



Pad Name: Groves Farm 34-L Pad
Well Name: GROVES FARM Q-34-33HN
Ground Level: 4844.0
SHL Latitude: 40° 31' 48.540 N
SHL Longitude: 104° 38' 34.548 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	
3	2684.3	23.69	124.26	2650.8	-135.8	199.5	2.00	124.26	-188.7	
4	5405.9	23.69	124.26	5143.2	-751.2	1103.1	0.00	0.00	-1043.9	
5	6590.2	0.00	270.92	6294.0	-887.1	1302.6	2.00	180.00	-1232.6	
6	6790.2	0.00	270.92	6494.0	-887.1	1302.6	0.00	0.00	-1232.6	
7	7687.4	89.72	270.92	7067.0	-878.0	732.5	10.00	0.00	-664.8	GF Q-34-33HN LP
8	7727.9	89.72	271.73	7067.2	-877.0	692.0	2.00	89.97	-624.5	
9	12746.8	89.72	271.73	7091.6	-725.9	-4324.6	0.00	0.00	4366.7	
10	12827.2	89.72	270.12	7092.0	-724.6	-4404.9	2.00	-90.04	4446.8	GF Q-34-33HN VP
11	17949.9	89.72	270.12	7117.0	-714.0	-9527.6	0.00	0.00	9554.3	GF Q-34-33HN PBHL

DESIGN TARGET DETAILS

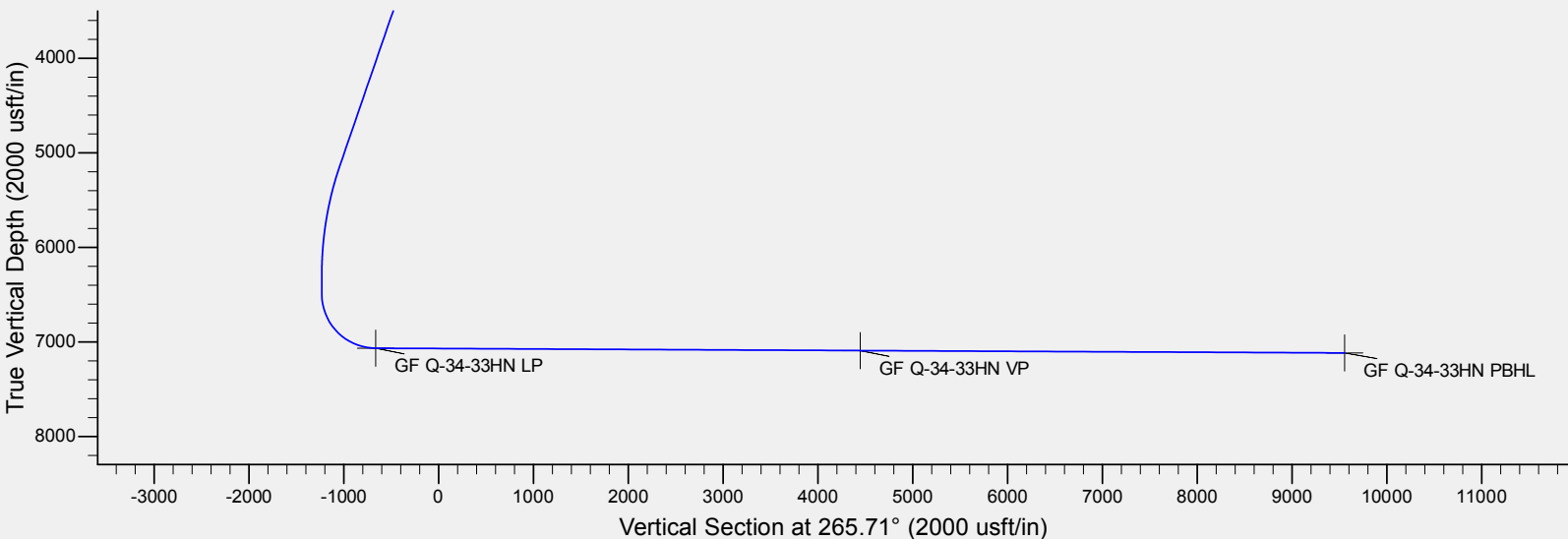
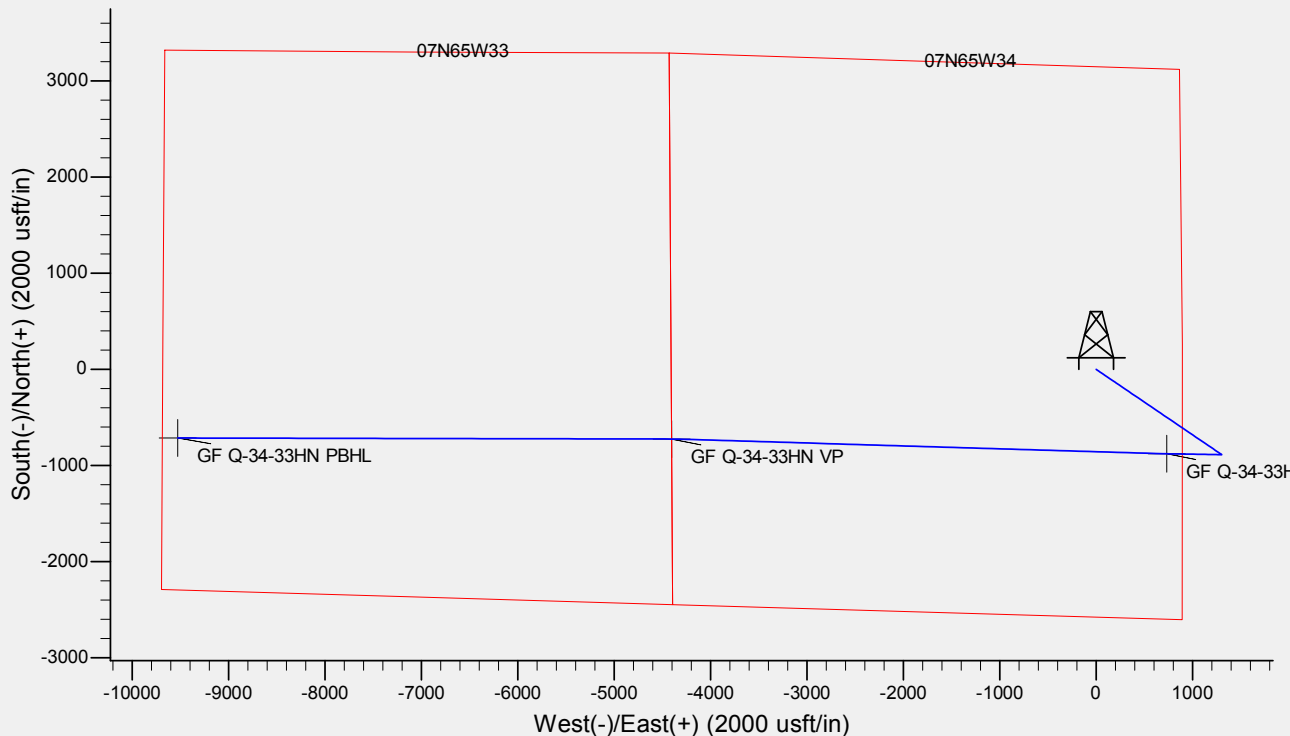
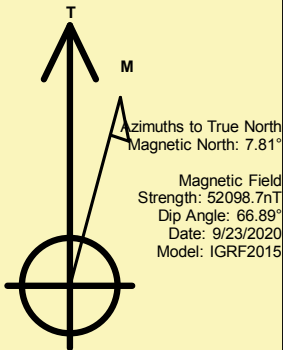
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
GF Q-34-33HN LP	7067.0	-878.0	732.5	1436254.84	3238981.83	40° 31' 39.864 N	104° 38' 25.062 W	Point
GF Q-34-33HN VP	- plan hits target center 7092.0	-724.6	-4404.9	1436358.57	3233843.17	40° 31' 41.376 N	104° 39' 31.594 W	Point
GF Q-34-33HN PBHL	- plan hits target center 7117.0	-714.0	-9527.6	1436319.62	3228720.62	40° 31' 41.466 N	104° 40' 37.934 W	Point

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well GROVES FARM Q-34-33HN, True North
Vertical (TVD) Reference: KB @ 4867.0usft (Original Well Elev)
Section (VS) Reference: Slot - (0.0N, 0.0E)
Measured Depth Reference: KB @ 4867.0usft (Original Well Elev)
Calculation Method: Minimum Curvature

CASING DETAILS

No casing data is available





BAYSWATER

Bayswater Exploration & Production, LLC

DJ Basin

Groves Farm 34-L Pad

GROVES FARM Q-34-33HN

Wellbore #1

Plan: Design #1

Standard Planning Report

26 September, 2020

Database:	EDM	Local Co-ordinate Reference:	Well GROVES FARM Q-34-33HN
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	KB @ 4867.0usft (Original Well Elev)
Project:	DJ Basin	MD Reference:	KB @ 4867.0usft (Original Well Elev)
Site:	Groves Farm 34-L Pad	North Reference:	True
Well:	GROVES FARM Q-34-33HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	DJ Basin, DJ Basin		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		Groves Farm 34-L Pad			
Site Position:		Northing:	1,437,185.82 usft	Latitude:	40° 31' 49.134 N
From:	Lat/Long	Easting:	3,238,241.98 usft	Longitude:	104° 38' 34.526 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.55

Well	GROVES FARM Q-34-33HN					
Well Position	+N/-S	-60.1 usft	Northing:	1,437,125.69 usft	Latitude:	40° 31' 48.540 N
	+E/-W	-1.7 usft	Easting:	3,238,240.89 usft	Longitude:	104° 38' 34.548 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	4,844.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	9/23/2020	7.81	66.89	52,098.72679805

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	265.71

Plan Survey Tool Program	Date	9/23/2020		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,949.9	Design #1 (Wellbore #1)	MWD
				OWSG MWD - Standard



Database:	EDM	Local Co-ordinate Reference:	Well GROVES FARM Q-34-33HN
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	KB @ 4867.0usft (Original Well Elev)
Project:	DJ Basin	MD Reference:	KB @ 4867.0usft (Original Well Elev)
Site:	Groves Farm 34-L Pad	North Reference:	True
Well:	GROVES FARM Q-34-33HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,684.3	23.69	124.26	2,650.8	-135.8	199.5	2.00	2.00	0.00	124.26	
5,405.9	23.69	124.26	5,143.2	-751.2	1,103.1	0.00	0.00	0.00	0.00	
6,590.2	0.00	270.92	6,294.0	-887.1	1,302.6	2.00	-2.00	0.00	180.00	
6,790.2	0.00	270.92	6,494.0	-887.1	1,302.6	0.00	0.00	0.00	0.00	
7,687.4	89.72	270.92	7,067.0	-878.0	732.5	10.00	10.00	0.00	0.00	GF Q-34-33HN LP
7,727.9	89.72	271.73	7,067.2	-877.0	692.0	2.00	0.00	2.00	89.97	
12,746.8	89.72	271.73	7,091.6	-725.9	-4,324.6	0.00	0.00	0.00	0.00	
12,827.2	89.72	270.12	7,092.0	-724.6	-4,404.9	2.00	0.00	-2.00	-90.04	GF Q-34-33HN VP
17,949.9	89.72	270.12	7,117.0	-714.0	-9,527.6	0.00	0.00	0.00	0.00	GF Q-34-33HN PBHL



Database:	EDM	Local Co-ordinate Reference:	Well GROVES FARM Q-34-33HN
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	KB @ 4867.0usft (Original Well Elev)
Project:	DJ Basin	MD Reference:	KB @ 4867.0usft (Original Well Elev)
Site:	Groves Farm 34-L Pad	North Reference:	True
Well:	GROVES FARM Q-34-33HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	2.00	124.26	1,600.0	-1.0	1.4	-1.4	2.00	2.00	0.00
1,700.0	4.00	124.26	1,699.8	-3.9	5.8	-5.5	2.00	2.00	0.00
1,800.0	6.00	124.26	1,799.5	-8.8	13.0	-12.3	2.00	2.00	0.00
1,900.0	8.00	124.26	1,898.7	-15.7	23.0	-21.8	2.00	2.00	0.00
2,000.0	10.00	124.26	1,997.5	-24.5	36.0	-34.0	2.00	2.00	0.00
2,100.0	12.00	124.26	2,095.6	-35.2	51.7	-49.0	2.00	2.00	0.00
2,200.0	14.00	124.26	2,193.1	-47.9	70.3	-66.6	2.00	2.00	0.00
2,300.0	16.00	124.26	2,289.6	-62.5	91.7	-86.8	2.00	2.00	0.00
2,400.0	18.00	124.26	2,385.3	-78.9	115.9	-109.7	2.00	2.00	0.00
2,500.0	20.00	124.26	2,479.8	-97.2	142.8	-135.1	2.00	2.00	0.00
2,600.0	22.00	124.26	2,573.2	-117.4	172.4	-163.2	2.00	2.00	0.00
2,684.3	23.69	124.26	2,650.8	-135.8	199.5	-188.7	2.00	2.00	0.00
2,700.0	23.69	124.26	2,665.2	-139.4	204.7	-193.7	0.00	0.00	0.00
2,800.0	23.69	124.26	2,756.8	-162.0	237.9	-225.1	0.00	0.00	0.00
2,900.0	23.69	124.26	2,848.4	-184.6	271.1	-256.5	0.00	0.00	0.00
3,000.0	23.69	124.26	2,940.0	-207.2	304.3	-288.0	0.00	0.00	0.00
3,100.0	23.69	124.26	3,031.5	-229.8	337.5	-319.4	0.00	0.00	0.00
3,200.0	23.69	124.26	3,123.1	-252.4	370.7	-350.8	0.00	0.00	0.00
3,300.0	23.69	124.26	3,214.7	-275.1	403.9	-382.2	0.00	0.00	0.00
3,400.0	23.69	124.26	3,306.3	-297.7	437.1	-413.6	0.00	0.00	0.00
3,500.0	23.69	124.26	3,397.8	-320.3	470.3	-445.1	0.00	0.00	0.00
3,600.0	23.69	124.26	3,489.4	-342.9	503.5	-476.5	0.00	0.00	0.00
3,700.0	23.69	124.26	3,581.0	-365.5	536.7	-507.9	0.00	0.00	0.00
3,800.0	23.69	124.26	3,672.6	-388.1	569.9	-539.3	0.00	0.00	0.00
3,900.0	23.69	124.26	3,764.2	-410.7	603.1	-570.7	0.00	0.00	0.00
4,000.0	23.69	124.26	3,855.7	-433.3	636.3	-602.2	0.00	0.00	0.00
4,100.0	23.69	124.26	3,947.3	-456.0	669.5	-633.6	0.00	0.00	0.00
4,200.0	23.69	124.26	4,038.9	-478.6	702.7	-665.0	0.00	0.00	0.00
4,300.0	23.69	124.26	4,130.5	-501.2	735.9	-696.4	0.00	0.00	0.00
4,400.0	23.69	124.26	4,222.0	-523.8	769.1	-727.8	0.00	0.00	0.00
4,500.0	23.69	124.26	4,313.6	-546.4	802.3	-759.3	0.00	0.00	0.00
4,600.0	23.69	124.26	4,405.2	-569.0	835.5	-790.7	0.00	0.00	0.00
4,700.0	23.69	124.26	4,496.8	-591.6	868.7	-822.1	0.00	0.00	0.00
4,800.0	23.69	124.26	4,588.3	-614.2	901.9	-853.5	0.00	0.00	0.00
4,900.0	23.69	124.26	4,679.9	-636.8	935.1	-884.9	0.00	0.00	0.00
5,000.0	23.69	124.26	4,771.5	-659.5	968.4	-916.4	0.00	0.00	0.00
5,100.0	23.69	124.26	4,863.1	-682.1	1,001.6	-947.8	0.00	0.00	0.00
5,200.0	23.69	124.26	4,954.6	-704.7	1,034.8	-979.2	0.00	0.00	0.00



Database:	EDM	Local Co-ordinate Reference:	Well GROVES FARM Q-34-33HN
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	KB @ 4867.0usft (Original Well Elev)
Project:	DJ Basin	MD Reference:	KB @ 4867.0usft (Original Well Elev)
Site:	Groves Farm 34-L Pad	North Reference:	True
Well:	GROVES FARM Q-34-33HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.0	23.69	124.26	5,046.2	-727.3	1,068.0	-1,010.6	0.00	0.00	0.00
5,400.0	23.69	124.26	5,137.8	-749.9	1,101.2	-1,042.0	0.00	0.00	0.00
5,405.9	23.69	124.26	5,143.2	-751.2	1,103.1	-1,043.9	0.00	0.00	0.00
5,500.0	21.80	124.26	5,230.0	-771.7	1,133.2	-1,072.4	2.00	-2.00	0.00
5,600.0	19.80	124.26	5,323.5	-791.7	1,162.5	-1,100.1	2.00	-2.00	0.00
5,700.0	17.80	124.26	5,418.1	-809.8	1,189.2	-1,125.3	2.00	-2.00	0.00
5,800.0	15.80	124.26	5,513.8	-826.1	1,213.1	-1,147.9	2.00	-2.00	0.00
5,900.0	13.80	124.26	5,610.5	-840.5	1,234.2	-1,167.9	2.00	-2.00	0.00
6,000.0	11.80	124.26	5,708.0	-853.0	1,252.5	-1,185.3	2.00	-2.00	0.00
6,100.0	9.80	124.26	5,806.2	-863.5	1,268.0	-1,199.9	2.00	-2.00	0.00
6,200.0	7.80	124.26	5,905.1	-872.1	1,280.7	-1,211.9	2.00	-2.00	0.00
6,300.0	5.80	124.26	6,004.4	-878.8	1,290.4	-1,221.2	2.00	-2.00	0.00
6,400.0	3.80	124.26	6,104.0	-883.5	1,297.4	-1,227.7	2.00	-2.00	0.00
6,500.0	1.80	124.26	6,203.9	-886.3	1,301.4	-1,231.5	2.00	-2.00	0.00
6,590.2	0.00	270.92	6,294.0	-887.1	1,302.6	-1,232.6	2.00	-2.00	0.00
6,600.0	0.00	0.00	6,303.9	-887.1	1,302.6	-1,232.6	0.00	0.00	0.00
6,700.0	0.00	0.00	6,403.9	-887.1	1,302.6	-1,232.6	0.00	0.00	0.00
6,790.2	0.00	270.92	6,494.0	-887.1	1,302.6	-1,232.6	0.00	0.00	0.00
6,800.0	0.98	270.92	6,503.9	-887.1	1,302.5	-1,232.6	10.00	10.00	0.00
6,900.0	10.98	270.92	6,603.2	-886.9	1,292.1	-1,222.2	10.00	10.00	0.00
7,000.0	20.98	270.92	6,699.2	-886.5	1,264.6	-1,194.8	10.00	10.00	0.00
7,100.0	30.98	270.92	6,789.0	-885.8	1,220.9	-1,151.2	10.00	10.00	0.00
7,200.0	40.98	270.92	6,869.8	-884.8	1,162.2	-1,092.8	10.00	10.00	0.00
7,300.0	50.98	270.92	6,939.2	-883.7	1,090.4	-1,021.3	10.00	10.00	0.00
7,400.0	60.98	270.92	6,995.1	-882.4	1,007.6	-938.8	10.00	10.00	0.00
7,500.0	70.98	270.92	7,035.7	-880.9	916.4	-848.0	10.00	10.00	0.00
7,600.0	80.98	270.92	7,059.9	-879.4	819.5	-751.5	10.00	10.00	0.00
7,687.4	89.72	270.92	7,067.0	-878.0	732.5	-664.8	10.00	10.00	0.00
GF Q-34-33HN LP									
7,700.0	89.72	271.17	7,067.1	-877.7	719.9	-652.3	2.00	0.00	2.00
7,727.9	89.72	271.73	7,067.2	-877.0	692.0	-624.5	2.00	0.00	2.00
7,800.0	89.72	271.73	7,067.5	-874.9	619.9	-552.8	0.00	0.00	0.00
7,900.0	89.72	271.73	7,068.0	-871.8	520.0	-453.4	0.00	0.00	0.00
8,000.0	89.72	271.73	7,068.5	-868.8	420.0	-353.9	0.00	0.00	0.00
8,100.0	89.72	271.73	7,069.0	-865.8	320.1	-254.5	0.00	0.00	0.00
8,200.0	89.72	271.73	7,069.5	-862.8	220.1	-155.0	0.00	0.00	0.00
8,300.0	89.72	271.73	7,070.0	-859.8	120.2	-55.6	0.00	0.00	0.00
8,400.0	89.72	271.73	7,070.5	-856.8	20.2	43.9	0.00	0.00	0.00
8,500.0	89.72	271.73	7,071.0	-853.8	-79.7	143.3	0.00	0.00	0.00
8,600.0	89.72	271.73	7,071.4	-850.8	-179.7	242.8	0.00	0.00	0.00
8,700.0	89.72	271.73	7,071.9	-847.8	-279.6	342.2	0.00	0.00	0.00
8,800.0	89.72	271.73	7,072.4	-844.7	-379.6	441.7	0.00	0.00	0.00
8,900.0	89.72	271.73	7,072.9	-841.7	-479.6	541.1	0.00	0.00	0.00
9,000.0	89.72	271.73	7,073.4	-838.7	-579.5	640.6	0.00	0.00	0.00
9,100.0	89.72	271.73	7,073.9	-835.7	-679.5	740.0	0.00	0.00	0.00
9,200.0	89.72	271.73	7,074.4	-832.7	-779.4	839.5	0.00	0.00	0.00
9,300.0	89.72	271.73	7,074.8	-829.7	-879.4	938.9	0.00	0.00	0.00
9,400.0	89.72	271.73	7,075.3	-826.7	-979.3	1,038.4	0.00	0.00	0.00
9,500.0	89.72	271.73	7,075.8	-823.7	-1,079.3	1,137.8	0.00	0.00	0.00
9,600.0	89.72	271.73	7,076.3	-820.6	-1,179.2	1,237.3	0.00	0.00	0.00
9,700.0	89.72	271.73	7,076.8	-817.6	-1,279.2	1,336.7	0.00	0.00	0.00
9,800.0	89.72	271.73	7,077.3	-814.6	-1,379.1	1,436.2	0.00	0.00	0.00
9,900.0	89.72	271.73	7,077.8	-811.6	-1,479.1	1,535.6	0.00	0.00	0.00



Database:	EDM	Local Co-ordinate Reference:	Well GROVES FARM Q-34-33HN
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	KB @ 4867.0usft (Original Well Elev)
Project:	DJ Basin	MD Reference:	KB @ 4867.0usft (Original Well Elev)
Site:	Groves Farm 34-L Pad	North Reference:	True
Well:	GROVES FARM Q-34-33HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,000.0	89.72	271.73	7,078.2	-808.6	-1,579.0	1,635.1	0.00	0.00	0.00	
10,100.0	89.72	271.73	7,078.7	-805.6	-1,679.0	1,734.5	0.00	0.00	0.00	
10,200.0	89.72	271.73	7,079.2	-802.6	-1,778.9	1,833.9	0.00	0.00	0.00	
10,300.0	89.72	271.73	7,079.7	-799.6	-1,878.9	1,933.4	0.00	0.00	0.00	
10,400.0	89.72	271.73	7,080.2	-796.5	-1,978.9	2,032.8	0.00	0.00	0.00	
10,500.0	89.72	271.73	7,080.7	-793.5	-2,078.8	2,132.3	0.00	0.00	0.00	
10,600.0	89.72	271.73	7,081.2	-790.5	-2,178.8	2,231.7	0.00	0.00	0.00	
10,700.0	89.72	271.73	7,081.7	-787.5	-2,278.7	2,331.2	0.00	0.00	0.00	
10,800.0	89.72	271.73	7,082.1	-784.5	-2,378.7	2,430.6	0.00	0.00	0.00	
10,900.0	89.72	271.73	7,082.6	-781.5	-2,478.6	2,530.1	0.00	0.00	0.00	
11,000.0	89.72	271.73	7,083.1	-778.5	-2,578.6	2,629.5	0.00	0.00	0.00	
11,100.0	89.72	271.73	7,083.6	-775.5	-2,678.5	2,729.0	0.00	0.00	0.00	
11,200.0	89.72	271.73	7,084.1	-772.5	-2,778.5	2,828.4	0.00	0.00	0.00	
11,300.0	89.72	271.73	7,084.6	-769.4	-2,878.4	2,927.9	0.00	0.00	0.00	
11,400.0	89.72	271.73	7,085.1	-766.4	-2,978.4	3,027.3	0.00	0.00	0.00	
11,500.0	89.72	271.73	7,085.5	-763.4	-3,078.3	3,126.8	0.00	0.00	0.00	
11,600.0	89.72	271.73	7,086.0	-760.4	-3,178.3	3,226.2	0.00	0.00	0.00	
11,700.0	89.72	271.73	7,086.5	-757.4	-3,278.2	3,325.7	0.00	0.00	0.00	
11,800.0	89.72	271.73	7,087.0	-754.4	-3,378.2	3,425.1	0.00	0.00	0.00	
11,900.0	89.72	271.73	7,087.5	-751.4	-3,478.2	3,524.6	0.00	0.00	0.00	
12,000.0	89.72	271.73	7,088.0	-748.4	-3,578.1	3,624.0	0.00	0.00	0.00	
12,100.0	89.72	271.73	7,088.5	-745.3	-3,678.1	3,723.5	0.00	0.00	0.00	
12,200.0	89.72	271.73	7,088.9	-742.3	-3,778.0	3,822.9	0.00	0.00	0.00	
12,300.0	89.72	271.73	7,089.4	-739.3	-3,878.0	3,922.4	0.00	0.00	0.00	
12,400.0	89.72	271.73	7,089.9	-736.3	-3,977.9	4,021.8	0.00	0.00	0.00	
12,500.0	89.72	271.73	7,090.4	-733.3	-4,077.9	4,121.3	0.00	0.00	0.00	
12,600.0	89.72	271.73	7,090.9	-730.3	-4,177.8	4,220.7	0.00	0.00	0.00	
12,700.0	89.72	271.73	7,091.4	-727.3	-4,277.8	4,320.2	0.00	0.00	0.00	
12,746.8	89.72	271.73	7,091.6	-725.9	-4,324.6	4,366.7	0.00	0.00	0.00	
12,800.0	89.72	270.66	7,091.9	-724.8	-4,377.7	4,419.7	2.00	0.00	-2.00	
12,827.2	89.72	270.12	7,092.0	-724.6	-4,404.9	4,446.8	2.00	0.00	-2.00	
GF Q-34-33HN VP										
12,900.0	89.72	270.12	7,092.4	-724.4	-4,477.7	4,519.4	0.00	0.00	0.00	
13,000.0	89.72	270.12	7,092.8	-724.2	-4,577.7	4,619.1	0.00	0.00	0.00	
13,100.0	89.72	270.12	7,093.3	-724.0	-4,677.7	4,718.8	0.00	0.00	0.00	
13,200.0	89.72	270.12	7,093.8	-723.8	-4,777.7	4,818.5	0.00	0.00	0.00	
13,300.0	89.72	270.12	7,094.3	-723.6	-4,877.7	4,918.2	0.00	0.00	0.00	
13,400.0	89.72	270.12	7,094.8	-723.4	-4,977.7	5,017.9	0.00	0.00	0.00	
13,500.0	89.72	270.12	7,095.3	-723.2	-5,077.7	5,117.6	0.00	0.00	0.00	
13,600.0	89.72	270.12	7,095.8	-723.0	-5,177.7	5,217.3	0.00	0.00	0.00	
13,700.0	89.72	270.12	7,096.3	-722.8	-5,277.7	5,317.0	0.00	0.00	0.00	
13,800.0	89.72	270.12	7,096.7	-722.6	-5,377.7	5,416.7	0.00	0.00	0.00	
13,900.0	89.72	270.12	7,097.2	-722.4	-5,477.7	5,516.4	0.00	0.00	0.00	
14,000.0	89.72	270.12	7,097.7	-722.2	-5,577.7	5,616.1	0.00	0.00	0.00	
14,100.0	89.72	270.12	7,098.2	-721.9	-5,677.7	5,715.8	0.00	0.00	0.00	
14,200.0	89.72	270.12	7,098.7	-721.7	-5,777.7	5,815.5	0.00	0.00	0.00	
14,300.0	89.72	270.12	7,099.2	-721.5	-5,877.7	5,915.2	0.00	0.00	0.00	
14,400.0	89.72	270.12	7,099.7	-721.3	-5,977.7	6,014.9	0.00	0.00	0.00	
14,500.0	89.72	270.12	7,100.2	-721.1	-6,077.7	6,114.6	0.00	0.00	0.00	
14,600.0	89.72	270.12	7,100.7	-720.9	-6,177.7	6,214.3	0.00	0.00	0.00	
14,700.0	89.72	270.12	7,101.1	-720.7	-6,277.7	6,314.0	0.00	0.00	0.00	
14,800.0	89.72	270.12	7,101.6	-720.5	-6,377.7	6,413.7	0.00	0.00	0.00	
14,900.0	89.72	270.12	7,102.1	-720.3	-6,477.7	6,513.4	0.00	0.00	0.00	
15,000.0	89.72	270.12	7,102.6	-720.1	-6,577.7	6,613.1	0.00	0.00	0.00	



Database:	EDM	Local Co-ordinate Reference:	Well GROVES FARM Q-34-33HN
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	KB @ 4867.0usft (Original Well Elev)
Project:	DJ Basin	MD Reference:	KB @ 4867.0usft (Original Well Elev)
Site:	Groves Farm 34-L Pad	North Reference:	True
Well:	GROVES FARM Q-34-33HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
15,100.0	89.72	270.12	7,103.1	-719.9	-6,677.7	6,712.8	0.00	0.00	0.00	
15,200.0	89.72	270.12	7,103.6	-719.7	-6,777.7	6,812.5	0.00	0.00	0.00	
15,300.0	89.72	270.12	7,104.1	-719.5	-6,877.7	6,912.2	0.00	0.00	0.00	
15,400.0	89.72	270.12	7,104.6	-719.3	-6,977.7	7,012.0	0.00	0.00	0.00	
15,500.0	89.72	270.12	7,105.0	-719.1	-7,077.7	7,111.7	0.00	0.00	0.00	
15,600.0	89.72	270.12	7,105.5	-718.9	-7,177.7	7,211.4	0.00	0.00	0.00	
15,700.0	89.72	270.12	7,106.0	-718.7	-7,277.7	7,311.1	0.00	0.00	0.00	
15,800.0	89.72	270.12	7,106.5	-718.4	-7,377.7	7,410.8	0.00	0.00	0.00	
15,900.0	89.72	270.12	7,107.0	-718.2	-7,477.7	7,510.5	0.00	0.00	0.00	
16,000.0	89.72	270.12	7,107.5	-718.0	-7,577.7	7,610.2	0.00	0.00	0.00	
16,100.0	89.72	270.12	7,108.0	-717.8	-7,677.7	7,709.9	0.00	0.00	0.00	
16,200.0	89.72	270.12	7,108.5	-717.6	-7,777.7	7,809.6	0.00	0.00	0.00	
16,300.0	89.72	270.12	7,108.9	-717.4	-7,877.7	7,909.3	0.00	0.00	0.00	
16,400.0	89.72	270.12	7,109.4	-717.2	-7,977.7	8,009.0	0.00	0.00	0.00	
16,500.0	89.72	270.12	7,109.9	-717.0	-8,077.7	8,108.7	0.00	0.00	0.00	
16,600.0	89.72	270.12	7,110.4	-716.8	-8,177.7	8,208.4	0.00	0.00	0.00	
16,700.0	89.72	270.12	7,110.9	-716.6	-8,277.7	8,308.1	0.00	0.00	0.00	
16,800.0	89.72	270.12	7,111.4	-716.4	-8,377.7	8,407.8	0.00	0.00	0.00	
16,900.0	89.72	270.12	7,111.9	-716.2	-8,477.7	8,507.5	0.00	0.00	0.00	
17,000.0	89.72	270.12	7,112.4	-716.0	-8,577.7	8,607.2	0.00	0.00	0.00	
17,100.0	89.72	270.12	7,112.9	-715.8	-8,677.7	8,706.9	0.00	0.00	0.00	
17,200.0	89.72	270.12	7,113.3	-715.6	-8,777.7	8,806.6	0.00	0.00	0.00	
17,300.0	89.72	270.12	7,113.8	-715.4	-8,877.7	8,906.3	0.00	0.00	0.00	
17,400.0	89.72	270.12	7,114.3	-715.1	-8,977.7	9,006.0	0.00	0.00	0.00	
17,500.0	89.72	270.12	7,114.8	-714.9	-9,077.7	9,105.7	0.00	0.00	0.00	
17,600.0	89.72	270.12	7,115.3	-714.7	-9,177.7	9,205.4	0.00	0.00	0.00	
17,700.0	89.72	270.12	7,115.8	-714.5	-9,277.7	9,305.1	0.00	0.00	0.00	
17,800.0	89.72	270.12	7,116.3	-714.3	-9,377.7	9,404.8	0.00	0.00	0.00	
17,900.0	89.72	270.12	7,116.8	-714.1	-9,477.7	9,504.5	0.00	0.00	0.00	
17,949.9	89.72	270.12	7,117.0	-714.0	-9,527.6	9,554.3	0.00	0.00	0.00	
GF Q-34-33HN PBHL										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude		Longitude
GF Q-34-33HN LP - hit/miss target - Shape	0.00	0.00	7,067.0	-878.0	732.5	1,436,254.84	3,238,981.84	40° 31' 39.864 N		104° 38' 25.062 W
GF Q-34-33HN VP - plan hits target center - Point	0.00	0.00	7,092.0	-724.6	-4,404.9	1,436,358.57	3,233,843.17	40° 31' 41.376 N		104° 39' 31.594 W
GF Q-34-33HN PBHL - plan hits target center - Point	0.00	0.00	7,117.0	-714.0	-9,527.6	1,436,319.62	3,228,720.63	40° 31' 41.466 N		104° 40' 37.934 W