



Pad Name: Groves Farm 34-L Pad
Well Name: GROVES FARM X-34-33HN
Ground Level: 4844.0
SHL Latitude: 40° 31' 47.503 N
SHL Longitude: 104° 38' 34.584 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	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	4119.2	52.91	157.84	3762.5	-1042.6	424.6	2.02	157.84	-177.0	
4	4606.7	52.91	157.84	4056.5	-1402.8	571.3	0.00	0.00	-238.2	
5	7225.9	0.00	271.11	6319.0	-2445.4	995.9	2.02	180.00	-415.2	
6	7425.9	0.00	271.11	6519.0	-2445.4	995.9	0.00	0.00	-415.2	
7	8324.4	89.85	271.11	7092.0	-2434.3	424.5	10.00	0.00	138.8	GF X-34-33HN LP
8	8353.3	89.85	271.69	7092.1	-2433.6	395.6	2.00	90.02	166.8	
9	13142.5	89.85	271.69	7104.5	-2292.2	-4391.5	0.00	0.00	4797.0	
10	13143.2	89.85	271.70	7104.5	-2292.2	-4392.2	2.00	87.95	4797.6	GF X-34-33HN VP
11	17977.0	89.85	271.70	7117.0	-2148.4	-9223.8	0.00	0.00	9470.7	GF X-34-33HN PBHL

DESIGN TARGET DETAILS

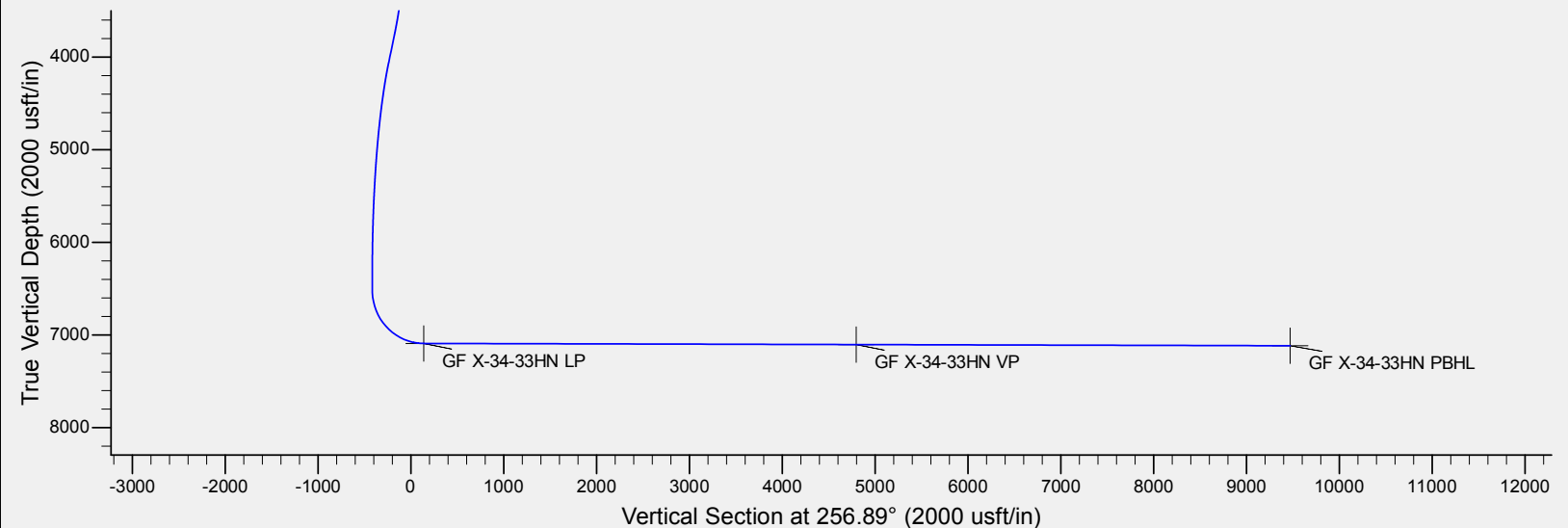
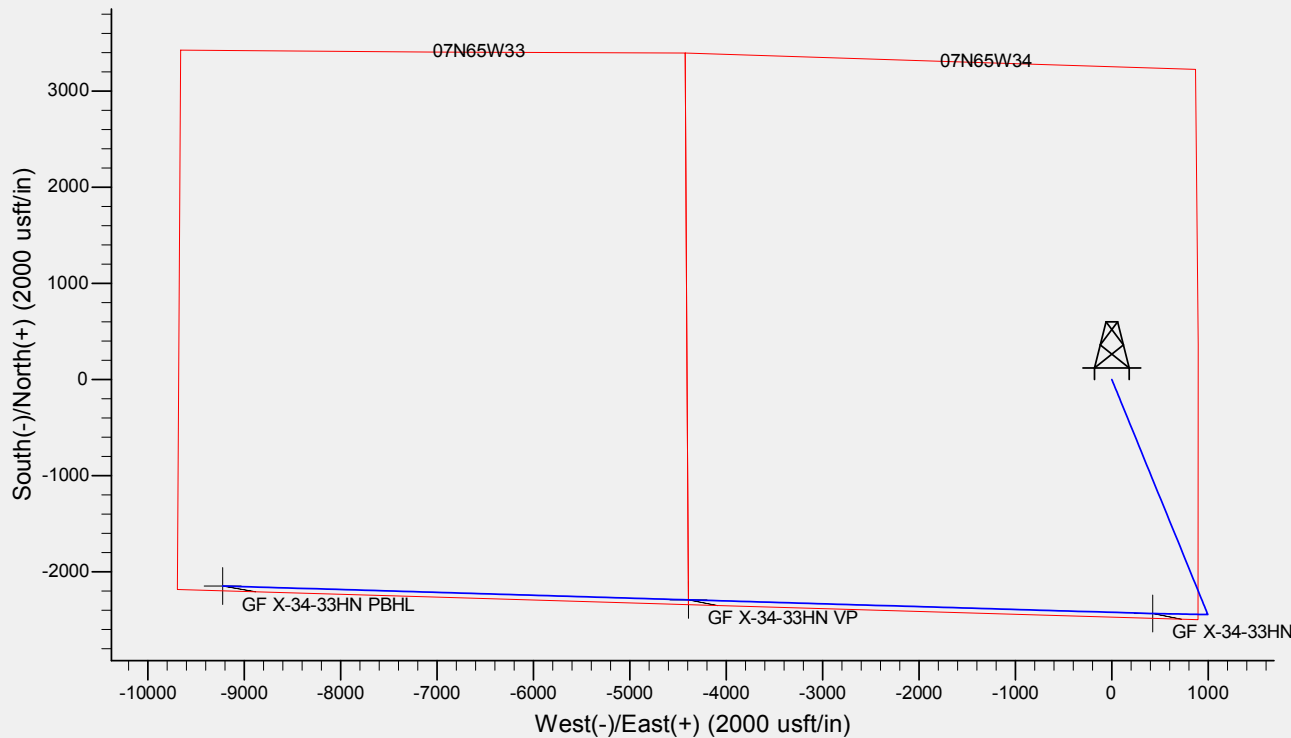
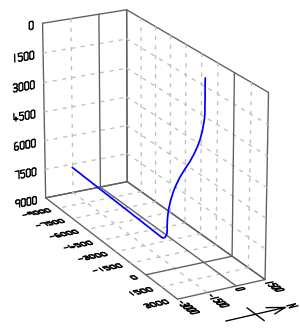
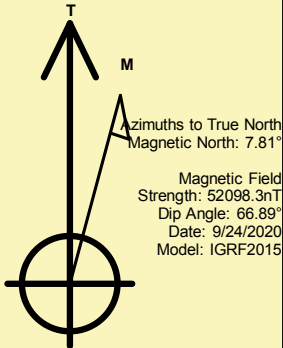
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
GF X-34-33HN LP	7092.0	-2434.3	424.5	1434590.67	3238687.15	40° 31' 23.448 N	104° 38' 29.087 W	Point
GF X-34-33HN VP	- plan hits target center 7104.5	-2292.2	-4392.2	1434686.21	3233869.32	40° 31' 24.848 N	104° 39' 31.460 W	Point
GF X-34-33HN PBHL	- plan hits target center 7117.0	-2148.4	-9223.8	1434783.28	3229036.52	40° 31' 26.256 N	104° 40' 34.028 W	Point

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well GROVES FARM X-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 X-34-33HN

Wellbore #1

Plan: Design #1

Standard Planning Report

26 September, 2020



Database:	EDM	Local Co-ordinate Reference:	Well GROVES FARM X-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 X-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 X-34-33HN					
Well Position	+N/-S	-165.0 usft	Northing:	1,437,020.74 usft	Latitude:	40° 31' 47.503 N
	+E/-W	-4.4 usft	Easting:	3,238,239.13 usft	Longitude:	104° 38' 34.584 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	9/24/2020	7.81	66.89	52,098.26762303

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	256.89	

Plan Survey Tool Program	Date	9/24/2020			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	17,977.0	Design #1 (Wellbore #1)	MWD	
				OWSG MWD - Standard	



Database:	EDM	Local Co-ordinate Reference:	Well GROVES FARM X-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 X-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	
4,119.2	52.91	157.84	3,762.5	-1,042.6	424.6	2.02	2.02	0.00	157.84	
4,606.7	52.91	157.84	4,056.5	-1,402.8	571.3	0.00	0.00	0.00	0.00	
7,225.9	0.00	271.11	6,319.0	-2,445.4	995.9	2.02	-2.02	0.00	180.00	
7,425.9	0.00	271.11	6,519.0	-2,445.4	995.9	0.00	0.00	0.00	0.00	
8,324.4	89.85	271.11	7,092.0	-2,434.3	424.5	10.00	10.00	0.00	0.00	GF X-34-33HN LP
8,353.3	89.85	271.69	7,092.1	-2,433.6	395.6	2.00	0.00	2.00	90.02	
13,142.5	89.85	271.69	7,104.5	-2,292.2	-4,391.5	0.00	0.00	0.00	0.00	
13,143.2	89.85	271.70	7,104.5	-2,292.2	-4,392.2	2.00	0.07	2.00	87.95	GF X-34-33HN VP
17,977.0	89.85	271.70	7,117.0	-2,148.4	-9,223.8	0.00	0.00	0.00	0.00	GF X-34-33HN PBHL



Database:	EDM	Local Co-ordinate Reference:	Well GROVES FARM X-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 X-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	2.02	157.84	1,600.0	-1.6	0.7	-0.3	2.02	2.02	0.00
1,700.0	4.04	157.84	1,699.8	-6.5	2.7	-1.1	2.02	2.02	0.00
1,800.0	6.06	157.84	1,799.4	-14.7	6.0	-2.5	2.02	2.02	0.00
1,900.0	8.08	157.84	1,898.7	-26.1	10.6	-4.4	2.02	2.02	0.00
2,000.0	10.10	157.84	1,997.4	-40.7	16.6	-6.9	2.02	2.02	0.00
2,100.0	12.12	157.84	2,095.5	-58.6	23.8	-9.9	2.02	2.02	0.00
2,200.0	14.14	157.84	2,192.9	-79.6	32.4	-13.5	2.02	2.02	0.00
2,300.0	16.16	157.84	2,289.4	-103.8	42.3	-17.6	2.02	2.02	0.00
2,400.0	18.18	157.84	2,385.0	-131.1	53.4	-22.3	2.02	2.02	0.00
2,500.0	20.20	157.84	2,479.4	-161.6	65.8	-27.4	2.02	2.02	0.00
2,600.0	22.22	157.84	2,572.6	-195.1	79.4	-33.1	2.02	2.02	0.00
2,700.0	24.24	157.84	2,664.5	-231.6	94.3	-39.3	2.02	2.02	0.00
2,800.0	26.26	157.84	2,755.0	-271.1	110.4	-46.0	2.02	2.02	0.00
2,900.0	28.28	157.84	2,843.8	-313.5	127.7	-53.2	2.02	2.02	0.00
3,000.0	30.30	157.84	2,931.1	-358.9	146.1	-60.9	2.02	2.02	0.00
3,100.0	32.32	157.84	3,016.5	-407.0	165.7	-69.1	2.02	2.02	0.00
3,200.0	34.34	157.84	3,100.0	-457.9	186.5	-77.7	2.02	2.02	0.00
3,300.0	36.36	157.84	3,181.6	-511.4	208.3	-86.8	2.02	2.02	0.00
3,400.0	38.38	157.84	3,261.1	-567.7	231.2	-96.4	2.02	2.02	0.00
3,500.0	40.40	157.84	3,338.3	-626.4	255.1	-106.4	2.02	2.02	0.00
3,600.0	42.42	157.84	3,413.3	-687.7	280.1	-116.8	2.02	2.02	0.00
3,700.0	44.44	157.84	3,486.0	-751.3	306.0	-127.6	2.02	2.02	0.00
3,800.0	46.46	157.84	3,556.1	-817.3	332.9	-138.8	2.02	2.02	0.00
3,900.0	48.48	157.84	3,623.7	-885.6	360.7	-150.4	2.02	2.02	0.00
4,000.0	50.50	157.84	3,688.7	-956.0	389.3	-162.3	2.02	2.02	0.00
4,100.0	52.52	157.84	3,750.9	-1,028.5	418.8	-174.6	2.02	2.02	0.00
4,119.2	52.91	157.84	3,762.5	-1,042.6	424.6	-177.0	2.02	2.02	0.00
4,200.0	52.91	157.84	3,811.3	-1,102.3	448.9	-187.2	0.00	0.00	0.00
4,300.0	52.91	157.84	3,871.6	-1,176.2	479.0	-199.7	0.00	0.00	0.00
4,400.0	52.91	157.84	3,931.9	-1,250.1	509.1	-212.2	0.00	0.00	0.00
4,500.0	52.91	157.84	3,992.2	-1,324.0	539.2	-224.8	0.00	0.00	0.00
4,600.0	52.91	157.84	4,052.5	-1,397.8	569.3	-237.3	0.00	0.00	0.00
4,606.7	52.91	157.84	4,056.5	-1,402.8	571.3	-238.2	0.00	0.00	0.00
4,700.0	51.02	157.84	4,114.0	-1,470.8	599.0	-249.7	2.02	-2.02	0.00
4,800.0	49.00	157.84	4,178.3	-1,541.8	627.9	-261.8	2.02	-2.02	0.00
4,900.0	46.98	157.84	4,245.2	-1,610.6	655.9	-273.4	2.02	-2.02	0.00
5,000.0	44.96	157.84	4,314.7	-1,677.2	683.0	-284.8	2.02	-2.02	0.00
5,100.0	42.94	157.84	4,386.7	-1,741.5	709.2	-295.7	2.02	-2.02	0.00



Database:	EDM	Local Co-ordinate Reference:	Well GROVES FARM X-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 X-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	40.92	157.84	4,461.1	-1,803.4	734.4	-306.2	2.02	-2.02	0.00
5,300.0	38.90	157.84	4,537.8	-1,862.8	758.6	-316.3	2.02	-2.02	0.00
5,400.0	36.88	157.84	4,616.7	-1,919.7	781.8	-325.9	2.02	-2.02	0.00
5,500.0	34.86	157.84	4,697.7	-1,973.9	803.9	-335.1	2.02	-2.02	0.00
5,600.0	32.84	157.84	4,780.7	-2,025.5	824.9	-343.9	2.02	-2.02	0.00
5,700.0	30.82	157.84	4,865.7	-2,074.4	844.8	-352.2	2.02	-2.02	0.00
5,800.0	28.80	157.84	4,952.5	-2,120.4	863.5	-360.0	2.02	-2.02	0.00
5,900.0	26.78	157.84	5,040.9	-2,163.6	881.1	-367.3	2.02	-2.02	0.00
6,000.0	24.76	157.84	5,131.0	-2,203.8	897.5	-374.2	2.02	-2.02	0.00
6,100.0	22.74	157.84	5,222.5	-2,241.2	912.7	-380.5	2.02	-2.02	0.00
6,200.0	20.72	157.84	5,315.4	-2,275.4	926.7	-386.3	2.02	-2.02	0.00
6,300.0	18.70	157.84	5,409.5	-2,306.7	939.4	-391.6	2.02	-2.02	0.00
6,400.0	16.68	157.84	5,504.8	-2,334.8	950.8	-396.4	2.02	-2.02	0.00
6,500.0	14.66	157.84	5,601.1	-2,359.8	961.0	-400.7	2.02	-2.02	0.00
6,600.0	12.64	157.84	5,698.2	-2,381.7	969.9	-404.4	2.02	-2.02	0.00
6,700.0	10.62	157.84	5,796.2	-2,400.4	977.5	-407.5	2.02	-2.02	0.00
6,800.0	8.60	157.84	5,894.8	-2,415.8	983.8	-410.2	2.02	-2.02	0.00
6,900.0	6.58	157.84	5,993.9	-2,428.1	988.8	-412.2	2.02	-2.02	0.00
7,000.0	4.56	157.84	6,093.4	-2,437.1	992.5	-413.8	2.02	-2.02	0.00
7,100.0	2.54	157.84	6,193.2	-2,442.8	994.8	-414.7	2.02	-2.02	0.00
7,200.0	0.52	157.84	6,293.2	-2,445.3	995.8	-415.2	2.02	-2.02	0.00
7,225.9	0.00	271.11	6,319.0	-2,445.4	995.9	-415.2	2.02	-2.02	0.00
7,300.0	0.00	0.00	6,393.2	-2,445.4	995.9	-415.2	0.00	0.00	0.00
7,400.0	0.00	0.00	6,493.2	-2,445.4	995.9	-415.2	0.00	0.00	0.00
7,425.9	0.00	271.11	6,519.0	-2,445.4	995.9	-415.2	0.00	0.00	0.00
7,500.0	7.41	271.11	6,593.0	-2,445.3	991.1	-410.5	10.00	10.00	0.00
7,600.0	17.41	271.11	6,690.5	-2,444.9	969.6	-389.7	10.00	10.00	0.00
7,700.0	27.41	271.11	6,782.8	-2,444.1	931.6	-352.8	10.00	10.00	0.00
7,800.0	37.41	271.11	6,867.1	-2,443.1	878.0	-300.9	10.00	10.00	0.00
7,900.0	47.41	271.11	6,940.9	-2,441.8	810.7	-235.6	10.00	10.00	0.00
8,000.0	57.41	271.11	7,001.8	-2,440.3	731.6	-158.9	10.00	10.00	0.00
8,100.0	67.41	271.11	7,048.0	-2,438.5	643.1	-73.1	10.00	10.00	0.00
8,200.0	77.41	271.11	7,078.2	-2,436.7	547.9	19.2	10.00	10.00	0.00
8,300.0	87.41	271.11	7,091.4	-2,434.8	448.9	115.1	10.00	10.00	0.00
8,324.4	89.85	271.11	7,092.0	-2,434.3	424.5	138.8	10.00	10.00	0.00
GF X-34-33HN LP									
8,353.3	89.85	271.69	7,092.1	-2,433.6	395.6	166.8	2.00	0.00	2.00
8,400.0	89.85	271.69	7,092.2	-2,432.2	348.9	211.9	0.00	0.00	0.00
8,500.0	89.85	271.69	7,092.5	-2,429.3	249.0	308.6	0.00	0.00	0.00
8,600.0	89.85	271.69	7,092.7	-2,426.3	149.0	405.3	0.00	0.00	0.00
8,700.0	89.85	271.69	7,093.0	-2,423.4	49.1	501.9	0.00	0.00	0.00
8,800.0	89.85	271.69	7,093.2	-2,420.4	-50.9	598.6	0.00	0.00	0.00
8,900.0	89.85	271.69	7,093.5	-2,417.4	-150.8	695.3	0.00	0.00	0.00
9,000.0	89.85	271.69	7,093.8	-2,414.5	-250.8	792.0	0.00	0.00	0.00
9,100.0	89.85	271.69	7,094.0	-2,411.5	-350.8	888.7	0.00	0.00	0.00
9,200.0	89.85	271.69	7,094.3	-2,408.6	-450.7	985.3	0.00	0.00	0.00
9,300.0	89.85	271.69	7,094.5	-2,405.6	-550.7	1,082.0	0.00	0.00	0.00
9,400.0	89.85	271.69	7,094.8	-2,402.7	-650.6	1,178.7	0.00	0.00	0.00
9,500.0	89.85	271.69	7,095.0	-2,399.7	-750.6	1,275.4	0.00	0.00	0.00
9,600.0	89.85	271.69	7,095.3	-2,396.8	-850.5	1,372.1	0.00	0.00	0.00
9,700.0	89.85	271.69	7,095.6	-2,393.8	-950.5	1,468.7	0.00	0.00	0.00
9,800.0	89.85	271.69	7,095.8	-2,390.9	-1,050.4	1,565.4	0.00	0.00	0.00
9,900.0	89.85	271.69	7,096.1	-2,387.9	-1,150.4	1,662.1	0.00	0.00	0.00



Database:	EDM	Local Co-ordinate Reference:	Well GROVES FARM X-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 X-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	89.85	271.69	7,096.3	-2,385.0	-1,250.4	1,758.8	0.00	0.00	0.00	
10,100.0	89.85	271.69	7,096.6	-2,382.0	-1,350.3	1,855.5	0.00	0.00	0.00	
10,200.0	89.85	271.69	7,096.9	-2,379.1	-1,450.3	1,952.2	0.00	0.00	0.00	
10,300.0	89.85	271.69	7,097.1	-2,376.1	-1,550.2	2,048.8	0.00	0.00	0.00	
10,400.0	89.85	271.69	7,097.4	-2,373.2	-1,650.2	2,145.5	0.00	0.00	0.00	
10,500.0	89.85	271.69	7,097.6	-2,370.2	-1,750.1	2,242.2	0.00	0.00	0.00	
10,600.0	89.85	271.69	7,097.9	-2,367.3	-1,850.1	2,338.9	0.00	0.00	0.00	
10,700.0	89.85	271.69	7,098.2	-2,364.3	-1,950.1	2,435.6	0.00	0.00	0.00	
10,800.0	89.85	271.69	7,098.4	-2,361.4	-2,050.0	2,532.2	0.00	0.00	0.00	
10,900.0	89.85	271.69	7,098.7	-2,358.4	-2,150.0	2,628.9	0.00	0.00	0.00	
11,000.0	89.85	271.69	7,098.9	-2,355.5	-2,249.9	2,725.6	0.00	0.00	0.00	
11,100.0	89.85	271.69	7,099.2	-2,352.5	-2,349.9	2,822.3	0.00	0.00	0.00	
11,200.0	89.85	271.69	7,099.5	-2,349.6	-2,449.8	2,919.0	0.00	0.00	0.00	
11,300.0	89.85	271.69	7,099.7	-2,346.6	-2,549.8	3,015.6	0.00	0.00	0.00	
11,400.0	89.85	271.69	7,100.0	-2,343.6	-2,649.7	3,112.3	0.00	0.00	0.00	
11,500.0	89.85	271.69	7,100.2	-2,340.7	-2,749.7	3,209.0	0.00	0.00	0.00	
11,600.0	89.85	271.69	7,100.5	-2,337.7	-2,849.7	3,305.7	0.00	0.00	0.00	
11,700.0	89.85	271.69	7,100.8	-2,334.8	-2,949.6	3,402.4	0.00	0.00	0.00	
11,800.0	89.85	271.69	7,101.0	-2,331.8	-3,049.6	3,499.0	0.00	0.00	0.00	
11,900.0	89.85	271.69	7,101.3	-2,328.9	-3,149.5	3,595.7	0.00	0.00	0.00	
12,000.0	89.85	271.69	7,101.5	-2,325.9	-3,249.5	3,692.4	0.00	0.00	0.00	
12,100.0	89.85	271.69	7,101.8	-2,323.0	-3,349.4	3,789.1	0.00	0.00	0.00	
12,200.0	89.85	271.69	7,102.1	-2,320.0	-3,449.4	3,885.8	0.00	0.00	0.00	
12,300.0	89.85	271.69	7,102.3	-2,317.1	-3,549.3	3,982.4	0.00	0.00	0.00	
12,400.0	89.85	271.69	7,102.6	-2,314.1	-3,649.3	4,079.1	0.00	0.00	0.00	
12,500.0	89.85	271.69	7,102.8	-2,311.2	-3,749.3	4,175.8	0.00	0.00	0.00	
12,600.0	89.85	271.69	7,103.1	-2,308.2	-3,849.2	4,272.5	0.00	0.00	0.00	
12,700.0	89.85	271.69	7,103.4	-2,305.3	-3,949.2	4,369.2	0.00	0.00	0.00	
12,800.0	89.85	271.69	7,103.6	-2,302.3	-4,049.1	4,465.8	0.00	0.00	0.00	
12,900.0	89.85	271.69	7,103.9	-2,299.4	-4,149.1	4,562.5	0.00	0.00	0.00	
13,000.0	89.85	271.69	7,104.1	-2,296.4	-4,249.0	4,659.2	0.00	0.00	0.00	
13,100.0	89.85	271.69	7,104.4	-2,293.5	-4,349.0	4,755.9	0.00	0.00	0.00	
13,142.5	89.85	271.69	7,104.5	-2,292.2	-4,391.5	4,797.0	0.00	0.00	0.00	
13,143.2	89.85	271.70	7,104.5	-2,292.2	-4,392.2	4,797.6	2.00	0.07	2.00	
GF X-34-33HN VP										
13,200.0	89.85	271.70	7,104.6	-2,290.5	-4,449.0	4,852.6	0.00	0.00	0.00	
13,300.0	89.85	271.70	7,104.9	-2,287.5	-4,548.9	4,949.2	0.00	0.00	0.00	
13,400.0	89.85	271.70	7,105.2	-2,284.6	-4,648.9	5,045.9	0.00	0.00	0.00	
13,500.0	89.85	271.70	7,105.4	-2,281.6	-4,748.8	5,142.6	0.00	0.00	0.00	
13,600.0	89.85	271.70	7,105.7	-2,278.6	-4,848.8	5,239.3	0.00	0.00	0.00	
13,700.0	89.85	271.70	7,105.9	-2,275.6	-4,948.7	5,335.9	0.00	0.00	0.00	
13,800.0	89.85	271.70	7,106.2	-2,272.7	-5,048.7	5,432.6	0.00	0.00	0.00	
13,900.0	89.85	271.70	7,106.5	-2,269.7	-5,148.6	5,529.3	0.00	0.00	0.00	
14,000.0	89.85	271.70	7,106.7	-2,266.7	-5,248.6	5,626.0	0.00	0.00	0.00	
14,100.0	89.85	271.70	7,107.0	-2,263.7	-5,348.6	5,722.6	0.00	0.00	0.00	
14,200.0	89.85	271.70	7,107.2	-2,260.8	-5,448.5	5,819.3	0.00	0.00	0.00	
14,300.0	89.85	271.70	7,107.5	-2,257.8	-5,548.5	5,916.0	0.00	0.00	0.00	
14,400.0	89.85	271.70	7,107.7	-2,254.8	-5,648.4	6,012.7	0.00	0.00	0.00	
14,500.0	89.85	271.70	7,108.0	-2,251.8	-5,748.4	6,109.3	0.00	0.00	0.00	
14,600.0	89.85	271.70	7,108.3	-2,248.9	-5,848.3	6,206.0	0.00	0.00	0.00	
14,700.0	89.85	271.70	7,108.5	-2,245.9	-5,948.3	6,302.7	0.00	0.00	0.00	
14,800.0	89.85	271.70	7,108.8	-2,242.9	-6,048.2	6,399.4	0.00	0.00	0.00	
14,900.0	89.85	271.70	7,109.0	-2,239.9	-6,148.2	6,496.0	0.00	0.00	0.00	
15,000.0	89.85	271.70	7,109.3	-2,237.0	-6,248.1	6,592.7	0.00	0.00	0.00	



Database:	EDM	Local Co-ordinate Reference:	Well GROVES FARM X-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 X-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	89.85	271.70	7,109.6	-2,234.0	-6,348.1	6,689.4	0.00	0.00	0.00	
15,200.0	89.85	271.70	7,109.8	-2,231.0	-6,448.1	6,786.1	0.00	0.00	0.00	
15,300.0	89.85	271.70	7,110.1	-2,228.0	-6,548.0	6,882.7	0.00	0.00	0.00	
15,400.0	89.85	271.70	7,110.3	-2,225.1	-6,648.0	6,979.4	0.00	0.00	0.00	
15,500.0	89.85	271.70	7,110.6	-2,222.1	-6,747.9	7,076.1	0.00	0.00	0.00	
15,600.0	89.85	271.70	7,110.9	-2,219.1	-6,847.9	7,172.8	0.00	0.00	0.00	
15,700.0	89.85	271.70	7,111.1	-2,216.1	-6,947.8	7,269.4	0.00	0.00	0.00	
15,800.0	89.85	271.70	7,111.4	-2,213.2	-7,047.8	7,366.1	0.00	0.00	0.00	
15,900.0	89.85	271.70	7,111.6	-2,210.2	-7,147.7	7,462.8	0.00	0.00	0.00	
16,000.0	89.85	271.70	7,111.9	-2,207.2	-7,247.7	7,559.5	0.00	0.00	0.00	
16,100.0	89.85	271.70	7,112.1	-2,204.2	-7,347.7	7,656.1	0.00	0.00	0.00	
16,200.0	89.85	271.70	7,112.4	-2,201.3	-7,447.6	7,752.8	0.00	0.00	0.00	
16,300.0	89.85	271.70	7,112.7	-2,198.3	-7,547.6	7,849.5	0.00	0.00	0.00	
16,400.0	89.85	271.70	7,112.9	-2,195.3	-7,647.5	7,946.2	0.00	0.00	0.00	
16,500.0	89.85	271.70	7,113.2	-2,192.3	-7,747.5	8,042.8	0.00	0.00	0.00	
16,600.0	89.85	271.70	7,113.4	-2,189.4	-7,847.4	8,139.5	0.00	0.00	0.00	
16,700.0	89.85	271.70	7,113.7	-2,186.4	-7,947.4	8,236.2	0.00	0.00	0.00	
16,800.0	89.85	271.70	7,114.0	-2,183.4	-8,047.3	8,332.9	0.00	0.00	0.00	
16,900.0	89.85	271.70	7,114.2	-2,180.4	-8,147.3	8,429.5	0.00	0.00	0.00	
17,000.0	89.85	271.70	7,114.5	-2,177.5	-8,247.3	8,526.2	0.00	0.00	0.00	
17,100.0	89.85	271.70	7,114.7	-2,174.5	-8,347.2	8,622.9	0.00	0.00	0.00	
17,200.0	89.85	271.70	7,115.0	-2,171.5	-8,447.2	8,719.6	0.00	0.00	0.00	
17,300.0	89.85	271.70	7,115.2	-2,168.5	-8,547.1	8,816.2	0.00	0.00	0.00	
17,400.0	89.85	271.70	7,115.5	-2,165.6	-8,647.1	8,912.9	0.00	0.00	0.00	
17,500.0	89.85	271.70	7,115.8	-2,162.6	-8,747.0	9,009.6	0.00	0.00	0.00	
17,600.0	89.85	271.70	7,116.0	-2,159.6	-8,847.0	9,106.3	0.00	0.00	0.00	
17,700.0	89.85	271.70	7,116.3	-2,156.6	-8,946.9	9,202.9	0.00	0.00	0.00	
17,800.0	89.85	271.70	7,116.5	-2,153.7	-9,046.9	9,299.6	0.00	0.00	0.00	
17,900.0	89.85	271.70	7,116.8	-2,150.7	-9,146.9	9,396.3	0.00	0.00	0.00	
17,977.0	89.85	271.70	7,117.0	-2,148.4	-9,223.8	9,470.7	0.00	0.00	0.00	
GF X-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 X-34-33HN LP - plan hits target center - Point	0.00	0.00	7,092.0	-2,434.3	424.5	1,434,590.67	3,238,687.15	40° 31' 23.448 N	104° 38' 29.087 W	
GF X-34-33HN VP - plan hits target center - Point	0.00	0.00	7,104.5	-2,292.2	-4,392.2	1,434,686.21	3,233,869.32	40° 31' 24.848 N	104° 39' 31.460 W	
GF X-34-33HN PBHL - plan hits target center - Point	0.00	0.00	7,117.0	-2,148.4	-9,223.8	1,434,783.28	3,229,036.53	40° 31' 26.256 N	104° 40' 34.028 W	