

**Project:** Weld County, CO  
**Site:** SEC 26 T8N-R67W  
**Well:** SARCEE 7-67-3-34C  
**Wellbore:** Original Wellbore  
**Design:** Plan 4

## Reference Details

Geodetic System: US State Plane 1983  
 Datum: North American Datum 1983  
 Ellipsoid: GRS 1980  
 Latitude: 40° 37' 34.547 N  
 Longitude: 104° 52' 6.438 W  
 Grid Convergence: 0.41° West  
 Ground Elevation: 5154.0  
 KB Elevation: KB @ 5180.0usft



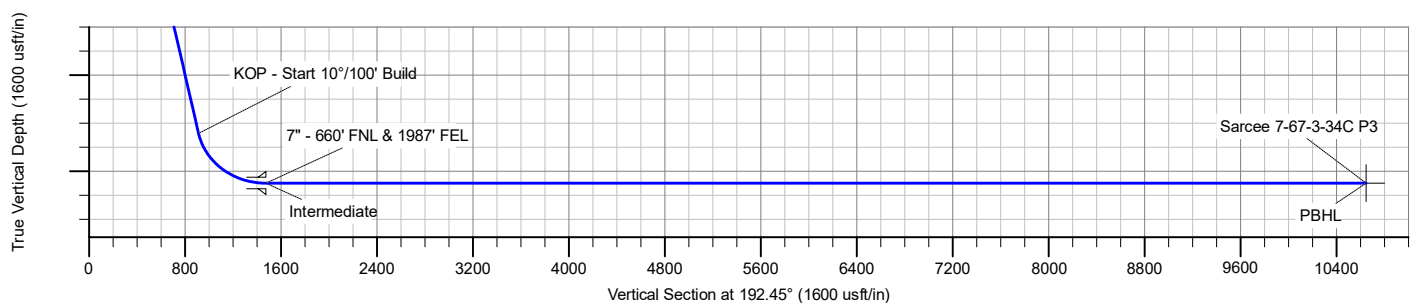
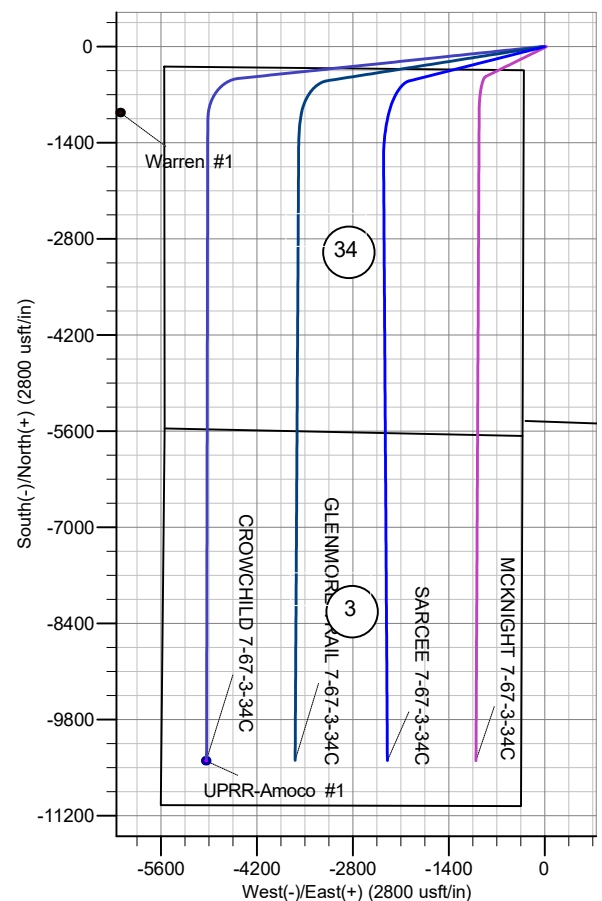
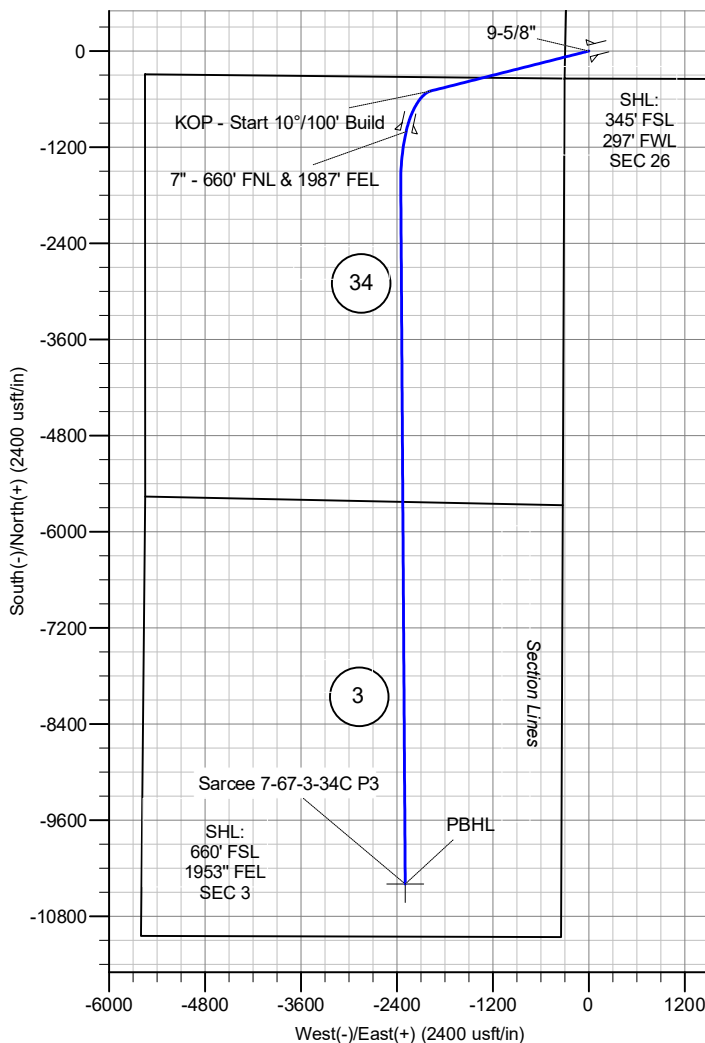
**RPM Consulting, Inc.**  
 1600 Broadway, Suite 1480  
 Denver, CO 80202  
 303-595-7625

## SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
2000.0	0.00	0.00	2000.0	0.0	0.0	0.00	0.00	0.0
3816.1	27.24	255.85	3748.4	-103.6	-410.8	1.50	255.85	189.7
7345.3	27.24	255.85	6886.2	-498.6	-1977.2	0.00	0.00	913.3
8127.0	90.00	192.45	7300.0	-1005.2	-2284.0	10.00	294.00	1474.1
8767.4	90.00	179.64	7300.0	-1640.8	-2351.3	2.00	-90.00	2109.2
17522.9	90.00	179.64	7300.0	-10396.0	-2295.7	0.00	0.00	10646.5

## CASING DETAILS

TVD	MD	Name
1600.0	1600.0	Surface
7300.0	8127.0	Intermediate



# **Enerplus Resources (USA) Corporation**

**Weld County, CO  
SEC 26 T8N-R67W  
SARCEE 7-67-3-34C**

**Original Wellbore**

**Plan: Plan 4**

## **Standard Planning Report**

**17 September, 2020**

## Planning Report

<b>Database:</b>	EDM Server Database	<b>Local Co-ordinate Reference:</b>	Well SARCEE 7-67-3-34C
<b>Company:</b>	Enerplus Resources (USA) Corporation	<b>TVD Reference:</b>	KB @ 5180.0usft
<b>Project:</b>	Weld County, CO	<b>MD Reference:</b>	KB @ 5180.0usft
<b>Site:</b>	SEC 26 T8N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	SARCEE 7-67-3-34C	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Wellbore		
<b>Design:</b>	Plan 4		

<b>Project</b>	Weld County, CO		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	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 "	Grid Convergence:	0.41 °

Well	SARCEE 7-67-3-34C					
Well Position	+N/-S	-76.7 usft	Northing:	1,471,613.81 usft	Latitude:	40° 37' 34.547 N
	+E/-W	-2,715.3 usft	Easting:	3,175,303.28 usft	Longitude:	104° 52' 6.438 W
Position Uncertainty	0.0 usft		Wellhead Elevation:		Ground Level:	5,154.0 usft

<b>Wellbore</b>	Original Wellbore				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	10/31/2020	7.93	66.93	52,110.41444295

<b>Design</b>	Plan 4			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	192.45

<b>Plan Survey Tool Program</b>	<b>Date</b>	9/16/2020		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.0	17,522.9	Plan 4 (Original Wellbore)	MWD
				OWSG MWD - Standard

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,816.1	27.24	255.85	3,748.4	-103.6	-410.8	1.50	1.50	0.00	255.85	
7,345.3	27.24	255.85	6,886.2	-498.6	-1,977.2	0.00	0.00	0.00	0.00	
8,127.0	90.00	192.45	7,300.0	-1,005.2	-2,284.0	10.00	8.03	-8.11	294.00	
8,767.4	90.00	179.64	7,300.0	-1,640.8	-2,351.3	2.00	0.00	-2.00	-90.00	
17,522.9	90.00	179.64	7,300.0	-10,396.0	-2,295.7	0.00	0.00	0.00	0.00	Sarcee 7-67-3-34C P:

# Planning Report

<b>Database:</b>	EDM Server Database	<b>Local Co-ordinate Reference:</b>	Well SARCEE 7-67-3-34C
<b>Company:</b>	Enerplus Resources (USA) Corporation	<b>TVD Reference:</b>	KB @ 5180.0usft
<b>Project:</b>	Weld County, CO	<b>MD Reference:</b>	KB @ 5180.0usft
<b>Site:</b>	SEC 26 T8N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	SARCEE 7-67-3-34C	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Wellbore		
<b>Design:</b>	Plan 4		

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	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
9-5/8" - Surface									
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
Begin 1.5° Nudge									
2,100.0	1.50	255.85	2,100.0	-0.3	-1.3	0.6	1.50	1.50	0.00
2,200.0	3.00	255.85	2,199.9	-1.3	-5.1	2.3	1.50	1.50	0.00
2,300.0	4.50	255.85	2,299.7	-2.9	-11.4	5.3	1.50	1.50	0.00
2,400.0	6.00	255.85	2,399.3	-5.1	-20.3	9.4	1.50	1.50	0.00
2,500.0	7.50	255.85	2,498.6	-8.0	-31.7	14.6	1.50	1.50	0.00
2,600.0	9.00	255.85	2,597.5	-11.5	-45.6	21.1	1.50	1.50	0.00
2,700.0	10.50	255.85	2,696.1	-15.6	-62.0	28.6	1.50	1.50	0.00
2,800.0	12.00	255.85	2,794.2	-20.4	-80.9	37.4	1.50	1.50	0.00
2,900.0	13.50	255.85	2,891.7	-25.8	-102.3	47.3	1.50	1.50	0.00
3,000.0	15.00	255.85	2,988.6	-31.8	-126.2	58.3	1.50	1.50	0.00
3,100.0	16.50	255.85	3,084.9	-38.5	-152.5	70.4	1.50	1.50	0.00
3,200.0	18.00	255.85	3,180.4	-45.7	-181.3	83.7	1.50	1.50	0.00
3,300.0	19.50	255.85	3,275.0	-53.6	-212.4	98.1	1.50	1.50	0.00
3,400.0	21.00	255.85	3,368.9	-62.0	-246.0	113.6	1.50	1.50	0.00
3,500.0	22.50	255.85	3,461.7	-71.1	-281.9	130.2	1.50	1.50	0.00
3,600.0	24.00	255.85	3,553.6	-80.8	-320.2	147.9	1.50	1.50	0.00
3,700.0	25.50	255.85	3,644.4	-91.0	-360.8	166.7	1.50	1.50	0.00
3,800.0	27.00	255.85	3,734.1	-101.8	-403.7	186.5	1.50	1.50	0.00
3,816.1	27.24	255.85	3,748.4	-103.6	-410.8	189.7	1.50	1.50	0.00
Begin 27.24° Tangent									
3,900.0	27.24	255.85	3,823.0	-113.0	-448.0	207.0	0.00	0.00	0.00
4,000.0	27.24	255.85	3,911.9	-124.2	-492.4	227.5	0.00	0.00	0.00
4,100.0	27.24	255.85	4,000.9	-135.4	-536.8	248.0	0.00	0.00	0.00
4,200.0	27.24	255.85	4,089.8	-146.6	-581.2	268.5	0.00	0.00	0.00
4,300.0	27.24	255.85	4,178.7	-157.8	-625.6	289.0	0.00	0.00	0.00
4,400.0	27.24	255.85	4,267.6	-169.0	-670.0	309.5	0.00	0.00	0.00
4,500.0	27.24	255.85	4,356.5	-180.2	-714.3	330.0	0.00	0.00	0.00
4,600.0	27.24	255.85	4,445.4	-191.4	-758.7	350.5	0.00	0.00	0.00
4,700.0	27.24	255.85	4,534.3	-202.5	-803.1	371.0	0.00	0.00	0.00
4,800.0	27.24	255.85	4,623.2	-213.7	-847.5	391.5	0.00	0.00	0.00

# Planning Report

<b>Database:</b>	EDM Server Database	<b>Local Co-ordinate Reference:</b>	Well SARCEE 7-67-3-34C
<b>Company:</b>	Enerplus Resources (USA) Corporation	<b>TVD Reference:</b>	KB @ 5180.0usft
<b>Project:</b>	Weld County, CO	<b>MD Reference:</b>	KB @ 5180.0usft
<b>Site:</b>	SEC 26 T8N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	SARCEE 7-67-3-34C	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Wellbore		
<b>Design:</b>	Plan 4		

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)
4,900.0	27.24	255.85	4,712.1	-224.9	-891.9	412.0	0.00	0.00	0.00
5,000.0	27.24	255.85	4,801.0	-236.1	-936.3	432.5	0.00	0.00	0.00
5,100.0	27.24	255.85	4,889.9	-247.3	-980.6	453.0	0.00	0.00	0.00
5,200.0	27.24	255.85	4,978.9	-258.5	-1,025.0	473.5	0.00	0.00	0.00
5,300.0	27.24	255.85	5,067.8	-269.7	-1,069.4	494.0	0.00	0.00	0.00
5,400.0	27.24	255.85	5,156.7	-280.9	-1,113.8	514.5	0.00	0.00	0.00
5,500.0	27.24	255.85	5,245.6	-292.1	-1,158.2	535.0	0.00	0.00	0.00
5,600.0	27.24	255.85	5,334.5	-303.3	-1,202.6	555.5	0.00	0.00	0.00
5,700.0	27.24	255.85	5,423.4	-314.5	-1,246.9	576.0	0.00	0.00	0.00
5,800.0	27.24	255.85	5,512.3	-325.7	-1,291.3	596.5	0.00	0.00	0.00
5,900.0	27.24	255.85	5,601.2	-336.9	-1,335.7	617.0	0.00	0.00	0.00
6,000.0	27.24	255.85	5,690.1	-348.1	-1,380.1	637.5	0.00	0.00	0.00
6,100.0	27.24	255.85	5,779.0	-359.3	-1,424.5	658.0	0.00	0.00	0.00
6,200.0	27.24	255.85	5,867.9	-370.5	-1,468.9	678.5	0.00	0.00	0.00
6,300.0	27.24	255.85	5,956.9	-381.6	-1,513.2	699.0	0.00	0.00	0.00
6,400.0	27.24	255.85	6,045.8	-392.8	-1,557.6	719.5	0.00	0.00	0.00
6,500.0	27.24	255.85	6,134.7	-404.0	-1,602.0	740.0	0.00	0.00	0.00
6,600.0	27.24	255.85	6,223.6	-415.2	-1,646.4	760.5	0.00	0.00	0.00
6,700.0	27.24	255.85	6,312.5	-426.4	-1,690.8	781.0	0.00	0.00	0.00
6,800.0	27.24	255.85	6,401.4	-437.6	-1,735.2	801.5	0.00	0.00	0.00
6,900.0	27.24	255.85	6,490.3	-448.8	-1,779.5	822.0	0.00	0.00	0.00
7,000.0	27.24	255.85	6,579.2	-460.0	-1,823.9	842.5	0.00	0.00	0.00
7,100.0	27.24	255.85	6,668.1	-471.2	-1,868.3	863.0	0.00	0.00	0.00
7,200.0	27.24	255.85	6,757.0	-482.4	-1,912.7	883.5	0.00	0.00	0.00
7,300.0	27.24	255.85	6,845.9	-493.6	-1,957.1	904.0	0.00	0.00	0.00
7,345.3	27.24	255.85	6,886.2	-498.7	-1,977.2	913.3	0.00	0.00	0.00
<b>KOP - Start 10°/100' Build</b>									
7,400.0	29.86	245.76	6,934.3	-507.3	-2,001.8	927.0	10.01	4.78	-18.43
7,500.0	36.18	231.46	7,018.2	-536.0	-2,047.7	964.9	10.00	6.32	-14.31
7,600.0	43.73	221.21	7,094.9	-580.5	-2,093.6	1,018.3	10.00	7.55	-10.25
7,700.0	51.97	213.55	7,162.0	-639.5	-2,138.3	1,085.5	10.00	8.24	-7.66
7,800.0	60.61	207.47	7,217.5	-711.1	-2,180.3	1,164.5	10.00	8.64	-6.07
7,900.0	69.48	202.37	7,259.7	-793.3	-2,218.3	1,253.0	10.00	8.87	-5.11
8,000.0	78.48	197.83	7,287.2	-883.5	-2,251.2	1,348.1	10.00	9.00	-4.54
8,100.0	87.55	193.57	7,299.4	-978.9	-2,278.0	1,447.1	10.00	9.07	-4.25
8,127.0	90.00	192.45	7,300.0	-1,005.2	-2,284.0	1,474.1	10.00	9.08	-4.18
<b>7" - 660' FNL &amp; 1987' FEL - Intermediate</b>									
8,200.0	90.00	190.99	7,300.0	-1,076.7	-2,298.9	1,547.1	2.00	0.00	-2.00
8,300.0	90.00	188.99	7,300.0	-1,175.2	-2,316.2	1,647.0	2.00	0.00	-2.00
8,400.0	90.00	186.99	7,300.0	-1,274.2	-2,330.1	1,746.7	2.00	0.00	-2.00
8,500.0	90.00	184.99	7,300.0	-1,373.7	-2,340.5	1,846.0	2.00	0.00	-2.00
8,600.0	90.00	182.99	7,300.0	-1,473.4	-2,347.5	1,944.9	2.00	0.00	-2.00
8,700.0	90.00	180.99	7,300.0	-1,573.3	-2,350.9	2,043.3	2.00	0.00	-2.00
8,767.4	90.00	179.64	7,300.0	-1,640.8	-2,351.3	2,109.2	2.00	0.00	-2.00
8,800.0	90.00	179.64	7,300.0	-1,673.3	-2,351.1	2,140.9	0.00	0.00	0.00
8,900.0	90.00	179.64	7,300.0	-1,773.3	-2,350.5	2,238.5	0.00	0.00	0.00
9,000.0	90.00	179.64	7,300.0	-1,873.3	-2,349.8	2,336.0	0.00	0.00	0.00
9,100.0	90.00	179.64	7,300.0	-1,973.3	-2,349.2	2,433.5	0.00	0.00	0.00
9,200.0	90.00	179.64	7,300.0	-2,073.3	-2,348.5	2,531.0	0.00	0.00	0.00
9,300.0	90.00	179.64	7,300.0	-2,173.3	-2,347.9	2,628.5	0.00	0.00	0.00
9,400.0	90.00	179.64	7,300.0	-2,273.3	-2,347.3	2,726.0	0.00	0.00	0.00
9,500.0	90.00	179.64	7,300.0	-2,373.3	-2,346.6	2,823.5	0.00	0.00	0.00
9,600.0	90.00	179.64	7,300.0	-2,473.3	-2,346.0	2,921.0	0.00	0.00	0.00
9,700.0	90.00	179.64	7,300.0	-2,573.3	-2,345.4	3,018.5	0.00	0.00	0.00

# Planning Report

<b>Database:</b>	EDM Server Database	<b>Local Co-ordinate Reference:</b>	Well SARCEE 7-67-3-34C
<b>Company:</b>	Enerplus Resources (USA) Corporation	<b>TVD Reference:</b>	KB @ 5180.0usft
<b>Project:</b>	Weld County, CO	<b>MD Reference:</b>	KB @ 5180.0usft
<b>Site:</b>	SEC 26 T8N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	SARCEE 7-67-3-34C	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Wellbore		
<b>Design:</b>	Plan 4		

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)
9,800.0	90.00	179.64	7,300.0	-2,673.3	-2,344.7	3,116.0	0.00	0.00	0.00
9,900.0	90.00	179.64	7,300.0	-2,773.3	-2,344.1	3,213.5	0.00	0.00	0.00
10,000.0	90.00	179.64	7,300.0	-2,873.3	-2,343.5	3,311.0	0.00	0.00	0.00
10,100.0	90.00	179.64	7,300.0	-2,973.3	-2,342.8	3,408.6	0.00	0.00	0.00
10,200.0	90.00	179.64	7,300.0	-3,073.3	-2,342.2	3,506.1	0.00	0.00	0.00
10,300.0	90.00	179.64	7,300.0	-3,173.3	-2,341.6	3,603.6	0.00	0.00	0.00
10,400.0	90.00	179.64	7,300.0	-3,273.3	-2,340.9	3,701.1	0.00	0.00	0.00
10,500.0	90.00	179.64	7,300.0	-3,373.3	-2,340.3	3,798.6	0.00	0.00	0.00
10,600.0	90.00	179.64	7,300.0	-3,473.3	-2,339.7	3,896.1	0.00	0.00	0.00
10,700.0	90.00	179.64	7,300.0	-3,573.3	-2,339.0	3,993.6	0.00	0.00	0.00
10,800.0	90.00	179.64	7,300.0	-3,673.3	-2,338.4	4,091.1	0.00	0.00	0.00
10,900.0	90.00	179.64	7,300.0	-3,773.3	-2,337.8	4,188.6	0.00	0.00	0.00
11,000.0	90.00	179.64	7,300.0	-3,873.3	-2,337.1	4,286.1	0.00	0.00	0.00
11,100.0	90.00	179.64	7,300.0	-3,973.3	-2,336.5	4,383.6	0.00	0.00	0.00
11,200.0	90.00	179.64	7,300.0	-4,073.3	-2,335.9	4,481.1	0.00	0.00	0.00
11,300.0	90.00	179.64	7,300.0	-4,173.3	-2,335.2	4,578.7	0.00	0.00	0.00
11,400.0	90.00	179.64	7,300.0	-4,273.3	-2,334.6	4,676.2	0.00	0.00	0.00
11,500.0	90.00	179.64	7,300.0	-4,373.3	-2,334.0	4,773.7	0.00	0.00	0.00
11,600.0	90.00	179.64	7,300.0	-4,473.3	-2,333.3	4,871.2	0.00	0.00	0.00
11,700.0	90.00	179.64	7,300.0	-4,573.3	-2,332.7	4,968.7	0.00	0.00	0.00
11,800.0	90.00	179.64	7,300.0	-4,673.3	-2,332.0	5,066.2	0.00	0.00	0.00
11,900.0	90.00	179.64	7,300.0	-4,773.3	-2,331.4	5,163.7	0.00	0.00	0.00
12,000.0	90.00	179.64	7,300.0	-4,873.3	-2,330.8	5,261.2	0.00	0.00	0.00
12,100.0	90.00	179.64	7,300.0	-4,973.3	-2,330.1	5,358.7	0.00	0.00	0.00
12,200.0	90.00	179.64	7,300.0	-5,073.3	-2,329.5	5,456.2	0.00	0.00	0.00
12,300.0	90.00	179.64	7,300.0	-5,173.3	-2,328.9	5,553.7	0.00	0.00	0.00
12,400.0	90.00	179.64	7,300.0	-5,273.3	-2,328.2	5,651.3	0.00	0.00	0.00
12,500.0	90.00	179.64	7,300.0	-5,373.3	-2,327.6	5,748.8	0.00	0.00	0.00
12,600.0	90.00	179.64	7,300.0	-5,473.3	-2,327.0	5,846.3	0.00	0.00	0.00
12,700.0	90.00	179.64	7,300.0	-5,573.3	-2,326.3	5,943.8	0.00	0.00	0.00
12,800.0	90.00	179.64	7,300.0	-5,673.3	-2,325.7	6,041.3	0.00	0.00	0.00
12,900.0	90.00	179.64	7,300.0	-5,773.3	-2,325.1	6,138.8	0.00	0.00	0.00
13,000.0	90.00	179.64	7,300.0	-5,873.3	-2,324.4	6,236.3	0.00	0.00	0.00
13,100.0	90.00	179.64	7,300.0	-5,973.3	-2,323.8	6,333.8	0.00	0.00	0.00
13,200.0	90.00	179.64	7,300.0	-6,073.2	-2,323.2	6,431.3	0.00	0.00	0.00
13,300.0	90.00	179.64	7,300.0	-6,173.2	-2,322.5	6,528.8	0.00	0.00	0.00
13,400.0	90.00	179.64	7,300.0	-6,273.2	-2,321.9	6,626.3	0.00	0.00	0.00
13,500.0	90.00	179.64	7,300.0	-6,373.2	-2,321.3	6,723.8	0.00	0.00	0.00
13,600.0	90.00	179.64	7,300.0	-6,473.2	-2,320.6	6,821.4	0.00	0.00	0.00
13,700.0	90.00	179.64	7,300.0	-6,573.2	-2,320.0	6,918.9	0.00	0.00	0.00
13,800.0	90.00	179.64	7,300.0	-6,673.2	-2,319.4	7,016.4	0.00	0.00	0.00
13,900.0	90.00	179.64	7,300.0	-6,773.2	-2,318.7	7,113.9	0.00	0.00	0.00
14,000.0	90.00	179.64	7,300.0	-6,873.2	-2,318.1	7,211.4	0.00	0.00	0.00
14,100.0	90.00	179.64	7,300.0	-6,973.2	-2,317.5	7,308.9	0.00	0.00	0.00
14,200.0	90.00	179.64	7,300.0	-7,073.2	-2,316.8	7,406.4	0.00	0.00	0.00
14,300.0	90.00	179.64	7,300.0	-7,173.2	-2,316.2	7,503.9	0.00	0.00	0.00
14,400.0	90.00	179.64	7,300.0	-7,273.2	-2,315.5	7,601.4	0.00	0.00	0.00
14,500.0	90.00	179.64	7,300.0	-7,373.2	-2,314.9	7,698.9	0.00	0.00	0.00
14,600.0	90.00	179.64	7,300.0	-7,473.2	-2,314.3	7,796.4	0.00	0.00	0.00
14,700.0	90.00	179.64	7,300.0	-7,573.2	-2,313.6	7,894.0	0.00	0.00	0.00
14,800.0	90.00	179.64	7,300.0	-7,673.2	-2,313.0	7,991.5	0.00	0.00	0.00
14,900.0	90.00	179.64	7,300.0	-7,773.2	-2,312.4	8,089.0	0.00	0.00	0.00
15,000.0	90.00	179.64	7,300.0	-7,873.2	-2,311.7	8,186.5	0.00	0.00	0.00
15,100.0	90.00	179.64	7,300.0	-7,973.2	-2,311.1	8,284.0	0.00	0.00	0.00

## Planning Report

<b>Database:</b>	EDM Server Database	<b>Local Co-ordinate Reference:</b>	Well SARCEE 7-67-3-34C
<b>Company:</b>	Enerplus Resources (USA) Corporation	<b>TVD Reference:</b>	KB @ 5180.0usft
<b>Project:</b>	Weld County, CO	<b>MD Reference:</b>	KB @ 5180.0usft
<b>Site:</b>	SEC 26 T8N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	SARCEE 7-67-3-34C	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Wellbore		
<b>Design:</b>	Plan 4		

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)	
15,200.0	90.00	179.64	7,300.0	-8,073.2	-2,310.5	8,381.5	0.00	0.00	0.00	
15,300.0	90.00	179.64	7,300.0	-8,173.2	-2,309.8	8,479.0	0.00	0.00	0.00	
15,400.0	90.00	179.64	7,300.0	-8,273.2	-2,309.2	8,576.5	0.00	0.00	0.00	
15,500.0	90.00	179.64	7,300.0	-8,373.2	-2,308.6	8,674.0	0.00	0.00	0.00	
15,600.0	90.00	179.64	7,300.0	-8,473.2	-2,307.9	8,771.5	0.00	0.00	0.00	
15,700.0	90.00	179.64	7,300.0	-8,573.2	-2,307.3	8,869.0	0.00	0.00	0.00	
15,800.0	90.00	179.64	7,300.0	-8,673.2	-2,306.7	8,966.5	0.00	0.00	0.00	
15,900.0	90.00	179.64	7,300.0	-8,773.2	-2,306.0	9,064.1	0.00	0.00	0.00	
16,000.0	90.00	179.64	7,300.0	-8,873.2	-2,305.4	9,161.6	0.00	0.00	0.00	
16,100.0	90.00	179.64	7,300.0	-8,973.2	-2,304.8	9,259.1	0.00	0.00	0.00	
16,200.0	90.00	179.64	7,300.0	-9,073.2	-2,304.1	9,356.6	0.00	0.00	0.00	
16,300.0	90.00	179.64	7,300.0	-9,173.2	-2,303.5	9,454.1	0.00	0.00	0.00	
16,400.0	90.00	179.64	7,300.0	-9,273.2	-2,302.9	9,551.6	0.00	0.00	0.00	
16,500.0	90.00	179.64	7,300.0	-9,373.2	-2,302.2	9,649.1	0.00	0.00	0.00	
16,600.0	90.00	179.64	7,300.0	-9,473.2	-2,301.6	9,746.6	0.00	0.00	0.00	
16,700.0	90.00	179.64	7,300.0	-9,573.2	-2,301.0	9,844.1	0.00	0.00	0.00	
16,800.0	90.00	179.64	7,300.0	-9,673.2	-2,300.3	9,941.6	0.00	0.00	0.00	
16,900.0	90.00	179.64	7,300.0	-9,773.2	-2,299.7	10,039.1	0.00	0.00	0.00	
17,000.0	90.00	179.64	7,300.0	-9,873.2	-2,299.0	10,136.7	0.00	0.00	0.00	
17,100.0	90.00	179.64	7,300.0	-9,973.2	-2,298.4	10,234.2	0.00	0.00	0.00	
17,200.0	90.00	179.64	7,300.0	-10,073.2	-2,297.8	10,331.7	0.00	0.00	0.00	
17,300.0	90.00	179.64	7,300.0	-10,173.2	-2,297.1	10,429.2	0.00	0.00	0.00	
17,400.0	90.00	179.64	7,300.0	-10,273.2	-2,296.5	10,526.7	0.00	0.00	0.00	
17,500.0	90.00	179.64	7,300.0	-10,373.2	-2,295.9	10,624.2	0.00	0.00	0.00	
17,522.9	90.00	179.64	7,300.0	-10,396.0	-2,295.7	10,646.5	0.00	0.00	0.00	
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										
Sarcee 7-67-3-34C P3	0.00	0.00	7,300.0	-10,396.0	-2,295.7	1,461,201.71	3,173,081.65	40° 35' 51.817 N	104° 52' 36.199 W	
- plan hits target center										
- Point										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,600.0	1,600.0	Surface	9-5/8	9-5/8	
8,127.0	7,300.0	Intermediate	7	7	

## Planning Report

<b>Database:</b>	EDM Server Database	<b>Local Co-ordinate Reference:</b>	Well SARCEE 7-67-3-34C
<b>Company:</b>	Enerplus Resources (USA) Corporation	<b>TVD Reference:</b>	KB @ 5180.0usft
<b>Project:</b>	Weld County, CO	<b>MD Reference:</b>	KB @ 5180.0usft
<b>Site:</b>	SEC 26 T8N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	SARCEE 7-67-3-34C	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Wellbore		
<b>Design:</b>	Plan 4		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,600.0	1,600.0	0.0	0.0	9-5/8"
2,000.0	2,000.0	0.0	0.0	Begin 1.5° Nudge
3,816.1	3,748.4	-103.6	-410.8	Begin 27.24° Tangent
7,345.3	6,886.2	-498.7	-1,977.2	KOP - Start 10°/100' Build
8,127.0	7,300.0	-1,005.2	-2,284.0	7" - 660' FNL & 1987' FEL
17,522.9	7,300.0	-10,396.0	-2,295.7	PBHL