

Reference Details

Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Latitude: 40° 37' 35.306 N
 Longitude: 104° 51' 31.223 W
 Grid Convergence: 0.41° West
 Ground Elevation: 5192.0
 KB Elevation: KB @ 5217.0usft

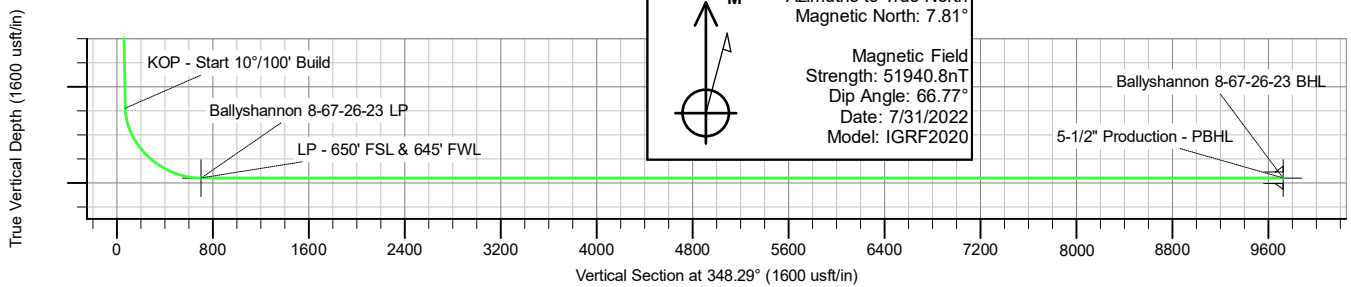
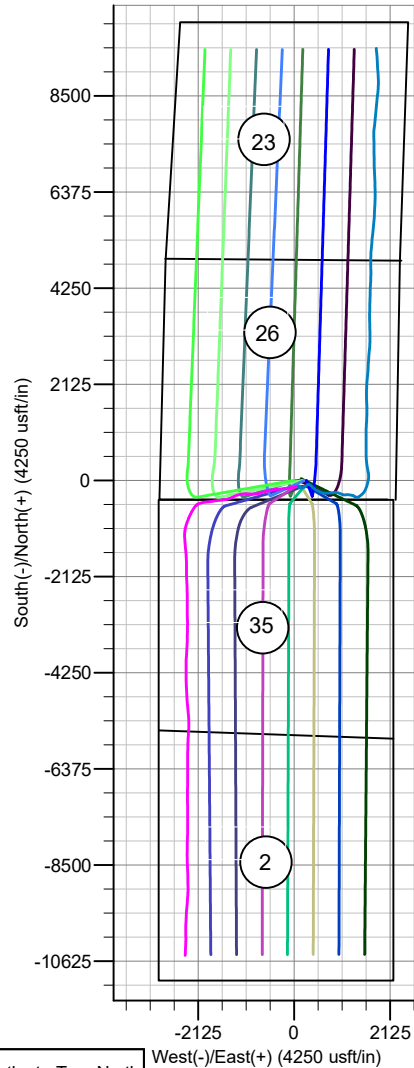
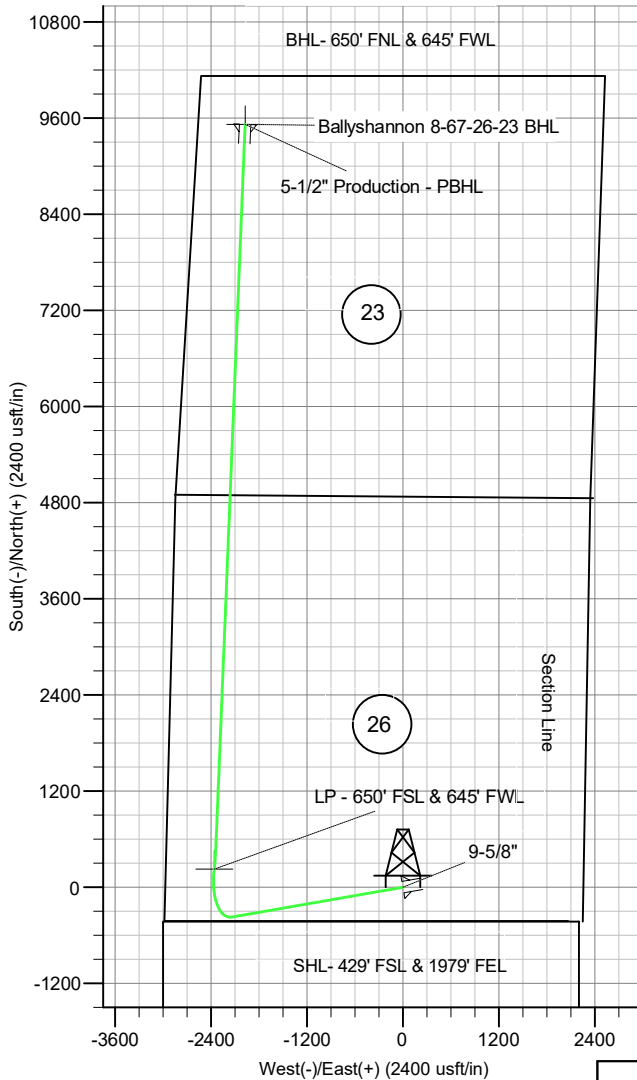


RPM Consulting, Inc.
 1600 Broadway, Suite 1510
 Denver, CO 80013
 303-595-7625

SECTION DETAILS

CASING DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	TVD	MD	Name
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	1500.0	1500.0	Surface
1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	7160.0	17357.2	Production
3346.2	27.69	260.15	3275.2	-74.9	-431.1	1.50	260.15	14.2			
7077.6	27.69	260.15	6579.1	-371.5	-2139.6	0.00	0.00	70.6			
8054.9	90.00	6.99	7160.0	227.5	-2360.2	10.00	105.00	701.9			
8288.2	90.00	2.32	7160.0	459.9	-2341.3	2.00	-90.00	925.6			
17357.2	90.00	2.32	7160.0	9521.6	-1973.9	0.00	0.00	9724.0			



Enerplus Resources (USA) Corporation

**Weld County, CO
SEC 26 T8N-R67W
Ballyshannon 8-67-26-23**

Hz

Plan: Plan 3

Standard Planning Report

06 July, 2022

Planning Report

Database:	EDM Server Database	Local Co-ordinate Reference:	Well Ballyshannon 8-67-26-23
Company:	Enerplus Resources (USA) Corporation	TVD Reference:	KB @ 5217.0usft
Project:	Weld County, CO	MD Reference:	KB @ 5217.0usft
Site:	SEC 26 T8N-R67W	North Reference:	True
Well:	Ballyshannon 8-67-26-23	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan 3		

Project	Weld County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	SEC 26 T8N-R67W				
Site Position:		Northing:	1,471,710.17 usft	Latitude:	40° 37' 35.306 N
From:	Lat/Long	Easting:	3,178,017.95 usft	Longitude:	104° 51' 31.223 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "		

Well	Ballyshannon 8-67-26-23					
Well Position	+N/-S	0.0 usft	Northing:	1,471,710.17 usft	Latitude:	40° 37' 35.306 N
	+E/-W	0.0 usft	Easting:	3,178,017.95 usft	Longitude:	104° 51' 31.223 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	5,192.0 usft
Grid Convergence:	0.41 °					

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	7/31/2022	7.81	66.77	51,940.83012780

Design	Plan 3				
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	348.29	

Plan Survey Tool Program	Date	7/6/2022			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	17,357.2 Plan 3 (Hz)	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	
3,346.2	27.69	260.15	3,275.2	-74.9	-431.1	1.50	1.50	0.00	260.15	
7,077.6	27.69	260.15	6,579.1	-371.5	-2,139.6	0.00	0.00	0.00	0.00	
8,054.9	90.00	6.99	7,160.0	227.5	-2,360.2	10.00	6.38	10.93	105.00	
8,288.2	90.00	2.32	7,160.0	459.9	-2,341.3	2.00	0.00	-2.00	-90.00	
17,357.2	90.00	2.32	7,160.0	9,521.6	-1,973.9	0.00	0.00	0.00	0.00	Ballyshannon 8-67-26

Planning Report

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Company:	Enerplus Resources (USA) Corporation	TVD Reference:	KB @ 5217.0usft
Project:	Weld County, CO	MD Reference:	KB @ 5217.0usft
Site:	SEC 26 T8N-R67W	North Reference:	True
Well:	Ballyshannon 8-67-26-23	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan 3		

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
1,277.0	0.00	0.00	1,277.0	0.0	0.0	0.0	0.00	0.00	0.00
Pierre									
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
9-5/8" - Surface									
1,600.0	1.50	260.15	1,600.0	-0.2	-1.3	0.0	1.50	1.50	0.00
1,700.0	3.00	260.15	1,699.9	-0.9	-5.2	0.2	1.50	1.50	0.00
1,800.0	4.50	260.15	1,799.7	-2.0	-11.6	0.4	1.50	1.50	0.00
1,900.0	6.00	260.15	1,899.3	-3.6	-20.6	0.7	1.50	1.50	0.00
2,000.0	7.50	260.15	1,998.6	-5.6	-32.2	1.1	1.50	1.50	0.00
2,100.0	9.00	260.15	2,097.5	-8.0	-46.3	1.5	1.50	1.50	0.00
2,200.0	10.50	260.15	2,196.1	-10.9	-63.0	2.1	1.50	1.50	0.00
2,300.0	12.00	260.15	2,294.2	-14.3	-82.2	2.7	1.50	1.50	0.00
2,400.0	13.50	260.15	2,391.7	-18.1	-104.0	3.4	1.50	1.50	0.00
2,500.0	15.00	260.15	2,488.6	-22.3	-128.2	4.2	1.50	1.50	0.00
2,600.0	16.50	260.15	2,584.9	-26.9	-155.0	5.1	1.50	1.50	0.00
2,700.0	18.00	260.15	2,680.4	-32.0	-184.2	6.1	1.50	1.50	0.00
2,800.0	19.50	260.15	2,775.0	-37.5	-215.9	7.1	1.50	1.50	0.00
2,900.0	21.00	260.15	2,868.9	-43.4	-250.0	8.2	1.50	1.50	0.00
3,000.0	22.50	260.15	2,961.7	-49.7	-286.5	9.4	1.50	1.50	0.00
3,100.0	24.00	260.15	3,053.6	-56.5	-325.4	10.7	1.50	1.50	0.00
3,200.0	25.50	260.15	3,144.4	-63.7	-366.6	12.1	1.50	1.50	0.00
3,300.0	27.00	260.15	3,234.1	-71.2	-410.2	13.5	1.50	1.50	0.00
3,346.2	27.69	260.15	3,275.2	-74.9	-431.1	14.2	1.50	1.50	0.00
Begin 27.69° Tangent									
3,400.0	27.69	260.15	3,322.8	-79.1	-455.7	15.0	0.00	0.00	0.00
3,500.0	27.69	260.15	3,411.3	-87.1	-501.5	16.5	0.00	0.00	0.00
3,600.0	27.69	260.15	3,499.9	-95.0	-547.3	18.1	0.00	0.00	0.00
3,700.0	27.69	260.15	3,588.4	-103.0	-593.1	19.6	0.00	0.00	0.00
3,732.3	27.69	260.15	3,617.0	-105.5	-607.9	20.0	0.00	0.00	0.00
Richards									
3,800.0	27.69	260.15	3,677.0	-110.9	-638.9	21.1	0.00	0.00	0.00
3,900.0	27.69	260.15	3,765.5	-118.9	-684.7	22.6	0.00	0.00	0.00
4,000.0	27.69	260.15	3,854.1	-126.8	-730.5	24.1	0.00	0.00	0.00
4,100.0	27.69	260.15	3,942.6	-134.8	-776.2	25.6	0.00	0.00	0.00
4,200.0	27.69	260.15	4,031.2	-142.7	-822.0	27.1	0.00	0.00	0.00
4,300.0	27.69	260.15	4,119.7	-150.7	-867.8	28.6	0.00	0.00	0.00
4,390.7	27.69	260.15	4,200.0	-157.9	-909.4	30.0	0.00	0.00	0.00
Terry									

Planning Report

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Project:	Weld County, CO	MD Reference:	KB @ 5217.0usft
Site:	SEC 26 T8N-R67W	North Reference:	True
Well:	Ballyshannon 8-67-26-23	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan 3		

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)	
4,400.0	27.69	260.15	4,208.2	-158.6	-913.6	30.1	0.00	0.00	0.00	
4,500.0	27.69	260.15	4,296.8	-166.6	-959.4	31.6	0.00	0.00	0.00	
4,600.0	27.69	260.15	4,385.3	-174.5	-1,005.2	33.2	0.00	0.00	0.00	
4,700.0	27.69	260.15	4,473.9	-182.5	-1,051.0	34.7	0.00	0.00	0.00	
4,800.0	27.69	260.15	4,562.4	-190.4	-1,096.8	36.2	0.00	0.00	0.00	
4,900.0	27.69	260.15	4,651.0	-198.4	-1,142.6	37.7	0.00	0.00	0.00	
5,000.0	27.69	260.15	4,739.5	-206.3	-1,188.3	39.2	0.00	0.00	0.00	
5,022.0	27.69	260.15	4,759.0	-208.1	-1,198.4	39.5	0.00	0.00	0.00	
Hygeine										
5,100.0	27.69	260.15	4,828.1	-214.3	-1,234.1	40.7	0.00	0.00	0.00	
5,200.0	27.69	260.15	4,916.6	-222.2	-1,279.9	42.2	0.00	0.00	0.00	
5,300.0	27.69	260.15	5,005.1	-230.2	-1,325.7	43.7	0.00	0.00	0.00	
5,400.0	27.69	260.15	5,093.7	-238.1	-1,371.5	45.2	0.00	0.00	0.00	
5,500.0	27.69	260.15	5,182.2	-246.1	-1,417.3	46.7	0.00	0.00	0.00	
5,600.0	27.69	260.15	5,270.8	-254.0	-1,463.1	48.3	0.00	0.00	0.00	
5,700.0	27.69	260.15	5,359.3	-262.0	-1,508.9	49.8	0.00	0.00	0.00	
5,800.0	27.69	260.15	5,447.9	-269.9	-1,554.7	51.3	0.00	0.00	0.00	
5,825.0	27.69	260.15	5,470.0	-271.9	-1,566.1	51.7	0.00	0.00	0.00	
Lower Pierre zero										
5,900.0	27.69	260.15	5,536.4	-277.9	-1,600.4	52.8	0.00	0.00	0.00	
6,000.0	27.69	260.15	5,625.0	-285.8	-1,646.2	54.3	0.00	0.00	0.00	
6,100.0	27.69	260.15	5,713.5	-293.8	-1,692.0	55.8	0.00	0.00	0.00	
6,200.0	27.69	260.15	5,802.1	-301.7	-1,737.8	57.3	0.00	0.00	0.00	
6,295.9	27.69	260.15	5,887.0	-309.4	-1,781.7	58.8	0.00	0.00	0.00	
Lower Pierre 1										
6,300.0	27.69	260.15	5,890.6	-309.7	-1,783.6	58.8	0.00	0.00	0.00	
6,400.0	27.69	260.15	5,979.1	-317.6	-1,829.4	60.3	0.00	0.00	0.00	
6,500.0	27.69	260.15	6,067.7	-325.6	-1,875.2	61.8	0.00	0.00	0.00	
6,600.0	27.69	260.15	6,156.2	-333.5	-1,921.0	63.4	0.00	0.00	0.00	
6,700.0	27.69	260.15	6,244.8	-341.5	-1,966.7	64.9	0.00	0.00	0.00	
6,800.0	27.69	260.15	6,333.3	-349.4	-2,012.5	66.4	0.00	0.00	0.00	
6,900.0	27.69	260.15	6,421.9	-357.4	-2,058.3	67.9	0.00	0.00	0.00	
7,000.0	27.69	260.15	6,510.4	-365.3	-2,104.1	69.4	0.00	0.00	0.00	
7,061.7	27.69	260.15	6,565.0	-370.2	-2,132.3	70.3	0.00	0.00	0.00	
Lower Pierre 2										
7,077.6	27.69	260.15	6,579.1	-371.5	-2,139.6	70.6	0.00	0.00	0.00	
KOP - Start 10°/100' Build										
7,100.0	27.19	264.90	6,599.0	-372.8	-2,149.9	71.3	10.01	-2.24	21.19	
7,200.0	27.02	286.95	6,688.2	-368.2	-2,194.5	84.9	10.00	-0.17	22.05	
7,300.0	30.11	306.95	6,776.3	-346.5	-2,236.4	114.7	10.00	3.08	20.00	
7,376.4	34.14	319.18	6,841.0	-318.7	-2,265.7	147.8	10.00	5.28	16.02	
Lower Pierre 3										
7,400.0	35.60	322.43	6,860.4	-308.3	-2,274.2	159.8	10.00	6.19	13.74	
7,500.0	42.58	333.84	6,938.1	-254.7	-2,307.0	218.9	10.00	6.98	11.41	
7,523.3	44.35	336.06	6,955.0	-240.1	-2,313.8	234.6	10.00	7.58	9.49	
Sharon Springs										
7,583.1	49.05	341.14	6,996.0	-199.6	-2,329.6	277.4	10.00	7.86	8.50	
Nio A Chalk										
7,600.0	50.41	342.44	7,006.9	-187.4	-2,333.6	290.2	10.00	8.09	7.71	
7,616.1	51.72	343.63	7,017.0	-175.5	-2,337.2	302.6	10.00	8.17	7.42	
Nio A Marl										
7,666.9	55.95	347.14	7,047.0	-135.8	-2,347.6	343.6	10.00	8.31	6.90	

Planning Report

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Project:	Weld County, CO	MD Reference:	KB @ 5217.0usft
Site:	SEC 26 T8N-R67W	North Reference:	True
Well:	Ballyshannon 8-67-26-23	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan 3		

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)
Nio B upper									
7,700.0	58.75	349.24	7,064.9	-108.5	-2,353.3	371.5	10.00	8.46	6.34
7,800.0	67.38	354.91	7,110.1	-20.3	-2,365.4	460.3	10.00	8.63	5.67
7,900.0	76.19	359.89	7,141.4	74.5	-2,369.6	553.9	10.00	8.81	4.99
7,947.4	80.40	2.11	7,151.0	120.8	-2,368.7	599.2	10.00	8.89	4.68
Nio B chalk									
8,000.0	85.09	4.51	7,157.6	172.9	-2,365.7	649.6	10.00	8.92	4.56
8,054.9	90.00	6.99	7,160.0	227.5	-2,360.2	701.9	10.00	8.93	4.50
LP - 650' FSL & 645' FWL									
8,100.0	90.00	6.09	7,160.0	272.3	-2,355.1	744.7	2.00	0.00	-2.00
8,200.0	90.00	4.09	7,160.0	371.9	-2,346.2	840.4	2.00	0.00	-2.00
8,288.2	90.00	2.32	7,160.0	459.9	-2,341.3	925.6	2.00	0.00	-2.00
8,300.0	90.00	2.32	7,160.0	471.8	-2,340.8	937.1	0.00	0.00	0.00
8,400.0	90.00	2.32	7,160.0	571.7	-2,336.8	1,034.1	0.00	0.00	0.00
8,500.0	90.00	2.32	7,160.0	671.6	-2,332.7	1,131.1	0.00	0.00	0.00
8,600.0	90.00	2.32	7,160.0	771.5	-2,328.7	1,228.2	0.00	0.00	0.00
8,700.0	90.00	2.32	7,160.0	871.4	-2,324.6	1,325.2	0.00	0.00	0.00
8,800.0	90.00	2.32	7,160.0	971.3	-2,320.6	1,422.2	0.00	0.00	0.00
8,900.0	90.00	2.32	7,160.0	1,071.3	-2,316.5	1,519.2	0.00	0.00	0.00
9,000.0	90.00	2.32	7,160.0	1,171.2	-2,312.5	1,616.2	0.00	0.00	0.00
9,100.0	90.00	2.32	7,160.0	1,271.1	-2,308.4	1,713.2	0.00	0.00	0.00
9,200.0	90.00	2.32	7,160.0	1,371.0	-2,304.4	1,810.2	0.00	0.00	0.00
9,300.0	90.00	2.32	7,160.0	1,470.9	-2,300.3	1,907.3	0.00	0.00	0.00
9,400.0	90.00	2.32	7,160.0	1,570.9	-2,296.3	2,004.3	0.00	0.00	0.00
9,500.0	90.00	2.32	7,160.0	1,670.8	-2,292.2	2,101.3	0.00	0.00	0.00
9,600.0	90.00	2.32	7,160.0	1,770.7	-2,288.2	2,198.3	0.00	0.00	0.00
9,700.0	90.00	2.32	7,160.0	1,870.6	-2,284.1	2,295.3	0.00	0.00	0.00
9,800.0	90.00	2.32	7,160.0	1,970.5	-2,280.1	2,392.3	0.00	0.00	0.00
9,900.0	90.00	2.32	7,160.0	2,070.4	-2,276.0	2,489.4	0.00	0.00	0.00
10,000.0	90.00	2.32	7,160.0	2,170.4	-2,272.0	2,586.4	0.00	0.00	0.00
10,100.0	90.00	2.32	7,160.0	2,270.3	-2,267.9	2,683.4	0.00	0.00	0.00
10,200.0	90.00	2.32	7,160.0	2,370.2	-2,263.9	2,780.4	0.00	0.00	0.00
10,300.0	90.00	2.32	7,160.0	2,470.1	-2,259.8	2,877.4	0.00	0.00	0.00
10,400.0	90.00	2.32	7,160.0	2,570.0	-2,255.8	2,974.4	0.00	0.00	0.00
10,500.0	90.00	2.32	7,160.0	2,669.9	-2,251.7	3,071.4	0.00	0.00	0.00
10,600.0	90.00	2.32	7,160.0	2,769.9	-2,247.7	3,168.5	0.00	0.00	0.00
10,700.0	90.00	2.32	7,160.0	2,869.8	-2,243.6	3,265.5	0.00	0.00	0.00
10,800.0	90.00	2.32	7,160.0	2,969.7	-2,239.6	3,362.5	0.00	0.00	0.00
10,900.0	90.00	2.32	7,160.0	3,069.6	-2,235.5	3,459.5	0.00	0.00	0.00
11,000.0	90.00	2.32	7,160.0	3,169.5	-2,231.5	3,556.5	0.00	0.00	0.00
11,100.0	90.00	2.32	7,160.0	3,269.5	-2,227.4	3,653.5	0.00	0.00	0.00
11,200.0	90.00	2.32	7,160.0	3,369.4	-2,223.4	3,750.6	0.00	0.00	0.00
11,300.0	90.00	2.32	7,160.0	3,469.3	-2,219.3	3,847.6	0.00	0.00	0.00
11,400.0	90.00	2.32	7,160.0	3,569.2	-2,215.3	3,944.6	0.00	0.00	0.00
11,500.0	90.00	2.32	7,160.0	3,669.1	-2,211.2	4,041.6	0.00	0.00	0.00
11,600.0	90.00	2.32	7,160.0	3,769.0	-2,207.2	4,138.6	0.00	0.00	0.00
11,700.0	90.00	2.32	7,160.0	3,869.0	-2,203.1	4,235.6	0.00	0.00	0.00
11,800.0	90.00	2.32	7,160.0	3,968.9	-2,199.0	4,332.6	0.00	0.00	0.00
11,900.0	90.00	2.32	7,160.0	4,068.8	-2,195.0	4,429.7	0.00	0.00	0.00
12,000.0	90.00	2.32	7,160.0	4,168.7	-2,190.9	4,526.7	0.00	0.00	0.00
12,100.0	90.00	2.32	7,160.0	4,268.6	-2,186.9	4,623.7	0.00	0.00	0.00
12,200.0	90.00	2.32	7,160.0	4,368.6	-2,182.8	4,720.7	0.00	0.00	0.00
12,300.0	90.00	2.32	7,160.0	4,468.5	-2,178.8	4,817.7	0.00	0.00	0.00

Planning Report

Database:	EDM Server Database	Local Co-ordinate Reference:	Well Ballyshannon 8-67-26-23
Company:	Enerplus Resources (USA) Corporation	TVD Reference:	KB @ 5217.0usft
Project:	Weld County, CO	MD Reference:	KB @ 5217.0usft
Site:	SEC 26 T8N-R67W	North Reference:	True
Well:	Ballyshannon 8-67-26-23	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan 3		

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)	
12,400.0	90.00	2.32	7,160.0	4,568.4	-2,174.7	4,914.7	0.00	0.00	0.00	
12,500.0	90.00	2.32	7,160.0	4,668.3	-2,170.7	5,011.8	0.00	0.00	0.00	
12,600.0	90.00	2.32	7,160.0	4,768.2	-2,166.6	5,108.8	0.00	0.00	0.00	
12,700.0	90.00	2.32	7,160.0	4,868.1	-2,162.6	5,205.8	0.00	0.00	0.00	
12,800.0	90.00	2.32	7,160.0	4,968.1	-2,158.5	5,302.8	0.00	0.00	0.00	
12,900.0	90.00	2.32	7,160.0	5,068.0	-2,154.5	5,399.8	0.00	0.00	0.00	
13,000.0	90.00	2.32	7,160.0	5,167.9	-2,150.4	5,496.8	0.00	0.00	0.00	
13,100.0	90.00	2.32	7,160.0	5,267.8	-2,146.4	5,593.8	0.00	0.00	0.00	
13,200.0	90.00	2.32	7,160.0	5,367.7	-2,142.3	5,690.9	0.00	0.00	0.00	
13,300.0	90.00	2.32	7,160.0	5,467.7	-2,138.3	5,787.9	0.00	0.00	0.00	
13,400.0	90.00	2.32	7,160.0	5,567.6	-2,134.2	5,884.9	0.00	0.00	0.00	
13,500.0	90.00	2.32	7,160.0	5,667.5	-2,130.2	5,981.9	0.00	0.00	0.00	
13,600.0	90.00	2.32	7,160.0	5,767.4	-2,126.1	6,078.9	0.00	0.00	0.00	
13,700.0	90.00	2.32	7,160.0	5,867.3	-2,122.1	6,175.9	0.00	0.00	0.00	
13,800.0	90.00	2.32	7,160.0	5,967.2	-2,118.0	6,273.0	0.00	0.00	0.00	
13,900.0	90.00	2.32	7,160.0	6,067.2	-2,114.0	6,370.0	0.00	0.00	0.00	
14,000.0	90.00	2.32	7,160.0	6,167.1	-2,109.9	6,467.0	0.00	0.00	0.00	
14,100.0	90.00	2.32	7,160.0	6,267.0	-2,105.9	6,564.0	0.00	0.00	0.00	
14,200.0	90.00	2.32	7,160.0	6,366.9	-2,101.8	6,661.0	0.00	0.00	0.00	
14,300.0	90.00	2.32	7,160.0	6,466.8	-2,097.8	6,758.0	0.00	0.00	0.00	
14,400.0	90.00	2.32	7,160.0	6,566.7	-2,093.7	6,855.0	0.00	0.00	0.00	
14,500.0	90.00	2.32	7,160.0	6,666.7	-2,089.7	6,952.1	0.00	0.00	0.00	
14,600.0	90.00	2.32	7,160.0	6,766.6	-2,085.6	7,049.1	0.00	0.00	0.00	
14,700.0	90.00	2.32	7,160.0	6,866.5	-2,081.6	7,146.1	0.00	0.00	0.00	
14,800.0	90.00	2.32	7,160.0	6,966.4	-2,077.5	7,243.1	0.00	0.00	0.00	
14,900.0	90.00	2.32	7,160.0	7,066.3	-2,073.5	7,340.1	0.00	0.00	0.00	
15,000.0	90.00	2.32	7,160.0	7,166.3	-2,069.4	7,437.1	0.00	0.00	0.00	
15,100.0	90.00	2.32	7,160.0	7,266.2	-2,065.4	7,534.2	0.00	0.00	0.00	
15,200.0	90.00	2.32	7,160.0	7,366.1	-2,061.3	7,631.2	0.00	0.00	0.00	
15,300.0	90.00	2.32	7,160.0	7,466.0	-2,057.3	7,728.2	0.00	0.00	0.00	
15,400.0	90.00	2.32	7,160.0	7,565.9	-2,053.2	7,825.2	0.00	0.00	0.00	
15,500.0	90.00	2.32	7,160.0	7,665.8	-2,049.2	7,922.2	0.00	0.00	0.00	
15,600.0	90.00	2.32	7,160.0	7,765.8	-2,045.1	8,019.2	0.00	0.00	0.00	
15,700.0	90.00	2.32	7,160.0	7,865.7	-2,041.1	8,116.2	0.00	0.00	0.00	
15,800.0	90.00	2.32	7,160.0	7,965.6	-2,037.0	8,213.3	0.00	0.00	0.00	
15,900.0	90.00	2.32	7,160.0	8,065.5	-2,033.0	8,310.3	0.00	0.00	0.00	
16,000.0	90.00	2.32	7,160.0	8,165.4	-2,028.9	8,407.3	0.00	0.00	0.00	
16,100.0	90.00	2.32	7,160.0	8,265.4	-2,024.9	8,504.3	0.00	0.00	0.00	
16,200.0	90.00	2.32	7,160.0	8,365.3	-2,020.8	8,601.3	0.00	0.00	0.00	
16,300.0	90.00	2.32	7,160.0	8,465.2	-2,016.8	8,698.3	0.00	0.00	0.00	
16,400.0	90.00	2.32	7,160.0	8,565.1	-2,012.7	8,795.4	0.00	0.00	0.00	
16,500.0	90.00	2.32	7,160.0	8,665.0	-2,008.7	8,892.4	0.00	0.00	0.00	
16,600.0	90.00	2.32	7,160.0	8,764.9	-2,004.6	8,989.4	0.00	0.00	0.00	
16,700.0	90.00	2.32	7,160.0	8,864.9	-2,000.6	9,086.4	0.00	0.00	0.00	
16,800.0	90.00	2.32	7,160.0	8,964.8	-1,996.5	9,183.4	0.00	0.00	0.00	
16,900.0	90.00	2.32	7,160.0	9,064.7	-1,992.5	9,280.4	0.00	0.00	0.00	
17,000.0	90.00	2.32	7,160.0	9,164.6	-1,988.4	9,377.4	0.00	0.00	0.00	
17,100.0	90.00	2.32	7,160.0	9,264.5	-1,984.4	9,474.5	0.00	0.00	0.00	
17,200.0	90.00	2.32	7,160.0	9,364.4	-1,980.3	9,571.5	0.00	0.00	0.00	
17,300.0	90.00	2.32	7,160.0	9,464.4	-1,976.3	9,668.5	0.00	0.00	0.00	
17,357.2	90.00	2.32	7,160.0	9,521.5	-1,973.9	9,724.0	0.00	0.00	0.00	
5-1/2" Production - PBHL - Production										

Planning Report

Database:	EDM Server Database	Local Co-ordinate Reference:	Well Ballyshannon 8-67-26-23
Company:	Enerplus Resources (USA) Corporation	TVD Reference:	KB @ 5217.0usft
Project:	Weld County, CO	MD Reference:	KB @ 5217.0usft
Site:	SEC 26 T8N-R67W	North Reference:	True
Well:	Ballyshannon 8-67-26-23	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan 3		

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
Ballyshannon 8-67-26-2: - plan hits target center - Point	0.00	0.00	7,160.0	9,521.6	-1,973.9	1,481,217.21	3,175,975.20	40° 39' 9.392 N	104° 51' 56.833 W
Ballyshannon 8-67-26-2: - plan hits target center - Point	0.00	0.00	7,160.0	227.5	-2,360.2	1,471,920.55	3,175,656.13	40° 37' 37.553 N	104° 52' 1.834 W

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,500.0	1,500.0	Surface	9-5/8	13-1/2	
17,357.2	7,160.0	Production	5-1/2	8-1/2	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,277.0	1,277.0	Pierre				
3,732.3	3,617.0	Richards				
4,390.7	4,200.0	Terry				
5,022.0	4,759.0	Hygeine				
5,825.0	5,470.0	Lower Pierre zero				
6,295.9	5,887.0	Lower Pierre 1				
7,061.7	6,565.0	Lower Pierre 2				
7,376.4	6,841.0	Lower Pierre 3				
7,523.3	6,955.0	Sharon Springs				
7,583.1	6,996.0	Nio A Chalk				
7,616.1	7,017.0	Nio A Marl				
7,666.9	7,047.0	Nio B upper				
7,947.4	7,151.0	Nio B chalk				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
1,500.0	1,500.0	0.0	0.0	9-5/8"	
3,346.2	3,275.2	-74.9	-431.1	Begin 27.69° Tangent	
7,077.6	6,579.1	-371.5	-2,139.6	KOP - Start 10°/100' Build	
8,054.9	7,160.0	227.5	-2,360.2	LP - 650' FSL & 645' FWL	
17,357.2	7,160.0	9,521.5	-1,973.9	5-1/2" Production - PBHL	