



BAYSWATER

Bayswater Exploration & Production, LLC

DJ Basin

Groves Farm 34-L Pad

GROVES FARM W-34-33HN

Wellbore #1

Plan: Design #1

Standard Planning Report

13 April, 2020



Pad Name: Groves Farm 34-L Pad
Well Name: GROVES FARM W-34-33HN
Ground Level: 4844.0
SHL Latitude: 40° 31' 47.651 N
SHL Longitude: 104° 38' 34.580 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	3795.4	45.91	154.79	3557.5	-788.4	371.2	2.00	154.79	-208.9	
4	4630.3	45.91	154.79	4138.5	-1330.9	626.7	0.00	0.00	-352.6	
5	6925.7	0.00	271.51	6196.0	-2119.3	997.9	2.00	180.00	-561.4	
6	7125.7	0.00	271.51	6396.0	-2119.3	997.9	0.00	0.00	-561.4	
7	8026.3	90.06	271.51	6969.0	-2104.2	424.5	10.00	0.00	-2.3	GF W-34-33HN LP
8	17676.4	90.06	271.51	6959.0	-1850.4	-9222.3	0.00	0.00	9406.1	GF W-34-33HN PBHL

DESIGN TARGET DETAILS

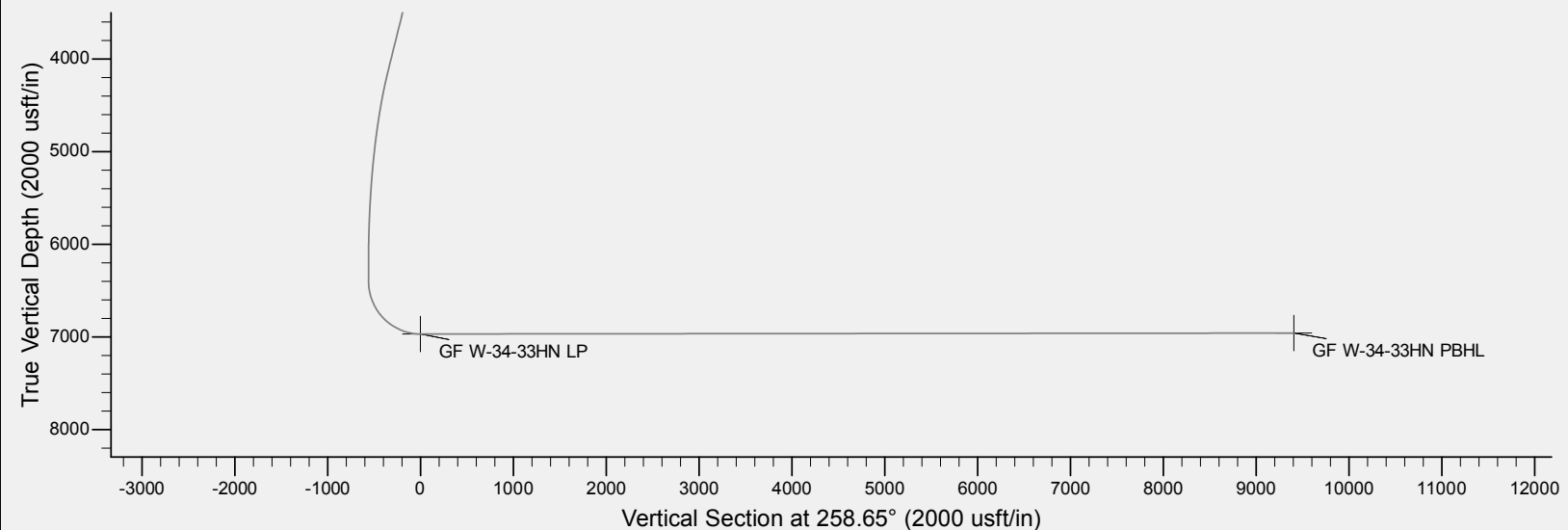
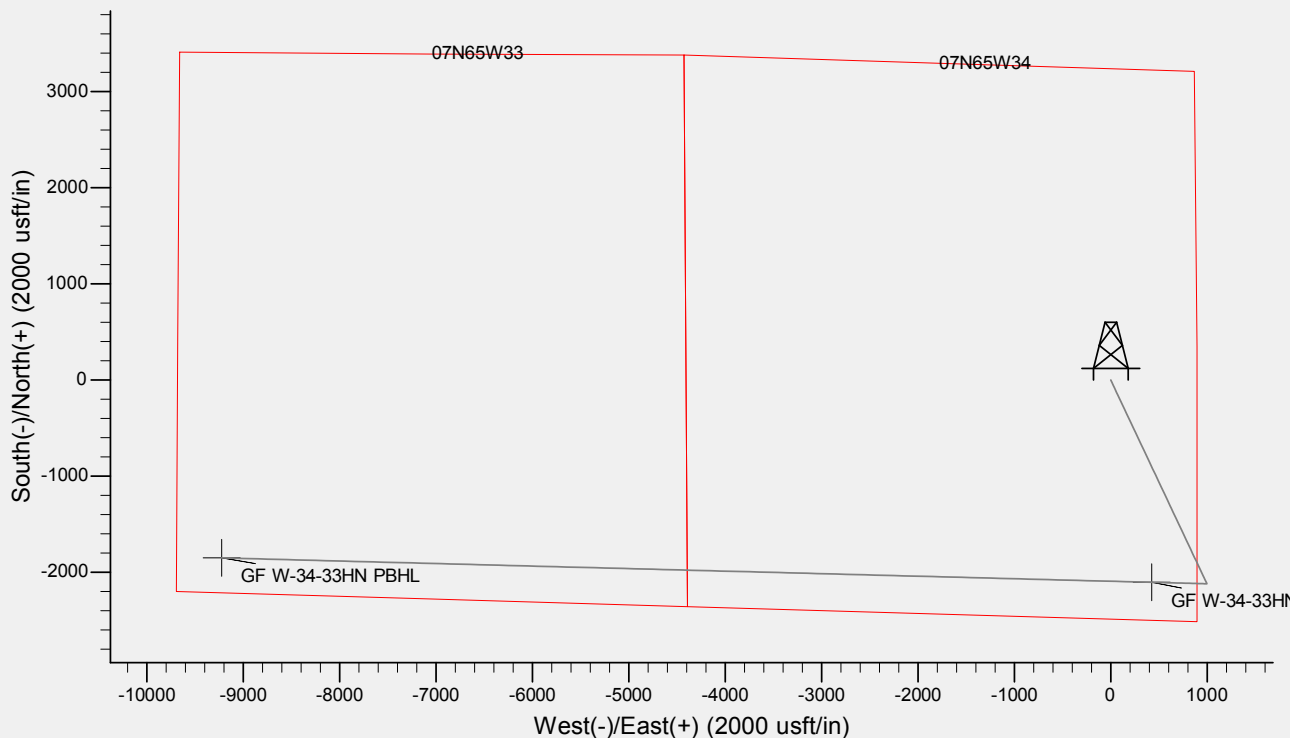
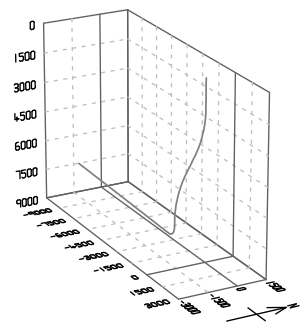
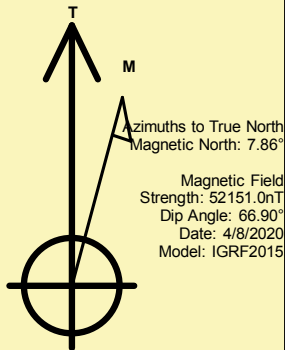
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
GF W-34-33HN LP	6969.0	-2104.2	424.5	1434935.65	3238684.08	40° 31' 26.857 N	104° 38' 29.083 W	Point
GF W-34-33HN PBHL	- plan hits target center 6959.0	-1850.4	-9222.3	1435096.22	3229035.28	40° 31' 29.348 N	104° 40' 34.007 W	Point
	- plan hits target center							

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well GROVES FARM W-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 W-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 W-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 W-34-33HN					
Well Position	+N/-S	-150.1 usft	Northing:	1,437,035.68 usft	Latitude:	40° 31' 47.651 N
	+E/-W	-4.2 usft	Easting:	3,238,239.26 usft	Longitude:	104° 38' 34.580 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	52,151.00378683

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	258.65

Plan Survey Tool Program	Date	4/8/2020		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,676.4	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	
3,795.4	45.91	154.79	3,557.5	-788.4	371.2	2.00	2.00	0.00	154.79	
4,630.3	45.91	154.79	4,138.5	-1,330.9	626.7	0.00	0.00	0.00	0.00	
6,925.7	0.00	271.51	6,196.0	-2,119.3	997.9	2.00	-2.00	0.00	180.00	
7,125.7	0.00	271.51	6,396.0	-2,119.3	997.9	0.00	0.00	0.00	0.00	
8,026.3	90.06	271.51	6,969.0	-2,104.2	424.5	10.00	10.00	0.00	0.00	GF W-34-33HN LP
17,676.4	90.06	271.51	6,959.0	-1,850.4	-9,222.3	0.00	0.00	0.00	0.00	GF W-34-33HN PBHL



Database:	EDM	Local Co-ordinate Reference:	Well GROVES FARM W-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 W-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	154.79	1,600.0	-1.6	0.7	-0.4	2.00	2.00	0.00
1,700.0	4.00	154.79	1,699.8	-6.3	3.0	-1.7	2.00	2.00	0.00
1,800.0	6.00	154.79	1,799.5	-14.2	6.7	-3.8	2.00	2.00	0.00
1,900.0	8.00	154.79	1,898.7	-25.2	11.9	-6.7	2.00	2.00	0.00
2,000.0	10.00	154.79	1,997.5	-39.4	18.5	-10.4	2.00	2.00	0.00
2,100.0	12.00	154.79	2,095.6	-56.6	26.7	-15.0	2.00	2.00	0.00
2,200.0	14.00	154.79	2,193.1	-77.0	36.2	-20.4	2.00	2.00	0.00
2,300.0	16.00	154.79	2,289.6	-100.4	47.3	-26.6	2.00	2.00	0.00
2,400.0	18.00	154.79	2,385.3	-126.9	59.7	-33.6	2.00	2.00	0.00
2,500.0	20.00	154.79	2,479.8	-156.3	73.6	-41.4	2.00	2.00	0.00
2,600.0	22.00	154.79	2,573.2	-188.7	88.9	-50.0	2.00	2.00	0.00
2,700.0	24.00	154.79	2,665.2	-224.1	105.5	-59.4	2.00	2.00	0.00
2,800.0	26.00	154.79	2,755.8	-262.3	123.5	-69.5	2.00	2.00	0.00
2,900.0	28.00	154.79	2,844.9	-303.4	142.8	-80.4	2.00	2.00	0.00
3,000.0	30.00	154.79	2,932.4	-347.2	163.5	-92.0	2.00	2.00	0.00
3,100.0	32.00	154.79	3,018.1	-393.8	185.4	-104.3	2.00	2.00	0.00
3,200.0	34.00	154.79	3,102.0	-443.1	208.6	-117.4	2.00	2.00	0.00
3,300.0	36.00	154.79	3,183.9	-495.0	233.1	-131.1	2.00	2.00	0.00
3,400.0	38.00	154.79	3,263.7	-549.4	258.7	-145.6	2.00	2.00	0.00
3,500.0	40.00	154.79	3,341.5	-606.4	285.5	-160.6	2.00	2.00	0.00
3,600.0	42.00	154.79	3,416.9	-665.7	313.5	-176.4	2.00	2.00	0.00
3,700.0	44.00	154.79	3,490.0	-727.4	342.5	-192.7	2.00	2.00	0.00
3,795.4	45.91	154.79	3,557.5	-788.4	371.2	-208.9	2.00	2.00	0.00
3,800.0	45.91	154.79	3,560.8	-791.4	372.6	-209.7	0.00	0.00	0.00
3,900.0	45.91	154.79	3,630.3	-856.4	403.2	-226.9	0.00	0.00	0.00
4,000.0	45.91	154.79	3,699.9	-921.4	433.8	-244.1	0.00	0.00	0.00
4,100.0	45.91	154.79	3,769.5	-986.3	464.4	-261.3	0.00	0.00	0.00
4,200.0	45.91	154.79	3,839.1	-1,051.3	495.0	-278.5	0.00	0.00	0.00
4,300.0	45.91	154.79	3,908.7	-1,116.3	525.6	-295.7	0.00	0.00	0.00
4,400.0	45.91	154.79	3,978.3	-1,181.3	556.2	-312.9	0.00	0.00	0.00
4,500.0	45.91	154.79	4,047.8	-1,246.3	586.8	-330.2	0.00	0.00	0.00
4,600.0	45.91	154.79	4,117.4	-1,311.2	617.4	-347.4	0.00	0.00	0.00
4,630.3	45.91	154.79	4,138.5	-1,330.9	626.7	-352.6	0.00	0.00	0.00
4,700.0	44.51	154.79	4,187.6	-1,375.7	647.7	-364.4	2.00	-2.00	0.00
4,800.0	42.51	154.79	4,260.1	-1,438.0	677.1	-380.9	2.00	-2.00	0.00
4,900.0	40.51	154.79	4,335.0	-1,497.9	705.3	-396.8	2.00	-2.00	0.00
5,000.0	38.51	154.79	4,412.1	-1,555.5	732.4	-412.1	2.00	-2.00	0.00
5,100.0	36.51	154.79	4,491.5	-1,610.6	758.3	-426.7	2.00	-2.00	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 W-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	34.51	154.79	4,572.9	-1,663.1	783.1	-440.6	2.00	-2.00	0.00
5,300.0	32.51	154.79	4,656.2	-1,713.1	806.6	-453.8	2.00	-2.00	0.00
5,400.0	30.51	154.79	4,741.5	-1,760.4	828.9	-466.3	2.00	-2.00	0.00
5,500.0	28.51	154.79	4,828.5	-1,804.9	849.8	-478.2	2.00	-2.00	0.00
5,600.0	26.51	154.79	4,917.2	-1,846.7	869.5	-489.2	2.00	-2.00	0.00
5,700.0	24.51	154.79	5,007.4	-1,885.7	887.9	-499.5	2.00	-2.00	0.00
5,800.0	22.51	154.79	5,099.1	-1,921.8	904.9	-509.1	2.00	-2.00	0.00
5,900.0	20.51	154.79	5,192.1	-1,955.0	920.5	-517.9	2.00	-2.00	0.00
6,000.0	18.51	154.79	5,286.4	-1,985.2	934.7	-525.9	2.00	-2.00	0.00
6,100.0	16.51	154.79	5,381.8	-2,012.4	947.5	-533.1	2.00	-2.00	0.00
6,200.0	14.51	154.79	5,478.1	-2,036.6	958.9	-539.5	2.00	-2.00	0.00
6,300.0	12.51	154.79	5,575.3	-2,057.7	968.9	-545.1	2.00	-2.00	0.00
6,400.0	10.51	154.79	5,673.3	-2,075.8	977.4	-549.9	2.00	-2.00	0.00
6,500.0	8.51	154.79	5,771.9	-2,090.8	984.4	-553.9	2.00	-2.00	0.00
6,600.0	6.51	154.79	5,871.1	-2,102.6	990.0	-557.0	2.00	-2.00	0.00
6,700.0	4.51	154.79	5,970.6	-2,111.3	994.1	-559.3	2.00	-2.00	0.00
6,800.0	2.51	154.79	6,070.4	-2,116.8	996.7	-560.8	2.00	-2.00	0.00
6,900.0	0.51	154.79	6,170.4	-2,119.2	997.8	-561.4	2.00	-2.00	0.00
6,925.7	0.00	271.51	6,196.0	-2,119.3	997.9	-561.4	2.00	-2.00	0.00
7,000.0	0.00	0.00	6,270.4	-2,119.3	997.9	-561.4	0.00	0.00	0.00
7,100.0	0.00	0.00	6,370.4	-2,119.3	997.9	-561.4	0.00	0.00	0.00
7,125.7	0.00	271.51	6,396.0	-2,119.3	997.9	-561.4	0.00	0.00	0.00
7,200.0	7.43	271.51	6,470.2	-2,119.2	993.0	-556.7	10.00	10.00	0.00
7,300.0	17.43	271.51	6,567.7	-2,118.6	971.6	-535.8	10.00	10.00	0.00
7,400.0	27.43	271.51	6,660.0	-2,117.6	933.5	-498.6	10.00	10.00	0.00
7,500.0	37.43	271.51	6,744.3	-2,116.2	879.9	-446.4	10.00	10.00	0.00
7,600.0	47.43	271.51	6,818.0	-2,114.4	812.5	-380.7	10.00	10.00	0.00
7,700.0	57.43	271.51	6,878.9	-2,112.4	733.4	-303.5	10.00	10.00	0.00
7,800.0	67.43	271.51	6,925.1	-2,110.0	644.9	-217.2	10.00	10.00	0.00
7,900.0	77.43	271.51	6,955.3	-2,107.5	549.7	-124.4	10.00	10.00	0.00
8,000.0	87.43	271.51	6,968.4	-2,104.9	450.8	-27.9	10.00	10.00	0.00
8,026.3	90.06	271.51	6,969.0	-2,104.2	424.5	-2.3	10.00	10.00	0.00
GF W-34-33HN LP									
8,100.0	90.06	271.51	6,968.9	-2,102.3	350.8	69.6	0.00	0.00	0.00
8,200.0	90.06	271.51	6,968.8	-2,099.7	250.8	167.1	0.00	0.00	0.00
8,300.0	90.06	271.51	6,968.7	-2,097.0	150.9	264.6	0.00	0.00	0.00
8,400.0	90.06	271.51	6,968.6	-2,094.4	50.9	362.1	0.00	0.00	0.00
8,500.0	90.06	271.51	6,968.5	-2,091.8	-49.1	459.6	0.00	0.00	0.00
8,600.0	90.06	271.51	6,968.4	-2,089.1	-149.0	557.1	0.00	0.00	0.00
8,700.0	90.06	271.51	6,968.3	-2,086.5	-249.0	654.6	0.00	0.00	0.00
8,800.0	90.06	271.51	6,968.2	-2,083.9	-349.0	752.1	0.00	0.00	0.00
8,900.0	90.06	271.51	6,968.1	-2,081.2	-448.9	849.6	0.00	0.00	0.00
9,000.0	90.06	271.51	6,968.0	-2,078.6	-548.9	947.1	0.00	0.00	0.00
9,100.0	90.06	271.51	6,967.9	-2,076.0	-648.9	1,044.6	0.00	0.00	0.00
9,200.0	90.06	271.51	6,967.8	-2,073.4	-748.8	1,142.1	0.00	0.00	0.00
9,300.0	90.06	271.51	6,967.7	-2,070.7	-848.8	1,239.6	0.00	0.00	0.00
9,400.0	90.06	271.51	6,967.6	-2,068.1	-948.7	1,337.1	0.00	0.00	0.00
9,500.0	90.06	271.51	6,967.5	-2,065.5	-1,048.7	1,434.5	0.00	0.00	0.00
9,600.0	90.06	271.51	6,967.4	-2,062.8	-1,148.7	1,532.0	0.00	0.00	0.00
9,700.0	90.06	271.51	6,967.3	-2,060.2	-1,248.6	1,629.5	0.00	0.00	0.00
9,800.0	90.06	271.51	6,967.2	-2,057.6	-1,348.6	1,727.0	0.00	0.00	0.00
9,900.0	90.06	271.51	6,967.1	-2,054.9	-1,448.6	1,824.5	0.00	0.00	0.00
10,000.0	90.06	271.51	6,967.0	-2,052.3	-1,548.5	1,922.0	0.00	0.00	0.00



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Site:	Groves Farm 34-L Pad	North Reference:	True
Well:	GROVES FARM W-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	90.06	271.51	6,966.9	-2,049.7	-1,648.5	2,019.5	0.00	0.00	0.00	
10,200.0	90.06	271.51	6,966.7	-2,047.1	-1,748.5	2,117.0	0.00	0.00	0.00	
10,300.0	90.06	271.51	6,966.6	-2,044.4	-1,848.4	2,214.5	0.00	0.00	0.00	
10,400.0	90.06	271.51	6,966.5	-2,041.8	-1,948.4	2,312.0	0.00	0.00	0.00	
10,500.0	90.06	271.51	6,966.4	-2,039.2	-2,048.4	2,409.5	0.00	0.00	0.00	
10,600.0	90.06	271.51	6,966.3	-2,036.5	-2,148.3	2,507.0	0.00	0.00	0.00	
10,700.0	90.06	271.51	6,966.2	-2,033.9	-2,248.3	2,604.5	0.00	0.00	0.00	
10,800.0	90.06	271.51	6,966.1	-2,031.3	-2,348.3	2,702.0	0.00	0.00	0.00	
10,900.0	90.06	271.51	6,966.0	-2,028.6	-2,448.2	2,799.5	0.00	0.00	0.00	
11,000.0	90.06	271.51	6,965.9	-2,026.0	-2,548.2	2,897.0	0.00	0.00	0.00	
11,100.0	90.06	271.51	6,965.8	-2,023.4	-2,648.2	2,994.5	0.00	0.00	0.00	
11,200.0	90.06	271.51	6,965.7	-2,020.8	-2,748.1	3,092.0	0.00	0.00	0.00	
11,300.0	90.06	271.51	6,965.6	-2,018.1	-2,848.1	3,189.5	0.00	0.00	0.00	
11,400.0	90.06	271.51	6,965.5	-2,015.5	-2,948.1	3,286.9	0.00	0.00	0.00	
11,500.0	90.06	271.51	6,965.4	-2,012.9	-3,048.0	3,384.4	0.00	0.00	0.00	
11,600.0	90.06	271.51	6,965.3	-2,010.2	-3,148.0	3,481.9	0.00	0.00	0.00	
11,700.0	90.06	271.51	6,965.2	-2,007.6	-3,248.0	3,579.4	0.00	0.00	0.00	
11,800.0	90.06	271.51	6,965.1	-2,005.0	-3,347.9	3,676.9	0.00	0.00	0.00	
11,900.0	90.06	271.51	6,965.0	-2,002.3	-3,447.9	3,774.4	0.00	0.00	0.00	
12,000.0	90.06	271.51	6,964.9	-1,999.7	-3,547.8	3,871.9	0.00	0.00	0.00	
12,100.0	90.06	271.51	6,964.8	-1,997.1	-3,647.8	3,969.4	0.00	0.00	0.00	
12,200.0	90.06	271.51	6,964.7	-1,994.5	-3,747.8	4,066.9	0.00	0.00	0.00	
12,300.0	90.06	271.51	6,964.6	-1,991.8	-3,847.7	4,164.4	0.00	0.00	0.00	
12,400.0	90.06	271.51	6,964.5	-1,989.2	-3,947.7	4,261.9	0.00	0.00	0.00	
12,500.0	90.06	271.51	6,964.4	-1,986.6	-4,047.7	4,359.4	0.00	0.00	0.00	
12,600.0	90.06	271.51	6,964.3	-1,983.9	-4,147.6	4,456.9	0.00	0.00	0.00	
12,700.0	90.06	271.51	6,964.2	-1,981.3	-4,247.6	4,554.4	0.00	0.00	0.00	
12,800.0	90.06	271.51	6,964.1	-1,978.7	-4,347.6	4,651.9	0.00	0.00	0.00	
12,900.0	90.06	271.51	6,963.9	-1,976.0	-4,447.5	4,749.4	0.00	0.00	0.00	
13,000.0	90.06	271.51	6,963.8	-1,973.4	-4,547.5	4,846.9	0.00	0.00	0.00	
13,100.0	90.06	271.51	6,963.7	-1,970.8	-4,647.5	4,944.4	0.00	0.00	0.00	
13,200.0	90.06	271.51	6,963.6	-1,968.1	-4,747.4	5,041.8	0.00	0.00	0.00	
13,300.0	90.06	271.51	6,963.5	-1,965.5	-4,847.4	5,139.3	0.00	0.00	0.00	
13,400.0	90.06	271.51	6,963.4	-1,962.9	-4,947.4	5,236.8	0.00	0.00	0.00	
13,500.0	90.06	271.51	6,963.3	-1,960.3	-5,047.3	5,334.3	0.00	0.00	0.00	
13,600.0	90.06	271.51	6,963.2	-1,957.6	-5,147.3	5,431.8	0.00	0.00	0.00	
13,700.0	90.06	271.51	6,963.1	-1,955.0	-5,247.3	5,529.3	0.00	0.00	0.00	
13,800.0	90.06	271.51	6,963.0	-1,952.4	-5,347.2	5,626.8	0.00	0.00	0.00	
13,900.0	90.06	271.51	6,962.9	-1,949.7	-5,447.2	5,724.3	0.00	0.00	0.00	
14,000.0	90.06	271.51	6,962.8	-1,947.1	-5,547.2	5,821.8	0.00	0.00	0.00	
14,100.0	90.06	271.51	6,962.7	-1,944.5	-5,647.1	5,919.3	0.00	0.00	0.00	
14,200.0	90.06	271.51	6,962.6	-1,941.8	-5,747.1	6,016.8	0.00	0.00	0.00	
14,300.0	90.06	271.51	6,962.5	-1,939.2	-5,847.1	6,114.3	0.00	0.00	0.00	
14,400.0	90.06	271.51	6,962.4	-1,936.6	-5,947.0	6,211.8	0.00	0.00	0.00	
14,500.0	90.06	271.51	6,962.3	-1,934.0	-6,047.0	6,309.3	0.00	0.00	0.00	
14,600.0	90.06	271.51	6,962.2	-1,931.3	-6,146.9	6,406.8	0.00	0.00	0.00	
14,700.0	90.06	271.51	6,962.1	-1,928.7	-6,246.9	6,504.3	0.00	0.00	0.00	
14,800.0	90.06	271.51	6,962.0	-1,926.1	-6,346.9	6,601.8	0.00	0.00	0.00	
14,900.0	90.06	271.51	6,961.9	-1,923.4	-6,446.8	6,699.3	0.00	0.00	0.00	
15,000.0	90.06	271.51	6,961.8	-1,920.8	-6,546.8	6,796.7	0.00	0.00	0.00	
15,100.0	90.06	271.51	6,961.7	-1,918.2	-6,646.8	6,894.2	0.00	0.00	0.00	
15,200.0	90.06	271.51	6,961.6	-1,915.5	-6,746.7	6,991.7	0.00	0.00	0.00	
15,300.0	90.06	271.51	6,961.5	-1,912.9	-6,846.7	7,089.2	0.00	0.00	0.00	
15,400.0	90.06	271.51	6,961.4	-1,910.3	-6,946.7	7,186.7	0.00	0.00	0.00	



Database:	EDM	Local Co-ordinate Reference:	Well GROVES FARM W-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 W-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	90.06	271.51	6,961.3	-1,907.7	-7,046.6	7,284.2	0.00	0.00	0.00
15,600.0	90.06	271.51	6,961.2	-1,905.0	-7,146.6	7,381.7	0.00	0.00	0.00
15,700.0	90.06	271.51	6,961.0	-1,902.4	-7,246.6	7,479.2	0.00	0.00	0.00
15,800.0	90.06	271.51	6,960.9	-1,899.8	-7,346.5	7,576.7	0.00	0.00	0.00
15,900.0	90.06	271.51	6,960.8	-1,897.1	-7,446.5	7,674.2	0.00	0.00	0.00
16,000.0	90.06	271.51	6,960.7	-1,894.5	-7,546.5	7,771.7	0.00	0.00	0.00
16,100.0	90.06	271.51	6,960.6	-1,891.9	-7,646.4	7,869.2	0.00	0.00	0.00
16,200.0	90.06	271.51	6,960.5	-1,889.2	-7,746.4	7,966.7	0.00	0.00	0.00
16,300.0	90.06	271.51	6,960.4	-1,886.6	-7,846.4	8,064.2	0.00	0.00	0.00
16,400.0	90.06	271.51	6,960.3	-1,884.0	-7,946.3	8,161.7	0.00	0.00	0.00
16,500.0	90.06	271.51	6,960.2	-1,881.4	-8,046.3	8,259.2	0.00	0.00	0.00
16,600.0	90.06	271.51	6,960.1	-1,878.7	-8,146.3	8,356.7	0.00	0.00	0.00
16,700.0	90.06	271.51	6,960.0	-1,876.1	-8,246.2	8,454.2	0.00	0.00	0.00
16,800.0	90.06	271.51	6,959.9	-1,873.5	-8,346.2	8,551.6	0.00	0.00	0.00
16,900.0	90.06	271.51	6,959.8	-1,870.8	-8,446.2	8,649.1	0.00	0.00	0.00
17,000.0	90.06	271.51	6,959.7	-1,868.2	-8,546.1	8,746.6	0.00	0.00	0.00
17,100.0	90.06	271.51	6,959.6	-1,865.6	-8,646.1	8,844.1	0.00	0.00	0.00
17,200.0	90.06	271.51	6,959.5	-1,862.9	-8,746.0	8,941.6	0.00	0.00	0.00
17,300.0	90.06	271.51	6,959.4	-1,860.3	-8,846.0	9,039.1	0.00	0.00	0.00
17,400.0	90.06	271.51	6,959.3	-1,857.7	-8,946.0	9,136.6	0.00	0.00	0.00
17,500.0	90.06	271.51	6,959.2	-1,855.0	-9,045.9	9,234.1	0.00	0.00	0.00
17,600.0	90.06	271.51	6,959.1	-1,852.4	-9,145.9	9,331.6	0.00	0.00	0.00
17,676.4	90.06	271.51	6,959.0	-1,850.4	-9,222.3	9,406.1	0.00	0.00	0.00
GF W-34-33HN PBHL									

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
GF W-34-33HN PBHL - plan hits target center - Point	0.00	0.00	6,959.0	-1,850.4	-9,222.3	1,435,096.23	3,229,035.29	40° 31' 29.348 N	104° 40' 34.007 W
GF W-34-33HN LP - plan hits target center - Point	0.00	0.00	6,969.0	-2,104.2	424.5	1,434,935.65	3,238,684.09	40° 31' 26.857 N	104° 38' 29.083 W