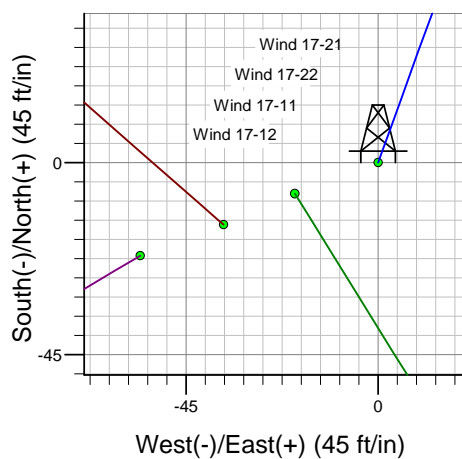
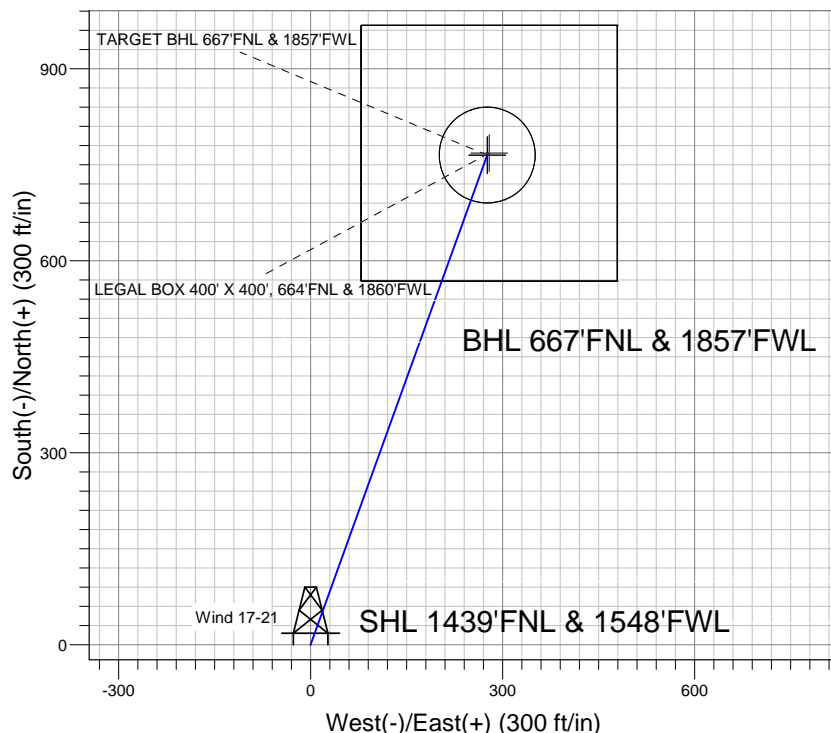
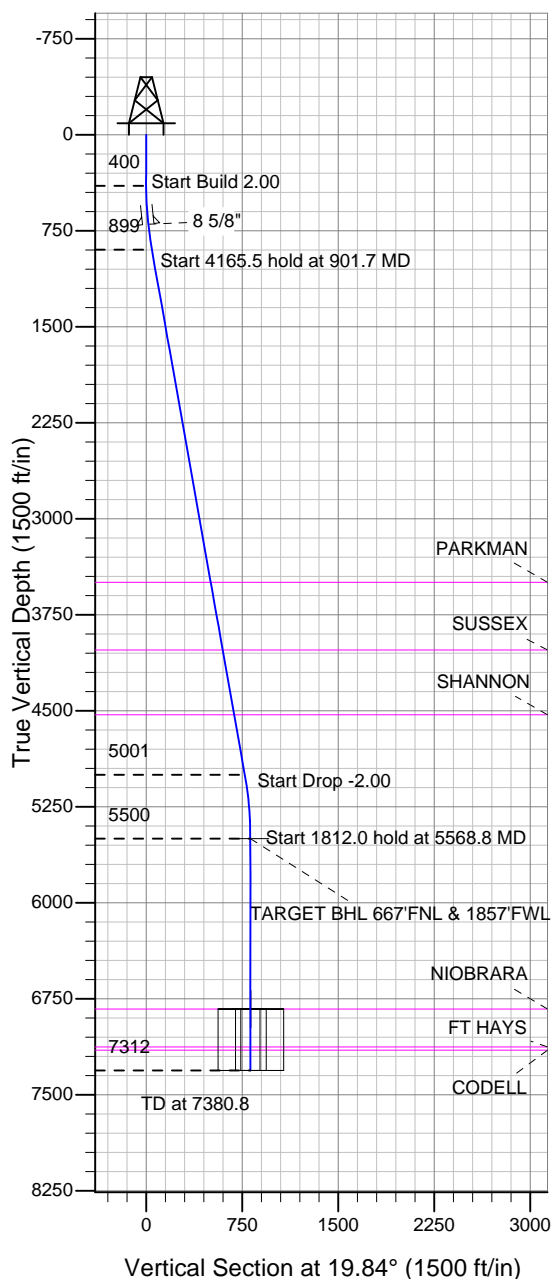


## Trilogy Resources, LLC. Weld County, CO



Wind 17-21  
Plan #1 (11-28-12)  
14:04, November 28 2012



Azimuths to True North  
Magnetic North: 8.74°

Magnetic Field  
Strength: 52918.0snT  
Dip Angle: 66.91°  
Date: 11/28/2012  
Model: IGRF2010

### WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 667'FNL & 1857'FWL	5500.0	765.1	276.1	40.318480	-104.917050	Point
LEGAL BOX 400' X 400', 664'FNL & 1860'FWL	6832.0	768.1	279.1	40.318488	-104.917039	Rectangle (Sides: L400.0 W400.0)
TARGET CIRCLE 667'FNL & 1857'FWL	6832.0	765.1	276.1	40.318480	-104.917050	Circle (Radius: 75.0)

### 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	400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	
3	901.7	10.03	19.84	899.1	41.2	14.9	2.00	19.84	43.8	
4	5067.2	10.03	19.84	5000.9	723.8	261.2	0.00	0.00	769.5	
5	5568.8	0.00	0.00	5500.0	765.1	276.1	2.00	180.00	813.3	TARGET BHL 667'FNL & 1857'FWL
6	7380.8	0.00	0.00	7312.0	765.1	276.1	0.00	0.00	813.3	



# **Trilogy Resources, LLC. Weld County, CO**

**SEC.17-T4N-R67W**

**Wind 17-22 Pad Sec.17-T4N-R67W**

**Wind 17-21**

**Wellbore #1**

**Plan: Plan #1 (11-28-12)**

## **Standard Planning Report**

**28 November, 2012**

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
901.7	10.03	19.84	899.1	41.2	14.9	2.00	2.00	0.00	19.84	
5,067.2	10.03	19.84	5,000.9	723.8	261.2	0.00	0.00	0.00	0.00	
5,568.8	0.00	0.00	5,500.0	765.1	276.1	2.00	-2.00	0.00	180.00	TARGET BHL 667°
7,380.8	0.00	0.00	7,312.0	765.1	276.1	0.00	0.00	0.00	0.00	

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Wind 17-21
<b>Company:</b>	Trilogy Resources, LLC. Weld County, CO	<b>TVD Reference:</b>	WELL @ 4807.0ft (RKB - 13')
<b>Project:</b>	SEC.17-T4N-R67W	<b>MD Reference:</b>	WELL @ 4807.0ft (RKB - 13')
<b>Site:</b>	Wind 17-22 Pad Sec.17-T4N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Wind 17-21	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (11-28-12)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
40.0	0.00	0.00	40.0	0.0	0.0	0.0	0.00	0.00	0.00
80.0	0.00	0.00	80.0	0.0	0.0	0.0	0.00	0.00	0.00
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00
160.0	0.00	0.00	160.0	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
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	0.00
280.0	0.00	0.00	280.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
360.0	0.00	0.00	360.0	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
440.0	0.80	19.84	440.0	0.3	0.1	0.3	2.00	2.00	0.00
480.0	1.60	19.84	480.0	1.1	0.4	1.1	2.00	2.00	0.00
520.0	2.40	19.84	520.0	2.4	0.9	2.5	2.00	2.00	0.00
560.0	3.20	19.84	559.9	4.2	1.5	4.5	2.00	2.00	0.00
600.0	4.00	19.84	599.8	6.6	2.4	7.0	2.00	2.00	0.00
640.0	4.80	19.84	639.7	9.5	3.4	10.0	2.00	2.00	0.00
680.0	5.60	19.84	679.6	12.9	4.6	13.7	2.00	2.00	0.00
700.6	6.01	19.84	700.0	14.8	5.3	15.8	2.00	2.00	0.00
8 5/8"									
720.0	6.40	19.84	719.3	16.8	6.1	17.9	2.00	2.00	0.00
760.0	7.20	19.84	759.1	21.2	7.7	22.6	2.00	2.00	0.00
800.0	8.00	19.84	798.7	26.2	9.5	27.9	2.00	2.00	0.00
840.0	8.80	19.84	838.3	31.7	11.4	33.7	2.00	2.00	0.00
880.0	9.60	19.84	877.8	37.7	13.6	40.1	2.00	2.00	0.00
901.7	10.03	19.84	899.1	41.2	14.9	43.8	2.00	2.00	0.00
920.0	10.03	19.84	917.2	44.2	16.0	47.0	0.00	0.00	0.00
960.0	10.03	19.84	956.5	50.8	18.3	54.0	0.00	0.00	0.00
1,000.0	10.03	19.84	995.9	57.3	20.7	60.9	0.00	0.00	0.00
1,040.0	10.03	19.84	1,035.3	63.9	23.1	67.9	0.00	0.00	0.00
1,080.0	10.03	19.84	1,074.7	70.4	25.4	74.9	0.00	0.00	0.00
1,120.0	10.03	19.84	1,114.1	77.0	27.8	81.9	0.00	0.00	0.00
1,160.0	10.03	19.84	1,153.5	83.5	30.1	88.8	0.00	0.00	0.00
1,200.0	10.03	19.84	1,192.9	90.1	32.5	95.8	0.00	0.00	0.00
1,240.0	10.03	19.84	1,232.3	96.7	34.9	102.8	0.00	0.00	0.00
1,280.0	10.03	19.84	1,271.7	103.2	37.2	109.7	0.00	0.00	0.00
1,320.0	10.03	19.84	1,311.0	109.8	39.6	116.7	0.00	0.00	0.00
1,360.0	10.03	19.84	1,350.4	116.3	42.0	123.7	0.00	0.00	0.00
1,400.0	10.03	19.84	1,389.8	122.9	44.3	130.6	0.00	0.00	0.00
1,440.0	10.03	19.84	1,429.2	129.4	46.7	137.6	0.00	0.00	0.00
1,480.0	10.03	19.84	1,468.6	136.0	49.1	144.6	0.00	0.00	0.00
1,520.0	10.03	19.84	1,508.0	142.5	51.4	151.5	0.00	0.00	0.00
1,560.0	10.03	19.84	1,547.4	149.1	53.8	158.5	0.00	0.00	0.00
1,600.0	10.03	19.84	1,586.8	155.7	56.2	165.5	0.00	0.00	0.00
1,640.0	10.03	19.84	1,626.1	162.2	58.5	172.4	0.00	0.00	0.00
1,680.0	10.03	19.84	1,665.5	168.8	60.9	179.4	0.00	0.00	0.00
1,720.0	10.03	19.84	1,704.9	175.3	63.3	186.4	0.00	0.00	0.00
1,760.0	10.03	19.84	1,744.3	181.9	65.6	193.4	0.00	0.00	0.00
1,800.0	10.03	19.84	1,783.7	188.4	68.0	200.3	0.00	0.00	0.00
1,840.0	10.03	19.84	1,823.1	195.0	70.4	207.3	0.00	0.00	0.00
1,880.0	10.03	19.84	1,862.5	201.5	72.7	214.3	0.00	0.00	0.00
1,920.0	10.03	19.84	1,901.9	208.1	75.1	221.2	0.00	0.00	0.00
1,960.0	10.03	19.84	1,941.3	214.6	77.5	228.2	0.00	0.00	0.00
2,000.0	10.03	19.84	1,980.6	221.2	79.8	235.2	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Wind 17-21
<b>Company:</b>	Trilogy Resources, LLC. Weld County, CO	<b>TVD Reference:</b>	WELL @ 4807.0ft (RKB - 13')
<b>Project:</b>	SEC.17-T4N-R67W	<b>MD Reference:</b>	WELL @ 4807.0ft (RKB - 13')
<b>Site:</b>	Wind 17-22 Pad Sec.17-T4N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Wind 17-21	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (11-28-12)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
2,040.0	10.03	19.84	2,020.0	227.8	82.2	242.1	0.00	0.00	0.00
2,080.0	10.03	19.84	2,059.4	234.3	84.6	249.1	0.00	0.00	0.00
2,120.0	10.03	19.84	2,098.8	240.9	86.9	256.1	0.00	0.00	0.00
2,160.0	10.03	19.84	2,138.2	247.4	89.3	263.0	0.00	0.00	0.00
2,200.0	10.03	19.84	2,177.6	254.0	91.6	270.0	0.00	0.00	0.00
2,240.0	10.03	19.84	2,217.0	260.5	94.0	277.0	0.00	0.00	0.00
2,280.0	10.03	19.84	2,256.4	267.1	96.4	283.9	0.00	0.00	0.00
2,320.0	10.03	19.84	2,295.7	273.6	98.7	290.9	0.00	0.00	0.00
2,360.0	10.03	19.84	2,335.1	280.2	101.1	297.9	0.00	0.00	0.00
2,400.0	10.03	19.84	2,374.5	286.8	103.5	304.9	0.00	0.00	0.00
2,440.0	10.03	19.84	2,413.9	293.3	105.8	311.8	0.00	0.00	0.00
2,480.0	10.03	19.84	2,453.3	299.9	108.2	318.8	0.00	0.00	0.00
2,520.0	10.03	19.84	2,492.7	306.4	110.6	325.8	0.00	0.00	0.00
2,560.0	10.03	19.84	2,532.1	313.0	112.9	332.7	0.00	0.00	0.00
2,600.0	10.03	19.84	2,571.5	319.5	115.3	339.7	0.00	0.00	0.00
2,640.0	10.03	19.84	2,610.9	326.1	117.7	346.7	0.00	0.00	0.00
2,680.0	10.03	19.84	2,650.2	332.6	120.0	353.6	0.00	0.00	0.00
2,720.0	10.03	19.84	2,689.6	339.2	122.4	360.6	0.00	0.00	0.00
2,760.0	10.03	19.84	2,729.0	345.8	124.8	367.6	0.00	0.00	0.00
2,800.0	10.03	19.84	2,768.4	352.3	127.1	374.5	0.00	0.00	0.00
2,840.0	10.03	19.84	2,807.8	358.9	129.5	381.5	0.00	0.00	0.00
2,880.0	10.03	19.84	2,847.2	365.4	131.9	388.5	0.00	0.00	0.00
2,920.0	10.03	19.84	2,886.6	372.0	134.2	395.4	0.00	0.00	0.00
2,960.0	10.03	19.84	2,926.0	378.5	136.6	402.4	0.00	0.00	0.00
3,000.0	10.03	19.84	2,965.3	385.1	139.0	409.4	0.00	0.00	0.00
3,040.0	10.03	19.84	3,004.7	391.6	141.3	416.4	0.00	0.00	0.00
3,080.0	10.03	19.84	3,044.1	398.2	143.7	423.3	0.00	0.00	0.00
3,120.0	10.03	19.84	3,083.5	404.7	146.1	430.3	0.00	0.00	0.00
3,160.0	10.03	19.84	3,122.9	411.3	148.4	437.3	0.00	0.00	0.00
3,200.0	10.03	19.84	3,162.3	417.9	150.8	444.2	0.00	0.00	0.00
3,240.0	10.03	19.84	3,201.7	424.4	153.1	451.2	0.00	0.00	0.00
3,280.0	10.03	19.84	3,241.1	431.0	155.5	458.2	0.00	0.00	0.00
3,320.0	10.03	19.84	3,280.5	437.5	157.9	465.1	0.00	0.00	0.00
3,360.0	10.03	19.84	3,319.8	444.1	160.2	472.1	0.00	0.00	0.00
3,400.0	10.03	19.84	3,359.2	450.6	162.6	479.1	0.00	0.00	0.00
3,440.0	10.03	19.84	3,398.6	457.2	165.0	486.0	0.00	0.00	0.00
3,480.0	10.03	19.84	3,438.0	463.7	167.3	493.0	0.00	0.00	0.00
3,520.0	10.03	19.84	3,477.4	470.3	169.7	500.0	0.00	0.00	0.00
3,539.9	10.03	19.84	3,497.0	473.6	170.9	503.5	0.00	0.00	0.00
<b>PARKMAN</b>									
3,560.0	10.03	19.84	3,516.8	476.9	172.1	507.0	0.00	0.00	0.00
3,600.0	10.03	19.84	3,556.2	483.4	174.4	513.9	0.00	0.00	0.00
3,640.0	10.03	19.84	3,595.6	490.0	176.8	520.9	0.00	0.00	0.00
3,680.0	10.03	19.84	3,634.9	496.5	179.2	527.9	0.00	0.00	0.00
3,720.0	10.03	19.84	3,674.3	503.1	181.5	534.8	0.00	0.00	0.00
3,760.0	10.03	19.84	3,713.7	509.6	183.9	541.8	0.00	0.00	0.00
3,800.0	10.03	19.84	3,753.1	516.2	186.3	548.8	0.00	0.00	0.00
3,840.0	10.03	19.84	3,792.5	522.7	188.6	555.7	0.00	0.00	0.00
3,880.0	10.03	19.84	3,831.9	529.3	191.0	562.7	0.00	0.00	0.00
3,920.0	10.03	19.84	3,871.3	535.9	193.4	569.7	0.00	0.00	0.00
3,960.0	10.03	19.84	3,910.7	542.4	195.7	576.6	0.00	0.00	0.00
4,000.0	10.03	19.84	3,950.1	549.0	198.1	583.6	0.00	0.00	0.00
4,040.0	10.03	19.84	3,989.4	555.5	200.5	590.6	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Wind 17-21
<b>Company:</b>	Trilogy Resources, LLC. Weld County, CO	<b>TVD Reference:</b>	WELL @ 4807.0ft (RKB - 13')
<b>Project:</b>	SEC.17-T4N-R67W	<b>MD Reference:</b>	WELL @ 4807.0ft (RKB - 13')
<b>Site:</b>	Wind 17-22 Pad Sec.17-T4N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Wind 17-21	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (11-28-12)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,078.1	10.03	19.84	4,027.0	561.8	202.7	597.2	0.00	0.00	0.00
<b>SUSSEX</b>									
4,080.0	10.03	19.84	4,028.8	562.1	202.8	597.5	0.00	0.00	0.00
4,120.0	10.03	19.84	4,068.2	568.6	205.2	604.5	0.00	0.00	0.00
4,160.0	10.03	19.84	4,107.6	575.2	207.6	611.5	0.00	0.00	0.00
4,200.0	10.03	19.84	4,147.0	581.7	209.9	618.5	0.00	0.00	0.00
4,240.0	10.03	19.84	4,186.4	588.3	212.3	625.4	0.00	0.00	0.00
4,280.0	10.03	19.84	4,225.8	594.8	214.6	632.4	0.00	0.00	0.00
4,320.0	10.03	19.84	4,265.2	601.4	217.0	639.4	0.00	0.00	0.00
4,360.0	10.03	19.84	4,304.5	608.0	219.4	646.3	0.00	0.00	0.00
4,400.0	10.03	19.84	4,343.9	614.5	221.7	653.3	0.00	0.00	0.00
4,440.0	10.03	19.84	4,383.3	621.1	224.1	660.3	0.00	0.00	0.00
4,480.0	10.03	19.84	4,422.7	627.6	226.5	667.2	0.00	0.00	0.00
4,520.0	10.03	19.84	4,462.1	634.2	228.8	674.2	0.00	0.00	0.00
4,560.0	10.03	19.84	4,501.5	640.7	231.2	681.2	0.00	0.00	0.00
4,591.0	10.03	19.84	4,532.0	645.8	233.0	686.6	0.00	0.00	0.00
<b>SHANNON</b>									
4,600.0	10.03	19.84	4,540.9	647.3	233.6	688.1	0.00	0.00	0.00
4,640.0	10.03	19.84	4,580.3	653.8	235.9	695.1	0.00	0.00	0.00
4,680.0	10.03	19.84	4,619.7	660.4	238.3	702.1	0.00	0.00	0.00
4,720.0	10.03	19.84	4,659.0	667.0	240.7	709.0	0.00	0.00	0.00
4,760.0	10.03	19.84	4,698.4	673.5	243.0	716.0	0.00	0.00	0.00
4,800.0	10.03	19.84	4,737.8	680.1	245.4	723.0	0.00	0.00	0.00
4,840.0	10.03	19.84	4,777.2	686.6	247.8	730.0	0.00	0.00	0.00
4,880.0	10.03	19.84	4,816.6	693.2	250.1	736.9	0.00	0.00	0.00
4,920.0	10.03	19.84	4,856.0	699.7	252.5	743.9	0.00	0.00	0.00
4,960.0	10.03	19.84	4,895.4	706.3	254.9	750.9	0.00	0.00	0.00
5,000.0	10.03	19.84	4,934.8	712.8	257.2	757.8	0.00	0.00	0.00
5,040.0	10.03	19.84	4,974.2	719.4	259.6	764.8	0.00	0.00	0.00
5,067.2	10.03	19.84	5,000.9	723.8	261.2	769.5	0.00	0.00	0.00
5,080.0	9.78	19.84	5,013.5	725.9	261.9	771.7	2.00	-2.00	0.00
5,120.0	8.98	19.84	5,053.0	732.1	264.2	778.3	2.00	-2.00	0.00
5,160.0	8.18	19.84	5,092.6	737.7	266.2	784.2	2.00	-2.00	0.00
5,200.0	7.38	19.84	5,132.2	742.8	268.0	789.6	2.00	-2.00	0.00
5,240.0	6.58	19.84	5,171.9	747.3	269.7	794.5	2.00	-2.00	0.00
5,280.0	5.78	19.84	5,211.7	751.4	271.1	798.8	2.00	-2.00	0.00
5,320.0	4.98	19.84	5,251.5	754.9	272.4	802.5	2.00	-2.00	0.00
5,360.0	4.18	19.84	5,291.4	757.9	273.5	805.7	2.00	-2.00	0.00
5,400.0	3.38	19.84	5,331.3	760.4	274.4	808.4	2.00	-2.00	0.00
5,440.0	2.58	19.84	5,371.2	762.3	275.1	810.4	2.00	-2.00	0.00
5,480.0	1.78	19.84	5,411.2	763.8	275.6	812.0	2.00	-2.00	0.00
5,520.0	0.98	19.84	5,451.2	764.7	275.9	812.9	2.00	-2.00	0.00
5,560.0	0.18	19.84	5,491.2	765.0	276.1	813.3	2.00	-2.00	0.00
5,568.8	0.00	0.00	5,500.0	765.1	276.1	813.3	2.00	-2.00	0.00
<b>TARGET BHL 667'FNL &amp; 1857'FWL</b>									
5,600.0	0.00	0.00	5,531.2	765.1	276.1	813.3	0.00	0.00	0.00
5,640.0	0.00	0.00	5,571.2	765.1	276.1	813.3	0.00	0.00	0.00
5,680.0	0.00	0.00	5,611.2	765.1	276.1	813.3	0.00	0.00	0.00
5,720.0	0.00	0.00	5,651.2	765.1	276.1	813.3	0.00	0.00	0.00
5,760.0	0.00	0.00	5,691.2	765.1	276.1	813.3	0.00	0.00	0.00
5,800.0	0.00	0.00	5,731.2	765.1	276.1	813.3	0.00	0.00	0.00
5,840.0	0.00	0.00	5,771.2	765.1	276.1	813.3	0.00	0.00	0.00
5,880.0	0.00	0.00	5,811.2	765.1	276.1	813.3	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Wind 17-21
<b>Company:</b>	Trilogy Resources, LLC. Weld County, CO	<b>TVD Reference:</b>	WELL @ 4807.0ft (RKB - 13')
<b>Project:</b>	SEC.17-T4N-R67W	<b>MD Reference:</b>	WELL @ 4807.0ft (RKB - 13')
<b>Site:</b>	Wind 17-22 Pad Sec.17-T4N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Wind 17-21	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (11-28-12)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,920.0	0.00	0.00	5,851.2	765.1	276.1	813.3	0.00	0.00	0.00
5,960.0	0.00	0.00	5,891.2	765.1	276.1	813.3	0.00	0.00	0.00
6,000.0	0.00	0.00	5,931.2	765.1	276.1	813.3	0.00	0.00	0.00
6,040.0	0.00	0.00	5,971.2	765.1	276.1	813.3	0.00	0.00	0.00
6,080.0	0.00	0.00	6,011.2	765.1	276.1	813.3	0.00	0.00	0.00
6,120.0	0.00	0.00	6,051.2	765.1	276.1	813.3	0.00	0.00	0.00
6,160.0	0.00	0.00	6,091.2	765.1	276.1	813.3	0.00	0.00	0.00
6,200.0	0.00	0.00	6,131.2	765.1	276.1	813.3	0.00	0.00	0.00
6,240.0	0.00	0.00	6,171.2	765.1	276.1	813.3	0.00	0.00	0.00
6,280.0	0.00	0.00	6,211.2	765.1	276.1	813.3	0.00	0.00	0.00
6,320.0	0.00	0.00	6,251.2	765.1	276.1	813.3	0.00	0.00	0.00
6,360.0	0.00	0.00	6,291.2	765.1	276.1	813.3	0.00	0.00	0.00
6,400.0	0.00	0.00	6,331.2	765.1	276.1	813.3	0.00	0.00	0.00
6,440.0	0.00	0.00	6,371.2	765.1	276.1	813.3	0.00	0.00	0.00
6,480.0	0.00	0.00	6,411.2	765.1	276.1	813.3	0.00	0.00	0.00
6,520.0	0.00	0.00	6,451.2	765.1	276.1	813.3	0.00	0.00	0.00
6,560.0	0.00	0.00	6,491.2	765.1	276.1	813.3	0.00	0.00	0.00
6,600.0	0.00	0.00	6,531.2	765.1	276.1	813.3	0.00	0.00	0.00
6,640.0	0.00	0.00	6,571.2	765.1	276.1	813.3	0.00	0.00	0.00
6,680.0	0.00	0.00	6,611.2	765.1	276.1	813.3	0.00	0.00	0.00
6,720.0	0.00	0.00	6,651.2	765.1	276.1	813.3	0.00	0.00	0.00
6,760.0	0.00	0.00	6,691.2	765.1	276.1	813.3	0.00	0.00	0.00
6,800.0	0.00	0.00	6,731.2	765.1	276.1	813.3	0.00	0.00	0.00
6,840.0	0.00	0.00	6,771.2	765.1	276.1	813.3	0.00	0.00	0.00
6,880.0	0.00	0.00	6,811.2	765.1	276.1	813.3	0.00	0.00	0.00
6,900.8	0.00	0.00	6,832.0	765.1	276.1	813.3	0.00	0.00	0.00
<b>NIORARA - TARGET CIRCLE 667'FNL &amp; 1857'FWL - LEGAL BOX 400' X 400', 664'FNL &amp; 1860'FWL</b>									
6,920.0	0.00	0.00	6,851.2	765.1	276.1	813.3	0.00	0.00	0.00
6,960.0	0.00	0.00	6,891.2	765.1	276.1	813.3	0.00	0.00	0.00
7,000.0	0.00	0.00	6,931.2	765.1	276.1	813.3	0.00	0.00	0.00
7,040.0	0.00	0.00	6,971.2	765.1	276.1	813.3	0.00	0.00	0.00
7,080.0	0.00	0.00	7,011.2	765.1	276.1	813.3	0.00	0.00	0.00
7,120.0	0.00	0.00	7,051.2	765.1	276.1	813.3	0.00	0.00	0.00
7,160.0	0.00	0.00	7,091.2	765.1	276.1	813.3	0.00	0.00	0.00
7,195.8	0.00	0.00	7,127.0	765.1	276.1	813.3	0.00	0.00	0.00
<b>FT HAYS</b>									
7,200.0	0.00	0.00	7,131.2	765.1	276.1	813.3	0.00	0.00	0.00
7,220.8	0.00	0.00	7,152.0	765.1	276.1	813.3	0.00	0.00	0.00
<b>CODELL</b>									
7,240.0	0.00	0.00	7,171.2	765.1	276.1	813.3	0.00	0.00	0.00
7,280.0	0.00	0.00	7,211.2	765.1	276.1	813.3	0.00	0.00	0.00
7,320.0	0.00	0.00	7,251.2	765.1	276.1	813.3	0.00	0.00	0.00
7,360.0	0.00	0.00	7,291.2	765.1	276.1	813.3	0.00	0.00	0.00
7,380.8	0.00	0.00	7,312.0	765.1	276.1	813.3	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Wind 17-21
<b>Company:</b>	Trilogy Resources, LLC. Weld County, CO	<b>TVD Reference:</b>	WELL @ 4807.0ft (RKB - 13')
<b>Project:</b>	SEC.17-T4N-R67W	<b>MD Reference:</b>	WELL @ 4807.0ft (RKB - 13')
<b>Site:</b>	Wind 17-22 Pad Sec.17-T4N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Wind 17-21	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (11-28-12)		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
TARGET CIRCLE 667	0.00	0.00	6,832.0	765.1	276.1	1,359,397.48	3,162,551.67	40.318480	-104.917050
- plan hits target center									
- Circle (radius 75.0)									
LEGAL BOX 400' X 40'	0.00	0.00	6,832.0	768.1	279.1	1,359,400.54	3,162,554.68	40.318488	-104.917039
- plan misses target center by 4.3ft at 6900.8ft MD (6832.0 TVD, 765.1 N, 276.1 E)									
- Rectangle (sides W400.0 H400.0 D480.0)									
TARGET BHL 667'FN	0.00	0.00	5,500.0	765.1	276.1	1,359,397.48	3,162,551.67	40.318480	-104.917050
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
700.6	700.0	8 5/8"	8-5/8	12-1/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,539.9	3,497.0	PARKMAN		0.00		
4,078.1	4,027.0	SUSSEX		0.00		
4,591.0	4,532.0	SHANNON		0.00		
6,900.8	6,832.0	NIOBRARA		0.00		
7,195.8	7,127.0	FT HAYS		0.00		
7,220.8	7,152.0	CODELL		0.00		





# **Trilogy Resources, LLC. Weld County, CO**

**SEC.17-T4N-R67W**

**Wind 17-22 Pad Sec.17-T4N-R67W**

**Wind 17-21**

**Wellbore #1**

**Plan #1 (11-28-12)**

## **Anticollision Report**

**28 November, 2012**

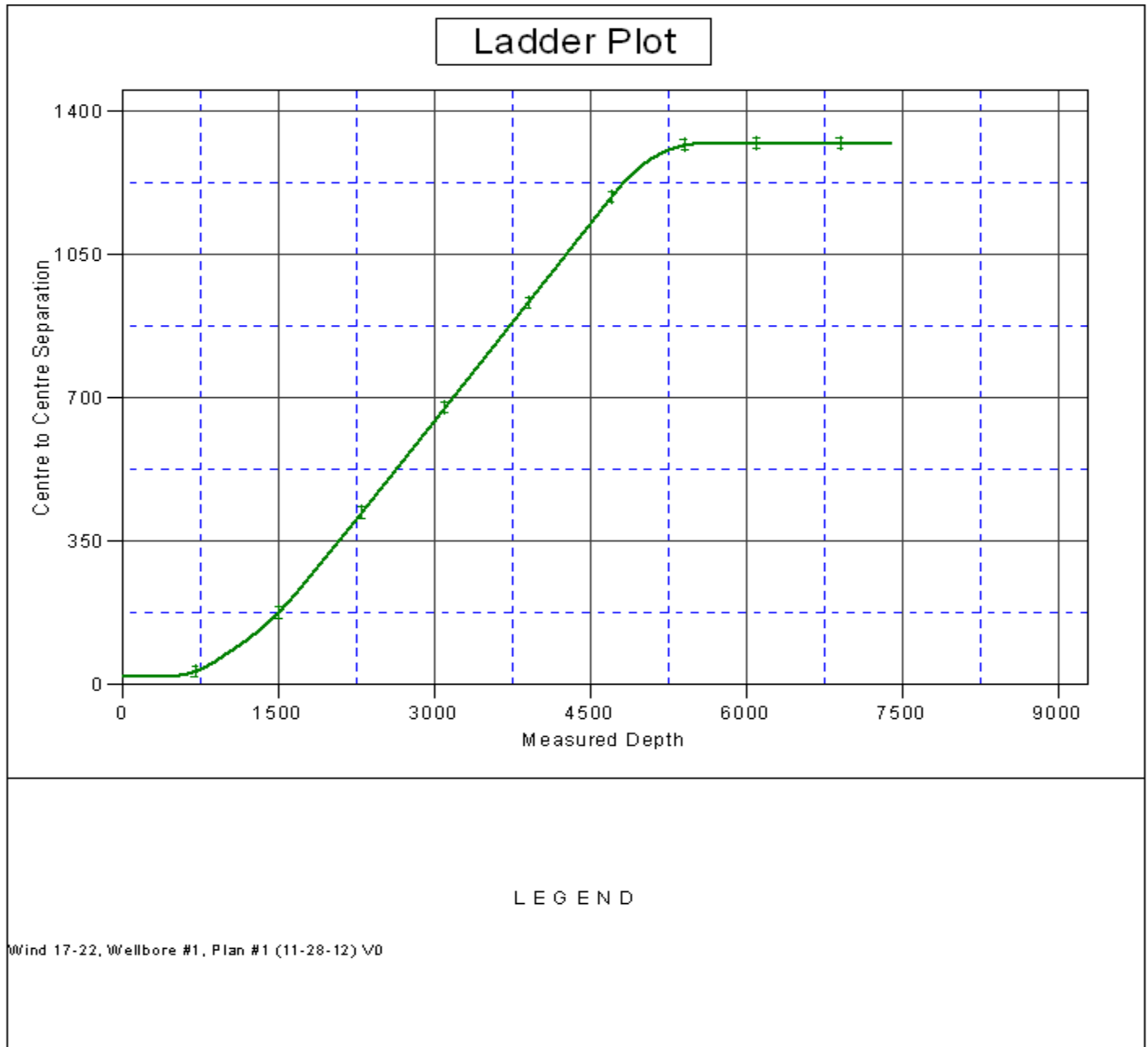


Offset Design													Wind 17-22 Pad Sec.17-T4N-R67W - Wind 17-22 - Wellbore #1 - Plan #1 (11-28-12)		Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft			
Reference		Offset		Semi Major Axis			Distance									
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)					
2,500.0	2,473.0	2,414.3	2,397.0	8.0	6.3	162.43	-175.2	84.3	485.0	473.4	11.60	41.793				
2,600.0	2,571.5	2,508.9	2,490.0	8.4	6.6	161.82	-190.4	93.8	516.9	504.7	12.14	42.573				
2,700.0	2,669.9	2,603.5	2,582.9	8.8	7.0	161.28	-205.7	103.2	548.8	536.2	12.68	43.283				
2,800.0	2,768.4	2,698.2	2,675.8	9.2	7.4	160.81	-220.9	112.6	580.8	567.6	13.22	43.933				
2,900.0	2,866.9	2,792.8	2,768.7	9.6	7.8	160.38	-236.2	122.0	612.9	599.1	13.76	44.530				
3,000.0	2,965.3	2,887.4	2,861.7	10.0	8.2	159.99	-251.4	131.5	644.9	630.6	14.31	45.078				
3,100.0	3,063.8	2,982.1	2,954.6	10.4	8.6	159.64	-266.7	140.9	677.0	662.2	14.85	45.585				
3,200.0	3,162.3	3,076.7	3,047.5	10.8	9.0	159.33	-281.9	150.3	709.1	693.7	15.40	46.054				
3,300.0	3,260.8	3,171.4	3,140.4	11.1	9.4	159.04	-297.2	159.8	741.3	725.3	15.94	46.490				
3,400.0	3,359.2	3,266.0	3,233.4	11.5	9.7	158.77	-312.4	169.2	773.4	756.9	16.49	46.895				
3,500.0	3,457.7	3,360.6	3,326.3	11.9	10.1	158.52	-327.7	178.6	805.5	788.5	17.04	47.272				
3,600.0	3,556.2	3,455.3	3,419.2	12.3	10.5	158.30	-342.9	188.1	837.7	820.1	17.59	47.625				
3,700.0	3,654.6	3,549.9	3,512.1	12.7	10.9	158.09	-358.2	197.5	869.9	851.7	18.14	47.956				
3,800.0	3,753.1	3,644.5	3,605.0	13.1	11.3	157.90	-373.4	206.9	902.1	883.4	18.69	48.265				
3,900.0	3,851.6	3,739.2	3,698.0	13.5	11.7	157.71	-388.7	216.4	934.3	915.0	19.24	48.557				
4,000.0	3,950.1	3,833.8	3,790.9	13.9	12.1	157.55	-403.9	225.8	966.5	946.7	19.79	48.831				
4,100.0	4,048.5	3,928.4	3,883.8	14.3	12.5	157.39	-419.2	235.2	998.7	978.3	20.34	49.089				
4,200.0	4,147.0	4,023.1	3,976.7	14.6	12.9	157.24	-434.4	244.6	1,030.9	1,010.0	20.90	49.333				
4,300.0	4,245.5	4,117.7	4,069.7	15.0	13.3	157.10	-449.7	254.1	1,063.1	1,041.7	21.45	49.564				
4,400.0	4,343.9	4,212.4	4,162.6	15.4	13.7	156.97	-464.9	263.5	1,095.3	1,073.3	22.00	49.783				
4,500.0	4,442.4	4,307.0	4,255.5	15.8	14.1	156.85	-480.1	272.9	1,127.6	1,105.0	22.56	49.990				
4,600.0	4,540.9	4,401.6	4,348.4	16.2	14.5	156.73	-495.4	282.4	1,159.8	1,136.7	23.11	50.187				
4,700.0	4,639.4	4,496.3	4,441.3	16.6	14.9	156.62	-510.6	291.8	1,192.0	1,168.4	23.66	50.373				
4,800.0	4,737.8	4,637.9	4,580.9	17.0	15.4	156.53	-531.2	304.5	1,222.8	1,198.5	24.30	50.318				
4,900.0	4,836.3	4,793.1	4,735.0	17.4	15.8	156.62	-546.9	314.2	1,249.1	1,224.2	24.91	50.142				
5,000.0	4,934.8	4,951.8	4,893.3	17.8	16.1	156.90	-555.7	319.7	1,270.7	1,245.2	25.49	49.856				
5,067.2	5,000.9	5,059.4	5,000.9	18.0	16.3	157.18	-557.4	320.7	1,282.6	1,256.7	25.86	49.597				
5,100.0	5,033.3	5,091.8	5,033.3	18.1	16.3	157.32	-557.4	320.7	1,287.7	1,261.7	26.03	49.472				
5,200.0	5,132.2	5,190.7	5,132.2	18.4	16.4	157.67	-557.4	320.7	1,301.2	1,274.7	26.49	49.125				
5,300.0	5,231.6	5,290.1	5,231.6	18.7	16.6	157.93	-557.4	320.7	1,311.5	1,284.6	26.91	48.737				
5,400.0	5,331.3	5,389.8	5,331.3	18.9	16.7	158.11	-557.4	320.7	1,318.6	1,291.3	27.29	48.309				
5,500.0	5,431.2	5,489.7	5,431.2	19.0	16.8	158.21	-557.4	320.7	1,322.4	1,294.8	27.64	47.841				
5,568.8	5,500.0	5,558.5	5,500.0	19.1	16.9	178.07	-557.4	320.7	1,323.2	1,295.3	27.86	47.496				
5,600.0	5,531.2	5,589.7	5,531.2	19.1	17.0	178.07	-557.4	320.7	1,323.2	1,295.2	27.96	47.317				
5,700.0	5,631.2	5,689.7	5,631.2	19.3	17.1	178.07	-557.4	320.7	1,323.2	1,294.9	28.32	46.715				
5,800.0	5,731.2	5,789.7	5,731.2	19.4	17.2	178.07	-557.4	320.7	1,323.2	1,294.5	28.69	46.125				
5,900.0	5,831.2	5,889.7	5,831.2	19.6	17.4	178.07	-557.4	320.7	1,323.2	1,294.1	29.05	45.545				
6,000.0	5,931.2	5,989.7	5,931.2	19.7	17.5	178.07	-557.4	320.7	1,323.2	1,293.8	29.42	44.976				
6,100.0	6,031.2	6,089.7	6,031.2	19.8	17.7	178.07	-557.4	320.7	1,323.2	1,293.4	29.79	44.418				
6,200.0	6,131.2	6,189.7	6,131.2	20.0	17.8	178.07	-557.4	320.7	1,323.2	1,293.0	30.16	43.871				
6,300.0	6,231.2	6,289.7	6,231.2	20.1	18.0	178.07	-557.4	320.7	1,323.2	1,292.7	30.54	43.333				
6,400.0	6,331.2	6,389.7	6,331.2	20.3	18.1	178.07	-557.4	320.7	1,323.2	1,292.3	30.91	42.806				
6,500.0	6,431.2	6,489.7	6,431.2	20.4	18.3	178.07	-557.4	320.7	1,323.2	1,291.9	31.29	42.289				
6,600.0	6,531.2	6,589.7	6,531.2	20.6	18.4	178.07	-557.4	320.7	1,323.2	1,291.5	31.67	41.782				
6,700.0	6,631.2	6,689.7	6,631.2	20.7	18.6	178.07	-557.4	320.7	1,323.2	1,291.1	32.05	41.285				
6,800.0	6,731.2	6,789.7	6,731.2	20.9	18.7	178.07	-557.4	320.7	1,323.2	1,290.8	32.43	40.797				
6,900.0	6,831.2	6,889.7	6,831.2	21.0	18.9	178.07	-557.4	320.7	1,323.2	1,290.4	32.82	40.318				
7,000.0	6,931.2	6,989.7	6,931.2	21.2	19.0	178.07	-557.4	320.7	1,323.2	1,290.0	33.21	39.849				
7,100.0	7,031.2	7,089.7	7,031.2	21.3	19.2	178.07	-557.4	320.7	1,323.2	1,289.6	33.59	39.388				
7,200.0	7,131.2	7,189.7	7,131.2	21.5	19.4	178.07	-557.4	320.7	1,323.2	1,289.2	33.98	38.937				
7,300.0	7,231.2	7,289.7	7,231.2	21.7	19.5	178.07	-557.4	320.7	1,323.2	1,288.8	34.37	38.494				
7,380.8	7,312.0	7,370.5	7,312.0	21.8	19.7	178.07	-557.4	320.7	1,323.2	1,288.5	34.69	38.142				

<b>Company:</b>	Trilogy Resources, LLC. Weld County, CO	<b>Local Co-ordinate Reference:</b>	Well Wind 17-21
<b>Project:</b>	SEC.17-T4N-R67W	<b>TVD Reference:</b>	WELL @ 4807.0ft (RKB - 13')
<b>Reference Site:</b>	Wind 17-22 Pad Sec.17-T4N-R67W	<b>MD Reference:</b>	WELL @ 4807.0ft (RKB - 13')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Wind 17-21	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (11-28-12)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 4807.0ft (RKB - 13')  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.500000 °

Coordinates are relative to: Wind 17-21  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.38°



<b>Company:</b>	Trilogy Resources, LLC. Weld County, CO	<b>Local Co-ordinate Reference:</b>	Well Wind 17-21
<b>Project:</b>	SEC.17-T4N-R67W	<b>TVD Reference:</b>	WELL @ 4807.0ft (RKB - 13')
<b>Reference Site:</b>	Wind 17-22 Pad Sec.17-T4N-R67W	<b>MD Reference:</b>	WELL @ 4807.0ft (RKB - 13')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Wind 17-21	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (11-28-12)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 4807.0ft (RKB - 13')  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.500000 °

Coordinates are relative to: Wind 17-21  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.38°

