2,615.03	2,570.05	58.129	CC, ES
UPRC H23-14J - Original Drilling - Original Drilling - As D	6,650.00	6,458.82	2,654.26	2,607.77	57.098	SF
UPRC H23-24 - Original Drilling - Original Drilling - As Dr	6,418.16	6,132.17	3,539.17	3,494.66	79.504	CC, ES
UPRC H23-24 - Original Drilling - Original Drilling - As Dr	6,750.00	6,487.68	3,622.01	3,575.13	77.265	SF
UPRR 53 Pan Am B#1 (PA) - Original Drilling - Original D	5,178.06	5,083.21	3,172.62	3,052.46	26.402	CC
UPRR 53 Pan Am B#1 (PA) - Original Drilling - Original D	6,406.49	6,288.63	3,181.44	3,032.57	21.371	ES
UPRR 53 Pan Am B#1 (PA) - Original Drilling - Original D	6,700.00	6,569.87	3,248.41	3,092.92	20.891	SF
UPRR 53 Pan Am UT V#1 - Original Drilling - Original Dri	6,493.35	6,526.88	6,048.41	6,002.34	131.289	CC
UPRR 53 Pan Am UT V#1 - Original Drilling - Original Dri	6,500.00	6,530.47	6,048.45	6,002.34	131.181	ES
UPRR 53 Pan Am UT V#1 - Original Drilling - Original Dri	6,900.00	6,772.23	6,172.24	6,124.04	128.054	SF

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Hurley H35-755
Project:	Mustang	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Reference Site:	H Section 26	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Hurley H35-755	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 #2	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						
H Section 25						
Dechant 21-25 - Original Drilling - Original Drilling - As Dr	575.98	554.00	5,744.32	5,740.72	1,598.383	CC
Dechant 21-25 - Original Drilling - Original Drilling - As Dr	1,400.00	1,358.18	5,745.22	5,735.86	614.229	ES
Dechant 21-25 - Original Drilling - Original Drilling - As Dr	7,039.88	7,169.71	5,827.71	5,775.47	111.545	SF
Dechant D30-33D - Original Drilling - Original Drilling - As	8,836.93	6,809.93	8,108.99	8,054.69	149.337	CC
Dechant D30-33D - Original Drilling - Original Drilling - As	8,900.00	6,810.02	8,109.24	8,054.65	148.562	ES
Dechant D30-33D - Original Drilling - Original Drilling - As	14,100.00	7,231.55	9,667.25	9,582.82	114.500	SF
Dechant D31-30D - Original Drilling - Original Drilling - As	9,846.13	6,992.42	7,995.70	7,932.18	125.886	CC
Dechant D31-30D - Original Drilling - Original Drilling - As	9,900.00	6,993.15	7,995.88	7,931.99	125.160	ES
Dechant D31-30D - Original Drilling - Original Drilling - As	14,200.00	7,071.47	9,104.00	9,012.14	99.110	SF
Dechant H25-64-1HN - Original Drilling - Original Drilling	8,526.56	6,423.00	3,142.56	3,092.83	63.191	CC, ES
Dechant H25-64-1HN - Original Drilling - Original Drilling	9,400.00	6,423.00	3,261.69	3,208.18	60.953	SF
Dechant H25-65HN - Original Drilling - Original Drilling	7,599.19	6,464.24	3,153.65	3,106.81	67.330	CC
Dechant H25-65HN - Original Drilling - Original Drilling	7,600.00	6,464.24	3,153.65	3,106.81	67.327	ES
Dechant H25-65HN - Original Drilling - Original Drilling	8,600.00	6,465.41	3,308.64	3,257.50	64.695	SF
Emmy H25-711 - Emmy H25-711 OH - As-Drilled	10,015.08	4,561.14	7,639.05	7,590.04	155.852	CC
Emmy H25-711 - Emmy H25-711 OH - As-Drilled	10,100.00	4,566.82	7,639.52	7,589.93	154.035	ES
Emmy H25-711 - Emmy H25-711 OH - As-Drilled	14,400.00	5,194.00	8,791.65	8,713.90	113.070	SF
Emmy State H25-718 - Emmy State H25-718 OH - As-Dr	9,976.79	4,794.35	7,404.94	7,355.98	151.249	CC
Emmy State H25-718 - Emmy State H25-718 OH - As-Dr	10,000.00	4,795.29	7,404.97	7,355.86	150.777	ES
Emmy State H25-718 - Emmy State H25-718 OH - As-Dr	12,500.00	12,500.00	7,804.91	7,710.16	82.372	SF
Emmy State H25-724 - Emmy State H25-724 OH - As-Dr	10,000.00	10,000.00	7,062.81	6,996.13	105.924	ES
Emmy State H25-724 - Emmy State H25-724 OH - As-Dr	10,226.21	5,905.15	7,059.30	7,005.50	131.212	CC
Emmy State H25-724 - Emmy State H25-724 OH - As-Dr	10,700.00	10,700.00	7,074.97	7,001.07	95.733	SF
Emmy State H25-731 - Emmy State H25-731 OH - As-Dr	8,123.63	8,802.27	6,754.61	6,702.41	129.408	CC, ES
Emmy State H25-731 - Emmy State H25-731 OH - As-Dr	13,700.00	6,425.00	7,628.61	7,552.77	100.585	SF
Emmy State H25-738 - Emmy State H25-738 OH - As-Dr	8,022.54	8,885.00	6,327.61	6,275.57	121.584	CC, ES
Emmy State H25-738 - Emmy State H25-738 OH - As-Dr	13,400.00	6,427.00	7,186.53	7,113.15	97.934	SF
Emmy State H25-744 - Emmy State H25-744 OH - As-Dr	8,254.56	8,644.09	5,900.36	5,848.75	114.329	CC, ES
Emmy State H25-744 - Emmy State H25-744 OH - As-Dr	12,800.00	6,613.00	6,505.40	6,434.59	91.870	SF
Emmy State H25-751 - Emmy State H25-751 OH - As-Dr	10,278.80	5,854.00	5,252.27	5,198.18	97.107	CC
Emmy State H25-751 - Emmy State H25-751 OH - As-Dr	10,300.00	5,854.00	5,252.31	5,198.07	96.844	ES
Emmy State H25-751 - Emmy State H25-751 OH - As-Dr	14,400.00	14,400.00	6,663.75	6,554.93	61.231	SF
Emmy State H25-757 - Emmy State H25-757 OH - As-Dr	10,242.27	5,910.35	5,091.96	5,037.58	93.638	CC
Emmy State H25-757 - Emmy State H25-757 OH - As-Dr	10,300.00	5,916.89	5,092.28	5,037.48	92.924	ES
Emmy State H25-757 - Emmy State H25-757 OH - As-Dr	12,100.00	12,100.00	5,410.54	5,321.34	60.654	SF
Emmy State H25-764 - Emmy State H25-764 OH - As-Dr	7,700.00	9,447.00	4,742.48	4,688.43	87.736	ES
Emmy State H25-764 - Emmy State H25-764 OH - As-Dr	7,739.01	9,416.00	4,742.41	4,688.45	87.895	CC
Emmy State H25-764 - Emmy State H25-764 OH - As-Dr	12,300.00	6,422.00	5,198.24	5,129.97	76.135	SF
Emmy State H25-771 - Emmy State H25-771 OH - As-Dr	8,644.37	8,315.00	4,327.34	4,275.73	83.847	CC, ES
Emmy State H25-771 - Emmy State H25-771 OH - As-Dr	11,800.00	6,612.00	4,641.83	4,576.79	71.369	SF
Emmy State H25-777 - Emmy State H25-777 OH - As-Dr	10,034.86	7,039.24	3,875.88	3,820.83	70.402	CC, ES
Emmy State H25-777 - Emmy State H25-777 OH - As-Dr	11,500.00	6,839.40	4,115.58	4,051.76	64.479	SF
Emmy State H25-785 - Emmy State H25-785 OH - As-Dr	9,420.53	7,650.00	3,369.06	3,315.95	63.430	CC, ES
Emmy State H25-785 - Emmy State H25-785 OH - As-Dr	11,200.00	6,854.02	3,611.65	3,549.22	57.852	SF
Emmy State H36-753 - Wellbore #1 - Plan #2	14,914.31	11,885.88	5,349.42	5,226.20	43.413	CC
Emmy State H36-753 - Wellbore #1 - Plan #2	15,000.00	11,885.88	5,350.11	5,226.03	43.120	ES
Emmy State H36-753 - Wellbore #1 - Plan #2	15,342.74	11,885.88	5,366.55	5,239.34	42.187	SF
Emmy State H36-766 - Wellbore #1 - Plan #2	14,917.94	11,943.61	4,470.20	4,347.23	36.353	CC, ES
Emmy State H36-766 - Wellbore #1 - Plan #2	15,342.74	11,943.61	4,490.34	4,363.98	35.536	SF
Emmy State H36-773 - Wellbore #1 - Plan #2	14,921.02	11,925.00	3,832.98	3,710.39	31.267	CC, ES
Emmy State H36-773 - Wellbore #1 - Plan #2	15,342.74	11,925.00	3,856.11	3,730.83	30.778	SF
Emmy State H36-787 - Wellbore #1 - Plan #2	14,925.85	11,923.93	3,147.64	3,024.41	25.541	CC, ES
Emmy State H36-787 - Wellbore #1 - Plan #2	15,200.00	11,923.93	3,159.56	3,034.97	25.360	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 Hurley H35-755
Project:	Mustang	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Reference Site:	H Section 26	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Hurley H35-755	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 #2	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						
H Section 25						
HSR Cohn 03-25 - Original Drilling - Original Drilling - As	6,794.64	6,620.88	5,077.23	5,030.09	107.716	CC
HSR Cohn 03-25 - Original Drilling - Original Drilling - As	6,800.00	6,625.36	5,077.24	5,030.07	107.643	ES
HSR Cohn 03-25 - Original Drilling - Original Drilling - As	7,300.00	6,863.46	5,154.34	5,105.11	104.680	SF
HSR Crowe 06-25 - Original Drilling - Original Drilling - As	7,215.95	6,972.56	4,911.58	4,862.32	99.699	CC, ES
HSR Crowe 06-25 - Original Drilling - Original Drilling - As	9,100.00	7,033.30	5,374.47	5,319.18	97.202	SF
HSR Dechant 04-25 - Original Drilling - Original Drilling -	6,724.27	7,064.51	4,088.60	4,018.11	58.001	CC, ES
HSR Dechant 04-25 - Original Drilling - Original Drilling -	6,950.00	7,228.81	4,106.44	4,035.21	57.648	SF
HSR Dechant 05-25 - Original Drilling - Original Drilling -	7,228.02	7,007.04	3,900.91	3,851.54	79.000	CC, ES
HSR Dechant 05-25 - Original Drilling - Original Drilling -	7,438.94	7,048.40	3,913.70	3,863.82	78.451	SF
KY Blue D30-32 - Original Drilling - Original Drilling - As D	7,595.75	6,906.09	8,052.67	8,003.03	162.232	CC
KY Blue D30-32 - Original Drilling - Original Drilling - As D	7,600.00	6,906.07	8,052.67	8,003.02	162.209	ES
KY Blue D30-32 - Original Drilling - Original Drilling - As D	13,000.00	6,875.65	9,697.97	9,623.08	129.488	SF
KY Blue H25-04J - Original Drilling - Original Drilling - As	9,102.29	7,400.00	7,273.81	7,243.52	240.104	CC, ES
KY Blue H25-04J - Original Drilling - Original Drilling - As	14,200.00	7,400.00	8,882.29	8,824.85	154.649	SF
KY Blue H25-09 - Original Drilling - Original Drilling - As D	8,109.99	6,895.19	7,531.08	7,480.30	148.317	CC, ES
KY Blue H25-09 - Original Drilling - Original Drilling - As D	12,800.00	6,889.80	8,872.05	8,797.68	119.292	SF
KY Blue H25-10 - Original Drilling - Original Drilling - As D	7,936.35	7,011.33	6,093.80	6,043.14	120.291	CC, ES
KY Blue H25-10 - Original Drilling - Original Drilling - As D	11,300.00	7,013.67	6,960.50	6,894.05	104.753	SF
KY Blue H25-11 - Original Drilling - Original Drilling - As D	8,107.08	7,028.04	4,918.80	4,836.87	60.040	CC, ES
KY Blue H25-11 - Original Drilling - Original Drilling - As D	9,600.00	7,004.32	5,140.31	5,051.98	58.195	SF
KY Blue H25-12 - Original Drilling - Original Drilling - As D	8,080.71	6,914.64	3,469.72	3,418.85	68.214	CC
KY Blue H25-12 - Original Drilling - Original Drilling - As D	8,100.00	6,914.22	3,469.77	3,418.84	68.132	ES
KY Blue H25-12 - Original Drilling - Original Drilling - As D	9,200.00	6,892.16	3,645.72	3,590.15	65.598	SF
KY Blue H25-14 - Original Drilling - Original Drilling - As D	9,592.82	6,880.32	4,985.41	4,928.31	87.302	CC
KY Blue H25-14 - Original Drilling - Original Drilling - As D	9,600.00	6,880.33	4,985.42	4,928.27	87.236	ES
KY Blue H25-14 - Original Drilling - Original Drilling - As D	13,800.00	13,800.00	6,523.31	6,422.22	64.533	SF
KY Blue H25-15 - Original Drilling - Original Drilling - As D	9,421.74	6,901.31	6,047.15	5,990.91	107.517	CC, ES
KY Blue H25-15 - Original Drilling - Original Drilling - As D	12,400.00	6,882.17	6,740.74	6,667.41	91.917	SF
KY H25-24 - Original Drilling - Original Drilling - As Drilled	8,772.53	6,972.88	5,647.68	5,594.35	105.904	CC
KY H25-24 - Original Drilling - Original Drilling - As Drilled	8,800.00	6,973.41	5,647.75	5,594.29	105.651	ES
KY H25-24 - Original Drilling - Original Drilling - As Drilled	11,700.00	7,031.63	6,361.08	6,291.55	91.485	SF
Moore UPRC H25-01 - Original Drilling - Original Drilling	6,914.25	6,722.06	7,889.92	7,842.13	165.093	CC, ES
Moore UPRC H25-01 - Original Drilling - Original Drilling	11,400.00	6,890.92	9,748.36	9,683.65	150.632	SF
Moore UPRC H25-02 - Original Drilling - Original Drilling	6,881.26	6,725.49	6,511.82	6,464.12	136.510	CC
Moore UPRC H25-02 - Original Drilling - Original Drilling	6,900.00	6,737.81	6,511.91	6,464.11	136.238	ES
Moore UPRC H25-02 - Original Drilling - Original Drilling	9,500.00	6,921.77	7,457.68	7,401.29	132.238	SF
Moser 25-32 - Original Drilling - Original Drilling - As Drille	7,270.95	6,949.77	6,018.47	5,969.19	122.108	CC, ES
Moser 25-32 - Original Drilling - Original Drilling - As Drille	10,400.00	7,005.66	6,918.93	6,857.70	112.995	SF
Moser 25-42 - Original Drilling - Original Drilling - As Drille	7,225.36	6,874.13	7,702.45	7,653.45	157.187	CC, ES
Moser 25-42 - Original Drilling - Original Drilling - As Drille	12,100.00	6,920.20	9,366.14	9,296.70	134.884	SF
UPRR 53 Pan Am T#2 - Original Drilling - Original Drilling	6,926.27	6,652.67	4,690.03	4,642.42	98.502	CC, ES
UPRR 53 Pan Am T#2 - Original Drilling - Original Drilling	7,350.00	6,757.63	4,736.74	4,687.77	96.723	SF
UPRR 53 Pan Am UT T#1 - Original Drilling - Original Dri	7,096.14	6,853.20	7,095.19	7,046.51	145.747	CC
UPRR 53 Pan Am UT T#1 - Original Drilling - Original Dri	7,100.00	6,854.74	7,095.20	7,046.50	145.704	ES
UPRR 53 Pan Am UT T#1 - Original Drilling - Original Dri	11,200.00	6,988.42	8,559.87	8,495.18	132.321	SF
Von Feldt 1-25B - Original Drilling - Original Drilling - As D	9,156.91	7,011.27	4,026.70	3,971.51	72.953	CC
Von Feldt 1-25B - Original Drilling - Original Drilling - As D	9,200.00	7,013.04	4,026.93	3,971.50	72.639	ES
Von Feldt 1-25B - Original Drilling - Original Drilling - As D	10,700.00	7,065.03	4,311.91	4,247.78	67.228	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 Hurley H35-755
Project:	Mustang	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Reference Site:	H Section 26	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Hurley H35-755	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 #2	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
H Section 26						
Bullard 31-26 - Original Drilling - Original Drilling - As Dril	6,504.06	6,377.89	1,906.15	1,860.53	41.785	CC, ES
Bullard 31-26 - Original Drilling - Original Drilling - As Dril	6,700.00	6,559.50	1,931.72	1,884.78	41.159	SF
Bullard 32-26 - Original Drilling - Original Drilling - As Dril	7,040.66	6,879.14	1,162.82	1,114.19	23.916	CC
Bullard 32-26 - Original Drilling - Original Drilling - As Dril	7,050.00	6,884.18	1,162.86	1,114.19	23.896	ES
Bullard 32-26 - Original Drilling - Original Drilling - As Dril	7,150.00	6,932.36	1,168.84	1,119.76	23.814	SF
Bullard 41-26 - Original Drilling - Original Drilling - As Dril	6,644.75	6,554.31	2,295.72	2,249.16	49.310	CC
Bullard 41-26 - Original Drilling - Original Drilling - As Dril	6,650.00	6,558.91	2,295.73	2,249.14	49.274	ES
Bullard 41-26 - Original Drilling - Original Drilling - As Dril	6,950.00	6,830.81	2,336.39	2,287.97	48.252	SF
Dechant H25-29D - Original Drilling - Original Drilling - As	111.13	130.40	3,711.51	3,711.04	7,917.791	CC
Dechant H25-29D - Original Drilling - Original Drilling - As	200.00	197.18	3,711.77	3,710.75	3,628.198	ES
Dechant H25-29D - Original Drilling - Original Drilling - As	12,800.00	12,800.00	9,213.90	9,092.34	75.797	SF
Dechant H25-33D - Original Drilling - Original Drilling - As	8,538.93	7,652.01	3,077.38	2,990.73	35.516	CC, ES
Dechant H25-33D - Original Drilling - Original Drilling - As	9,100.00	7,773.76	3,124.65	3,034.19	34.541	SF
Harsh H26-09D - Original Drilling - Original Drilling - As D	8,032.83	6,979.12	2,488.13	2,437.22	48.875	CC, ES
Harsh H26-09D - Original Drilling - Original Drilling - As D	8,600.00	6,989.85	2,551.93	2,498.74	47.975	SF
Harsh H26-10 - Original Drilling - Original Drilling - As Dri	7,885.50	7,002.01	1,201.40	1,150.86	23.772	CC, ES
Harsh H26-10 - Original Drilling - Original Drilling - As Dri	8,000.00	7,001.85	1,206.84	1,155.88	23.680	SF
Harsh H26-15 - Original Drilling - Original Drilling - As Dri	9,327.93	6,979.51	1,127.65	1,071.54	20.096	CC, ES
Harsh H26-15 - Original Drilling - Original Drilling - As Dri	9,500.00	6,981.43	1,140.70	1,083.36	19.895	SF
Harsh H26-16 - Original Drilling - Original Drilling - As Dri	9,409.79	6,972.70	2,190.41	2,133.96	38.806	CC, ES
Harsh H26-16 - Original Drilling - Original Drilling - As Dri	9,900.00	6,978.37	2,244.58	2,185.09	37.731	SF
Harsh H26-23D - Original Drilling - Original Drilling - As D	8,715.12	7,112.37	1,820.93	1,764.75	32.410	CC, ES
Harsh H26-23D - Original Drilling - Original Drilling - As D	9,100.00	7,105.39	1,861.15	1,802.01	31.471	SF
HSR Moser 04-26 - Original Drilling - Original Drilling - As	1,940.35	1,903.81	1,892.05	1,878.86	143.370	CC
HSR Moser 04-26 - Original Drilling - Original Drilling - As	2,000.00	1,951.24	1,892.24	1,878.66	139.383	ES
HSR Moser 04-26 - Original Drilling - Original Drilling - As	6,600.00	6,426.48	2,300.29	2,254.29	49.996	SF
HSR Moser 06-26 - Original Drilling - Original Drilling - As	6,726.43	6,624.62	56.46	9.48	1.202	Level 3, CC, ES, SF
HSR Regalia 05-26 - Original Drilling - Original Drilling - A	2,268.27	2,238.41	739.89	724.33	47.554	CC
HSR Regalia 05-26 - Original Drilling - Original Drilling - A	2,300.00	2,268.83	739.96	724.18	46.901	ES
A HSR Regalia 05-26 - Original Drilling - Original Drilling - A	6,450.00	6,347.92	1,118.25	1,073.18	24.810	SF
HSR-Moser 03-26A - Original Drilling - Original Drilling - A	6,438.21	6,304.98	1,535.91	1,490.71	33.983	CC, ES
HSR-Moser 03-26A - Original Drilling - Original Drilling - A	6,550.00	6,396.15	1,546.42	1,500.50	33.674	SF
Hurley H26-712 - Hurley H26-712 OH - As-Drilled	7,541.89	6,772.71	2,909.12	2,863.53	63.814	CC, ES
Hurley H26-712 - Hurley H26-712 OH - As-Drilled	7,900.00	6,738.70	2,930.48	2,883.98	63.018	SF
Hurley H26-717 - Hurley H26-717 OH - As-Drilled	7,377.19	7,038.74	2,655.47	2,610.12	58.560	CC, ES
Hurley H26-717 - Hurley H26-717 OH - As-Drilled	8,600.00	8,600.00	2,900.47	2,847.38	54.631	SF
Hurley H26-724 - Hurley H26-724 OH - As-Drilled	7,317.05	7,163.12	2,108.08	2,063.15	46.923	CC, ES
Hurley H26-724 - Hurley H26-724 OH - As-Drilled	7,400.00	7,124.21	2,110.30	2,065.27	46.861	SF
Hurley H26-730 - Hurley H26-730 OH - As-Drilled	7,182.43	6,990.00	1,724.06	1,680.08	39.205	CC, ES
Hurley H26-730 - Hurley H26-730 OH - As-Drilled	7,250.00	6,961.41	1,725.13	1,681.08	39.169	SF
Hurley H26-736 - Hurley H26-736 OH - As-Drilled	7,176.13	7,242.81	1,408.95	1,363.97	31.325	CC, ES
Hurley H26-736 - Hurley H26-736 OH - As-Drilled	7,350.00	7,350.00	1,416.84	1,371.35	31.149	SF
Hurley H26-743 - Hurley H26-743 OH - As-Drilled	7,168.00	7,353.63	881.97	835.99	19.181	CC, ES, SF
Hurley H26-750 - Hurley H26-750 OH - As-Drilled	2,201.54	2,201.61	142.84	128.48	9.952	CC, ES
Hurley H26-750 - Hurley H26-750 OH - As-Drilled	7,438.94	7,149.66	362.24	315.69	7.781	SF
Hurley H26-756 - Hurley H26-756 OH - As-Drilled	7,202.50	7,330.64	79.42	33.43	1.727	CC, ES, SF
Hurley H26-762 - Hurley H26-762 OH - As-Drilled	2,170.99	2,170.00	154.89	140.68	10.900	CC
Hurley H26-762 - Hurley H26-762 OH - As-Drilled	2,200.00	2,198.99	154.89	140.56	10.810	ES
Hurley H26-762 - Hurley H26-762 OH - As-Drilled	7,200.00	7,345.49	342.65	297.25	7.547	SF
Hurley H26-768 - Hurley H26-768 OH - As-Drilled	103.79	102.79	164.82	164.52	547.928	CC
Hurley H26-768 - Hurley H26-768 OH - As-Drilled	2,200.00	2,197.74	171.29	156.95	11.943	ES
Hurley H26-768 - Hurley H26-768 OH - As-Drilled	2,300.00	2,295.57	174.16	159.41	11.812	SF
Hurley H26-776 - Hurley H26-776 OH - As-Drilled	548.27	547.28	173.66	170.21	50.322	CC

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 Hurley H35-755
Project:	Mustang	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Reference Site:	H Section 26	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Hurley H35-755	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 #2	Offset TVD Reference:	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
H Section 26						
Hurley H26-776 - Hurley H26-776 OH - As-Drilled	2,201.89	2,201.05	178.17	163.84	12.433	ES
Hurley H26-776 - Hurley H26-776 OH - As-Drilled	2,300.00	2,296.31	180.25	165.52	12.238	SF
Hurley H26-783 - Hurley H26-783 OH - As-drilled	0.00	0.00	188.22			
Hurley H26-783 - Hurley H26-783 OH - As-drilled	2,000.00	1,998.09	195.90	182.31	14.410	ES
Hurley H26-783 - Hurley H26-783 OH - As-drilled	2,100.00	2,090.48	198.33	184.37	14.208	SF
Hurley H35-727 - Wellbore #1 - Plan #2	15,342.74	15,001.32	1,814.90	1,668.16	12.368	CC, ES, SF
Hurley H35-733 - Wellbore #1 - Plan #2	15,342.74	15,386.89	1,194.95	1,047.78	8.120	CC, ES, SF
Hurley H35-746 - Wellbore #1 - Plan #2	15,342.74	15,198.79	496.75	349.67	3.377	CC, ES, SF
Hurley H35-768 - Wellbore #1 - Plan #2	2,200.00	2,200.00	44.69	29.39	2.920	CC, ES
Hurley H35-768 - Wellbore #1 - Plan #2	2,300.00	2,300.02	46.38	30.36	2.896	SF
Hurley H35-774 - Wellbore #1 - Plan #2	2,200.00	2,200.00	67.04	51.74	4.380	CC, ES
Hurley H35-774 - Wellbore #1 - Plan #2	2,300.00	2,300.02	68.73	52.71	4.291	SF
Hurley H35-787 - Wellbore #1 - Plan #2	2,200.00	2,199.00	111.80	96.49	7.305	CC, ES
Hurley H35-787 - Wellbore #1 - Plan #2	2,300.00	2,295.23	115.09	99.10	7.201	SF
Hurley State H35-713 - Wellbore #1 - Plan #2	15,342.74	15,174.64	2,499.70	2,353.02	17.042	CC, ES, SF
John 03-26 - Original Drilling - Original Drilling - As Drilled	6,440.22	6,342.51	1,291.41	1,246.12	28.520	CC, ES
John 03-26 - Original Drilling - Original Drilling - As Drilled	6,550.00	6,437.32	1,301.44	1,255.43	28.283	SF
Lamp H25-31 - Original Drilling - Original Drilling - As Dril	6,865.76	6,837.79	3,083.86	3,035.86	64.248	CC, ES
Lamp H25-31 - Original Drilling - Original Drilling - As Dril	7,200.00	7,025.28	3,123.03	3,073.54	63.104	SF
Lamp H26-01 - Original Drilling - Original Drilling - As Dril	6,610.36	6,546.83	3,024.53	2,974.00	59.859	CC, ES
Lamp H26-01 - Original Drilling - Original Drilling - As Dril	6,950.00	6,893.20	3,071.26	3,018.74	58.483	SF
Lamp H26-08 - Original Drilling - Original Drilling - As Dril	6,967.55	6,729.40	2,507.53	2,459.52	52.235	CC, ES
Lamp H26-08 - Original Drilling - Original Drilling - As Dril	7,250.00	6,878.46	2,531.46	2,482.27	51.460	SF
Lamp H26-22 - Original Drilling - Original Drilling - As Dril	7,350.00	7,162.75	1,730.50	1,674.52	30.909	SF
Lamp H26-22 - Original Drilling - Original Drilling - As Dril	7,465.05	7,156.19	1,725.46	1,669.81	31.001	CC, ES
Moser 05-26 - Original Drilling - Original Drilling - As Drille	2,216.08	2,188.78	890.22	875.05	58.660	CC, ES
Moser 05-26 - Original Drilling - Original Drilling - As Drille	6,950.00	6,811.63	1,614.74	1,566.54	33.500	SF
Moser 41-27 - Original Drilling - Original Drilling - As Drille	936.32	908.47	889.27	883.14	145.034	CC, ES
Moser 41-27 - Original Drilling - Original Drilling - As Drille	6,550.00	6,600.01	2,310.66	2,261.97	47.455	SF
Moser H26-11 - Original Drilling - Original Drilling - As Dri	7,879.59	6,974.58	433.95	383.50	8.602	CC, ES, SF
Moser H26-12 - Wellbore #1 - Wellbore #1 - As Drilled	2,115.77	2,086.82	1,319.50	1,305.03	91.209	CC
Moser H26-12 - Wellbore #1 - Wellbore #1 - As Drilled	2,200.00	2,164.05	1,319.71	1,304.68	87.761	ES
Moser H26-12 - Wellbore #1 - Wellbore #1 - As Drilled	8,200.00	6,983.16	1,579.22	1,527.98	30.817	SF
Moser H26-13 - Wellbore #1 - Wellbore #1 - As Drilled	9,403.83	6,967.86	1,626.76	1,570.41	28.866	CC, ES
Moser H26-13 - Wellbore #1 - Wellbore #1 - As Drilled	9,500.00	6,972.92	1,629.60	1,572.92	28.752	SF
Moser H26-14 - Original Drilling - Original Drilling - As Dr	9,610.14	6,977.50	92.86	35.64	1.623	CC, ES, SF
Moser H26-18D - Original Drilling - Original Drilling - As D	6,553.63	6,919.08	921.08	864.51	16.283	CC, ES
Moser H26-18D - Original Drilling - Original Drilling - As D	6,700.00	7,050.16	935.45	877.13	16.040	SF
Moser H26-24 - Original Drilling - Original Drilling - As Dr	8,597.19	6,990.83	224.44	171.60	4.248	CC
Moser H26-24 - Original Drilling - Original Drilling - As Dr	8,600.00	6,990.87	224.46	171.58	4.245	ES, SF
Moser H26-25 - Original Drilling - Original Drilling - As Dr	8,796.60	7,010.86	576.98	523.27	10.743	CC, ES, SF
Moser H26-27D - Original Drilling - Original Drilling - As D	6,561.58	6,650.07	2,715.69	2,663.21	51.754	CC, ES
Moser H26-27D - Original Drilling - Original Drilling - As D	6,800.00	6,868.01	2,748.95	2,695.12	51.068	SF
Moser H26-28D - Original Drilling - Original Drilling - As D	6,452.55	6,940.82	2,172.32	2,097.20	28.921	CC, ES
Moser H26-28D - Original Drilling - Original Drilling - As D	6,550.00	7,050.03	2,179.40	2,103.81	28.834	SF
Moser H26-29D - Original Drilling - Original Drilling - As D	5,140.90	5,761.77	2,032.94	1,955.83	26.364	CC, ES
Moser H26-29D - Original Drilling - Original Drilling - As D	5,700.00	6,173.79	2,067.84	1,986.32	25.368	SF
Moser, Wesley E. G. U. B1 (PA) - Original Drilling - Origin	9,087.05	6,972.00	1,225.96	1,055.91	7.209	CC, ES
Moser, Wesley E. G. U. B1 (PA) - Original Drilling - Origin	9,100.00	6,972.00	1,226.03	1,055.95	7.208	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 Hurley H35-755
Project:	Mustang	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Reference Site:	H Section 26	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Hurley H35-755	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 #2	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						
H Section 27						
HSR Moser 10-27 - Wellbore #1 - Wellbore #1 - As Drilled	172.24	140.25	3,471.09	3,470.39	4,940.811	CC
HSR Moser 10-27 - Wellbore #1 - Wellbore #1 - As Drilled	900.00	847.86	3,473.09	3,467.31	600.672	ES
HSR Moser 10-27 - Wellbore #1 - Wellbore #1 - As Drilled	9,100.00	6,980.30	4,292.59	4,238.61	79.529	SF
HSR Moser 1-27 - Original Drilling - Original Drilling - As	100.00	55.46	2,482.67	2,482.45	10,000.000	CC
HSR Moser 1-27 - Original Drilling - Original Drilling - As	1,000.00	942.82	2,485.64	2,479.17	383.729	ES
HSR Moser 1-27 - Original Drilling - Original Drilling - As	6,750.00	6,542.13	3,150.14	3,103.44	67.455	SF
HSR Moser 15-27 - Wellbore #1 - Wellbore #1 - As Drilled	2,223.34	2,225.77	4,321.62	4,306.28	281.750	CC, ES
HSR Moser 15-27 - Wellbore #1 - Wellbore #1 - As Drilled	10,800.00	6,948.56	4,644.59	4,582.41	74.692	SF
HSR Moser 16-27 - Original Drilling - Original Drilling - As	9,560.28	6,983.57	2,724.30	2,667.04	47.575	CC, ES
HSR Moser 16-27 - Original Drilling - Original Drilling - As	10,000.00	6,985.37	2,759.56	2,700.63	46.825	SF
HSR Thorson 09-27 - Wellbore #1 - Wellbore #1 - As Dril	2,250.07	2,261.31	2,808.20	2,792.65	180.522	CC
HSR Thorson 09-27 - Wellbore #1 - Wellbore #1 - As Dril	2,300.00	2,320.27	2,808.54	2,792.60	176.223	ES
HSR Thorson 09-27 - Wellbore #1 - Wellbore #1 - As Dril	9,100.00	6,937.05	3,316.72	3,262.79	61.495	SF
Moser 09-27X (PA) - Original Drilling - Original Drilling - A	370.48	339.51	2,118.68	2,116.56	999.604	CC
Moser 09-27X (PA) - Original Drilling - Original Drilling - A	2,000.00	1,955.22	2,122.74	2,109.14	156.115	ES
Moser 09-27X (PA) - Original Drilling - Original Drilling - A	8,400.00	6,974.74	2,776.22	2,722.70	51.878	SF
Moser 23-27 - Wellbore #1 - Wellbore #1 - As Drilled	883.14	848.23	3,328.74	3,323.02	581.330	CC
Moser 23-27 - Wellbore #1 - Wellbore #1 - As Drilled	900.00	859.03	3,328.76	3,322.93	571.495	ES
Moser 23-27 - Wellbore #1 - Wellbore #1 - As Drilled	10,100.00	7,400.01	5,057.70	4,972.85	59.607	SF
Moser 24-27 - Original Drilling - Original Drilling - As Drille	850.21	818.21	2,104.33	2,098.83	382.827	CC
Moser 24-27 - Original Drilling - Original Drilling - As Drille	900.00	857.72	2,104.45	2,098.64	361.970	ES
Moser 24-27 - Original Drilling - Original Drilling - As Drille	7,400.00	7,000.76	3,490.55	3,438.77	67.408	SF
Moser 39-27 - Original Drilling - Original Drilling - As Drille	462.14	431.15	2,131.45	2,128.70	772.744	CC
Moser 39-27 - Original Drilling - Original Drilling - As Drille	500.00	460.98	2,131.52	2,128.53	711.008	ES
Moser 39-27 - Original Drilling - Original Drilling - As Drille	9,100.00	7,073.77	2,337.72	2,278.46	39.447	SF
Moser 7-27 - Wellbore #1 - Wellbore #1 - As Drilled	2,212.38	2,189.50	3,314.46	3,299.26	218.033	CC, ES
Moser 7-27 - Wellbore #1 - Wellbore #1 - As Drilled	7,300.00	6,889.89	4,156.44	4,107.42	84.783	SF
Moser Farms UPRR 31-27 #1 - Wellbore #1 - Wellbore #	1,546.39	1,504.43	3,759.58	3,749.19	361.611	CC
Moser Farms UPRR 31-27 #1 - Wellbore #1 - Wellbore #	2,200.00	2,140.86	3,760.41	3,745.45	251.384	ES
Moser Farms UPRR 31-27 #1 - Wellbore #1 - Wellbore #	6,900.00	6,581.34	4,518.03	4,470.97	95.995	SF
Moser Farms UPRR 42-27 #3 - Original Drilling - Original	100.00	62.04	1,949.53	1,949.30	8,325.019	CC
Moser Farms UPRR 42-27 #3 - Original Drilling - Original	2,200.00	2,154.92	1,961.20	1,946.19	130.629	ES
Moser Farms UPRR 42-27 #3 - Original Drilling - Original	7,150.00	6,838.81	2,765.76	2,717.20	56.954	SF
Moser H22-711 - Original Drilling - Original Drilling - As D	2,429.15	2,519.08	2,613.68	2,597.92	165.887	CC, ES
Moser H22-711 - Original Drilling - Original Drilling - As D	6,550.00	6,391.58	2,909.23	2,864.64	65.253	SF
Moser H22-715 - Original Drilling - Original Drilling - As D	1,873.89	1,861.63	2,663.74	2,652.37	234.243	CC
Moser H22-715 - Original Drilling - Original Drilling - As D	1,900.00	1,874.49	2,663.82	2,652.31	231.416	ES
Moser H22-715 - Original Drilling - Original Drilling - As D	6,600.00	6,388.95	3,138.13	3,093.24	69.907	SF
Moser H22-725 - Original Drilling - Original Drilling - As D	100.00	83.81	2,700.32	2,700.05	9,936.368	CC
Moser H22-725 - Original Drilling - Original Drilling - As D	1,800.00	1,750.00	2,701.00	2,690.22	250.450	ES
Moser H22-725 - Original Drilling - Original Drilling - As D	6,600.00	6,443.00	3,638.55	3,593.69	81.105	SF
Moser H22-735 - Original Drilling - Original Drilling - As D	1,055.33	1,044.36	3,809.78	3,802.89	552.281	CC
Moser H22-735 - Original Drilling - Original Drilling - As D	1,600.00	1,565.05	3,811.49	3,800.82	357.507	ES
Moser H22-735 - Original Drilling - Original Drilling - As D	6,650.00	6,347.29	4,383.43	4,340.93	103.133	SF
Moser H22-745 - Original Drilling - Original Drilling - As D	2,058.44	2,050.00	3,804.65	3,790.96	277.846	CC, ES
Moser H22-745 - Original Drilling - Original Drilling - As D	6,650.00	6,311.00	4,965.11	4,927.46	131.898	SF
Moser H22-748 - Original Drilling - Original Drilling - As D	222.10	211.10	3,850.37	3,849.26	3,486.211	CC
Moser H22-748 - Original Drilling - Original Drilling - As D	1,400.00	1,364.69	3,853.83	3,844.47	411.822	ES
Moser H22-748 - Original Drilling - Original Drilling - As D	6,650.00	6,311.00	5,106.12	5,065.19	124.762	SF
Moser H22-750 - Original Drilling - Original Drilling - As D	4,688.27	5,409.60	5,047.67	5,018.46	172.808	CC
Moser H22-750 - Original Drilling - Original Drilling - As D	4,700.00	5,412.60	5,047.69	5,018.43	172.520	ES
Moser H22-750 - Original Drilling - Original Drilling - As D	6,750.00	6,541.70	5,305.24	5,267.31	139.876	SF
Moser H22-755 - Original Drilling - Original Drilling - As D	1,127.99	1,116.00	5,230.89	5,223.38	696.810	CC

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 Hurley H35-755
Project:	Mustang	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Reference Site:	H Section 26	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Hurley H35-755	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 #2	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						
H Section 27						
Moser H22-755 - Original Drilling - Original Drilling - As D	1,700.00	1,641.27	5,231.83	5,220.44	459.336	ES
Moser H22-755 - Original Drilling - Original Drilling - As D	6,750.00	6,324.00	5,798.37	5,760.11	151.564	SF
Moser H22-765 - Original Drilling - Original Drilling - As D	303.15	291.15	5,269.82	5,268.45	3,855.512	CC, ES
Moser H22-765 - Original Drilling - Original Drilling - As D	6,800.00	6,551.00	6,280.11	6,236.83	145.110	SF
Moser H22-776 - Original Drilling - Original Drilling - As D	100.00	81.53	6,283.77	6,283.51	10,000.000	CC
Moser H22-776 - Original Drilling - Original Drilling - As D	1,900.00	1,856.54	6,289.71	6,278.51	561.328	ES
Moser H22-776 - Original Drilling - Original Drilling - As D	6,850.00	6,525.00	7,010.21	6,965.47	156.661	SF
Moser H34-717 - Original Drilling - Original Drilling - As D	6,586.32	8,385.00	2,522.49	2,470.25	48.290	CC
Moser H34-717 - Original Drilling - Original Drilling - As D	6,600.00	8,385.36	2,522.52	2,470.22	48.225	ES
Moser H34-717 - Original Drilling - Original Drilling - As D	14,900.00	16,342.00	2,663.19	2,508.88	17.258	SF
Moser H34-725 - Original Drilling - Original Drilling - As D	100.00	83.56	2,716.64	2,716.37	10,000.000	CC
Moser H34-725 - Original Drilling - Original Drilling - As D	1,200.00	1,153.08	2,718.58	2,712.08	418.451	ES
Moser H34-725 - Original Drilling - Original Drilling - As D	15,100.00	16,701.00	3,253.55	3,098.58	20.995	SF
Moser H34-735 - Original Drilling - Original Drilling - As D	1,960.46	1,954.00	3,742.31	3,728.91	279.351	CC
Moser H34-735 - Original Drilling - Original Drilling - As D	14,808.96	16,441.00	3,890.92	3,659.00	16.777	ES
Moser H34-735 - Original Drilling - Original Drilling - As D	15,000.00	16,441.00	3,895.61	3,662.87	16.738	SF
Moser H34-748 - Original Drilling - Original Drilling - As D	763.18	752.22	3,867.76	3,862.82	782.993	CC
Moser H34-748 - Original Drilling - Original Drilling - As D	1,200.00	1,158.72	3,868.81	3,860.88	487.720	ES
Moser H34-748 - Original Drilling - Original Drilling - As D	15,200.00	16,561.00	4,716.52	4,471.11	19.219	SF
Moser H34-750 - Original Drilling - Original Drilling - As D	14,806.46	16,800.00	4,884.66	4,726.93	30.969	CC, ES
Moser H34-750 - Original Drilling - Original Drilling - As D	15,300.00	16,800.00	4,909.53	4,749.57	30.691	SF
Moser H34-757 - Original Drilling - Original Drilling - As D	0.00	0.00	5,251.52			
Moser H34-757 - Original Drilling - Original Drilling - As D	14,802.36	16,873.00	5,331.31	5,174.75	34.053	ES
Moser H34-757 - Original Drilling - Original Drilling - As D	15,342.74	16,873.00	5,358.63	5,199.28	33.629	SF
Moser H34-769 - Original Drilling - Original Drilling - As D	2,405.98	2,753.00	6,203.58	6,185.50	343.110	CC, ES
Moser H34-769 - Original Drilling - Original Drilling - As D	15,342.74	16,650.00	6,492.41	6,325.92	38.995	SF
Moser H34-778 - Original Drilling - Original Drilling -As Dr	2,230.58	2,278.05	6,278.77	6,264.98	455.423	CC, ES
Moser H34-778 - Original Drilling - Original Drilling -As Dr	15,342.74	16,453.00	6,815.17	6,651.68	41.685	SF
Moser H34-778 - Original Drilling - ST01 - Original Drilling	5,832.00	8,983.66	6,644.25	6,607.66	181.596	CC, ES
Moser H34-778 - Original Drilling - ST01 - Original Drilling	15,342.74	16,440.00	6,815.79	6,666.76	45.735	SF
Ritchey 1-27 1 - Wellbore #1 - Wellbore #1 - As Drilled	752.08	714.09	5,083.78	5,078.99	1,062.751	CC
Ritchey 1-27 1 - Wellbore #1 - Wellbore #1 - As Drilled	2,200.00	2,126.09	5,089.11	5,074.21	341.411	ES
Ritchey 1-27 1 - Wellbore #1 - Wellbore #1 - As Drilled	9,900.00	9,900.00	6,883.25	6,817.96	105.433	SF
Ritchey H27-04 - Wellbore #1 - Wellbore #1 - As Drilled	310.29	268.30	6,479.82	6,478.17	3,942.414	CC
Ritchey H27-04 - Wellbore #1 - Wellbore #1 - As Drilled	2,100.00	2,022.28	6,485.30	6,471.12	457.192	ES
Ritchey H27-04 - Wellbore #1 - Wellbore #1 - As Drilled	7,250.00	6,791.98	7,424.17	7,375.63	152.947	SF
Ritchey H27-05 - Wellbore #1 - Wellbore #1 - As Drilled	100.00	51.82	6,245.45	6,245.23	10,000.000	CC
Ritchey H27-05 - Wellbore #1 - Wellbore #1 - As Drilled	1,300.00	1,227.35	6,249.32	6,240.77	731.245	ES
Ritchey H27-05 - Wellbore #1 - Wellbore #1 - As Drilled	10,700.00	7,000.01	8,313.20	8,254.04	140.527	SF
Ritchey H27-11 - Wellbore #1 - Wellbore #1 - As Drilled	1,672.92	1,639.95	4,872.25	4,860.93	430.242	CC
Ritchey H27-11 - Wellbore #1 - Wellbore #1 - As Drilled	2,200.00	2,145.71	4,874.56	4,859.58	325.547	ES
Ritchey H27-11 - Wellbore #1 - Wellbore #1 - As Drilled	10,300.00	6,957.84	6,073.92	6,015.30	103.627	SF
Ritchey H27-12 - Wellbore #1 - Wellbore #1 - As Drilled	179.93	148.93	6,010.07	6,009.31	7,929.529	CC
Ritchey H27-12 - Wellbore #1 - Wellbore #1 - As Drilled	400.00	328.99	6,011.01	6,008.83	2,763.224	ES
Ritchey H27-12 - Wellbore #1 - Wellbore #1 - As Drilled	11,500.00	6,830.76	7,740.52	7,677.25	122.346	SF
Ritchey H27-14 - Wellbore #1 - Wellbore #1 - As Drilled	406.54	377.55	5,334.17	5,331.80	2,249.696	CC
Ritchey H27-14 - Wellbore #1 - Wellbore #1 - As Drilled	600.00	539.02	5,334.67	5,331.04	1,470.570	ES
Ritchey H27-14 - Wellbore #1 - Wellbore #1 - As Drilled	11,600.00	7,027.35	6,063.65	5,997.16	91.200	SF
Ritchey H27-20 - Wellbore #1 - Wellbore #1 - As Drilled	0.00	0.00	5,387.66			
Ritchey H27-20 - Wellbore #1 - Wellbore #1 - As Drilled	100.00	42.60	5,387.71	5,387.51	10,000.000	ES
Ritchey H27-20 - Wellbore #1 - Wellbore #1 - As Drilled	10,800.00	6,548.88	7,388.61	7,330.07	126.210	SF
Ritchey H27-21 - Wellbore #1 - Wellbore #1 - As Drilled	944.10	909.77	4,224.30	4,218.14	686.128	CC
Ritchey H27-21 - Wellbore #1 - Wellbore #1 - As Drilled	1,400.00	1,339.55	4,226.02	4,216.73	454.773	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 Hurley H35-755
Project:	Mustang	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Reference Site:	H Section 26	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Hurley H35-755	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 #2	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						
H Section 27						
Ritchey H27-21 - Wellbore #1 - Wellbore #1 - As Drilled	8,800.00	6,964.38	5,206.38	5,153.85	99.105	SF
Ritchey H27-25 - Wellbore #1 - Wellbore #1 - As Drilled	0.00	0.00	5,767.76			
Ritchey H27-25 - Wellbore #1 - Wellbore #1 - As Drilled	2,222.29	2,237.22	5,776.80	5,761.43	375.761	ES
Ritchey H27-25 - Wellbore #1 - Wellbore #1 - As Drilled	11,700.00	7,032.79	6,950.42	6,884.13	104.859	SF
Ritchey H34-28 - Wellbore #1 - Wellbore #1 - As Drilled	0.00	0.00	5,130.23			
Ritchey H34-28 - Wellbore #1 - Wellbore #1 - As Drilled	1,000.00	937.19	5,133.56	5,127.10	795.178	ES
Ritchey H34-28 - Wellbore #1 - Wellbore #1 - As Drilled	11,900.00	6,632.62	5,535.91	5,468.80	82.495	SF
Ritchey H34-29 - Wellbore #1 - Wellbore #1 - As Drilled	100.00	80.17	6,109.20	6,108.93	10,000.000	CC
Ritchey H34-29 - Wellbore #1 - Wellbore #1 - As Drilled	700.00	639.26	6,110.39	6,106.05	1,409.239	ES
Ritchey H34-29 - Wellbore #1 - Wellbore #1 - As Drilled	12,300.00	6,893.26	6,822.07	6,751.80	97.083	SF
UPRR 53 Pan Am Unit "O" 1 - Original Drilling - Original D	482.60	445.62	2,695.72	2,692.83	934.202	CC
UPRR 53 Pan Am Unit "O" 1 - Original Drilling - Original D	600.00	547.28	2,696.01	2,692.34	734.845	ES
UPRR 53 Pan Am Unit "O" 1 - Original Drilling - Original D	7,000.00	6,816.75	3,548.94	3,500.71	73.581	SF

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Hurley H35-755
Project:	Mustang	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Reference Site:	H Section 26	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Hurley H35-755	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 #2	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						
H Section 34						
Cannon H34-11 - Wellbore #1 - Wellbore #1 - As Drilled	13,421.93	6,785.46	5,676.58	5,594.45	69.122	CC, ES
Cannon H34-11 - Wellbore #1 - Wellbore #1 - As Drilled	15,000.00	6,800.01	5,891.79	5,801.09	64.954	SF
Cannon H34-12 - Wellbore #1 - Wellbore #1 - As Drilled	13,359.14	7,005.38	6,905.10	6,822.43	83.525	CC
Cannon H34-12 - Wellbore #1 - Wellbore #1 - As Drilled	13,400.00	7,005.29	6,905.22	6,822.28	83.250	ES
Cannon H34-12 - Wellbore #1 - Wellbore #1 - As Drilled	15,342.74	7,000.19	7,184.36	7,090.40	76.464	SF
Cannon H34-13 - Wellbore #1 - Wellbore #1 - As Drilled	14,640.52	6,849.99	6,825.11	6,733.49	74.494	CC
Cannon H34-13 - Wellbore #1 - Wellbore #1 - As Drilled	14,700.00	6,849.74	6,825.37	6,733.34	74.165	ES
Cannon H34-13 - Wellbore #1 - Wellbore #1 - As Drilled	15,342.74	6,847.00	6,861.14	6,764.96	71.332	SF
Cannon H34-14 - Wellbore #1 - Wellbore #1 - As Drilled	14,714.82	7,100.01	5,655.30	5,561.89	60.544	CC, ES
Cannon H34-14 - Wellbore #1 - Wellbore #1 - As Drilled	15,342.74	7,100.01	5,690.05	5,592.73	58.467	SF
Cannon H34-25 - Wellbore #1 - Wellbore #1 - As Drilled	13,962.74	7,000.01	6,269.24	6,182.04	71.894	CC
Cannon H34-25 - Wellbore #1 - Wellbore #1 - As Drilled	14,000.00	7,000.01	6,269.35	6,181.89	71.688	ES
Cannon H34-25 - Wellbore #1 - Wellbore #1 - As Drilled	15,300.00	7,000.01	6,410.27	6,315.22	67.441	SF
Cannon Land 11-34 - Wellbore #1 - Wellbore #1 - As Drill	13,195.85	6,833.37	5,650.52	5,569.84	70.035	CC
Cannon Land 11-34 - Wellbore #1 - Wellbore #1 - As Drill	13,200.00	6,833.41	5,650.53	5,569.82	70.012	ES
Cannon Land 11-34 - Wellbore #1 - Wellbore #1 - As Drill	14,800.00	6,851.39	5,873.80	5,784.44	65.728	SF
Cannon X 03-29 - Wellbore #1 - Wellbore #1 - As Drilled	15,209.34	7,039.91	6,222.85	6,126.00	64.251	CC, ES
Cannon X 03-29 - Wellbore #1 - Wellbore #1 - As Drilled	15,342.74	7,037.40	6,224.28	6,126.52	63.673	SF
Cannon X 03-30D - Wellbore #1 - Wellbore #1 - As Drilled	15,234.32	7,264.84	7,449.24	7,348.13	73.673	CC
Cannon X 03-30D - Wellbore #1 - Wellbore #1 - As Drilled	15,300.00	7,264.36	7,449.53	7,347.89	73.295	ES
Cannon X 03-30D - Wellbore #1 - Wellbore #1 - As Drilled	15,342.74	7,264.04	7,450.03	7,348.05	73.056	SF
Moser 34-06 - Original Drilling - Original Drilling - As Drille	11,707.10	7,000.00	5,932.06	5,861.31	83.844	CC, ES
Moser 34-06 - Original Drilling - Original Drilling - As Drille	13,700.00	7,000.00	6,257.88	6,176.70	77.086	SF
Moser H34-01 - Original Drilling - Original Drilling - As Dr	10,869.12	7,066.03	2,904.57	2,839.05	44.328	CC, ES
Moser H34-01 - Original Drilling - Original Drilling - As Dr	11,300.00	7,059.08	2,936.35	2,868.93	43.554	SF
Moser H34-02 - Wellbore #1 - Wellbore #1 - As Drilled	10,768.37	7,128.35	4,205.13	4,140.01	64.573	CC
Moser H34-02 - Wellbore #1 - Wellbore #1 - As Drilled	10,800.00	7,130.19	4,205.25	4,139.95	64.396	ES
Moser H34-02 - Wellbore #1 - Wellbore #1 - As Drilled	11,900.00	7,194.30	4,354.24	4,283.46	61.518	SF
Moser H34-04 - Wellbore #1 - Wellbore #1 - As Drilled	10,753.03	6,900.01	6,965.77	6,901.80	108.906	CC
Moser H34-04 - Wellbore #1 - Wellbore #1 - As Drilled	10,800.00	6,900.01	6,965.92	6,901.69	108.445	ES
Moser H34-04 - Wellbore #1 - Wellbore #1 - As Drilled	13,700.00	6,930.99	7,563.40	7,484.12	95.396	SF
Moser H34-06 - Wellbore #1 - Wellbore #1 - As Drilled	11,707.10	7,000.01	5,932.06	5,861.31	83.844	CC, ES
Moser H34-06 - Wellbore #1 - Wellbore #1 - As Drilled	13,700.00	7,000.01	6,257.88	6,176.70	77.086	SF
Moser H34-08 - Original Drilling - Original Drilling - As Dr	11,726.12	7,009.23	3,291.57	3,220.62	46.389	CC, ES
Moser H34-08 - Original Drilling - Original Drilling - As Dr	12,300.00	7,007.42	3,341.22	3,267.55	45.352	SF
Moser H34-09 - Wellbore #1 - Wellbore #1 - As Drilled	13,379.98	7,007.24	2,812.43	2,729.56	33.938	CC
Moser H34-09 - Wellbore #1 - Wellbore #1 - As Drilled	13,400.00	7,007.27	2,812.50	2,729.52	33.892	ES
Moser H34-09 - Wellbore #1 - Wellbore #1 - As Drilled	13,700.00	7,007.70	2,830.58	2,746.16	33.531	SF
Moser H34-10 - Wellbore #1 - Wellbore #1 - As Drilled	13,266.12	6,949.51	4,265.53	4,183.80	52.189	CC
Moser H34-10 - Wellbore #1 - Wellbore #1 - As Drilled	13,300.00	6,949.66	4,265.67	4,183.72	52.054	ES
Moser H34-10 - Wellbore #1 - Wellbore #1 - As Drilled	14,100.00	6,953.07	4,346.27	4,260.14	50.460	SF
Moser H34-15 - Wellbore #1 - Wellbore #1 - As Drilled	14,604.87	7,012.49	4,228.97	4,136.83	45.896	CC, ES
Moser H34-15 - Wellbore #1 - Wellbore #1 - As Drilled	15,342.74	7,020.25	4,292.86	4,196.76	44.673	SF
Moser H34-16 - Wellbore #1 - Wellbore #1 - As Drilled	14,627.84	6,961.10	2,823.38	2,731.37	30.684	CC, ES
Moser H34-16 - Wellbore #1 - Wellbore #1 - As Drilled	15,000.00	6,968.64	2,847.79	2,754.02	30.369	SF
Moser H34-18 - Wellbore #1 - Wellbore #1 - As Drilled	11,406.86	6,930.13	5,063.27	4,994.90	74.054	CC, ES
Moser H34-18 - Wellbore #1 - Wellbore #1 - As Drilled	12,900.00	6,928.99	5,278.85	5,202.90	69.508	SF
Moser H34-20 - Wellbore #1 - Wellbore #1 - As Drilled	12,575.57	6,973.31	6,262.77	6,185.98	81.556	CC
Moser H34-20 - Wellbore #1 - Wellbore #1 - As Drilled	12,600.00	6,973.02	6,262.82	6,185.87	81.390	ES
Moser H34-20 - Wellbore #1 - Wellbore #1 - As Drilled	14,600.00	6,956.84	6,581.82	6,494.17	75.090	SF
Moser H34-21 - Wellbore #1 - Wellbore #1 - As Drilled	12,470.81	6,937.95	5,124.10	5,048.26	67.562	CC
Moser H34-21 - Wellbore #1 - Wellbore #1 - As Drilled	12,500.00	6,937.91	5,124.19	5,048.16	67.400	ES
Moser H34-21 - Wellbore #1 - Wellbore #1 - As Drilled	13,800.00	6,936.33	5,293.69	5,210.82	63.878	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 Hurley H35-755
Project:	Mustang	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Reference Site:	H Section 26	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Hurley H35-755	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 #2	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						
H Section 34						
Moser H34-22 - Wellbore #1 - Wellbore #1 - As Drilled	12,535.01	6,981.93	3,482.56	3,406.01	45.497	CC, ES
Moser H34-22 - Wellbore #1 - Wellbore #1 - As Drilled	13,100.00	6,979.90	3,528.09	3,448.73	44.455	SF
Moser H34-23 - Wellbore #1 - Wellbore #1 - As Drilled	13,977.86	7,011.99	3,578.87	3,491.50	40.966	CC
Moser H34-23 - Wellbore #1 - Wellbore #1 - As Drilled	14,000.00	7,012.49	3,578.93	3,491.43	40.901	ES
Moser H34-23 - Wellbore #1 - Wellbore #1 - As Drilled	14,600.00	7,022.00	3,632.53	3,542.04	40.143	SF
Moser H34-31 - Wellbore #1 - Wellbore #1 - As Drilled	11,349.91	7,089.17	7,456.92	7,388.22	108.545	CC
Moser H34-31 - Wellbore #1 - Wellbore #1 - As Drilled	11,400.00	7,090.70	7,457.08	7,388.07	108.051	ES
Moser H34-31 - Wellbore #1 - Wellbore #1 - As Drilled	14,500.00	7,162.47	8,094.46	8,008.70	94.390	SF
Moser H35-32 - Wellbore #1 - Wellbore #1 - As Drilled	12,545.82	6,990.55	2,418.82	2,342.12	31.539	CC, ES
Moser H35-32 - Wellbore #1 - Wellbore #1 - As Drilled	12,800.00	6,991.63	2,432.14	2,354.29	31.244	SF
Moser H35-33 - Wellbore #1 - Wellbore #1 - As Drilled	14,040.89	7,030.27	2,348.68	2,260.71	26.700	CC, ES
Moser H35-33 - Wellbore #1 - Wellbore #1 - As Drilled	14,300.00	7,023.27	2,362.92	2,273.88	26.538	SF
Moser X 3-27 - Wellbore #1 - Wellbore #1 - As Drilled	15,217.88	6,808.39	3,619.45	3,523.74	37.817	CC, ES
Moser X 3-27 - Wellbore #1 - Wellbore #1 - As Drilled	15,342.74	6,814.74	3,621.59	3,525.08	37.526	SF
Moser X 3-28 - Wellbore #1 - Wellbore #1 - As Drilled	15,214.18	6,873.46	4,870.32	4,774.17	50.652	CC, ES
Moser X 3-28 - Wellbore #1 - Wellbore #1 - As Drilled	15,342.74	6,879.84	4,872.02	4,774.99	50.212	SF

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Hurley H35-755
Project:	Mustang	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Reference Site:	H Section 26	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Hurley H35-755	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 #2	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						
H Section 35						
Cannon Farms 01-35C - Original Drilling - Original Drilling	14,306.48	6,979.92	1,836.47	1,746.78	20.475	CC, ES
Cannon Farms 01-35C - Original Drilling - Original Drilling	14,500.00	6,974.04	1,846.63	1,755.27	20.213	SF
Cannon H35-03D - Original Drilling - Original Drilling - As	13,781.51	6,971.10	588.15	502.70	6.883	CC, ES, SF
Cannon H35-09 - Original Drilling - Original Drilling - As D	13,377.54	7,002.28	2,219.08	2,131.80	25.427	CC
Cannon H35-09 - Original Drilling - Original Drilling - As D	13,400.00	7,001.80	2,219.19	2,131.71	25.370	ES
Cannon H35-09 - Original Drilling - Original Drilling - As D	13,700.00	6,995.32	2,242.37	2,152.64	24.990	SF
Cannon H35-10 - Original Drilling - Original Drilling - As D	13,482.86	6,971.24	977.25	893.73	11.701	CC
Cannon H35-10 - Original Drilling - Original Drilling - As D	13,500.00	6,971.33	977.40	893.68	11.675	ES
Cannon H35-10 - Original Drilling - Original Drilling - As D	13,600.00	6,971.85	984.25	899.64	11.634	SF
Cannon H35-11 - Original Drilling - Original Drilling - As D	13,362.94	6,990.14	90.40	8.00	1.097	Level 2, CC, ES, SF
Cannon H35-12 - Original Drilling - Original Drilling - As D	13,461.81	6,991.69	1,557.03	1,473.62	18.667	CC, ES
Cannon H35-12 - Original Drilling - Original Drilling - As D	13,500.00	6,992.12	1,557.50	1,473.93	18.638	SF
Cannon H35-13 - Wellbore #1 - Wellbore #1 - As Drilled	14,653.88	6,996.20	1,622.23	1,529.79	17.549	CC, ES
Cannon H35-13 - Wellbore #1 - Wellbore #1 - As Drilled	14,700.00	6,994.93	1,622.89	1,530.26	17.521	SF
Cannon H35-14 - Original Drilling - Original Drilling - As D	14,691.11	6,992.21	228.81	129.85	2.312	CC, ES, SF
Cannon H35-15 (PA) - Original Drilling - Original Drilling -	14,730.67	6,984.00	987.46	779.08	4.739	CC, ES
Cannon H35-15 (PA) - Original Drilling - Original Drilling -	14,800.00	6,984.00	989.89	780.79	4.734	SF
Cannon H35-20 - Original Drilling - Original Drilling - As D	12,862.09	6,945.83	953.45	874.98	12.150	CC, ES
Cannon H35-20 - Original Drilling - Original Drilling - As D	12,900.00	6,946.40	954.20	875.66	12.149	SF
Cannon H35-21 - Original Drilling - Original Drilling - As D	12,948.98	6,988.68	464.78	385.20	5.840	CC, ES
Cannon H35-21 - Original Drilling - Original Drilling - As D	13,000.00	6,988.90	467.57	387.38	5.830	SF
Cannon H35-22 - Original Drilling - Original Drilling - As D	12,869.97	6,856.29	1,393.04	1,314.33	17.698	CC, ES
Cannon H35-22 - Original Drilling - Original Drilling - As D	13,000.00	6,856.07	1,399.10	1,319.17	17.503	SF
Cannon H35-24 - Original Drilling - Original Drilling - As D	14,135.61	7,000.11	258.30	170.17	2.931	CC, ES, SF
Cannon X02-27 - Original Drilling - Original Drilling - As D	15,215.29	6,977.01	1,406.93	1,310.32	14.563	CC, ES
Cannon X02-27 - Original Drilling - Original Drilling - As D	15,342.74	6,976.98	1,412.69	1,314.91	14.448	SF
Cannon X02-28 - Original Drilling - Original Drilling - As D	14,980.29	6,997.68	224.08	129.35	2.366	CC, ES, SF
Cannon X02-29 - Original Drilling - Original Drilling - As D	15,060.91	7,045.46	1,102.63	1,006.43	11.462	CC, ES
Cannon X02-29 - Original Drilling - Original Drilling - As D	15,100.00	7,048.04	1,103.32	1,007.03	11.458	SF
Foster 18-35 - Original Drilling - Original Drilling - As Drill	11,198.67	6,953.63	1,076.15	1,009.17	16.067	CC
Foster 18-35 - Original Drilling - Original Drilling - As Drill	11,200.00	6,953.64	1,076.15	1,009.17	16.066	ES, SF
Foster UPRR 31-35 #1 (PA) - Original Drilling - Original D	10,627.73	6,996.01	1,053.90	874.94	5.889	CC, ES
Foster UPRR 31-35 #1 (PA) - Original Drilling - Original D	10,700.00	6,996.01	1,056.37	876.74	5.881	SF
Foster UPRR 32-35 - Original Drilling - Original Drilling - A	11,960.81	6,990.83	917.76	845.29	12.663	CC, ES
Foster UPRR 32-35 - Original Drilling - Original Drilling - A	12,100.00	6,991.27	928.26	854.55	12.593	SF
Foster UPRR 41-35 - Original Drilling - Original Drilling - A	10,852.81	6,978.73	2,380.99	2,307.02	32.191	CC, ES
Foster UPRR 41-35 - Original Drilling - Original Drilling - A	11,300.00	6,981.19	2,422.62	2,345.36	31.360	SF
Foster UPRR 42-35 #2 - Original Drilling - Original Drilling	11,943.34	6,885.18	2,329.19	2,256.96	32.247	CC, ES
Foster UPRR 42-35 #2 - Original Drilling - Original Drilling	12,400.00	6,892.97	2,373.53	2,297.89	31.382	SF
HSR Foster 03-35 - Original Drilling - Original Drilling - As	10,839.67	6,988.15	188.02	123.08	2.895	CC, ES, SF
HSR Foster 04-35 - Wellbore #1 - Wellbore #1 - As Drille	10,531.84	6,848.91	1,854.62	1,792.66	29.930	CC, ES
HSR Foster 04-35 - Wellbore #1 - Wellbore #1 - As Drille	10,700.00	6,849.34	1,862.23	1,799.65	29.758	SF
HSR Foster 05-35 - Wellbore #1 - Wellbore #1 - As Drille	12,122.14	6,871.96	1,652.50	1,579.78	22.725	CC, ES
HSR Foster 05-35 - Wellbore #1 - Wellbore #1 - As Drille	12,200.00	6,872.80	1,654.33	1,581.30	22.653	SF
HSR Foster 06-35 - Original Drilling - Original Drilling - As	12,019.29	7,012.06	281.85	208.98	3.868	CC, ES, SF
UPRR 53 Pan Am Unit P1 - Original Drilling - Original Dri	11,437.02	6,989.97	1,823.45	1,754.64	26.501	CC, ES
UPRR 53 Pan Am Unit P1 - Original Drilling - Original Dri	11,700.00	6,989.25	1,842.31	1,771.41	25.984	SF
UPRR 53 Pan Am UT P2 - Original Drilling - Original Drill	11,057.02	6,956.82	654.61	588.73	9.936	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 Hurley H35-755
Project:	Mustang	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Reference Site:	H Section 26	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Hurley H35-755	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 #2	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						
H Section 36						
Dechant 07-36 - Original Drilling - Original Drilling - As Dr	12,353.38	6,842.85	6,006.96	5,932.13	80.275	CC
Dechant 07-36 - Original Drilling - Original Drilling - As Dr	12,400.00	6,843.05	6,007.14	5,931.94	79.884	ES
Dechant 07-36 - Original Drilling - Original Drilling - As Dr	14,600.00	6,852.22	6,413.32	6,323.67	71.536	SF
Dechant 13N-1HZ - Production Hole - Production Hole - A	14,600.00	14,600.00	3,535.29	3,417.40	29.988	SF
Dechant 13N-1HZ - Production Hole - Production Hole - A	15,342.74	6,961.91	3,429.71	3,333.01	35.469	CC, ES
Dechant 13N-1HZ - Surface Hole - Surface Hole - As Dril	15,199.90	600.00	7,647.22	7,573.03	103.083	CC
Dechant 13N-1HZ - Surface Hole - Surface Hole - As Dril	15,300.00	600.00	7,647.88	7,572.88	101.972	ES
Dechant 13N-1HZ - Surface Hole - Surface Hole - As Dril	15,342.74	600.00	7,648.55	7,573.21	101.514	SF
Dechant 14C-1HZ - Production Hole - Production Hole - A	15,342.74	6,929.93	4,775.82	4,680.30	49.999	CC, ES, SF
Dechant 14C-1HZ - Surface Hole - Surface Hole - As Dril	15,203.85	610.00	7,690.83	7,616.54	103.518	CC
Dechant 14C-1HZ - Surface Hole - Surface Hole - As Dril	15,300.00	610.00	7,691.43	7,616.36	102.447	ES
Dechant 14C-1HZ - Surface Hole - Surface Hole - As Dril	15,342.74	610.00	7,692.09	7,616.66	101.987	SF
Dechant 15-36 - Original Drilling - Original Drilling - As Dr	14,806.91	6,932.71	5,989.69	5,879.65	54.432	CC
Dechant 15-36 - Original Drilling - Original Drilling - As Dr	14,900.00	6,933.11	5,990.41	5,879.58	54.049	ES
Dechant 15-36 - Original Drilling - Original Drilling - As Dr	15,342.74	6,935.02	6,013.61	5,899.20	52.565	SF
Dechant 24-36 - Original Drilling - Original Drilling - As Dr	12,691.13	7,093.01	6,696.22	6,615.94	83.413	CC
Dechant 24-36 - Original Drilling - Original Drilling - As Dr	12,800.00	7,093.06	6,697.10	6,615.82	82.394	ES
Dechant 24-36 - Original Drilling - Original Drilling - As Dr	15,342.74	7,094.01	7,202.11	7,100.88	71.150	SF
Dechant 35N-E1HZ - Production Hole - Production Hole -	15,342.74	6,963.00	4,495.70	4,399.79	46.874	CC, ES, SF
Dechant 35N-E1HZ - Surface Hole - Surface Hole - As D	15,202.69	612.00	7,673.90	7,599.63	103.325	CC
Dechant 35N-E1HZ - Surface Hole - Surface Hole - As D	15,300.00	612.00	7,674.52	7,599.45	102.243	ES
Dechant 35N-E1HZ - Surface Hole - Surface Hole - As D	15,342.74	612.00	7,675.18	7,599.77	101.784	SF
Dechant 35N-W1HZ - Original Drilling - Original Drilling -	15,342.74	6,886.00	4,062.71	3,967.22	42.542	CC, ES, SF
Dechant 36N-W1HZ - Original Drilling - Original Drilling -	15,205.52	6,306.97	5,131.73	5,035.73	53.455	CC, ES
Dechant 36N-W1HZ - Original Drilling - Original Drilling -	15,342.74	6,309.68	5,133.57	5,036.38	52.822	SF
Dechant 37N-E1HZ - Production Hole - Production Hole -	15,296.06	5,013.02	7,164.66	7,072.46	77.707	CC
Dechant 37N-E1HZ - Production Hole - Production Hole -	15,342.74	5,013.06	7,164.81	7,072.20	77.366	ES, SF
Dechant 37N-E1HZ - Surface Hole - Surface Hole - As D	15,179.18	648.00	8,467.57	8,392.60	112.944	CC
Dechant 37N-E1HZ - Surface Hole - Surface Hole - As D	15,200.00	648.00	8,467.59	8,392.45	112.688	ES
Dechant 37N-E1HZ - Surface Hole - Surface Hole - As D	15,342.74	648.00	8,469.15	8,392.85	110.998	SF
Dechant 37N-W1HZ - Production Hole - Production Hole	15,138.62	7,339.00	6,514.10	6,417.89	67.705	CC
Dechant 37N-W1HZ - Production Hole - Production Hole	15,342.74	15,342.74	6,515.64	6,380.50	48.212	ES, SF
Dechant 37N-W1HZ - Surface Hole - Surface Hole - As D	15,197.51	655.00	8,477.09	8,401.95	112.819	CC
Dechant 37N-W1HZ - Surface Hole - Surface Hole - As D	15,300.00	655.00	8,477.70	8,401.73	111.586	ES
Dechant 37N-W1HZ - Surface Hole - Surface Hole - As D	15,342.74	655.00	8,478.33	8,402.01	111.089	SF
Dechant State 15C-1HZ - Wellbore #1 - As Drilled	15,137.38	11,637.96	6,122.98	5,994.05	47.491	CC
Dechant State 15C-1HZ - Wellbore #1 - As Drilled	15,342.74	11,771.00	6,124.17	5,992.26	46.426	ES, SF
Dechant State 16C-1HZ - Original Drilling - Original Drilling	15,342.74	12,574.03	7,329.69	7,154.89	41.933	CC, ES, SF
Dechant State 36N-E1HZ - Wellbore #1 - Wellbore #1	13,700.00	13,700.00	5,801.71	5,663.59	42.006	SF
Dechant State 36N-E1HZ - Wellbore #1 - Wellbore #1	14,893.96	11,272.00	5,776.10	5,651.43	46.331	CC
Dechant State 36N-E1HZ - Wellbore #1 - Wellbore #1	14,900.00	11,272.00	5,776.10	5,651.38	46.312	ES
Dechant State 37N-E36HZ - Wellbore #1 - As Drilled	13,824.37	10,335.90	7,120.05	7,012.94	66.474	CC
Dechant State 37N-E36HZ - Wellbore #1 - As Drilled	15,000.00	11,466.00	7,124.47	6,997.31	56.030	ES
Dechant State 37N-E36HZ - Wellbore #1 - As Drilled	15,342.74	11,466.00	7,134.90	7,005.11	54.970	SF
Dechant State 37N-W36HZ - Wellbore #1 - As Drilled	13,700.00	13,700.00	6,598.29	6,460.49	47.883	SF
Dechant State 37N-W36HZ - Wellbore #1 - As Drilled	14,953.74	11,490.00	6,585.67	6,458.72	51.876	CC
Dechant State 37N-W36HZ - Wellbore #1 - As Drilled	15,000.00	11,490.00	6,585.83	6,458.48	51.715	ES
Dechant State 38N-1HZ - Wellbore #1 - As Drilled	10,857.26	7,305.33	7,855.39	7,791.61	123.167	CC
Dechant State 38N-1HZ - Wellbore #1 - As Drilled	15,200.00	15,200.00	7,859.91	7,692.61	46.981	ES, SF
Dechant State H36-11D - Original Drilling - Original Drilling	13,540.59	6,900.01	4,837.07	4,753.36	57.785	CC
Dechant State H36-11D - Original Drilling - Original Drilling	13,600.00	6,900.01	4,837.44	4,753.23	57.448	ES
Dechant State H36-11D - Original Drilling - Original Drilling	14,900.00	6,900.01	5,024.47	4,931.36	53.966	SF
Dechant State H36-18D - Dechant State H36-18D Gyros	11,486.79	7,066.18	5,400.41	5,328.58	75.185	CC

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 Hurley H35-755
Project:	Mustang	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Reference Site:	H Section 26	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Hurley H35-755	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 #2	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						
H Section 36						
Dechant State H36-18D - Dechant State H36-18D Gyros	11,600.00	7,070.67	5,401.60	5,328.32	73.721	ES
Dechant State H36-18D - Dechant State H36-18D Gyros	14,500.00	14,500.00	6,182.68	6,057.05	49.215	SF
Dechant State H36-18D - Dechant State H36-18D OH - A	11,486.75	7,079.18	5,400.45	5,328.62	75.186	CC
Dechant State H36-18D - Dechant State H36-18D OH - A	11,600.00	7,083.67	5,401.63	5,328.36	73.721	ES
Dechant State H36-18D - Dechant State H36-18D OH - A	14,500.00	14,500.00	6,182.73	6,057.14	49.228	SF
Dechant State H36-19 - Original Drilling - Original Drilling	11,142.02	7,185.60	4,009.73	3,942.62	59.749	CC
Dechant State H36-19 - Original Drilling - Original Drilling	11,200.00	7,186.07	4,010.15	3,942.60	59.364	ES
Dechant State H36-19 - Original Drilling - Original Drilling	12,400.00	7,200.00	4,202.42	4,126.96	55.692	SF
Dechant State H36-20D - Dechant State H36-20D Gyros	12,928.02	7,279.34	4,205.40	4,121.57	50.164	CC, ES
Dechant State H36-20D - Dechant State H36-20D Gyros	14,200.00	14,200.00	4,393.10	4,282.27	39.638	SF
Dechant State H36-20D - Dechant State H36-20D OH - A	12,928.03	7,292.34	4,205.40	4,121.57	50.164	CC, ES
Dechant State H36-20D - Dechant State H36-20D OH - A	14,200.00	14,200.00	4,393.10	4,282.31	39.652	SF
Dechant State H36-21D - Dechant State H36-21D Gyros	12,916.25	7,018.25	5,420.14	5,334.77	63.488	CC, ES
Dechant State H36-21D - Dechant State H36-21D Gyros	14,300.00	7,010.49	5,593.98	5,501.61	60.560	SF
Dechant State H36-21D - Dechant State H36-21D OH - A	12,916.27	7,031.25	5,420.12	5,334.74	63.488	CC, ES
Dechant State H36-21D - Dechant State H36-21D OH - A	14,300.00	7,023.49	5,593.96	5,501.58	60.560	SF
Dechant State H36-24 - Original Drilling - Original Drilling	14,114.50	7,163.89	5,479.32	5,389.42	60.950	CC
Dechant State H36-24 - Original Drilling - Original Drilling	14,200.00	7,162.92	5,479.99	5,389.35	60.463	ES
Dechant State H36-24 - Original Drilling - Original Drilling	15,342.74	7,150.61	5,615.28	5,515.85	56.473	SF
Dechant State H36-31D - Dechant State H36-31D OH - A	11,496.33	7,085.46	3,005.30	2,935.62	43.127	CC
Dechant State H36-31D - Dechant State H36-31D OH - A	11,500.00	7,085.49	3,005.30	2,935.59	43.112	ES
Dechant State H36-31D - Dechant State H36-31D OH - A	12,200.00	7,091.24	3,086.58	3,012.43	41.629	SF
Dechant State H36-32D - Dechant State H36-32D Gyros	12,740.02	6,950.00	2,985.93	2,901.96	35.559	CC
Dechant State H36-32D - Dechant State H36-32D Gyros	12,800.00	6,950.00	2,986.53	2,901.91	35.291	ES
Dechant State H36-32D - Dechant State H36-32D Gyros	13,400.00	6,950.00	3,058.00	2,968.01	33.981	SF
Dechant State H36-32D - Dechant State H36-32D OH - A	12,741.67	7,064.21	2,983.65	2,899.72	35.552	CC
Dechant State H36-32D - Dechant State H36-32D OH - A	12,800.00	7,065.03	2,984.22	2,899.66	35.292	ES
Dechant State H36-32D - Dechant State H36-32D OH - A	13,400.00	7,073.48	3,055.39	2,965.49	33.987	SF
Dechant State H36-33 - Dechant State H36-33D Gyros -	13,956.67	7,302.42	3,024.60	2,936.82	34.453	CC
Dechant State H36-33 - Dechant State H36-33D Gyros -	14,000.00	7,302.31	3,024.92	2,936.60	34.252	ES
Dechant State H36-33 - Dechant State H36-33D Gyros -	15,200.00	7,299.25	3,270.18	3,165.60	31.268	SF
Dechant State H36-33 - Dechant State H36-33D OH - As	13,956.69	7,315.42	3,024.61	2,936.83	34.453	CC
Dechant State H36-33 - Dechant State H36-33D OH - As	14,000.00	7,315.31	3,024.92	2,936.61	34.252	ES
Dechant State H36-33 - Dechant State H36-33D OH - As	15,200.00	7,312.26	3,270.19	3,165.60	31.268	SF
HSR Dechant State 01-36 - Wellbore #1 - As Drilled	10,629.54	6,870.84	7,681.45	7,618.23	121.497	CC
HSR Dechant State 01-36 - Wellbore #1 - As Drilled	10,700.00	6,871.26	7,681.78	7,618.07	120.577	ES
HSR Dechant State 01-36 - Wellbore #1 - As Drilled	14,600.00	6,894.72	8,646.88	8,559.19	98.602	SF
HSR Dechant State 02-36 - Original Drilling - Original Dri	10,599.40	6,848.53	5,964.58	5,901.65	94.776	CC
HSR Dechant State 02-36 - Original Drilling - Original Dri	10,600.00	6,848.55	5,964.58	5,901.65	94.769	ES
HSR Dechant State 02-36 - Original Drilling - Original Dri	13,200.00	6,913.84	6,506.50	6,427.19	82.040	SF
HSR Dechant/State 07-36 (PA) - Original Drilling - Origina	11,794.55	6,949.00	6,548.69	6,362.67	35.203	CC
HSR Dechant/State 07-36 (PA) - Original Drilling - Origina	11,800.00	6,949.00	6,548.70	6,362.63	35.195	ES
HSR Dechant/State 07-36 (PA) - Original Drilling - Origina	13,300.00	6,949.00	6,719.51	6,522.75	34.151	SF
Spike State GWS H36-03 - Original Drilling - Original Dril	10,745.43	10,745.43	5,045.02	4,967.60	65.159	CC
Spike State GWS H36-03 - Original Drilling - Original Dril	10,800.00	10,800.00	5,045.32	4,967.31	64.679	ES
Spike State GWS H36-03 - Original Drilling - Original Dril	10,900.00	10,900.00	5,047.39	4,968.32	63.836	SF
Spike State GWS H36-04 - Original Drilling - Original Dril	10,579.80	7,032.87	3,543.68	3,471.84	49.327	CC
Spike State GWS H36-04 - Original Drilling - Original Dril	10,600.00	7,032.72	3,543.74	3,471.75	49.227	ES
Spike State GWS H36-04 - Original Drilling - Original Dril	11,500.00	7,026.08	3,661.20	3,583.27	46.978	SF
Spike State GWS H36-13 - Original Drilling - Original Dril	14,907.51	6,600.01	3,415.50	3,322.01	36.532	CC, ES
Spike State GWS H36-13 - Original Drilling - Original Dril	15,342.74	6,600.01	3,443.12	3,346.17	35.513	SF
Spike State GWS H36-14 - Original Drilling - Original Dril	14,901.34	6,878.11	5,090.31	4,996.30	54.147	CC, ES
Spike State GWS H36-14 - Original Drilling - Original Dril	15,342.74	6,864.40	5,109.38	5,011.82	52.369	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 Hurley H35-755
Project:	Mustang	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Reference Site:	H Section 26	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Hurley H35-755	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 #2	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						
H Section 36						
Spike State H36-02J - Original Drilling - Original Drilling -	11,805.87	6,908.66	4,487.65	4,385.01	43.721	CC, ES
Spike State H36-02J - Original Drilling - Original Drilling -	13,000.00	6,929.30	4,643.76	4,532.20	41.624	SF
Spike State H36-05 - Original Drilling - Original Drilling - A	11,980.66	7,092.95	3,479.36	3,406.67	47.866	CC
Spike State H36-05 - Original Drilling - Original Drilling - A	12,000.00	7,092.89	3,479.41	3,406.56	47.763	ES
Spike State H36-05 - Original Drilling - Original Drilling - A	12,900.00	7,089.89	3,598.76	3,519.71	45.526	SF
Spike State H36-11J - Original Drilling - Original Drilling -	14,142.68	6,933.23	4,245.09	4,156.79	48.072	CC
Spike State H36-11J - Original Drilling - Original Drilling -	14,200.00	6,932.13	4,245.48	4,156.68	47.811	ES
Spike State H36-11J - Original Drilling - Original Drilling -	15,200.00	6,912.12	4,374.74	4,279.05	45.718	SF
Spike State H36-12 - Original Drilling - Original Drilling - A	13,249.36	6,971.76	3,366.44	3,284.75	41.210	CC
Spike State H36-12 - Original Drilling - Original Drilling - A	13,300.00	6,971.22	3,366.83	3,284.70	40.994	ES
Spike State H36-12 - Original Drilling - Original Drilling - A	14,000.00	6,963.25	3,449.11	3,362.02	39.607	SF
X Section 01						
Dechant USX X1-6 - Wellbore #1 - As Drilled	15,342.74	6,800.00	4,930.26	4,838.23	53.571	CC, ES, SF
Dechant USX X1-7 - Wellbore #1 - As Drilled	15,342.74	6,853.85	6,181.63	6,090.76	68.031	CC, ES, SF
Dechant X01-02 - Wellbore #1 - As Drilled	15,342.74	7,131.46	6,107.87	6,010.84	62.951	CC, ES, SF
Dechant X01-03 - Wellbore #1 - Wellbore #1	15,342.74	6,830.25	4,965.62	4,869.97	51.910	CC, ES, SF
Dechant X01-04 - Wellbore #1 - As Drilled	15,342.74	6,981.25	3,636.49	3,540.75	37.982	CC, ES, SF
Dechant X01-06 - Wellbore #1 - As Drilled	15,342.74	6,967.77	5,540.90	5,450.25	61.126	CC, ES, SF
Dechant X12-01 - Wellbore #1 - As Drilled	15,342.74	6,737.43	3,917.13	3,830.66	45.300	CC, ES, SF
X Section 02						
Greenleaf 1C-2HZ - Original Hole - As-Drilled	15,342.74	12,178.00	2,514.39	2,361.12	16.406	CC, ES, SF
Greenleaf 1N-2HZ - Original Hole - As-Drilled	15,342.74	11,854.00	1,941.66	1,791.72	12.949	CC, ES, SF
Greenleaf 26N-2HZ - Original Hole - As-Drilled	15,342.74	11,967.00	2,747.55	2,593.17	17.798	CC, ES, SF
Greenleaf 27N-2HZ - Original Hole - As-Drilled	15,342.74	11,754.00	1,224.52	1,088.53	9.004	CC, ES, SF
Greenleaf 28C-2HZ - Original Hole - Original Hole	15,342.74	12,005.00	693.10	617.63	9.184	CC, ES, SF
Greenleaf 29C-2HZ - Original Hole - Original Hole	15,342.74	12,733.00	1,012.25	869.70	7.101	CC, ES, SF
Greenleaf 29N-2HZ - Original Hole - Original Hole	15,342.74	12,533.00	1,219.91	1,071.13	8.200	CC, ES, SF
Greenleaf 2N-2HZ - Original Hole - Original Hole	15,342.74	12,018.00	760.77	665.12	7.954	CC, ES, SF
Greenleaf 30N-2HZ - Original Hole - Original Hole	15,342.74	11,541.00	2,275.66	2,122.55	14.863	CC, ES, SF
Greenleaf 3N-2HZR - Original Hole - Original Hole	15,342.74	12,432.00	552.54	491.86	9.106	CC, ES, SF
Greenleaf 4N-2HZ - Original Hole - Original Hole	15,342.74	12,764.00	1,501.86	1,347.11	9.706	CC, ES, SF
Harkis 11-02 - Original Drilling - Original Drilling - As Drille	15,342.74	6,947.83	1,879.07	1,783.09	19.578	CC, ES, SF
Harkis 31-2 - Original Hole - As-Drilled	15,342.74	6,981.94	1,120.62	1,035.14	13.109	CC, ES, SF
Pioneer 1-2 - Original Hole - As-Drilled	15,342.74	7,269.91	2,432.00	2,299.43	18.346	CC, ES, SF
Pioneer 3-2 - Original Hole - Original Hole	15,342.74	7,268.03	668.50	580.33	7.582	CC, ES, SF
Pioneer 3-2 - Surface Gyros - Surface Gyros	15,342.74	7,251.03	668.56	581.28	7.660	CC, ES, SF

Noble Energy, Inc.
Anticollision Summary Report

Company:	Northern Region - DJ Basin	Local Co-ordinate Reference:	Well Hurley H35-755
Project:	Mustang	TVD Reference:	WELL @ 4852.00ft (Original Well Elev)
Reference Site:	H Section 26	MD Reference:	WELL @ 4852.00ft (Original Well Elev)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Hurley H35-755	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 #2	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						
X Section 03						
Brown 3-3A - Wellbore #1 - Wellbore #1 - As Drilled	15,342.74	7,103.87	5,357.08	5,258.70	54.452	CC, ES, SF
Cannon 1-3 - Wellbore #1 - Wellbore #1 - As Drilled	15,342.74	6,945.81	2,791.05	2,693.77	28.690	CC, ES, SF
Cannon 13C-3HZ - Wellbore #1 - Wellbore #1 - As Drilled	15,342.74	6,853.00	6,823.71	6,728.41	71.608	CC, ES, SF
Cannon 13N-3HZ - Wellbore #1 - Wellbore #1 - As Drilled	15,342.74	6,979.00	7,045.41	6,949.42	73.401	CC, ES, SF
Cannon 14N-E3HZ - Wellbore #1 - Wellbore #1 - As Drille	15,342.74	5,942.75	5,683.39	5,591.71	61.994	CC, ES, SF
Cannon 14N-W3HZ - Wellbore #1 - Wellbore #1 - As Drill	15,342.74	6,645.66	6,374.06	6,280.34	68.013	CC, ES, SF
Cannon 15N-W3HZ - Wellbore #1 - Wellbore #1 - As Drill	15,342.74	7,249.28	4,023.12	3,926.35	41.576	CC, ES, SF
Cannon 16N-E3HZ - Wellbore #1 - Wellbore #1 - As Drille	15,342.74	6,797.26	2,966.25	2,872.37	31.595	CC, ES, SF
Cannon 26-3 - Wellbore #1 - Wellbore #1 - As Drilled	15,342.74	7,373.32	2,368.12	2,257.84	21.475	CC, ES, SF
Cannon 36N-E3HZ - Wellbore #1 - Wellbore #1 - As Drille	14,600.00	14,600.00	4,755.21	4,643.38	42.522	SF
Cannon 36N-E3HZ - Wellbore #1 - Wellbore #1 - As Drille	15,342.74	6,808.00	4,670.75	4,576.43	49.521	CC, ES
Cannon 36N-W3HZX - Original Hole - Original Hole	15,342.74	6,252.00	5,196.68	5,104.45	56.345	CC, ES, SF
Cannon 36N-W3HZX - Sidetrack 01 - Sidetrack 01	15,342.74	6,252.00	5,196.68	5,104.45	56.345	CC, ES, SF
Cannon 37C-3HZ - Wellbore #1 - Wellbore #1 - As Drilled	15,342.74	6,875.00	2,589.77	2,495.34	27.423	CC, ES, SF
Cannon 37N-E3HZ - Wellbore #1 - Wellbore #1 - As Drille	15,342.74	6,706.47	3,313.93	3,219.50	35.093	CC, ES, SF