



BAYSWATER

Bayswater Exploration & Production, LLC

DJ Basin

Groves Farm 34-L Pad

GROVES FARM U-34-33HN

Wellbore #1

Plan: Design #1

Standard Planning Report

20 April, 2020



Pad Name: Groves Farm 34-L Pad
Well Name: GROVES FARM U-34-33HN
Ground Level: 4844.0
SHL Latitude: 40° 31' 47.949 N
SHL Longitude: 104° 38' 34.570 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	3362.4	37.25	142.42	3234.0	-463.1	356.3	2.00	142.42	-282.7	
4	4968.0	37.25	142.42	4512.1	-1233.4	949.0	0.00	0.00	-752.8	
5	6830.4	0.00	271.31	6246.0	-1696.5	1305.3	2.00	180.00	-1035.5	
6	7030.4	0.00	271.31	6446.0	-1696.5	1305.3	0.00	0.00	-1035.5	
7	7929.0	89.86	271.31	7019.0	-1683.4	733.9	10.00	0.00	-472.5	GF U-34-33HN LP
8	18196.1	89.86	271.31	7044.0	-1449.2	-9530.4	0.00	0.00	9640.0	GF U-34-33HN PBHL

DESIGN TARGET DETAILS

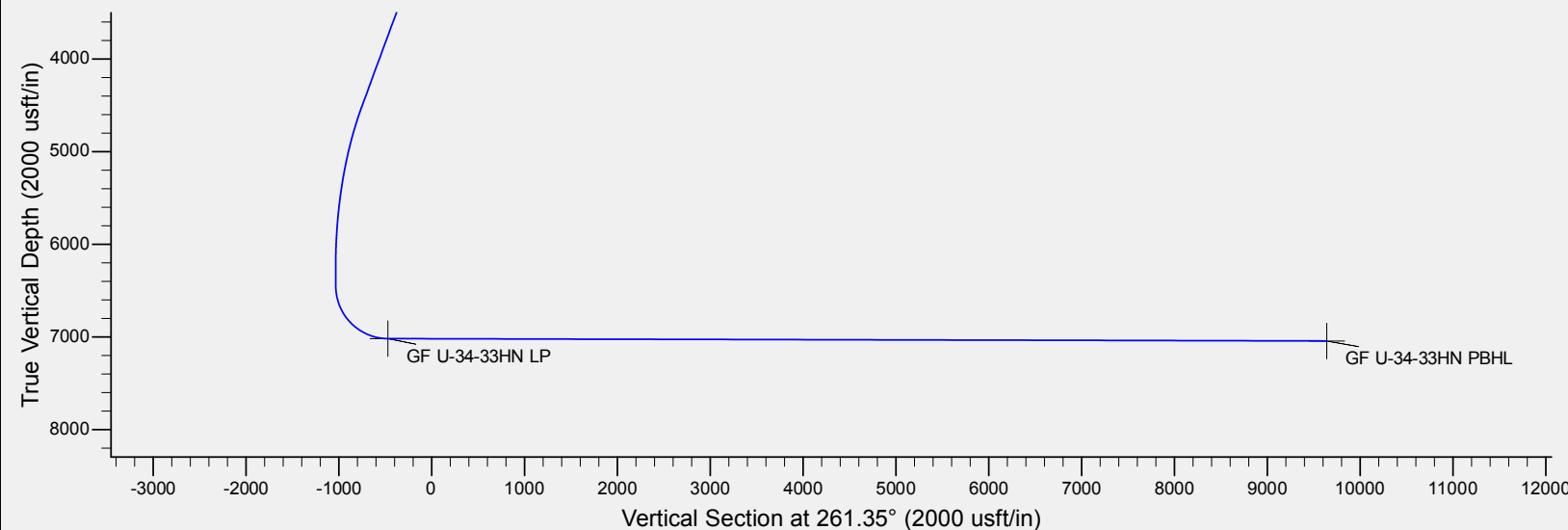
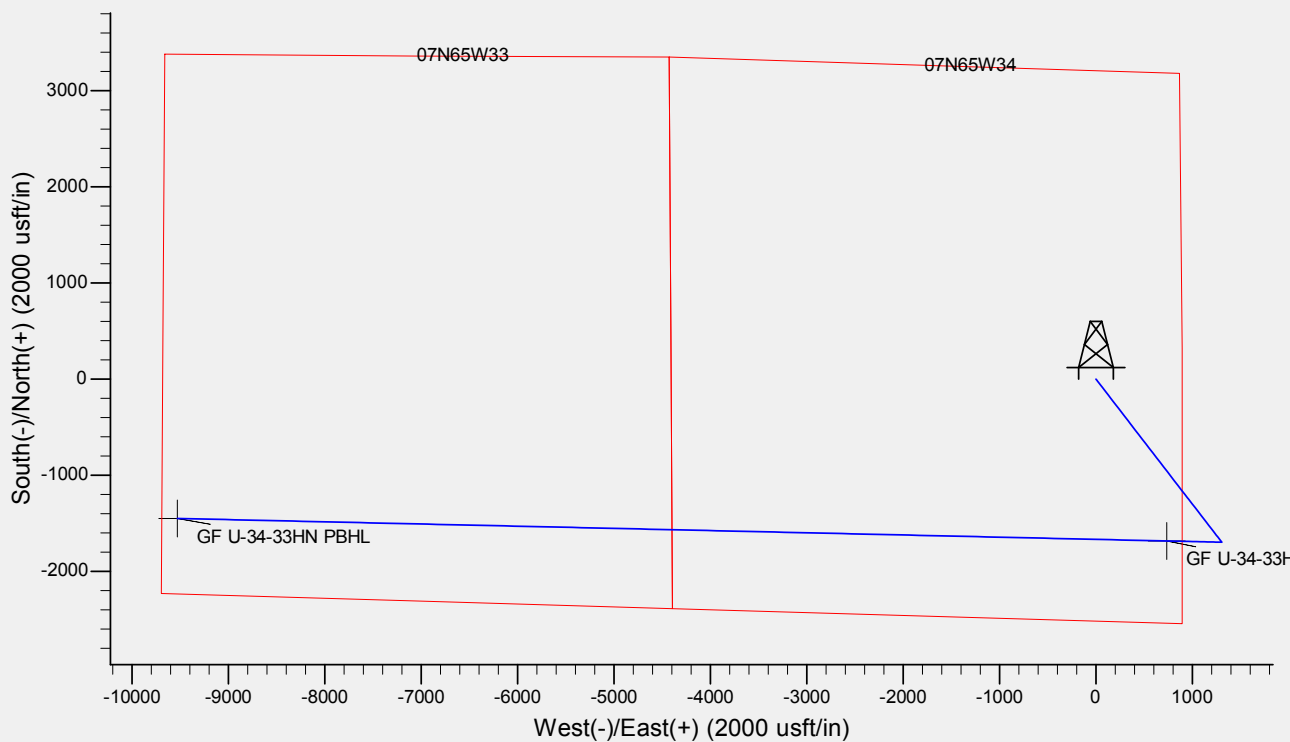
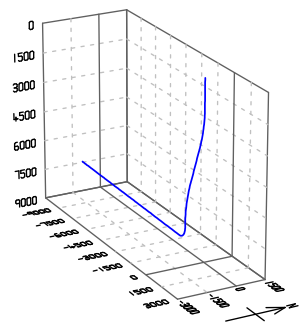
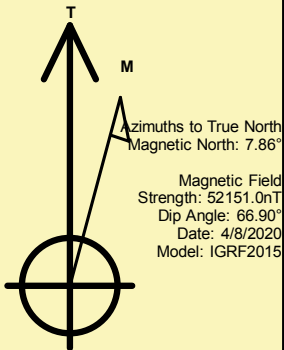
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
GF U-34-33HN LP	7019.0	-1683.4	733.9	1435389.65	3238989.95	40° 31' 31.314 N	104° 38' 25.066 W	Point
GF U-34-33HN PBHL	- plan hits target center 7044.0	-1449.2	-9530.4	1435524.69	3228723.83	40° 31' 33.611 N	104° 40' 37.988 W	Point

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well GROVES FARM U-34-33HN, True North
Vertical (TVD) Reference: KB @ 4869.0usft (Original Well Elev)
Section (VS) Reference: Slot - (0.0N, 0.0E)
Measured Depth Reference: KB @ 4869.0usft (Original Well Elev)
Calculation Method: Minimum Curvature

CASING DETAILS

No casing data is available





Database:	EDM	Local Co-ordinate Reference:	Well GROVES FARM U-34-33HN
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	KB @ 4869.0usft (Original Well Elev)
Project:	DJ Basin	MD Reference:	KB @ 4869.0usft (Original Well Elev)
Site:	Groves Farm 34-L Pad	North Reference:	True
Well:	GROVES FARM U-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 U-34-33HN					
Well Position	+N/-S	-119.9 usft	Northing:	1,437,065.93 usft	Latitude:	40° 31' 47.949 N
	+E/-W	-3.3 usft	Easting:	3,238,239.80 usft	Longitude:	104° 38' 34.570 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	4/8/2020	7.86	66.90	52,151.04674597

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	261.35

Plan Survey Tool Program	Date	4/20/2020		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	18,196.1	Design #1 (Wellbore #1)	MWD
				OWSG MWD - Standard

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	
3,362.4	37.25	142.42	3,234.0	-463.1	356.3	2.00	2.00	0.00	142.42	
4,968.0	37.25	142.42	4,512.1	-1,233.4	949.0	0.00	0.00	0.00	0.00	
6,830.4	0.00	271.31	6,246.0	-1,696.5	1,305.3	2.00	-2.00	0.00	180.00	
7,030.4	0.00	271.31	6,446.0	-1,696.5	1,305.3	0.00	0.00	0.00	0.00	
7,929.0	89.86	271.31	7,019.0	-1,683.4	733.9	10.00	10.00	0.00	0.00	GF U-34-33HN LP
18,196.1	89.86	271.31	7,044.0	-1,449.2	-9,530.4	0.00	0.00	0.00	0.00	GF U-34-33HN PBHL



Database:	EDM	Local Co-ordinate Reference:	Well GROVES FARM U-34-33HN
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	KB @ 4869.0usft (Original Well Elev)
Project:	DJ Basin	MD Reference:	KB @ 4869.0usft (Original Well Elev)
Site:	Groves Farm 34-L Pad	North Reference:	True
Well:	GROVES FARM U-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	142.42	1,600.0	-1.4	1.1	-0.8	2.00	2.00	0.00
1,700.0	4.00	142.42	1,699.8	-5.5	4.3	-3.4	2.00	2.00	0.00
1,800.0	6.00	142.42	1,799.5	-12.4	9.6	-7.6	2.00	2.00	0.00
1,900.0	8.00	142.42	1,898.7	-22.1	17.0	-13.5	2.00	2.00	0.00
2,000.0	10.00	142.42	1,997.5	-34.5	26.5	-21.1	2.00	2.00	0.00
2,100.0	12.00	142.42	2,095.6	-49.6	38.2	-30.3	2.00	2.00	0.00
2,200.0	14.00	142.42	2,193.1	-67.4	51.9	-41.2	2.00	2.00	0.00
2,300.0	16.00	142.42	2,289.6	-88.0	67.7	-53.7	2.00	2.00	0.00
2,400.0	18.00	142.42	2,385.3	-111.1	85.5	-67.8	2.00	2.00	0.00
2,500.0	20.00	142.42	2,479.8	-136.9	105.4	-83.6	2.00	2.00	0.00
2,600.0	22.00	142.42	2,573.2	-165.3	127.2	-100.9	2.00	2.00	0.00
2,700.0	24.00	142.42	2,665.2	-196.3	151.0	-119.8	2.00	2.00	0.00
2,800.0	26.00	142.42	2,755.8	-229.8	176.8	-140.3	2.00	2.00	0.00
2,900.0	28.00	142.42	2,844.9	-265.8	204.5	-162.2	2.00	2.00	0.00
3,000.0	30.00	142.42	2,932.4	-304.2	234.0	-185.7	2.00	2.00	0.00
3,100.0	32.00	142.42	3,018.1	-345.0	265.5	-210.6	2.00	2.00	0.00
3,200.0	34.00	142.42	3,102.0	-388.2	298.7	-236.9	2.00	2.00	0.00
3,300.0	36.00	142.42	3,183.9	-433.6	333.6	-264.7	2.00	2.00	0.00
3,362.4	37.25	142.42	3,234.0	-463.1	356.3	-282.7	2.00	2.00	0.00
3,400.0	37.25	142.42	3,263.9	-481.2	370.2	-293.7	0.00	0.00	0.00
3,500.0	37.25	142.42	3,343.5	-529.1	407.1	-323.0	0.00	0.00	0.00
3,600.0	37.25	142.42	3,423.1	-577.1	444.0	-352.2	0.00	0.00	0.00
3,700.0	37.25	142.42	3,502.7	-625.1	480.9	-381.5	0.00	0.00	0.00
3,800.0	37.25	142.42	3,582.3	-673.0	517.9	-410.8	0.00	0.00	0.00
3,900.0	37.25	142.42	3,661.9	-721.0	554.8	-440.1	0.00	0.00	0.00
4,000.0	37.25	142.42	3,741.5	-769.0	591.7	-469.4	0.00	0.00	0.00
4,100.0	37.25	142.42	3,821.1	-817.0	628.6	-498.6	0.00	0.00	0.00
4,200.0	37.25	142.42	3,900.7	-864.9	665.5	-527.9	0.00	0.00	0.00
4,300.0	37.25	142.42	3,980.3	-912.9	702.4	-557.2	0.00	0.00	0.00
4,400.0	37.25	142.42	4,059.9	-960.9	739.3	-586.5	0.00	0.00	0.00
4,500.0	37.25	142.42	4,139.5	-1,008.8	776.2	-615.7	0.00	0.00	0.00
4,600.0	37.25	142.42	4,219.1	-1,056.8	813.1	-645.0	0.00	0.00	0.00
4,700.0	37.25	142.42	4,298.7	-1,104.8	850.0	-674.3	0.00	0.00	0.00
4,800.0	37.25	142.42	4,378.3	-1,152.8	887.0	-703.6	0.00	0.00	0.00
4,900.0	37.25	142.42	4,457.9	-1,200.7	923.9	-732.9	0.00	0.00	0.00
4,968.0	37.25	142.42	4,512.1	-1,233.4	949.0	-752.8	0.00	0.00	0.00
5,000.0	36.61	142.42	4,537.6	-1,248.6	960.7	-762.1	2.00	-2.00	0.00
5,100.0	34.61	142.42	4,618.9	-1,294.7	996.2	-790.2	2.00	-2.00	0.00



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Site:	Groves Farm 34-L Pad	North Reference:	True
Well:	GROVES FARM U-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)
5,200.0	32.61	142.42	4,702.2	-1,338.6	1,029.9	-817.0	2.00	-2.00	0.00
5,300.0	30.61	142.42	4,787.4	-1,380.1	1,061.9	-842.4	2.00	-2.00	0.00
5,400.0	28.61	142.42	4,874.3	-1,419.3	1,092.0	-866.3	2.00	-2.00	0.00
5,500.0	26.61	142.42	4,962.9	-1,456.0	1,120.3	-888.7	2.00	-2.00	0.00
5,600.0	24.61	142.42	5,053.1	-1,490.3	1,146.6	-909.6	2.00	-2.00	0.00
5,700.0	22.61	142.42	5,144.7	-1,522.0	1,171.1	-929.0	2.00	-2.00	0.00
5,800.0	20.61	142.42	5,237.7	-1,551.2	1,193.5	-946.8	2.00	-2.00	0.00
5,900.0	18.61	142.42	5,331.9	-1,577.8	1,214.0	-963.0	2.00	-2.00	0.00
6,000.0	16.61	142.42	5,427.2	-1,601.8	1,232.4	-977.6	2.00	-2.00	0.00
6,100.0	14.61	142.42	5,523.5	-1,623.1	1,248.8	-990.7	2.00	-2.00	0.00
6,200.0	12.61	142.42	5,620.7	-1,641.7	1,263.2	-1,002.0	2.00	-2.00	0.00
6,300.0	10.61	142.42	5,718.6	-1,657.7	1,275.5	-1,011.8	2.00	-2.00	0.00
6,400.0	8.61	142.42	5,817.2	-1,670.9	1,285.6	-1,019.8	2.00	-2.00	0.00
6,500.0	6.61	142.42	5,916.3	-1,681.4	1,293.7	-1,026.2	2.00	-2.00	0.00
6,600.0	4.61	142.42	6,015.9	-1,689.1	1,299.7	-1,031.0	2.00	-2.00	0.00
6,700.0	2.61	142.42	6,115.6	-1,694.1	1,303.5	-1,034.0	2.00	-2.00	0.00
6,800.0	0.61	142.42	6,215.6	-1,696.4	1,305.2	-1,035.4	2.00	-2.00	0.00
6,830.4	0.00	271.31	6,246.0	-1,696.5	1,305.3	-1,035.5	2.00	-2.00	0.00
6,900.0	0.00	0.00	6,315.6	-1,696.5	1,305.3	-1,035.5	0.00	0.00	0.00
7,000.0	0.00	0.00	6,415.6	-1,696.5	1,305.3	-1,035.5	0.00	0.00	0.00
7,030.4	0.00	271.31	6,446.0	-1,696.5	1,305.3	-1,035.5	0.00	0.00	0.00
7,100.0	6.96	271.31	6,515.4	-1,696.4	1,301.1	-1,031.3	10.00	10.00	0.00
7,200.0	16.96	271.31	6,613.1	-1,695.9	1,280.4	-1,010.9	10.00	10.00	0.00
7,300.0	26.96	271.31	6,705.8	-1,695.1	1,243.1	-974.1	10.00	10.00	0.00
7,400.0	36.96	271.31	6,790.5	-1,693.9	1,190.2	-922.1	10.00	10.00	0.00
7,500.0	46.96	271.31	6,864.8	-1,692.3	1,123.5	-856.3	10.00	10.00	0.00
7,600.0	56.96	271.31	6,926.3	-1,690.5	1,044.9	-778.8	10.00	10.00	0.00
7,700.0	66.96	271.31	6,973.3	-1,688.5	956.7	-692.0	10.00	10.00	0.00
7,800.0	76.96	271.31	7,004.2	-1,686.4	861.8	-598.5	10.00	10.00	0.00
7,900.0	86.96	271.31	7,018.2	-1,684.1	762.9	-501.1	10.00	10.00	0.00
7,929.0	89.86	271.31	7,019.0	-1,683.4	733.9	-472.5	10.00	10.00	0.00
GF U-34-33HN LP									
8,000.0	89.86	271.31	7,019.2	-1,681.8	663.0	-402.6	0.00	0.00	0.00
8,100.0	89.86	271.31	7,019.4	-1,679.5	563.0	-304.1	0.00	0.00	0.00
8,200.0	89.86	271.31	7,019.7	-1,677.3	463.0	-205.6	0.00	0.00	0.00
8,300.0	89.86	271.31	7,019.9	-1,675.0	363.1	-107.1	0.00	0.00	0.00
8,400.0	89.86	271.31	7,020.1	-1,672.7	263.1	-8.6	0.00	0.00	0.00
8,500.0	89.86	271.31	7,020.4	-1,670.4	163.1	89.9	0.00	0.00	0.00
8,600.0	89.86	271.31	7,020.6	-1,668.1	63.1	188.4	0.00	0.00	0.00
8,700.0	89.86	271.31	7,020.9	-1,665.9	-36.8	286.9	0.00	0.00	0.00
8,800.0	89.86	271.31	7,021.1	-1,663.6	-136.8	385.3	0.00	0.00	0.00
8,900.0	89.86	271.31	7,021.4	-1,661.3	-236.8	483.8	0.00	0.00	0.00
9,000.0	89.86	271.31	7,021.6	-1,659.0	-336.8	582.3	0.00	0.00	0.00
9,100.0	89.86	271.31	7,021.9	-1,656.7	-436.7	680.8	0.00	0.00	0.00
9,200.0	89.86	271.31	7,022.1	-1,654.4	-536.7	779.3	0.00	0.00	0.00
9,300.0	89.86	271.31	7,022.3	-1,652.2	-636.7	877.8	0.00	0.00	0.00
9,400.0	89.86	271.31	7,022.6	-1,649.9	-736.7	976.3	0.00	0.00	0.00
9,500.0	89.86	271.31	7,022.8	-1,647.6	-836.6	1,074.8	0.00	0.00	0.00
9,600.0	89.86	271.31	7,023.1	-1,645.3	-936.6	1,173.3	0.00	0.00	0.00
9,700.0	89.86	271.31	7,023.3	-1,643.0	-1,036.6	1,271.8	0.00	0.00	0.00
9,800.0	89.86	271.31	7,023.6	-1,640.8	-1,136.6	1,370.3	0.00	0.00	0.00
9,900.0	89.86	271.31	7,023.8	-1,638.5	-1,236.5	1,468.8	0.00	0.00	0.00
10,000.0	89.86	271.31	7,024.0	-1,636.2	-1,336.5	1,567.3	0.00	0.00	0.00



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Project:	DJ Basin	MD Reference:	KB @ 4869.0usft (Original Well Elev)
Site:	Groves Farm 34-L Pad	North Reference:	True
Well:	GROVES FARM U-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)	
10,100.0	89.86	271.31	7,024.3	-1,633.9	-1,436.5	1,665.8	0.00	0.00	0.00	
10,200.0	89.86	271.31	7,024.5	-1,631.6	-1,536.4	1,764.3	0.00	0.00	0.00	
10,300.0	89.86	271.31	7,024.8	-1,629.4	-1,636.4	1,862.8	0.00	0.00	0.00	
10,400.0	89.86	271.31	7,025.0	-1,627.1	-1,736.4	1,961.3	0.00	0.00	0.00	
10,500.0	89.86	271.31	7,025.3	-1,624.8	-1,836.4	2,059.8	0.00	0.00	0.00	
10,600.0	89.86	271.31	7,025.5	-1,622.5	-1,936.3	2,158.3	0.00	0.00	0.00	
10,700.0	89.86	271.31	7,025.7	-1,620.2	-2,036.3	2,256.7	0.00	0.00	0.00	
10,800.0	89.86	271.31	7,026.0	-1,617.9	-2,136.3	2,355.2	0.00	0.00	0.00	
10,900.0	89.86	271.31	7,026.2	-1,615.7	-2,236.3	2,453.7	0.00	0.00	0.00	
11,000.0	89.86	271.31	7,026.5	-1,613.4	-2,336.2	2,552.2	0.00	0.00	0.00	
11,100.0	89.86	271.31	7,026.7	-1,611.1	-2,436.2	2,650.7	0.00	0.00	0.00	
11,200.0	89.86	271.31	7,027.0	-1,608.8	-2,536.2	2,749.2	0.00	0.00	0.00	
11,300.0	89.86	271.31	7,027.2	-1,606.5	-2,636.2	2,847.7	0.00	0.00	0.00	
11,400.0	89.86	271.31	7,027.5	-1,604.3	-2,736.1	2,946.2	0.00	0.00	0.00	
11,500.0	89.86	271.31	7,027.7	-1,602.0	-2,836.1	3,044.7	0.00	0.00	0.00	
11,600.0	89.86	271.31	7,027.9	-1,599.7	-2,936.1	3,143.2	0.00	0.00	0.00	
11,700.0	89.86	271.31	7,028.2	-1,597.4	-3,036.1	3,241.7	0.00	0.00	0.00	
11,800.0	89.86	271.31	7,028.4	-1,595.1	-3,136.0	3,340.2	0.00	0.00	0.00	
11,900.0	89.86	271.31	7,028.7	-1,592.8	-3,236.0	3,438.7	0.00	0.00	0.00	
12,000.0	89.86	271.31	7,028.9	-1,590.6	-3,336.0	3,537.2	0.00	0.00	0.00	
12,100.0	89.86	271.31	7,029.2	-1,588.3	-3,435.9	3,635.7	0.00	0.00	0.00	
12,200.0	89.86	271.31	7,029.4	-1,586.0	-3,535.9	3,734.2	0.00	0.00	0.00	
12,300.0	89.86	271.31	7,029.6	-1,583.7	-3,635.9	3,832.7	0.00	0.00	0.00	
12,400.0	89.86	271.31	7,029.9	-1,581.4	-3,735.9	3,931.2	0.00	0.00	0.00	
12,500.0	89.86	271.31	7,030.1	-1,579.2	-3,835.8	4,029.6	0.00	0.00	0.00	
12,600.0	89.86	271.31	7,030.4	-1,576.9	-3,935.8	4,128.1	0.00	0.00	0.00	
12,700.0	89.86	271.31	7,030.6	-1,574.6	-4,035.8	4,226.6	0.00	0.00	0.00	
12,800.0	89.86	271.31	7,030.9	-1,572.3	-4,135.8	4,325.1	0.00	0.00	0.00	
12,900.0	89.86	271.31	7,031.1	-1,570.0	-4,235.7	4,423.6	0.00	0.00	0.00	
13,000.0	89.86	271.31	7,031.3	-1,567.7	-4,335.7	4,522.1	0.00	0.00	0.00	
13,100.0	89.86	271.31	7,031.6	-1,565.5	-4,435.7	4,620.6	0.00	0.00	0.00	
13,200.0	89.86	271.31	7,031.8	-1,563.2	-4,535.7	4,719.1	0.00	0.00	0.00	
13,300.0	89.86	271.31	7,032.1	-1,560.9	-4,635.6	4,817.6	0.00	0.00	0.00	
13,400.0	89.86	271.31	7,032.3	-1,558.6	-4,735.6	4,916.1	0.00	0.00	0.00	
13,500.0	89.86	271.31	7,032.6	-1,556.3	-4,835.6	5,014.6	0.00	0.00	0.00	
13,600.0	89.86	271.31	7,032.8	-1,554.1	-4,935.6	5,113.1	0.00	0.00	0.00	
13,700.0	89.86	271.31	7,033.1	-1,551.8	-5,035.5	5,211.6	0.00	0.00	0.00	
13,800.0	89.86	271.31	7,033.3	-1,549.5	-5,135.5	5,310.1	0.00	0.00	0.00	
13,900.0	89.86	271.31	7,033.5	-1,547.2	-5,235.5	5,408.6	0.00	0.00	0.00	
14,000.0	89.86	271.31	7,033.8	-1,544.9	-5,335.4	5,507.1	0.00	0.00	0.00	
14,100.0	89.86	271.31	7,034.0	-1,542.6	-5,435.4	5,605.6	0.00	0.00	0.00	
14,200.0	89.86	271.31	7,034.3	-1,540.4	-5,535.4	5,704.1	0.00	0.00	0.00	
14,300.0	89.86	271.31	7,034.5	-1,538.1	-5,635.4	5,802.5	0.00	0.00	0.00	
14,400.0	89.86	271.31	7,034.8	-1,535.8	-5,735.3	5,901.0	0.00	0.00	0.00	
14,500.0	89.86	271.31	7,035.0	-1,533.5	-5,835.3	5,999.5	0.00	0.00	0.00	
14,600.0	89.86	271.31	7,035.2	-1,531.2	-5,935.3	6,098.0	0.00	0.00	0.00	
14,700.0	89.86	271.31	7,035.5	-1,529.0	-6,035.3	6,196.5	0.00	0.00	0.00	
14,800.0	89.86	271.31	7,035.7	-1,526.7	-6,135.2	6,295.0	0.00	0.00	0.00	
14,900.0	89.86	271.31	7,036.0	-1,524.4	-6,235.2	6,393.5	0.00	0.00	0.00	
15,000.0	89.86	271.31	7,036.2	-1,522.1	-6,335.2	6,492.0	0.00	0.00	0.00	
15,100.0	89.86	271.31	7,036.5	-1,519.8	-6,435.2	6,590.5	0.00	0.00	0.00	
15,200.0	89.86	271.31	7,036.7	-1,517.5	-6,535.1	6,689.0	0.00	0.00	0.00	
15,300.0	89.86	271.31	7,036.9	-1,515.3	-6,635.1	6,787.5	0.00	0.00	0.00	
15,400.0	89.86	271.31	7,037.2	-1,513.0	-6,735.1	6,886.0	0.00	0.00	0.00	



Database:	EDM	Local Co-ordinate Reference:	Well GROVES FARM U-34-33HN
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	KB @ 4869.0usft (Original Well Elev)
Project:	DJ Basin	MD Reference:	KB @ 4869.0usft (Original Well Elev)
Site:	Groves Farm 34-L Pad	North Reference:	True
Well:	GROVES FARM U-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)	
15,500.0	89.86	271.31	7,037.4	-1,510.7	-6,835.1	6,984.5	0.00	0.00	0.00	
15,600.0	89.86	271.31	7,037.7	-1,508.4	-6,935.0	7,083.0	0.00	0.00	0.00	
15,700.0	89.86	271.31	7,037.9	-1,506.1	-7,035.0	7,181.5	0.00	0.00	0.00	
15,800.0	89.86	271.31	7,038.2	-1,503.9	-7,135.0	7,280.0	0.00	0.00	0.00	
15,900.0	89.86	271.31	7,038.4	-1,501.6	-7,234.9	7,378.5	0.00	0.00	0.00	
16,000.0	89.86	271.31	7,038.7	-1,499.3	-7,334.9	7,477.0	0.00	0.00	0.00	
16,100.0	89.86	271.31	7,038.9	-1,497.0	-7,434.9	7,575.4	0.00	0.00	0.00	
16,200.0	89.86	271.31	7,039.1	-1,494.7	-7,534.9	7,673.9	0.00	0.00	0.00	
16,300.0	89.86	271.31	7,039.4	-1,492.5	-7,634.8	7,772.4	0.00	0.00	0.00	
16,400.0	89.86	271.31	7,039.6	-1,490.2	-7,734.8	7,870.9	0.00	0.00	0.00	
16,500.0	89.86	271.31	7,039.9	-1,487.9	-7,834.8	7,969.4	0.00	0.00	0.00	
16,600.0	89.86	271.31	7,040.1	-1,485.6	-7,934.8	8,067.9	0.00	0.00	0.00	
16,700.0	89.86	271.31	7,040.4	-1,483.3	-8,034.7	8,166.4	0.00	0.00	0.00	
16,800.0	89.86	271.31	7,040.6	-1,481.0	-8,134.7	8,264.9	0.00	0.00	0.00	
16,900.0	89.86	271.31	7,040.8	-1,478.8	-8,234.7	8,363.4	0.00	0.00	0.00	
17,000.0	89.86	271.31	7,041.1	-1,476.5	-8,334.7	8,461.9	0.00	0.00	0.00	
17,100.0	89.86	271.31	7,041.3	-1,474.2	-8,434.6	8,560.4	0.00	0.00	0.00	
17,200.0	89.86	271.31	7,041.6	-1,471.9	-8,534.6	8,658.9	0.00	0.00	0.00	
17,300.0	89.86	271.31	7,041.8	-1,469.6	-8,634.6	8,757.4	0.00	0.00	0.00	
17,400.0	89.86	271.31	7,042.1	-1,467.4	-8,734.6	8,855.9	0.00	0.00	0.00	
17,500.0	89.86	271.31	7,042.3	-1,465.1	-8,834.5	8,954.4	0.00	0.00	0.00	
17,600.0	89.86	271.31	7,042.5	-1,462.8	-8,934.5	9,052.9	0.00	0.00	0.00	
17,700.0	89.86	271.31	7,042.8	-1,460.5	-9,034.5	9,151.4	0.00	0.00	0.00	
17,800.0	89.86	271.31	7,043.0	-1,458.2	-9,134.4	9,249.9	0.00	0.00	0.00	
17,900.0	89.86	271.31	7,043.3	-1,455.9	-9,234.4	9,348.4	0.00	0.00	0.00	
18,000.0	89.86	271.31	7,043.5	-1,453.7	-9,334.4	9,446.8	0.00	0.00	0.00	
18,100.0	89.86	271.31	7,043.8	-1,451.4	-9,434.4	9,545.3	0.00	0.00	0.00	
18,196.1	89.86	271.31	7,044.0	-1,449.2	-9,530.4	9,640.0	0.00	0.00	0.00	
GF U-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	
- hit/miss target										
- Shape										
GF U-34-33HN LP	0.00	0.00	7,019.0	-1,683.4	733.9	1,435,389.65	3,238,989.95	40° 31' 31.314 N	104° 38' 25.066 W	
- plan hits target center										
- Point										
GF U-34-33HN PBHL	0.00	0.00	7,044.0	-1,449.2	-9,530.4	1,435,524.69	3,228,723.83	40° 31' 33.611 N	104° 40' 37.988 W	
- plan hits target center										
- Point										