

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	900.0	0.00	0.00	900.0	0.0	0.0	0.00	0.00	0.0	
3	1883.4	19.67	357.71	1864.2	167.0	-6.7	2.00	357.71	167.1	
4	5039.1	19.67	357.71	4835.8	1228.3	-49.1	0.00	0.00	1229.3	
5	6022.5	0.00	0.00	5800.0	1395.3	-55.8	2.00	180.00	1396.4	TARGET BHL 1971'FSL & 1832'FWL
6	7537.5	0.00	0.00	7315.0	1395.3	-55.8	0.00	0.00	1396.4	



Trilogy Resources, LLC. Weld County, CO

SEC.17-T4N-R67W

Wind 17-14 Pad Sec.17-T4N-R67W

Wind 17-23

Wellbore #1

Plan: Plan #1 (11-19-12)

Standard Planning Report

20 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	
900.0	0.00	0.00	900.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,883.4	19.67	357.71	1,864.2	167.0	-6.7	2.00	2.00	0.00	357.71	
5,039.1	19.67	357.71	4,835.8	1,228.3	-49.1	0.00	0.00	0.00	0.00	
6,022.5	0.00	0.00	5,800.0	1,395.3	-55.8	2.00	-2.00	0.00	180.00	TARGET BHL 1971
7,537.5	0.00	0.00	7,315.0	1,395.3	-55.8	0.00	0.00	0.00	0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well Wind 17-23
Company:	Trilogy Resources, LLC. Weld County, CO	TVD Reference:	WELL @ 4854.0ft (RKB - 13')
Project:	SEC.17-T4N-R67W	MD Reference:	WELL @ 4854.0ft (RKB - 13')
Site:	Wind 17-14 Pad Sec.17-T4N-R67W	North Reference:	True
Well:	Wind 17-23	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-19-12)		

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	0.00	0.00	440.0	0.0	0.0	0.0	0.00	0.00	0.00
480.0	0.00	0.00	480.0	0.0	0.0	0.0	0.00	0.00	0.00
520.0	0.00	0.00	520.0	0.0	0.0	0.0	0.00	0.00	0.00
560.0	0.00	0.00	560.0	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
640.0	0.00	0.00	640.0	0.0	0.0	0.0	0.00	0.00	0.00
680.0	0.00	0.00	680.0	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
8 5/8"									
720.0	0.00	0.00	720.0	0.0	0.0	0.0	0.00	0.00	0.00
760.0	0.00	0.00	760.0	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
840.0	0.00	0.00	840.0	0.0	0.0	0.0	0.00	0.00	0.00
880.0	0.00	0.00	880.0	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
920.0	0.40	357.71	920.0	0.1	0.0	0.1	2.00	2.00	0.00
960.0	1.20	357.71	960.0	0.6	0.0	0.6	2.00	2.00	0.00
1,000.0	2.00	357.71	1,000.0	1.7	-0.1	1.7	2.00	2.00	0.00
1,040.0	2.80	357.71	1,039.9	3.4	-0.1	3.4	2.00	2.00	0.00
1,080.0	3.60	357.71	1,079.9	5.6	-0.2	5.7	2.00	2.00	0.00
1,120.0	4.40	357.71	1,119.8	8.4	-0.3	8.4	2.00	2.00	0.00
1,160.0	5.20	357.71	1,159.6	11.8	-0.5	11.8	2.00	2.00	0.00
1,200.0	6.00	357.71	1,199.5	15.7	-0.6	15.7	2.00	2.00	0.00
1,240.0	6.80	357.71	1,239.2	20.1	-0.8	20.2	2.00	2.00	0.00
1,280.0	7.60	357.71	1,278.9	25.1	-1.0	25.2	2.00	2.00	0.00
1,320.0	8.40	357.71	1,318.5	30.7	-1.2	30.7	2.00	2.00	0.00
1,360.0	9.20	357.71	1,358.0	36.8	-1.5	36.9	2.00	2.00	0.00
1,400.0	10.00	357.71	1,397.5	43.5	-1.7	43.5	2.00	2.00	0.00
1,440.0	10.80	357.71	1,436.8	50.7	-2.0	50.7	2.00	2.00	0.00
1,480.0	11.60	357.71	1,476.0	58.5	-2.3	58.5	2.00	2.00	0.00
1,520.0	12.40	357.71	1,515.2	66.8	-2.7	66.8	2.00	2.00	0.00
1,560.0	13.20	357.71	1,554.2	75.6	-3.0	75.7	2.00	2.00	0.00
1,600.0	14.00	357.71	1,593.1	85.0	-3.4	85.1	2.00	2.00	0.00
1,640.0	14.80	357.71	1,631.8	95.0	-3.8	95.0	2.00	2.00	0.00
1,680.0	15.60	357.71	1,670.4	105.4	-4.2	105.5	2.00	2.00	0.00
1,720.0	16.40	357.71	1,708.8	116.5	-4.7	116.6	2.00	2.00	0.00
1,760.0	17.20	357.71	1,747.1	128.0	-5.1	128.1	2.00	2.00	0.00
1,800.0	18.00	357.71	1,785.3	140.1	-5.6	140.2	2.00	2.00	0.00
1,840.0	18.80	357.71	1,823.2	152.7	-6.1	152.8	2.00	2.00	0.00
1,880.0	19.60	357.71	1,861.0	165.9	-6.6	166.0	2.00	2.00	0.00
1,883.4	19.67	357.71	1,864.2	167.0	-6.7	167.1	2.00	2.00	0.00
1,920.0	19.67	357.71	1,898.7	179.3	-7.2	179.5	0.00	0.00	0.00
1,960.0	19.67	357.71	1,936.3	192.8	-7.7	192.9	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Wind 17-23
Company:	Trilogy Resources, LLC. Weld County, CO	TVD Reference:	WELL @ 4854.0ft (RKB - 13')
Project:	SEC.17-T4N-R67W	MD Reference:	WELL @ 4854.0ft (RKB - 13')
Site:	Wind 17-14 Pad Sec.17-T4N-R67W	North Reference:	True
Well:	Wind 17-23	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-19-12)		

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)
2,000.0	19.67	357.71	1,974.0	206.2	-8.2	206.4	0.00	0.00	0.00
2,040.0	19.67	357.71	2,011.7	219.7	-8.8	219.8	0.00	0.00	0.00
2,080.0	19.67	357.71	2,049.3	233.1	-9.3	233.3	0.00	0.00	0.00
2,120.0	19.67	357.71	2,087.0	246.6	-9.9	246.8	0.00	0.00	0.00
2,160.0	19.67	357.71	2,124.7	260.0	-10.4	260.2	0.00	0.00	0.00
2,200.0	19.67	357.71	2,162.3	273.5	-10.9	273.7	0.00	0.00	0.00
2,240.0	19.67	357.71	2,200.0	286.9	-11.5	287.2	0.00	0.00	0.00
2,280.0	19.67	357.71	2,237.7	300.4	-12.0	300.6	0.00	0.00	0.00
2,320.0	19.67	357.71	2,275.3	313.8	-12.5	314.1	0.00	0.00	0.00
2,360.0	19.67	357.71	2,313.0	327.3	-13.1	327.5	0.00	0.00	0.00
2,400.0	19.67	357.71	2,350.7	340.7	-13.6	341.0	0.00	0.00	0.00
2,440.0	19.67	357.71	2,388.3	354.2	-14.2	354.5	0.00	0.00	0.00
2,480.0	19.67	357.71	2,426.0	367.6	-14.7	367.9	0.00	0.00	0.00
2,520.0	19.67	357.71	2,463.7	381.1	-15.2	381.4	0.00	0.00	0.00
2,560.0	19.67	357.71	2,501.3	394.5	-15.8	394.9	0.00	0.00	0.00
2,600.0	19.67	357.71	2,539.0	408.0	-16.3	408.3	0.00	0.00	0.00
2,640.0	19.67	357.71	2,576.7	421.5	-16.8	421.8	0.00	0.00	0.00
2,680.0	19.67	357.71	2,614.3	434.9	-17.4	435.3	0.00	0.00	0.00
2,720.0	19.67	357.71	2,652.0	448.4	-17.9	448.7	0.00	0.00	0.00
2,760.0	19.67	357.71	2,689.7	461.8	-18.5	462.2	0.00	0.00	0.00
2,800.0	19.67	357.71	2,727.3	475.3	-19.0	475.6	0.00	0.00	0.00
2,840.0	19.67	357.71	2,765.0	488.7	-19.5	489.1	0.00	0.00	0.00
2,880.0	19.67	357.71	2,802.7	502.2	-20.1	502.6	0.00	0.00	0.00
2,920.0	19.67	357.71	2,840.3	515.6	-20.6	516.0	0.00	0.00	0.00
2,960.0	19.67	357.71	2,878.0	529.1	-21.1	529.5	0.00	0.00	0.00
3,000.0	19.67	357.71	2,915.7	542.5	-21.7	543.0	0.00	0.00	0.00
3,040.0	19.67	357.71	2,953.3	556.0	-22.2	556.4	0.00	0.00	0.00
3,080.0	19.67	357.71	2,991.0	569.4	-22.8	569.9	0.00	0.00	0.00
3,120.0	19.67	357.71	3,028.7	582.9	-23.3	583.3	0.00	0.00	0.00
3,160.0	19.67	357.71	3,066.3	596.3	-23.8	596.8	0.00	0.00	0.00
3,200.0	19.67	357.71	3,104.0	609.8	-24.4	610.3	0.00	0.00	0.00
3,240.0	19.67	357.71	3,141.7	623.2	-24.9	623.7	0.00	0.00	0.00
3,280.0	19.67	357.71	3,179.3	636.7	-25.5	637.2	0.00	0.00	0.00
3,320.0	19.67	357.71	3,217.0	650.1	-26.0	650.7	0.00	0.00	0.00
3,360.0	19.67	357.71	3,254.6	663.6	-26.5	664.1	0.00	0.00	0.00
3,400.0	19.67	357.71	3,292.3	677.0	-27.1	677.6	0.00	0.00	0.00
3,439.0	19.67	357.71	3,329.0	690.2	-27.6	690.7	0.00	0.00	0.00
PARKMAN									
3,440.0	19.67	357.71	3,330.0	690.5	-27.6	691.1	0.00	0.00	0.00
3,480.0	19.67	357.71	3,367.6	704.0	-28.1	704.5	0.00	0.00	0.00
3,520.0	19.67	357.71	3,405.3	717.4	-28.7	718.0	0.00	0.00	0.00
3,560.0	19.67	357.71	3,443.0	730.9	-29.2	731.4	0.00	0.00	0.00
3,600.0	19.67	357.71	3,480.6	744.3	-29.8	744.9	0.00	0.00	0.00
3,640.0	19.67	357.71	3,518.3	757.8	-30.3	758.4	0.00	0.00	0.00
3,680.0	19.67	357.71	3,556.0	771.2	-30.8	771.8	0.00	0.00	0.00
3,720.0	19.67	357.71	3,593.6	784.7	-31.4	785.3	0.00	0.00	0.00
3,760.0	19.67	357.71	3,631.3	798.1	-31.9	798.8	0.00	0.00	0.00
3,800.0	19.67	357.71	3,669.0	811.6	-32.4	812.2	0.00	0.00	0.00
3,840.0	19.67	357.71	3,706.6	825.0	-33.0	825.7	0.00	0.00	0.00
3,880.0	19.67	357.71	3,744.3	838.5	-33.5	839.1	0.00	0.00	0.00
3,920.0	19.67	357.71	3,782.0	851.9	-34.1	852.6	0.00	0.00	0.00
3,960.0	19.67	357.71	3,819.6	865.4	-34.6	866.1	0.00	0.00	0.00
4,000.0	19.67	357.71	3,857.3	878.8	-35.1	879.5	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Wind 17-23
Company:	Trilogy Resources, LLC. Weld County, CO	TVD Reference:	WELL @ 4854.0ft (RKB - 13')
Project:	SEC.17-T4N-R67W	MD Reference:	WELL @ 4854.0ft (RKB - 13')
Site:	Wind 17-14 Pad Sec.17-T4N-R67W	North Reference:	True
Well:	Wind 17-23	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-19-12)		

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)
4,040.0	19.67	357.71	3,895.0	892.3	-35.7	893.0	0.00	0.00	0.00
4,080.0	19.67	357.71	3,932.6	905.7	-36.2	906.5	0.00	0.00	0.00
4,120.0	19.67	357.71	3,970.3	919.2	-36.7	919.9	0.00	0.00	0.00
4,160.0	19.67	357.71	4,008.0	932.6	-37.3	933.4	0.00	0.00	0.00
4,182.3	19.67	357.71	4,029.0	940.2	-37.6	940.9	0.00	0.00	0.00
SUSSEX									
4,200.0	19.67	357.71	4,045.6	946.1	-37.8	946.9	0.00	0.00	0.00
4,240.0	19.67	357.71	4,083.3	959.5	-38.4	960.3	0.00	0.00	0.00
4,280.0	19.67	357.71	4,121.0	973.0	-38.9	973.8	0.00	0.00	0.00
4,320.0	19.67	357.71	4,158.6	986.5	-39.4	987.2	0.00	0.00	0.00
4,360.0	19.67	357.71	4,196.3	999.9	-40.0	1,000.7	0.00	0.00	0.00
4,400.0	19.67	357.71	4,234.0	1,013.4	-40.5	1,014.2	0.00	0.00	0.00
4,440.0	19.67	357.71	4,271.6	1,026.8	-41.0	1,027.6	0.00	0.00	0.00
4,480.0	19.67	357.71	4,309.3	1,040.3	-41.6	1,041.1	0.00	0.00	0.00
4,520.0	19.67	357.71	4,347.0	1,053.7	-42.1	1,054.6	0.00	0.00	0.00
4,560.0	19.67	357.71	4,384.6	1,067.2	-42.7	1,068.0	0.00	0.00	0.00
4,585.9	19.67	357.71	4,409.0	1,075.9	-43.0	1,076.7	0.00	0.00	0.00
SHANNON									
4,600.0	19.67	357.71	4,422.3	1,080.6	-43.2	1,081.5	0.00	0.00	0.00
4,640.0	19.67	357.71	4,460.0	1,094.1	-43.7	1,094.9	0.00	0.00	0.00
4,680.0	19.67	357.71	4,497.6	1,107.5	-44.3	1,108.4	0.00	0.00	0.00
4,720.0	19.67	357.71	4,535.3	1,121.0	-44.8	1,121.9	0.00	0.00	0.00
4,760.0	19.67	357.71	4,573.0	1,134.4	-45.3	1,135.3	0.00	0.00	0.00
4,800.0	19.67	357.71	4,610.6	1,147.9	-45.9	1,148.8	0.00	0.00	0.00
4,840.0	19.67	357.71	4,648.3	1,161.3	-46.4	1,162.3	0.00	0.00	0.00
4,880.0	19.67	357.71	4,686.0	1,174.8	-47.0	1,175.7	0.00	0.00	0.00
4,920.0	19.67	357.71	4,723.6	1,188.2	-47.5	1,189.2	0.00	0.00	0.00
4,960.0	19.67	357.71	4,761.3	1,201.7	-48.0	1,202.7	0.00	0.00	0.00
5,000.0	19.67	357.71	4,799.0	1,215.1	-48.6	1,216.1	0.00	0.00	0.00
5,039.1	19.67	357.71	4,835.8	1,228.3	-49.1	1,229.3	0.00	0.00	0.00
5,040.0	19.65	357.71	4,836.6	1,228.6	-49.1	1,229.6	2.00	-2.00	0.00
5,080.0	18.85	357.71	4,874.4	1,241.8	-49.6	1,242.8	2.00	-2.00	0.00
5,120.0	18.05	357.71	4,912.3	1,254.4	-50.1	1,255.4	2.00	-2.00	0.00
5,160.0	17.25	357.71	4,950.5	1,266.5	-50.6	1,267.6	2.00	-2.00	0.00
5,200.0	16.45	357.71	4,988.7	1,278.1	-51.1	1,279.1	2.00	-2.00	0.00
5,240.0	15.65	357.71	5,027.2	1,289.2	-51.5	1,290.2	2.00	-2.00	0.00
5,280.0	14.85	357.71	5,065.8	1,299.7	-52.0	1,300.7	2.00	-2.00	0.00
5,320.0	14.05	357.71	5,104.5	1,309.7	-52.4	1,310.7	2.00	-2.00	0.00
5,360.0	13.25	357.71	5,143.4	1,319.1	-52.7	1,320.1	2.00	-2.00	0.00
5,400.0	12.45	357.71	5,182.4	1,328.0	-53.1	1,329.0	2.00	-2.00	0.00
5,440.0	11.65	357.71	5,221.5	1,336.3	-53.4	1,337.4	2.00	-2.00	0.00
5,480.0	10.85	357.71	5,260.7	1,344.1	-53.7	1,345.2	2.00	-2.00	0.00
5,520.0	10.05	357.71	5,300.1	1,351.4	-54.0	1,352.5	2.00	-2.00	0.00
5,560.0	9.25	357.71	5,339.5	1,358.1	-54.3	1,359.2	2.00	-2.00	0.00
5,600.0	8.45	357.71	5,379.0	1,364.2	-54.5	1,365.3	2.00	-2.00	0.00
5,640.0	7.65	357.71	5,418.6	1,369.8	-54.8	1,370.9	2.00	-2.00	0.00
5,680.0	6.85	357.71	5,458.3	1,374.9	-55.0	1,376.0	2.00	-2.00	0.00
5,720.0	6.05	357.71	5,498.0	1,379.4	-55.1	1,380.5	2.00	-2.00	0.00
5,760.0	5.25	357.71	5,537.8	1,383.3	-55.3	1,384.4	2.00	-2.00	0.00
5,800.0	4.45	357.71	5,577.7	1,386.7	-55.4	1,387.8	2.00	-2.00	0.00
5,840.0	3.65	357.71	5,617.6	1,389.5	-55.5	1,390.6	2.00	-2.00	0.00
5,880.0	2.85	357.71	5,657.5	1,391.8	-55.6	1,392.9	2.00	-2.00	0.00
5,920.0	2.05	357.71	5,697.5	1,393.5	-55.7	1,394.6	2.00	-2.00	0.00
5,960.0	1.25	357.71	5,737.5	1,394.6	-55.8	1,395.7	2.00	-2.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Wind 17-23
Company:	Trilogy Resources, LLC. Weld County, CO	TVD Reference:	WELL @ 4854.0ft (RKB - 13')
Project:	SEC.17-T4N-R67W	MD Reference:	WELL @ 4854.0ft (RKB - 13')
Site:	Wind 17-14 Pad Sec.17-T4N-R67W	North Reference:	True
Well:	Wind 17-23	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-19-12)		

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)
6,000.0	0.45	357.71	5,777.5	1,395.2	-55.8	1,396.3	2.00	-2.00	0.00
6,022.5	0.00	0.00	5,800.0	1,395.3	-55.8	1,396.4	2.00	-2.00	0.00
TARGET BHL 1971'FSL & 1832'FWL									
6,040.0	0.00	0.00	5,817.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,080.0	0.00	0.00	5,857.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,120.0	0.00	0.00	5,897.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,160.0	0.00	0.00	5,937.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,200.0	0.00	0.00	5,977.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,240.0	0.00	0.00	6,017.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,280.0	0.00	0.00	6,057.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,320.0	0.00	0.00	6,097.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,360.0	0.00	0.00	6,137.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,400.0	0.00	0.00	6,177.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,440.0	0.00	0.00	6,217.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,480.0	0.00	0.00	6,257.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,520.0	0.00	0.00	6,297.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,560.0	0.00	0.00	6,337.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,600.0	0.00	0.00	6,377.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,640.0	0.00	0.00	6,417.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,680.0	0.00	0.00	6,457.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,720.0	0.00	0.00	6,497.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,760.0	0.00	0.00	6,537.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,800.0	0.00	0.00	6,577.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,840.0	0.00	0.00	6,617.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,880.0	0.00	0.00	6,657.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,920.0	0.00	0.00	6,697.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,960.0	0.00	0.00	6,737.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
6,981.5	0.00	0.00	6,759.0	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
NIORARA - LEGAL BOX 400' X 400', 1976'FSL & 1835'FWL - TARGET CIRCLE 1971'FSL & 1832'FWL									
7,000.0	0.00	0.00	6,777.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
7,040.0	0.00	0.00	6,817.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
7,080.0	0.00	0.00	6,857.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
7,120.0	0.00	0.00	6,897.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
7,160.0	0.00	0.00	6,937.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
7,200.0	0.00	0.00	6,977.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
7,240.0	0.00	0.00	7,017.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
7,280.0	0.00	0.00	7,057.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
7,284.5	0.00	0.00	7,062.0	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
FT HAYS									
7,306.5	0.00	0.00	7,084.0	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
CODELL									
7,320.0	0.00	0.00	7,097.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
7,360.0	0.00	0.00	7,137.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
7,400.0	0.00	0.00	7,177.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
7,440.0	0.00	0.00	7,217.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
7,480.0	0.00	0.00	7,257.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
7,520.0	0.00	0.00	7,297.5	1,395.3	-55.8	1,396.4	0.00	0.00	0.00
7,537.5	0.00	0.00	7,315.0	1,395.3	-55.8	1,396.4	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Wind 17-23
Company:	Trilogy Resources, LLC. Weld County, CO	TVD Reference:	WELL @ 4854.0ft (RKB - 13')
Project:	SEC.17-T4N-R67W	MD Reference:	WELL @ 4854.0ft (RKB - 13')
Site:	Wind 17-14 Pad Sec.17-T4N-R67W	North Reference:	True
Well:	Wind 17-23	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-19-12)		

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)		
LEGAL BOX 400' X 400'	0.00	0.00	6,759.0	1,400.3	-52.8	1,356,758.37	3,162,658.45	40.311234	-104.916729
- plan misses target center by 5.8ft at 6981.5ft MD (6759.0 TVD, 1395.3 N, -55.8 E)									
- Rectangle (sides W400.0 H400.0 D556.0)									
TARGET CIRCLE 197'	0.00	0.00	6,759.0	1,395.3	-55.8	1,356,753.35	3,162,655.51	40.311220	-104.916740
- plan hits target center									
- Circle (radius 75.0)									
TARGET BHL 1971'F:	0.00	0.00	5,800.0	1,395.3	-55.8	1,356,753.35	3,162,655.51	40.311220	-104.916740
- plan hits target center									
- Point									

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

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,439.0	3,329.0	PARKMAN		0.00		
4,182.3	4,029.0	SUSSEX		0.00		
4,585.9	4,409.0	SHANNON		0.00		
6,981.5	6,759.0	NIOBRARA		0.00		
7,284.5	7,062.0	FT HAYS		0.00		
7,306.5	7,084.0	CODELL		0.00		



Trilogy Resources, LLC. Weld County, CO

SEC.17-T4N-R67W

Wind 17-14 Pad Sec.17-T4N-R67W

Wind 17-23

Wellbore #1

Plan #1 (11-19-12)

Anticollision Report

20 November, 2012

Offset Design													Wind 17-14 Pad Sec.17-T4N-R67W - Wind 17-13 - Wellbore #1 - Plan #1 (11-19-12)		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	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)						
2,000.0	1,974.0	1,919.5	1,847.6	5.7	9.4	-58.47	340.8	-307.4	351.2	339.9	11.33	31.007					
2,100.0	2,068.2	2,016.4	1,937.0	6.3	10.1	-60.82	368.7	-332.3	371.1	358.7	12.45	29.801					
2,200.0	2,162.3	2,113.2	2,026.4	6.9	10.9	-62.94	396.5	-357.3	391.6	377.9	13.62	28.743					
2,300.0	2,256.5	2,210.1	2,115.8	7.5	11.7	-64.85	424.4	-382.2	412.5	397.6	14.83	27.820					
2,400.0	2,350.7	2,307.0	2,205.2	8.1	12.4	-66.58	452.3	-407.1	433.8	417.7	16.06	27.014					
2,500.0	2,444.8	2,403.9	2,294.5	8.8	13.2	-68.15	480.1	-432.1	455.5	438.1	17.31	26.310					
2,600.0	2,539.0	2,500.8	2,383.9	9.4	14.0	-69.58	508.0	-457.0	477.4	458.8	18.58	25.694					
2,700.0	2,633.2	2,597.7	2,473.3	10.0	14.7	-70.88	535.8	-481.9	499.7	479.8	19.86	25.153					
2,800.0	2,727.3	2,694.6	2,562.7	10.7	15.5	-72.07	563.7	-506.9	522.1	501.0	21.16	24.676					
2,900.0	2,821.5	2,791.5	2,652.1	11.3	16.3	-73.16	591.5	-531.8	544.8	522.3	22.46	24.254					
3,000.0	2,915.7	2,888.4	2,741.5	12.0	17.0	-74.17	619.4	-556.7	567.6	543.8	23.77	23.878					
3,100.0	3,009.8	2,985.2	2,830.9	12.6	17.8	-75.10	647.2	-581.7	590.6	565.5	25.09	23.543					
3,200.0	3,104.0	3,082.1	2,920.3	13.3	18.6	-75.96	675.1	-606.6	613.7	587.3	26.40	23.242					
3,300.0	3,198.1	3,179.0	3,009.6	13.9	19.4	-76.76	702.9	-631.5	636.9	609.2	27.73	22.972					
3,400.0	3,292.3	3,275.9	3,099.0	14.6	20.1	-77.50	730.8	-656.4	660.3	631.2	29.05	22.727					
3,500.0	3,386.5	3,372.8	3,188.4	15.2	20.9	-78.19	758.7	-681.4	683.7	653.4	30.38	22.506					
3,600.0	3,480.6	3,469.7	3,277.8	15.9	21.7	-78.84	786.5	-706.3	707.3	675.6	31.71	22.304					
3,700.0	3,574.8	3,566.6	3,367.2	16.5	22.5	-79.44	814.4	-731.2	730.9	697.9	33.04	22.120					
3,800.0	3,669.0	3,663.5	3,456.6	17.2	23.2	-80.01	842.2	-756.2	754.6	720.2	34.37	21.952					
3,900.0	3,763.1	3,760.4	3,546.0	17.8	24.0	-80.54	870.1	-781.1	778.3	742.6	35.71	21.797					
4,000.0	3,857.3	3,857.3	3,635.4	18.5	24.8	-81.04	897.9	-806.0	802.2	765.1	37.04	21.655					
4,100.0	3,951.5	3,954.1	3,724.7	19.1	25.5	-81.51	925.8	-831.0	826.0	787.7	38.38	21.524					
4,200.0	4,045.6	4,051.0	3,814.1	19.8	26.3	-81.96	953.6	-855.9	850.0	810.2	39.71	21.402					
4,300.0	4,139.8	4,147.9	3,903.5	20.5	27.1	-82.38	981.5	-880.8	873.9	832.9	41.05	21.289					
4,400.0	4,234.0	4,244.8	3,992.9	21.1	27.9	-82.78	1,009.3	-905.8	897.9	855.6	42.39	21.185					
4,500.0	4,328.1	4,341.7	4,082.3	21.8	28.6	-83.16	1,037.2	-930.7	922.0	878.3	43.72	21.087					
4,600.0	4,422.3	4,438.6	4,171.7	22.4	29.4	-83.52	1,065.1	-955.6	946.1	901.0	45.06	20.996					
4,700.0	4,516.5	4,535.5	4,261.1	23.1	30.2	-83.86	1,092.9	-980.5	970.2	923.8	46.40	20.911					
4,800.0	4,610.6	4,632.4	4,350.5	23.8	31.0	-84.18	1,120.8	-1,005.5	994.3	946.6	47.73	20.831					
4,900.0	4,704.8	4,729.3	4,439.8	24.4	31.7	-84.49	1,148.6	-1,030.4	1,018.5	969.5	49.07	20.756					
5,000.0	4,799.0	4,826.1	4,529.2	25.1	32.5	-84.79	1,176.5	-1,055.3	1,042.7	992.3	50.41	20.686					
5,039.1	4,835.8	4,864.0	4,564.2	25.3	32.8	-84.90	1,187.4	-1,065.1	1,052.2	1,001.3	50.93	20.659					
5,100.0	4,893.3	4,923.0	4,618.6	25.7	33.3	-85.34	1,204.3	-1,080.3	1,067.0	1,015.2	51.76	20.614					
5,200.0	4,988.7	5,020.0	4,708.1	26.2	34.1	-85.90	1,232.2	-1,105.2	1,091.6	1,038.6	52.98	20.602					
5,300.0	5,085.1	5,117.8	4,798.3	26.6	34.8	-86.29	1,260.3	-1,130.4	1,116.3	1,062.2	54.12	20.627					
5,400.0	5,182.4	5,249.6	4,921.1	27.0	35.7	-86.49	1,296.0	-1,162.3	1,139.8	1,084.6	55.24	20.633					
5,500.0	5,280.4	5,383.3	5,047.8	27.3	36.4	-86.63	1,327.8	-1,190.8	1,160.5	1,104.2	56.21	20.646					
5,600.0	5,379.0	5,518.8	5,178.0	27.6	37.0	-86.71	1,355.6	-1,215.6	1,178.2	1,121.2	57.05	20.653					
5,700.0	5,478.2	5,655.9	5,311.5	27.9	37.6	-86.74	1,378.9	-1,236.6	1,193.1	1,135.3	57.76	20.657					
5,800.0	5,577.7	5,794.4	5,447.6	28.1	38.0	-86.71	1,397.7	-1,253.3	1,204.9	1,146.5	58.34	20.653					
5,900.0	5,677.5	5,934.0	5,586.0	28.3	38.4	-86.63	1,411.6	-1,265.8	1,213.7	1,154.9	58.78	20.649					
6,000.0	5,777.5	6,074.4	5,725.9	28.4	38.6	-86.50	1,420.5	-1,273.8	1,219.3	1,160.2	59.08	20.638					
6,022.5	5,800.0	6,106.1	5,757.5	28.4	38.7	-88.75	1,421.8	-1,274.9	1,220.2	1,161.0	59.13	20.635					
6,100.0	5,877.5	6,215.4	5,866.8	28.5	38.8	-88.64	1,424.3	-1,277.2	1,221.8	1,162.5	59.28	20.610					
6,200.0	5,977.5	6,325.1	5,976.5	28.6	38.8	-88.63	1,424.5	-1,277.3	1,221.9	1,162.4	59.46	20.548					
6,300.0	6,077.5	6,425.1	6,076.5	28.7	38.9	-88.63	1,424.5	-1,277.3	1,221.9	1,162.2	59.64	20.486					
6,400.0	6,177.5	6,525.1	6,176.5	28.8	39.0	-88.63	1,424.5	-1,277.3	1,221.9	1,162.0	59.83	20.423					
6,500.0	6,277.5	6,625.1	6,276.5	28.9	39.1	-88.63	1,424.5	-1,277.3	1,221.9	1,161.9	60.01	20.360					
6,600.0	6,377.5	6,725.1	6,376.5	29.0	39.1	-88.63	1,424.5	-1,277.3	1,221.9	1,161.7	60.20	20.296					
6,700.0	6,477.5	6,825.1	6,476.5	29.1	39.2	-88.63	1,424.5	-1,277.3	1,221.9	1,161.5	60.39	20.232					
6,800.0	6,577.5	6,925.1	6,576.5	29.2	39.3	-88.63	1,424.5	-1,277.3	1,221.9	1,161.3	60.59	20.167					
6,900.0	6,677.5	7,025.1	6,676.5	29.3	39.4	-88.63	1,424.5	-1,277.3	1,221.9	1,161.1	60.79	20.101					

Company:	Trilogy Resources, LLC. Weld County, CO	Local Co-ordinate Reference:	Well Wind 17-23
Project:	SEC.17-T4N-R67W	TVD Reference:	WELL @ 4854.0ft (RKB - 13')
Reference Site:	Wind 17-14 Pad Sec.17-T4N-R67W	MD Reference:	WELL @ 4854.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Wind 17-23	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (11-19-12)	Offset TVD Reference:	Offset Datum

Offset Design Wind 17-14 Pad Sec.17-T4N-R67W - Wind 17-13 - Wellbore #1 - Plan #1 (11-19-12)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,000.0	6,777.5	7,125.1	6,776.5	29.4	39.5	-88.63	1,424.5	-1,277.3	1,221.9	1,160.9	60.99	20.036	
7,100.0	6,877.5	7,225.1	6,876.5	29.5	39.5	-88.63	1,424.5	-1,277.3	1,221.9	1,160.7	61.19	19.969	
7,200.0	6,977.5	7,325.1	6,976.5	29.6	39.6	-88.63	1,424.5	-1,277.3	1,221.9	1,160.5	61.39	19.903	
7,300.0	7,077.5	7,425.1	7,076.5	29.7	39.7	-88.63	1,424.5	-1,277.3	1,221.9	1,160.3	61.60	19.836	
7,400.0	7,177.5	7,525.1	7,176.5	29.8	39.8	-88.63	1,424.5	-1,277.3	1,221.9	1,160.1	61.81	19.768	
7,500.0	7,277.5	7,625.1	7,276.5	29.9	39.9	-88.63	1,424.5	-1,277.3	1,221.9	1,159.9	62.02	19.700	
7,537.5	7,315.0	7,662.6	7,314.0	30.0	39.9	-88.63	1,424.5	-1,277.3	1,221.9	1,159.8	62.10	19.675 SF	

Offset Design													Wind 17-14 Pad Sec.17-T4N-R67W - Wind 17-14 - Wellbore #1 - Plan #1 (11-19-12)		Offset Site Error:		0.0 ft
Survey Program: 0-MWD													Offset Well Error:		0.0 ft		
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-58.6	58.6								
100.0	100.0	98.0	98.0	0.1	0.1	-90.00	0.0	-58.6	58.6	58.3	0.22	263.208					
200.0	200.0	198.0	198.0	0.3	0.3	-90.00	0.0	-58.6	58.6	57.9	0.67	87.443					
300.0	300.0	298.0	298.0	0.6	0.6	-90.00	0.0	-58.6	58.6	57.5	1.12	52.325					
400.0	400.0	398.0	398.0	0.8	0.8	-90.00	0.0	-58.6	58.6	57.0	1.57	37.332					
500.0	500.0	498.0	498.0	1.0	1.0	-90.00	0.0	-58.6	58.6	56.6	2.02	29.018					
600.0	600.0	598.0	598.0	1.2	1.2	-90.00	0.0	-58.6	58.6	56.1	2.47	23.732					
700.0	700.0	698.0	698.0	1.5	1.5	-90.00	0.0	-58.6	58.6	55.7	2.92	20.076					
800.0	800.0	798.0	798.0	1.7	1.7	-90.00	0.0	-58.6	58.6	55.2	3.37	17.395					
900.0	900.0	898.0	898.0	1.9	1.9	-90.00	0.0	-58.6	58.6	54.8	3.82	15.346					
1,000.0	1,000.0	998.0	998.0	2.1	2.1	-89.42	0.0	-58.6	58.5	54.3	4.27	13.722					
1,015.7	1,015.7	1,013.7	1,013.7	2.2	2.2	-90.00	0.0	-58.6	58.5	54.2	4.34	13.498 CC					
1,100.0	1,099.8	1,097.8	1,097.8	2.4	2.4	-94.53	0.0	-58.6	58.7	54.0	4.71	12.454 ES					
1,200.0	1,199.5	1,195.5	1,195.5	2.6	2.6	-102.10	0.1	-60.2	61.6	56.4	5.15	11.945 SF					
1,300.0	1,298.7	1,292.7	1,292.6	2.8	2.8	-110.21	0.6	-65.0	69.6	64.0	5.60	12.433					
1,400.0	1,397.5	1,389.1	1,388.6	3.1	3.0	-117.23	1.3	-73.1	83.2	77.1	6.07	13.714					
1,500.0	1,495.6	1,484.5	1,483.3	3.4	3.2	-122.53	2.2	-84.2	102.1	95.5	6.56	15.569					
1,600.0	1,593.1	1,578.5	1,576.3	3.8	3.5	-126.22	3.5	-98.3	126.0	118.9	7.08	17.794					
1,700.0	1,689.6	1,671.0	1,667.2	4.2	3.7	-128.68	4.9	-115.1	154.5	146.9	7.64	20.220					
1,800.0	1,785.3	1,761.7	1,755.8	4.6	4.0	-130.26	6.6	-134.4	187.5	179.2	8.25	22.717					
1,883.4	1,864.2	1,835.8	1,827.8	5.1	4.3	-131.10	8.2	-152.2	218.2	209.4	8.80	24.785					
1,900.0	1,879.8	1,850.4	1,841.9	5.2	4.4	-131.32	8.5	-155.9	224.6	215.6	8.92	25.177					
2,000.0	1,974.0	1,937.6	1,925.7	5.7	4.8	-132.14	10.6	-179.7	264.2	254.6	9.65	27.377					
2,100.0	2,068.2	2,028.3	2,012.5	6.3	5.2	-132.49	12.9	-206.0	304.9	294.5	10.44	29.211					
2,200.0	2,162.3	2,119.6	2,099.8	6.9	5.7	-132.76	15.2	-232.6	345.7	334.4	11.25	30.716					
2,300.0	2,256.5	2,210.9	2,187.2	7.5	6.2	-132.97	17.5	-259.1	386.4	374.3	12.09	31.956					
2,400.0	2,350.7	2,302.3	2,274.5	8.1	6.7	-133.14	19.8	-285.7	427.2	414.2	12.95	32.986					
2,500.0	2,444.8	2,393.6	2,361.8	8.8	7.2	-133.28	22.1	-312.2	467.9	454.1	13.82	33.848					
2,600.0	2,539.0	2,484.9	2,449.2	9.4	7.7	-133.40	24.5	-338.7	508.7	494.0	14.71	34.577					
2,700.0	2,633.2	2,576.2	2,536.5	10.0	8.2	-133.51	26.8	-365.3	549.5	533.8	15.61	35.199					
2,800.0	2,727.3	2,667.5	2,623.9	10.7	8.8	-133.59	29.1	-391.8	590.2	573.7	16.52	35.734					
2,900.0	2,821.5	2,758.8	2,711.2	11.3	9.3	-133.67	31.4	-418.4	631.0	613.5	17.43	36.198					
3,000.0	2,915.7	2,850.1	2,798.5	12.0	9.8	-133.74	33.7	-444.9	671.7	653.4	18.35	36.603					
3,100.0	3,009.8	2,941.4	2,885.9	12.6	10.4	-133.80	36.0	-471.4	712.5	693.2	19.28	36.958					
3,200.0	3,104.0	3,032.8	2,973.2	13.3	10.9	-133.85	38.4	-498.0	753.3	733.1	20.21	37.272					
3,300.0	3,198.1	3,124.1	3,060.6	13.9	11.5	-133.90	40.7	-524.5	794.0	772.9	21.15	37.551					
3,400.0	3,292.3	3,215.4	3,147.9	14.6	12.0	-133.94	43.0	-551.1	834.8	812.7	22.08	37.800					
3,500.0	3,386.5	3,306.7	3,235.2	15.2	12.6	-133.98	45.3	-577.6	875.6	852.5	23.03	38.023					
3,600.0	3,480.6	3,398.0	3,322.6	15.9	13.2	-134.01	47.6	-604.2	916.3	892.3	23.97	38.225					
3,700.0	3,574.8	3,489.3	3,409.9	16.5	13.7	-134.04	50.0	-630.7	957.1	932.2	24.92	38.407					
3,800.0	3,669.0	3,580.6	3,497.3	17.2	14.3	-134.07	52.3	-657.2	997.8	972.0	25.87	38.572					
3,900.0	3,763.1	3,671.9	3,584.6	17.8	14.8	-134.10	54.6	-683.8	1,038.6	1,011.8	26.82	38.723					
4,000.0	3,857.3	3,763.3	3,671.9	18.5	15.4	-134.13	56.9	-710.3	1,079.4	1,051.6	27.78	38.861					
4,100.0	3,951.5	3,854.6	3,759.3	19.1	15.9	-134.15	59.2	-736.9	1,120.1	1,091.4	28.73	38.987					
4,200.0	4,045.6	3,945.9	3,846.6	19.8	16.5	-134.17	61.5	-763.4	1,160.9	1,131.2	29.69	39.104					
4,300.0	4,139.8	4,037.2	3,934.0	20.5	17.1	-134.19	63.9	-789.9	1,201.7	1,171.0	30.65	39.211					
4,400.0	4,234.0	4,128.5	4,021.3	21.1	17.6	-134.21	66.2	-816.5	1,242.4	1,210.8	31.61	39.311					
4,500.0	4,328.1	4,219.8	4,108.6	21.8	18.2	-134.23	68.5	-843.0	1,283.2	1,250.6	32.57	39.403					
4,600.0	4,422.3	4,311.1	4,196.0	22.4	18.8	-134.25	70.8	-869.6	1,324.0	1,290.4	33.53	39.488					
4,700.0	4,516.5	4,402.4	4,283.3	23.1	19.3	-134.26	73.1	-896.1	1,364.7	1,330.2	34.49	39.568					
4,800.0	4,610.6	4,493.8	4,370.7	23.8	19.9	-134.28	75.4	-922.6	1,405.5	1,370.1	35.45	39.642					
4,900.0	4,704.8	4,585.1	4,458.0	24.4	20.5	-134.29	77.8	-949.2	1,446.3	1,409.9	36.42	39.712					

COMPASS 2003.21 Build 46

Company:	Trilogy Resources, LLC. Weld County, CO	Local Co-ordinate Reference:	Well Wind 17-23
Project:	SEC.17-T4N-R67W	TVD Reference:	WELL @ 4854.0ft (RKB - 13')
Reference Site:	Wind 17-14 Pad Sec.17-T4N-R67W	MD Reference:	WELL @ 4854.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Wind 17-23	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (11-19-12)	Offset TVD Reference:	Offset Datum

Offset Design Wind 17-14 Pad Sec.17-T4N-R67W - Wind 17-14 - Wellbore #1 - Plan #1 (11-19-12)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.0	4,799.0	4,676.4	4,545.3	25.1	21.0	-134.30	80.1	-975.7	1,487.0	1,449.7	37.38	39.777		
5,039.1	4,835.8	4,712.1	4,579.5	25.3	21.2	-134.31	81.0	-986.1	1,503.0	1,465.2	37.76	39.802		
5,100.0	4,893.3	4,767.9	4,632.9	25.7	21.6	-134.68	82.4	-1,002.3	1,527.4	1,489.0	38.40	39.779		
5,200.0	4,988.7	4,860.2	4,721.2	26.2	22.2	-135.17	84.8	-1,029.2	1,565.7	1,526.3	39.37	39.772		
5,300.0	5,085.1	4,953.4	4,810.3	26.6	22.7	-135.52	87.1	-1,056.2	1,601.6	1,561.3	40.31	39.735		
5,400.0	5,182.4	5,047.3	4,900.1	27.0	23.3	-135.75	89.5	-1,083.5	1,635.3	1,594.1	41.22	39.676		
5,500.0	5,280.4	5,156.2	5,004.4	27.3	24.0	-135.82	92.2	-1,114.9	1,666.5	1,624.4	42.14	39.551		
5,600.0	5,379.0	5,303.5	5,146.8	27.6	24.6	-135.73	95.5	-1,152.0	1,693.3	1,650.2	43.05	39.332		
5,700.0	5,478.2	5,454.7	5,294.9	27.9	25.1	-135.65	98.1	-1,182.5	1,714.6	1,670.8	43.81	39.134		
5,800.0	5,577.7	5,609.1	5,447.5	28.1	25.6	-135.60	100.1	-1,205.5	1,730.4	1,685.9	44.45	38.927		
5,900.0	5,677.5	5,765.7	5,603.4	28.3	25.9	-135.56	101.5	-1,220.4	1,740.4	1,695.5	44.94	38.726		
6,000.0	5,777.5	5,923.6	5,761.2	28.4	26.1	-135.54	102.0	-1,226.9	1,744.7	1,699.4	45.30	38.518		
6,022.5	5,800.0	5,959.3	5,796.8	28.4	26.1	-137.83	102.0	-1,227.2	1,744.9	1,699.5	45.36	38.471		
6,100.0	5,877.5	6,037.9	5,875.5	28.5	26.2	-137.83	102.0	-1,227.2	1,744.9	1,699.4	45.53	38.323		
6,200.0	5,977.5	6,137.9	5,975.5	28.6	26.3	-137.83	102.0	-1,227.2	1,744.9	1,699.1	45.77	38.122		
6,300.0	6,077.5	6,237.9	6,075.5	28.7	26.4	-137.83	102.0	-1,227.2	1,744.9	1,698.9	46.01	37.921		
6,400.0	6,177.5	6,337.9	6,175.5	28.8	26.6	-137.83	102.0	-1,227.2	1,744.9	1,698.6	46.26	37.720		
6,500.0	6,277.5	6,437.9	6,275.5	28.9	26.7	-137.83	102.0	-1,227.2	1,744.9	1,698.4	46.51	37.518		
6,600.0	6,377.5	6,537.9	6,375.5	29.0	26.8	-137.83	102.0	-1,227.2	1,744.9	1,698.1	46.76	37.316		
6,700.0	6,477.5	6,637.9	6,475.5	29.1	26.9	-137.83	102.0	-1,227.2	1,744.9	1,697.9	47.01	37.114		
6,800.0	6,577.5	6,737.9	6,575.5	29.2	27.0	-137.83	102.0	-1,227.2	1,744.9	1,697.6	47.27	36.912		
6,900.0	6,677.5	6,837.9	6,675.5	29.3	27.1	-137.83	102.0	-1,227.2	1,744.9	1,697.4	47.53	36.710		
7,000.0	6,777.5	6,937.9	6,775.5	29.4	27.2	-137.83	102.0	-1,227.2	1,744.9	1,697.1	47.80	36.508		
7,100.0	6,877.5	7,037.9	6,875.5	29.5	27.4	-137.83	102.0	-1,227.2	1,744.9	1,696.8	48.06	36.306		
7,200.0	6,977.5	7,137.9	6,975.5	29.6	27.5	-137.83	102.0	-1,227.2	1,744.9	1,696.6	48.33	36.104		
7,300.0	7,077.5	7,237.9	7,075.5	29.7	27.6	-137.83	102.0	-1,227.2	1,744.9	1,696.3	48.60	35.902		
7,400.0	7,177.5	7,337.9	7,175.5	29.8	27.7	-137.83	102.0	-1,227.2	1,744.9	1,696.0	48.88	35.701		
7,500.0	7,277.5	7,437.9	7,275.5	29.9	27.9	-137.83	102.0	-1,227.2	1,744.9	1,695.7	49.15	35.500		
7,537.5	7,315.0	7,475.4	7,313.0	30.0	27.9	-137.83	102.0	-1,227.2	1,744.9	1,695.6	49.26	35.425		

Company:	Trilogy Resources, LLC. Weld County, CO	Local Co-ordinate Reference:	Well Wind 17-23
Project:	SEC.17-T4N-R67W	TVD Reference:	WELL @ 4854.0ft (RKB - 13')
Reference Site:	Wind 17-14 Pad Sec.17-T4N-R67W	MD Reference:	WELL @ 4854.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Wind 17-23	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (11-19-12)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4854.0ft (RKB - 13')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Wind 17-23
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.38°



Company:	Trilogy Resources, LLC. Weld County, CO	Local Co-ordinate Reference:	Well Wind 17-23
Project:	SEC.17-T4N-R67W	TVD Reference:	WELL @ 4854.0ft (RKB - 13')
Reference Site:	Wind 17-14 Pad Sec.17-T4N-R67W	MD Reference:	WELL @ 4854.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Wind 17-23	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (11-19-12)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4854.0ft (RKB - 13')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Wind 17-23
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.38°

