



Well: Silverton 5-03-3L
Site: Section 04-T04N-R63W
Project: Weld County, Colorado
Wellbore: Original hole
Design: plan1

Section Details

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSec	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	KOP Begin 2°/100' build
3	3191.06	23.82	355.23	3157.04	243.21	-20.29	2.00	60.29	Begin 23.82° tangent section
4	6268.21	23.82	355.23	5972.05	1481.72	-123.60	0.00	367.29	Begin 10°/100' build/turn
5	7149.10	90.00	269.97	6479.00	1704.45	-696.36	10.00	969.03	LP Begin 90° lateral
6	16571.27	90.00	269.97	6479.00	1699.24	-10118.53	0.00	10260.22	PBHL/TD 16571.27 MD 6479.00 TVD

DESIGN TARGET DETAILS

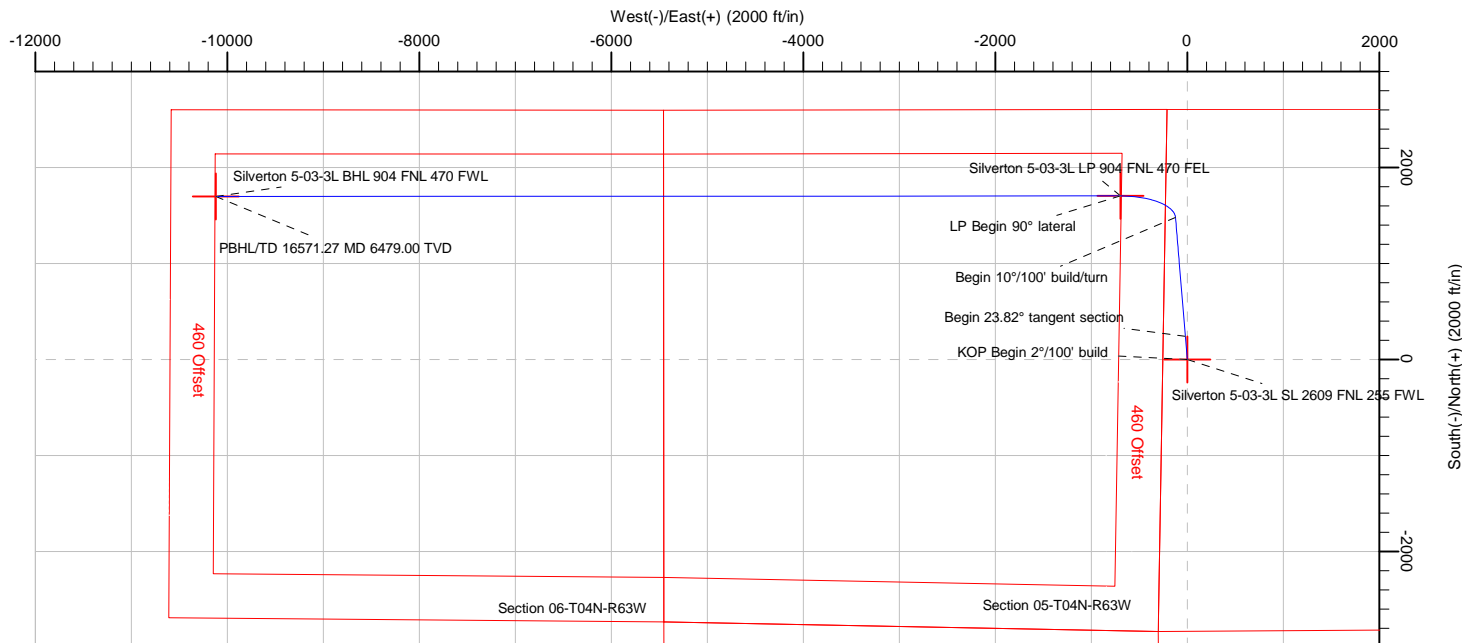
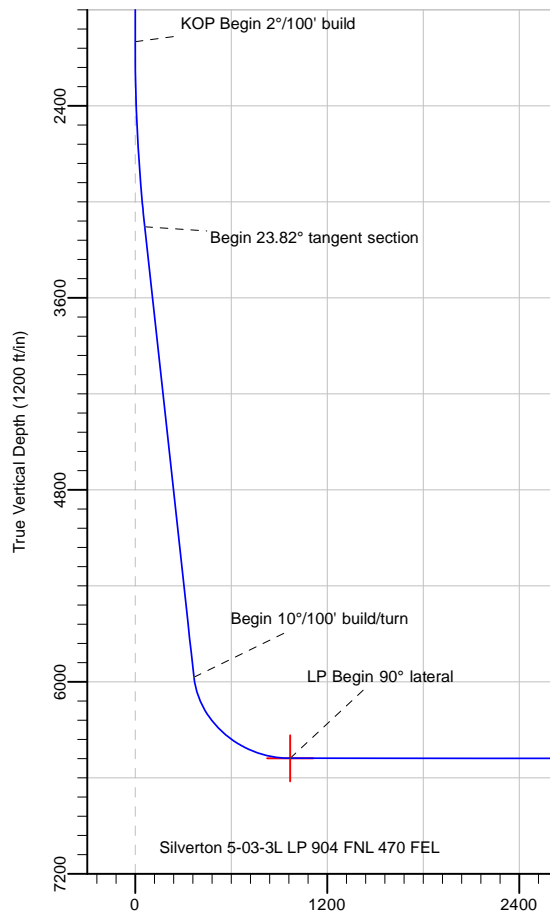
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Silverton 5-03-3L SL 2609 FNL 255 FWL	24.00	0.00	0.00	14651582.20	1793253.21	40.34154814	-104.45151338
Silverton 5-03-3L BHL 904 FNL 470 FWL	6479.00	1699.24	-10118.53	14653218.70	1783124.36	40.34620849	-104.48782752
Silverton 5-03-3L LP 904 FNL 470 FEL	6479.00	1704.45	-696.36	14653282.30	1792546.30	40.34622845	-104.45401253

Silverton 5-03-3L			
Surf loc: 2609 FNL 255 FWL Section 04-T04N-R63W			
NAD83 Colorado - HARN			
Universal Transverse Mercator (US Survey Feet)			
Zone 13N (108 W to 102 W)			
RKB=4628+24 @ 4652.00ft			
Northing	Easting	Latitude	Longitude
14651582.20	1793253.21	40.34154814	-104.45151338



Azimuths to True North
Magnetic North: 8.08°

Magnetic Field
Strength: 52227.6snT
Dip Angle: 66.90°
Date: 5/29/2018
Model: HDGM



Vertical Section at 279.53° (1200 ft/in)

Note: All lease lines and hard lines are estimates only and are subject to customers approval.

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-03-3L
Company:	Confluence Resources	TVD Reference:	RKB=4628+24 @ 4652.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=4628+24 @ 4652.00ft
Site:	Section 04-T04N-R63W	North Reference:	True
Well:	Silverton 5-03-3L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original hole		
Design:	plan1		

Project	Weld County, Colorado		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD83 Colorado - HARN		
Map Zone:	Zone 13N (108 W to 102 W)		

Site		Section 04-T04N-R63W			
Site Position:		Northing:	14,650,073.90 usft	Latitude:	40.33740565
From:	Map	Easting:	1,793,302.13 usft	Longitude:	-104.45137138
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.36 °

Well	Silverton 5-03-3L, Surf loc: 2609 FNL 255 FWL Section 04-T04N-R63W					
Well Position	+N/-S	0.00 ft	Northing:	14,651,582.20 usft	Latitude:	40.34154813
	+E/-W	0.00 ft	Easting:	1,793,253.21 usft	Longitude:	-104.45151339
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,628.00 ft

Wellbore	Original hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	5/29/2018	8.08	66.90	52,227.60000000

Design	plan1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	279.53

Plan Survey Tool Program	Date	5/29/2018		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	16,571.27 plan1 (Original hole)		

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,191.06	23.82	355.23	3,157.04	243.21	-20.29	2.00	2.00	0.00	355.23	
6,268.21	23.82	355.23	5,972.05	1,481.72	-123.60	0.00	0.00	0.00	0.00	
7,149.10	90.00	269.97	6,479.00	1,704.45	-696.36	10.00	7.51	-9.68	-85.67	Silverton 5-03-3L LP 5
16,571.27	90.00	269.97	6,479.00	1,699.24	-10,118.53	0.00	0.00	0.00	0.00	Silverton 5-03-3L BHL

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-03-3L
Company:	Confluence Resources	TVD Reference:	RKB=4628+24 @ 4652.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=4628+24 @ 4652.00ft
Site:	Section 04-T04N-R63W	North Reference:	True
Well:	Silverton 5-03-3L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original hole		
Design:	plan1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
100.00	0.00	0.00	100.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
200.00	0.00	0.00	200.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
300.00	0.00	0.00	300.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
400.00	0.00	0.00	400.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
500.00	0.00	0.00	500.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
600.00	0.00	0.00	600.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
700.00	0.00	0.00	700.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
800.00	0.00	0.00	800.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
900.00	0.00	0.00	900.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
1,100.00	0.00	0.00	1,100.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
1,200.00	0.00	0.00	1,200.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
1,300.00	0.00	0.00	1,300.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
1,400.00	0.00	0.00	1,400.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
1,500.00	0.00	0.00	1,500.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
1,600.00	0.00	0.00	1,600.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
1,700.00	0.00	0.00	1,700.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
1,800.00	0.00	0.00	1,800.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
1,900.00	0.00	0.00	1,900.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
2,000.00	0.00	0.00	2,000.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
KOP Begin 2°/100' build									
2,100.00	2.00	355.23	2,099.98	1.74	-0.15	14,651,583.94	1,793,253.05	40.34155291	-104.45151391
2,200.00	4.00	355.23	2,199.84	6.95	-0.58	14,651,589.15	1,793,252.59	40.34156723	-104.45151547
2,300.00	6.00	355.23	2,299.45	15.64	-1.30	14,651,597.83	1,793,251.81	40.34159108	-104.45151807
2,400.00	8.00	355.23	2,398.70	27.78	-2.32	14,651,609.97	1,793,250.72	40.34162443	-104.45152170
2,500.00	10.00	355.23	2,497.47	43.37	-3.62	14,651,625.55	1,793,249.32	40.34166723	-104.45152637
2,600.00	12.00	355.23	2,595.62	62.39	-5.20	14,651,644.55	1,793,247.62	40.34171944	-104.45153206
2,700.00	14.00	355.23	2,693.06	84.80	-7.07	14,651,666.95	1,793,245.61	40.34178100	-104.45153877
2,800.00	16.00	355.23	2,789.64	110.59	-9.23	14,651,692.73	1,793,243.30	40.34185182	-104.45154649
2,900.00	18.00	355.23	2,885.27	139.73	-11.66	14,651,721.85	1,793,240.69	40.34193182	-104.45155521
3,000.00	20.00	355.23	2,979.82	172.17	-14.36	14,651,754.27	1,793,237.78	40.34202090	-104.45156493
3,100.00	22.00	355.23	3,073.17	207.88	-17.34	14,651,789.97	1,793,234.58	40.34211896	-104.45157562
3,191.06	23.82	355.23	3,157.04	243.21	-20.29	14,651,825.27	1,793,231.42	40.34221597	-104.45158619
Begin 23.82° tangent section									
3,200.00	23.82	355.23	3,165.22	246.80	-20.59	14,651,828.87	1,793,231.09	40.34222585	-104.45158727
3,300.00	23.82	355.23	3,256.70	287.05	-23.94	14,651,869.10	1,793,227.49	40.34233637	-104.45159932
3,400.00	23.82	355.23	3,348.18	327.30	-27.30	14,651,909.32	1,793,223.88	40.34244689	-104.45161137
3,500.00	23.82	355.23	3,439.66	367.55	-30.66	14,651,949.55	1,793,220.27	40.34255741	-104.45162342
3,600.00	23.82	355.23	3,531.14	407.80	-34.02	14,651,989.78	1,793,216.67	40.34266793	-104.45163546
3,700.00	23.82	355.23	3,622.63	448.05	-37.37	14,652,030.00	1,793,213.06	40.34277845	-104.45164751
3,800.00	23.82	355.23	3,714.11	488.30	-40.73	14,652,070.23	1,793,209.45	40.34288897	-104.45165956
3,900.00	23.82	355.23	3,805.59	528.54	-44.09	14,652,110.46	1,793,205.85	40.34299949	-104.45167161
4,000.00	23.82	355.23	3,897.07	568.79	-47.45	14,652,150.68	1,793,202.24	40.34311001	-104.45168366
4,100.00	23.82	355.23	3,988.55	609.04	-50.80	14,652,190.91	1,793,198.63	40.34322053	-104.45169571
4,200.00	23.82	355.23	4,080.03	649.29	-54.16	14,652,231.14	1,793,195.03	40.34333105	-104.45170776
4,300.00	23.82	355.23	4,171.51	689.54	-57.52	14,652,271.37	1,793,191.42	40.34344157	-104.45171981
4,400.00	23.82	355.23	4,262.99	729.79	-60.88	14,652,311.59	1,793,187.81	40.34355209	-104.45173186
4,500.00	23.82	355.23	4,354.47	770.04	-64.23	14,652,351.82	1,793,184.21	40.34366262	-104.45174390
4,600.00	23.82	355.23	4,445.95	810.28	-67.59	14,652,392.05	1,793,180.60	40.34377314	-104.45175595
4,700.00	23.82	355.23	4,537.44	850.53	-70.95	14,652,432.27	1,793,176.99	40.34388366	-104.45176800
4,800.00	23.82	355.23	4,628.92	890.78	-74.31	14,652,472.50	1,793,173.39	40.34399418	-104.45178005
4,900.00	23.82	355.23	4,720.40	931.03	-77.66	14,652,512.73	1,793,169.78	40.34410470	-104.45179210
5,000.00	23.82	355.23	4,811.88	971.28	-81.02	14,652,552.95	1,793,166.17	40.34421522	-104.45180415

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-03-3L
Company:	Confluence Resources	TVD Reference:	RKB=4628+24 @ 4652.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=4628+24 @ 4652.00ft
Site:	Section 04-T04N-R63W	North Reference:	True
Well:	Silverton 5-03-3L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original hole		
Design:	plan1		

Planned Survey										
Measured			Vertical			Map	Map			
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Northing	Easting		Latitude	Longitude
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)			
5,100.00	23.82	355.23	4,903.36	1,011.53	-84.38	14,652,593.18	1,793,162.57		40.34432574	-104.45181620
5,200.00	23.82	355.23	4,994.84	1,051.78	-87.74	14,652,633.41	1,793,158.96		40.34443626	-104.45182825
5,300.00	23.82	355.23	5,086.32	1,092.03	-91.09	14,652,673.64	1,793,155.35		40.34454678	-104.45184030
5,400.00	23.82	355.23	5,177.80	1,132.27	-94.45	14,652,713.86	1,793,151.74		40.34465730	-104.45185235
5,500.00	23.82	355.23	5,269.28	1,172.52	-97.81	14,652,754.09	1,793,148.14		40.34476782	-104.45186440
5,600.00	23.82	355.23	5,360.76	1,212.77	-101.16	14,652,794.32	1,793,144.53		40.34487834	-104.45187645
5,700.00	23.82	355.23	5,452.25	1,253.02	-104.52	14,652,834.54	1,793,140.92		40.34498886	-104.45188850
5,800.00	23.82	355.23	5,543.73	1,293.27	-107.88	14,652,874.77	1,793,137.32		40.34509939	-104.45190055
5,900.00	23.82	355.23	5,635.21	1,333.52	-111.24	14,652,915.00	1,793,133.71		40.34520991	-104.45191260
6,000.00	23.82	355.23	5,726.69	1,373.77	-114.59	14,652,955.22	1,793,130.10		40.34532043	-104.45192465
6,100.00	23.82	355.23	5,818.17	1,414.01	-117.95	14,652,995.45	1,793,126.50		40.34543095	-104.45193670
6,200.00	23.82	355.23	5,909.65	1,454.26	-121.31	14,653,035.68	1,793,122.89		40.34554147	-104.45194875
6,268.21	23.82	355.23	5,972.05	1,481.72	-123.60	14,653,063.12	1,793,120.43		40.34561686	-104.45195697
Begin 10°/100' build/turn										
6,300.00	24.26	347.50	6,001.09	1,494.49	-125.55	14,653,075.88	1,793,118.40		40.34565194	-104.45196396
6,400.00	27.90	326.17	6,091.09	1,534.08	-143.07	14,653,115.36	1,793,100.64		40.34576065	-104.45202683
6,500.00	34.01	310.67	6,176.95	1,571.84	-177.39	14,653,152.90	1,793,066.08		40.34586432	-104.45215003
6,600.00	41.50	299.79	6,256.04	1,606.61	-227.49	14,653,187.37	1,793,015.77		40.34595981	-104.45232980
6,700.00	49.74	291.84	6,325.98	1,637.35	-291.82	14,653,217.70	1,792,951.25		40.34604421	-104.45256069
6,800.00	58.41	285.67	6,384.63	1,663.11	-368.44	14,653,242.99	1,792,874.47		40.34611495	-104.45283567
6,900.00	67.32	280.56	6,430.21	1,683.12	-455.02	14,653,262.46	1,792,787.76		40.34616988	-104.45314641
7,000.00	76.38	276.09	6,461.34	1,696.76	-548.94	14,653,275.52	1,792,693.77		40.34620735	-104.45348344
7,100.00	85.51	271.95	6,477.08	1,703.63	-647.32	14,653,281.78	1,792,595.34		40.34622620	-104.45383654
7,149.10	90.00	269.97	6,479.00	1,704.45	-696.36	14,653,282.30	1,792,546.30		40.34622845	-104.45401254
LP Begin 90° lateral										
7,200.00	90.00	269.97	6,479.00	1,704.42	-747.26	14,653,281.95	1,792,495.40		40.34622837	-104.45419521
7,300.00	90.00	269.97	6,479.00	1,704.37	-847.26	14,653,281.28	1,792,395.40		40.34622821	-104.45455410
7,400.00	90.00	269.97	6,479.00	1,704.31	-947.26	14,653,280.60	1,792,295.41		40.34622804	-104.45491299
7,500.00	90.00	269.97	6,479.00	1,704.26	-1,047.26	14,653,279.93	1,792,195.41		40.34622788	-104.45527187
7,600.00	90.00	269.97	6,479.00	1,704.20	-1,147.26	14,653,279.25	1,792,095.41		40.34622772	-104.45563076
7,700.00	90.00	269.97	6,479.00	1,704.15	-1,247.26	14,653,278.58	1,791,995.41		40.34622755	-104.45598965
7,800.00	90.00	269.97	6,479.00	1,704.09	-1,347.26	14,653,277.90	1,791,895.42		40.34622739	-104.45634854
7,900.00	90.00	269.97	6,479.00	1,704.04	-1,447.26	14,653,277.23	1,791,795.42		40.34622722	-104.45670742
8,000.00	90.00	269.97	6,479.00	1,703.98	-1,547.26	14,653,276.55	1,791,695.42		40.34622705	-104.45706631
8,100.00	90.00	269.97	6,479.00	1,703.93	-1,647.26	14,653,275.88	1,791,595.42		40.34622688	-104.45742520
8,200.00	90.00	269.97	6,479.00	1,703.87	-1,747.26	14,653,275.20	1,791,495.43		40.34622671	-104.45778408
8,300.00	90.00	269.97	6,479.00	1,703.82	-1,847.26	14,653,274.53	1,791,395.43		40.34622654	-104.45814297
8,400.00	90.00	269.97	6,479.00	1,703.76	-1,947.26	14,653,273.85	1,791,295.43		40.34622637	-104.45850186
8,500.00	90.00	269.97	6,479.00	1,703.71	-2,047.26	14,653,273.18	1,791,195.43		40.34622619	-104.45886074
8,600.00	90.00	269.97	6,479.00	1,703.65	-2,147.26	14,653,272.50	1,791,095.44		40.34622602	-104.45921963
8,700.00	90.00	269.97	6,479.00	1,703.59	-2,247.26	14,653,271.83	1,790,995.44		40.34622584	-104.45957852
8,800.00	90.00	269.97	6,479.00	1,703.54	-2,347.26	14,653,271.15	1,790,895.44		40.34622566	-104.45993740
8,900.00	90.00	269.97	6,479.00	1,703.48	-2,447.26	14,653,270.48	1,790,795.44		40.34622549	-104.46029629
9,000.00	90.00	269.97	6,479.00	1,703.43	-2,547.26	14,653,269.80	1,790,695.45		40.34622531	-104.46065518
9,100.00	90.00	269.97	6,479.00	1,703.37	-2,647.26	14,653,269.13	1,790,595.45		40.34622513	-104.46101407
9,200.00	90.00	269.97	6,479.00	1,703.32	-2,747.26	14,653,268.45	1,790,495.45		40.34622494	-104.46137295
9,300.00	90.00	269.97	6,479.00	1,703.26	-2,847.26	14,653,267.78	1,790,395.45		40.34622476	-104.46173184
9,400.00	90.00	269.97	6,479.00	1,703.21	-2,947.26	14,653,267.10	1,790,295.45		40.34622458	-104.46209073
9,500.00	90.00	269.97	6,479.00	1,703.15	-3,047.26	14,653,266.43	1,790,195.46		40.34622439	-104.46244961
9,600.00	90.00	269.97	6,479.00	1,703.10	-3,147.26	14,653,265.75	1,790,095.46		40.34622421	-104.46280850
9,700.00	90.00	269.97	6,479.00	1,703.04	-3,247.26	14,653,265.08	1,789,995.46		40.34622402	-104.46316739
9,800.00	90.00	269.97	6,479.00	1,702.99	-3,347.26	14,653,264.40	1,789,895.46		40.34622383	-104.46352627
9,900.00	90.00	269.97	6,479.00	1,702.93	-3,447.26	14,653,263.73	1,789,795.47		40.34622364	-104.46388516
10,000.00	90.00	269.97	6,479.00	1,702.88	-3,547.26	14,653,263.05	1,789,695.47		40.34622345	-104.46424405



Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-03-3L
Company:	Confluence Resources	TVD Reference:	RKB=4628+24 @ 4652.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=4628+24 @ 4652.00ft
Site:	Section 04-T04N-R63W	North Reference:	True
Well:	Silverton 5-03-3L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original hole		
Design:	plan1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
10,100.00	90.00	269.97	6,479.00	1,702.82	-3,647.26	14,653,262.38	1,789,595.47	40.34622326	-104.46460294	
10,200.00	90.00	269.97	6,479.00	1,702.77	-3,747.26	14,653,261.70	1,789,495.47	40.34622306	-104.46496182	
10,300.00	90.00	269.97	6,479.00	1,702.71	-3,847.26	14,653,261.03	1,789,395.48	40.34622287	-104.46532071	
10,400.00	90.00	269.97	6,479.00	1,702.66	-3,947.26	14,653,260.35	1,789,295.48	40.34622268	-104.46567960	
10,500.00	90.00	269.97	6,479.00	1,702.60	-4,047.26	14,653,259.68	1,789,195.48	40.34622248	-104.46603848	
10,600.00	90.00	269.97	6,479.00	1,702.54	-4,147.26	14,653,259.00	1,789,095.48	40.34622228	-104.46639737	
10,700.00	90.00	269.97	6,479.00	1,702.49	-4,247.26	14,653,258.33	1,788,995.49	40.34622208	-104.46675626	
10,800.00	90.00	269.97	6,479.00	1,702.43	-4,347.26	14,653,257.65	1,788,895.49	40.34622188	-104.46711515	
10,900.00	90.00	269.97	6,479.00	1,702.38	-4,447.26	14,653,256.98	1,788,795.49	40.34622168	-104.46747403	
11,000.00	90.00	269.97	6,479.00	1,702.32	-4,547.26	14,653,256.30	1,788,695.49	40.34622148	-104.46783292	
11,100.00	90.00	269.97	6,479.00	1,702.27	-4,647.26	14,653,255.63	1,788,595.50	40.34622128	-104.46819181	
11,200.00	90.00	269.97	6,479.00	1,702.21	-4,747.26	14,653,254.95	1,788,495.50	40.34622107	-104.46855070	
11,300.00	90.00	269.97	6,479.00	1,702.16	-4,847.26	14,653,254.28	1,788,395.50	40.34622087	-104.46890958	
11,400.00	90.00	269.97	6,479.00	1,702.10	-4,947.26	14,653,253.60	1,788,295.50	40.34622066	-104.46926847	
11,500.00	90.00	269.97	6,479.00	1,702.05	-5,047.26	14,653,252.93	1,788,195.51	40.34622046	-104.46962736	
11,600.00	90.00	269.97	6,479.00	1,701.99	-5,147.26	14,653,252.25	1,788,095.51	40.34622025	-104.46998624	
11,700.00	90.00	269.97	6,479.00	1,701.94	-5,247.26	14,653,251.58	1,787,995.51	40.34622004	-104.47034513	
11,800.00	90.00	269.97	6,479.00	1,701.88	-5,347.26	14,653,250.90	1,787,895.51	40.34621983	-104.47070402	
11,900.00	90.00	269.97	6,479.00	1,701.83	-5,447.26	14,653,250.23	1,787,795.52	40.34621962	-104.47106291	
12,000.00	90.00	269.97	6,479.00	1,701.77	-5,547.26	14,653,249.55	1,787,695.52	40.34621940	-104.47142179	
12,100.00	90.00	269.97	6,479.00	1,701.72	-5,647.26	14,653,248.88	1,787,595.52	40.34621919	-104.47178068	
12,200.00	90.00	269.97	6,479.00	1,701.66	-5,747.26	14,653,248.20	1,787,495.52	40.34621897	-104.47213957	
12,300.00	90.00	269.97	6,479.00	1,701.60	-5,847.26	14,653,247.53	1,787,395.53	40.34621876	-104.47249846	
12,400.00	90.00	269.97	6,479.00	1,701.55	-5,947.26	14,653,246.85	1,787,295.53	40.34621854	-104.47285734	
12,500.00	90.00	269.97	6,479.00	1,701.49	-6,047.26	14,653,246.18	1,787,195.53	40.34621832	-104.47321623	
12,600.00	90.00	269.97	6,479.00	1,701.44	-6,147.26	14,653,245.50	1,787,095.53	40.34621810	-104.47357512	
12,700.00	90.00	269.97	6,479.00	1,701.38	-6,247.26	14,653,244.83	1,786,995.54	40.34621788	-104.47393400	
12,800.00	90.00	269.97	6,479.00	1,701.33	-6,347.26	14,653,244.15	1,786,895.54	40.34621766	-104.47429289	
12,900.00	90.00	269.97	6,479.00	1,701.27	-6,447.26	14,653,243.48	1,786,795.54	40.34621744	-104.47465178	
13,000.00	90.00	269.97	6,479.00	1,701.22	-6,547.26	14,653,242.80	1,786,695.54	40.34621721	-104.47501067	
13,100.00	90.00	269.97	6,479.00	1,701.16	-6,647.26	14,653,242.13	1,786,595.55	40.34621699	-104.47536955	
13,200.00	90.00	269.97	6,479.00	1,701.11	-6,747.26	14,653,241.45	1,786,495.55	40.34621676	-104.47572844	
13,300.00	90.00	269.97	6,479.00	1,701.05	-6,847.26	14,653,240.78	1,786,395.55	40.34621653	-104.47608733	
13,400.00	90.00	269.97	6,479.00	1,701.00	-6,947.26	14,653,240.10	1,786,295.55	40.34621630	-104.47644622	
13,500.00	90.00	269.97	6,479.00	1,700.94	-7,047.26	14,653,239.43	1,786,195.56	40.34621608	-104.47680510	
13,600.00	90.00	269.97	6,479.00	1,700.89	-7,147.26	14,653,238.75	1,786,095.56	40.34621584	-104.47716399	
13,700.00	90.00	269.97	6,479.00	1,700.83	-7,247.26	14,653,238.08	1,785,995.56	40.34621561	-104.47752288	
13,800.00	90.00	269.97	6,479.00	1,700.78	-7,347.26	14,653,237.40	1,785,895.56	40.34621538	-104.47788177	
13,900.00	90.00	269.97	6,479.00	1,700.72	-7,447.26	14,653,236.73	1,785,795.57	40.34621515	-104.47824065	
14,000.00	90.00	269.97	6,479.00	1,700.67	-7,547.26	14,653,236.05	1,785,695.57	40.34621491	-104.47859954	
14,100.00	90.00	269.97	6,479.00	1,700.61	-7,647.26	14,653,235.38	1,785,595.57	40.34621467	-104.47895843	
14,200.00	90.00	269.97	6,479.00	1,700.55	-7,747.26	14,653,234.70	1,785,495.57	40.34621444	-104.47931732	
14,300.00	90.00	269.97	6,479.00	1,700.50	-7,847.26	14,653,234.03	1,785,395.58	40.34621420	-104.47967620	
14,400.00	90.00	269.97	6,479.00	1,700.44	-7,947.26	14,653,233.35	1,785,295.58	40.34621396	-104.48003509	
14,500.00	90.00	269.97	6,479.00	1,700.39	-8,047.26	14,653,232.68	1,785,195.58	40.34621372	-104.48039398	
14,600.00	90.00	269.97	6,479.00	1,700.33	-8,147.26	14,653,232.00	1,785,095.58	40.34621348	-104.48075287	
14,700.00	90.00	269.97	6,479.00	1,700.28	-8,247.26	14,653,231.33	1,784,995.59	40.34621323	-104.48111175	
14,800.00	90.00	269.97	6,479.00	1,700.22	-8,347.26	14,653,230.65	1,784,895.59	40.34621299	-104.48147064	
14,900.00	90.00	269.97	6,479.00	1,700.17	-8,447.26	14,653,229.98	1,784,795.59	40.34621274	-104.48182953	
15,000.00	90.00	269.97	6,479.00	1,700.11	-8,547.26	14,653,229.30	1,784,695.59	40.34621250	-104.48218842	
15,100.00	90.00	269.97	6,479.00	1,700.06	-8,647.26	14,653,228.63	1,784,595.60	40.34621225	-104.48254730	
15,200.00	90.00	269.97	6,479.00	1,700.00	-8,747.26	14,653,227.95	1,784,495.60	40.34621200	-104.48290619	
15,300.00	90.00	269.97	6,479.00	1,699.95	-8,847.26	14,653,227.28	1,784,395.60	40.34621175	-104.48326508	
15,400.00	90.00	269.97	6,479.00	1,699.89	-8,947.26	14,653,226.60	1,784,295.60	40.34621150	-104.48362397	
15,500.00	90.00	269.97	6,479.00	1,699.84	-9,047.26	14,653,225.93	1,784,195.61	40.34621125	-104.48398285	

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-03-3L
Company:	Confluence Resources	TVD Reference:	RKB=4628+24 @ 4652.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=4628+24 @ 4652.00ft
Site:	Section 04-T04N-R63W	North Reference:	True
Well:	Silverton 5-03-3L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original hole		
Design:	plan1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
15,600.00	90.00	269.97	6,479.00	1,699.78	-9,147.26	14,653,225.25	1,784,095.61	40.34621100	-104.48434173
15,700.00	90.00	269.97	6,479.00	1,699.73	-9,247.26	14,653,224.58	1,783,995.61	40.34621074	-104.48470062
15,800.00	90.00	269.97	6,479.00	1,699.67	-9,347.26	14,653,223.90	1,783,895.61	40.34621049	-104.48505951
15,900.00	90.00	269.97	6,479.00	1,699.62	-9,447.26	14,653,223.23	1,783,795.62	40.34621023	-104.48541840
16,000.00	90.00	269.97	6,479.00	1,699.56	-9,547.26	14,653,222.55	1,783,695.62	40.34620997	-104.48577728
16,100.00	90.00	269.97	6,479.00	1,699.50	-9,647.26	14,653,221.88	1,783,595.62	40.34620971	-104.48613617
16,200.00	90.00	269.97	6,479.00	1,699.45	-9,747.26	14,653,221.20	1,783,495.62	40.34620945	-104.48649506
16,300.00	90.00	269.97	6,479.00	1,699.39	-9,847.26	14,653,220.53	1,783,395.63	40.34620919	-104.48685395
16,400.00	90.00	269.97	6,479.00	1,699.34	-9,947.26	14,653,219.85	1,783,295.63	40.34620893	-104.48721283
16,500.00	90.00	269.97	6,479.00	1,699.28	-10,047.26	14,653,219.18	1,783,195.63	40.34620867	-104.48757172
16,571.27	90.00	269.97	6,479.00	1,699.24	-10,118.53	14,653,218.70	1,783,124.36	40.34620848	-104.48782751
PBHL/TD 16571.27 MD 6479.00 TVD									

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Silverton 5-03-3L SL 26C - plan hits target center - Point	0.00	0.00	24.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813	-104.45151339
Silverton 5-03-3L BHL 9C - plan hits target center - Point	0.00	0.00	6,479.00	1,699.24	-10,118.53	14,653,218.70	1,783,124.36	40.34620848	-104.48782751
Silverton 5-03-3L LP 90C - plan hits target center - Point	0.00	0.00	6,479.00	1,704.45	-696.36	14,653,282.30	1,792,546.30	40.34622845	-104.45401254

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
2,000.00	2,000.00	0.00	0.00	KOP Begin 2°/100' build
3,191.06	3,157.04	243.21	-20.29	Begin 23.82° tangent section
6,268.21	5,972.05	1,481.72	-123.60	Begin 10°/100' build/turn
7,149.10	6,479.00	1,704.45	-696.36	LP Begin 90° lateral
16,571.27	6,479.00	1,699.24	-10,118.53	PBHL/TD 16571.27 MD 6479.00 TVD

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-03-3L
Company:	Confluence Resources	TVD Reference:	RKB=4628+24 @ 4652.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=4628+24 @ 4652.00ft
Site:	Section 04-T04N-R63W	North Reference:	True
Well:	Silverton 5-03-3L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original hole		
Design:	plan1		

Project	Weld County, Colorado		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD83 Colorado - HARN		
Map Zone:	Zone 13N (108 W to 102 W)		

Site		Section 04-T04N-R63W			
Site Position:		Northing:	14,650,073.90 usft	Latitude:	40.33740565
From:	Map	Easting:	1,793,302.13 usft	Longitude:	-104.45137138
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.36 °

Well	Silverton 5-03-3L, Surf loc: 2609 FNL 255 FWL Section 04-T04N-R63W					
Well Position	+N/-S	1,508.58 ft	Northing:	14,651,582.20 usft	Latitude:	40.34154813
	+E/-W	-39.57 ft	Easting:	1,793,253.21 usft	Longitude:	-104.45151339
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,628.00 ft

Wellbore	Original hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	5/29/2018	8.08	66.90	52,227.60000000

Design	plan1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	279.53

Plan Survey Tool Program	Date	5/29/2018		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	16,571.27	plan1 (Original hole)	

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,191.06	23.82	355.23	3,157.04	243.21	-20.29	2.00	2.00	0.00	355.23	
6,268.21	23.82	355.23	5,972.05	1,481.72	-123.60	0.00	0.00	0.00	0.00	
7,149.10	90.00	269.97	6,479.00	1,704.45	-696.36	10.00	7.51	-9.68	-85.67	Silverton 5-03-3L LP 5
16,571.27	90.00	269.97	6,479.00	1,699.24	-10,118.53	0.00	0.00	0.00	0.00	Silverton 5-03-3L BHL

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-03-3L
Company:	Confluence Resources	TVD Reference:	RKB=4628+24 @ 4652.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=4628+24 @ 4652.00ft
Site:	Section 04-T04N-R63W	North Reference:	True
Well:	Silverton 5-03-3L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original hole		
Design:	plan1		

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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP Begin 2°/100' build									
2,100.00	2.00	355.23	2,099.98	1.74	-0.15	0.43	2.00	2.00	0.00
2,200.00	4.00	355.23	2,199.84	6.95	-0.58	1.72	2.00	2.00	0.00
2,300.00	6.00	355.23	2,299.45	15.64	-1.30	3.88	2.00	2.00	0.00
2,400.00	8.00	355.23	2,398.70	27.78	-2.32	6.89	2.00	2.00	0.00
2,500.00	10.00	355.23	2,497.47	43.37	-3.62	10.75	2.00	2.00	0.00
2,600.00	12.00	355.23	2,595.62	62.39	-5.20	15.46	2.00	2.00	0.00
2,700.00	14.00	355.23	2,693.06	84.80	-7.07	21.02	2.00	2.00	0.00
2,800.00	16.00	355.23	2,789.64	110.59	-9.23	27.41	2.00	2.00	0.00
2,900.00	18.00	355.23	2,885.27	139.73	-11.66	34.64	2.00	2.00	0.00
3,000.00	20.00	355.23	2,979.82	172.17	-14.36	42.68	2.00	2.00	0.00
3,100.00	22.00	355.23	3,073.17	207.88	-17.34	51.53	2.00	2.00	0.00
3,191.06	23.82	355.23	3,157.04	243.21	-20.29	60.29	2.00	2.00	0.00
Begin 23.82° tangent section									
3,200.00	23.82	355.23	3,165.22	246.80	-20.59	61.18	0.00	0.00	0.00
3,300.00	23.82	355.23	3,256.70	287.05	-23.94	71.15	0.00	0.00	0.00
3,400.00	23.82	355.23	3,348.18	327.30	-27.30	81.13	0.00	0.00	0.00
3,500.00	23.82	355.23	3,439.66	367.55	-30.66	91.11	0.00	0.00	0.00
3,600.00	23.82	355.23	3,531.14	407.80	-34.02	101.08	0.00	0.00	0.00
3,700.00	23.82	355.23	3,622.63	448.05	-37.37	111.06	0.00	0.00	0.00
3,800.00	23.82	355.23	3,714.11	488.30	-40.73	121.04	0.00	0.00	0.00
3,900.00	23.82	355.23	3,805.59	528.54	-44.09	131.02	0.00	0.00	0.00
4,000.00	23.82	355.23	3,897.07	568.79	-47.45	140.99	0.00	0.00	0.00
4,100.00	23.82	355.23	3,988.55	609.04	-50.80	150.97	0.00	0.00	0.00
4,200.00	23.82	355.23	4,080.03	649.29	-54.16	160.95	0.00	0.00	0.00
4,300.00	23.82	355.23	4,171.51	689.54	-57.52	170.92	0.00	0.00	0.00
4,400.00	23.82	355.23	4,262.99	729.79	-60.88	180.90	0.00	0.00	0.00
4,500.00	23.82	355.23	4,354.47	770.04	-64.23	190.88	0.00	0.00	0.00
4,600.00	23.82	355.23	4,445.95	810.28	-67.59	200.85	0.00	0.00	0.00
4,700.00	23.82	355.23	4,537.44	850.53	-70.95	210.83	0.00	0.00	0.00
4,800.00	23.82	355.23	4,628.92	890.78	-74.31	220.81	0.00	0.00	0.00
4,900.00	23.82	355.23	4,720.40	931.03	-77.66	230.78	0.00	0.00	0.00

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-03-3L
Company:	Confluence Resources	TVD Reference:	RKB=4628+24 @ 4652.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=4628+24 @ 4652.00ft
Site:	Section 04-T04N-R63W	North Reference:	True
Well:	Silverton 5-03-3L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original hole		
Design:	plan1		

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)
5,000.00	23.82	355.23	4,811.88	971.28	-81.02	240.76	0.00	0.00	0.00
5,100.00	23.82	355.23	4,903.36	1,011.53	-84.38	250.74	0.00	0.00	0.00
5,200.00	23.82	355.23	4,994.84	1,051.78	-87.74	260.71	0.00	0.00	0.00
5,300.00	23.82	355.23	5,086.32	1,092.03	-91.09	270.69	0.00	0.00	0.00
5,400.00	23.82	355.23	5,177.80	1,132.27	-94.45	280.67	0.00	0.00	0.00
5,500.00	23.82	355.23	5,269.28	1,172.52	-97.81	290.64	0.00	0.00	0.00
5,600.00	23.82	355.23	5,360.76	1,212.77	-101.16	300.62	0.00	0.00	0.00
5,700.00	23.82	355.23	5,452.25	1,253.02	-104.52	310.60	0.00	0.00	0.00
5,800.00	23.82	355.23	5,543.73	1,293.27	-107.88	320.57	0.00	0.00	0.00
5,900.00	23.82	355.23	5,635.21	1,333.52	-111.24	330.55	0.00	0.00	0.00
6,000.00	23.82	355.23	5,726.69	1,373.77	-114.59	340.53	0.00	0.00	0.00
6,100.00	23.82	355.23	5,818.17	1,414.01	-117.95	350.50	0.00	0.00	0.00
6,200.00	23.82	355.23	5,909.65	1,454.26	-121.31	360.48	0.00	0.00	0.00
6,268.21	23.82	355.23	5,972.05	1,481.72	-123.60	367.29	0.00	0.00	0.00
Begin 10°/100' build/turn									
6,300.00	24.26	347.50	6,001.09	1,494.49	-125.55	371.32	10.00	1.37	-24.33
6,400.00	27.90	326.17	6,091.09	1,534.08	-143.07	395.16	10.00	3.64	-21.33
6,500.00	34.01	310.67	6,176.95	1,571.84	-177.39	435.26	10.00	6.11	-15.50
6,600.00	41.50	299.79	6,256.04	1,606.61	-227.49	490.42	10.00	7.49	-10.88
6,700.00	49.74	291.84	6,325.98	1,637.35	-291.82	558.96	10.00	8.24	-7.95
6,800.00	58.41	285.67	6,384.63	1,663.11	-368.44	638.79	10.00	8.67	-6.18
6,900.00	67.32	280.56	6,430.21	1,683.12	-455.02	727.49	10.00	8.91	-5.10
7,000.00	76.38	276.09	6,461.34	1,696.76	-548.94	822.36	10.00	9.05	-4.47
7,100.00	85.51	271.95	6,477.08	1,703.63	-647.32	920.53	10.00	9.13	-4.14
7,149.10	90.00	269.97	6,479.00	1,704.45	-696.36	969.03	10.00	9.15	-4.04
LP Begin 90° lateral									
7,200.00	90.00	269.97	6,479.00	1,704.42	-747.26	1,019.22	0.00	0.00	0.00
7,300.00	90.00	269.97	6,479.00	1,704.37	-847.26	1,117.83	0.00	0.00	0.00
7,400.00	90.00	269.97	6,479.00	1,704.31	-947.26	1,216.44	0.00	0.00	0.00
7,500.00	90.00	269.97	6,479.00	1,704.26	-1,047.26	1,315.05	0.00	0.00	0.00
7,600.00	90.00	269.97	6,479.00	1,704.20	-1,147.26	1,413.66	0.00	0.00	0.00
7,700.00	90.00	269.97	6,479.00	1,704.15	-1,247.26	1,512.27	0.00	0.00	0.00
7,800.00	90.00	269.97	6,479.00	1,704.09	-1,347.26	1,610.88	0.00	0.00	0.00
7,900.00	90.00	269.97	6,479.00	1,704.04	-1,447.26	1,709.49	0.00	0.00	0.00
8,000.00	90.00	269.97	6,479.00	1,703.98	-1,547.26	1,808.10	0.00	0.00	0.00
8,100.00	90.00	269.97	6,479.00	1,703.93	-1,647.26	1,906.71	0.00	0.00	0.00
8,200.00	90.00	269.97	6,479.00	1,703.87	-1,747.26	2,005.32	0.00	0.00	0.00
8,300.00	90.00	269.97	6,479.00	1,703.82	-1,847.26	2,103.93	0.00	0.00	0.00
8,400.00	90.00	269.97	6,479.00	1,703.76	-1,947.26	2,202.54	0.00	0.00	0.00
8,500.00	90.00	269.97	6,479.00	1,703.71	-2,047.26	2,301.15	0.00	0.00	0.00
8,600.00	90.00	269.97	6,479.00	1,703.65	-2,147.26	2,399.76	0.00	0.00	0.00
8,700.00	90.00	269.97	6,479.00	1,703.59	-2,247.26	2,498.37	0.00	0.00	0.00
8,800.00	90.00	269.97	6,479.00	1,703.54	-2,347.26	2,596.98	0.00	0.00	0.00
8,900.00	90.00	269.97	6,479.00	1,703.48	-2,447.26	2,695.59	0.00	0.00	0.00
9,000.00	90.00	269.97	6,479.00	1,703.43	-2,547.26	2,794.20	0.00	0.00	0.00
9,100.00	90.00	269.97	6,479.00	1,703.37	-2,647.26	2,892.81	0.00	0.00	0.00
9,200.00	90.00	269.97	6,479.00	1,703.32	-2,747.26	2,991.42	0.00	0.00	0.00
9,300.00	90.00	269.97	6,479.00	1,703.26	-2,847.26	3,090.03	0.00	0.00	0.00
9,400.00	90.00	269.97	6,479.00	1,703.21	-2,947.26	3,188.64	0.00	0.00	0.00
9,500.00	90.00	269.97	6,479.00	1,703.15	-3,047.26	3,287.25	0.00	0.00	0.00
9,600.00	90.00	269.97	6,479.00	1,703.10	-3,147.26	3,385.86	0.00	0.00	0.00
9,700.00	90.00	269.97	6,479.00	1,703.04	-3,247.26	3,484.47	0.00	0.00	0.00
9,800.00	90.00	269.97	6,479.00	1,702.99	-3,347.26	3,583.08	0.00	0.00	0.00
9,900.00	90.00	269.97	6,479.00	1,702.93	-3,447.26	3,681.69	0.00	0.00	0.00

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-03-3L
Company:	Confluence Resources	TVD Reference:	RKB=4628+24 @ 4652.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=4628+24 @ 4652.00ft
Site:	Section 04-T04N-R63W	North Reference:	True
Well:	Silverton 5-03-3L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original hole		
Design:	plan1		

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)
10,000.00	90.00	269.97	6,479.00	1,702.88	-3,547.26	3,780.30	0.00	0.00	0.00
10,100.00	90.00	269.97	6,479.00	1,702.82	-3,647.26	3,878.91	0.00	0.00	0.00
10,200.00	90.00	269.97	6,479.00	1,702.77	-3,747.26	3,977.52	0.00	0.00	0.00
10,300.00	90.00	269.97	6,479.00	1,702.71	-3,847.26	4,076.13	0.00	0.00	0.00
10,400.00	90.00	269.97	6,479.00	1,702.66	-3,947.26	4,174.74	0.00	0.00	0.00
10,500.00	90.00	269.97	6,479.00	1,702.60	-4,047.26	4,273.35	0.00	0.00	0.00
10,600.00	90.00	269.97	6,479.00	1,702.54	-4,147.26	4,371.96	0.00	0.00	0.00
10,700.00	90.00	269.97	6,479.00	1,702.49	-4,247.26	4,470.57	0.00	0.00	0.00
10,800.00	90.00	269.97	6,479.00	1,702.43	-4,347.26	4,569.18	0.00	0.00	0.00
10,900.00	90.00	269.97	6,479.00	1,702.38	-4,447.26	4,667.79	0.00	0.00	0.00
11,000.00	90.00	269.97	6,479.00	1,702.32	-4,547.26	4,766.40	0.00	0.00	0.00
11,100.00	90.00	269.97	6,479.00	1,702.27	-4,647.26	4,865.01	0.00	0.00	0.00
11,200.00	90.00	269.97	6,479.00	1,702.21	-4,747.26	4,963.62	0.00	0.00	0.00
11,300.00	90.00	269.97	6,479.00	1,702.16	-4,847.26	5,062.23	0.00	0.00	0.00
11,400.00	90.00	269.97	6,479.00	1,702.10	-4,947.26	5,160.84	0.00	0.00	0.00
11,500.00	90.00	269.97	6,479.00	1,702.05	-5,047.26	5,259.45	0.00	0.00	0.00
11,600.00	90.00	269.97	6,479.00	1,701.99	-5,147.26	5,358.06	0.00	0.00	0.00
11,700.00	90.00	269.97	6,479.00	1,701.94	-5,247.26	5,456.67	0.00	0.00	0.00
11,800.00	90.00	269.97	6,479.00	1,701.88	-5,347.26	5,555.28	0.00	0.00	0.00
11,900.00	90.00	269.97	6,479.00	1,701.83	-5,447.26	5,653.89	0.00	0.00	0.00
12,000.00	90.00	269.97	6,479.00	1,701.77	-5,547.26	5,752.50	0.00	0.00	0.00
12,100.00	90.00	269.97	6,479.00	1,701.72	-5,647.26	5,851.11	0.00	0.00	0.00
12,200.00	90.00	269.97	6,479.00	1,701.66	-5,747.26	5,949.72	0.00	0.00	0.00
12,300.00	90.00	269.97	6,479.00	1,701.60	-5,847.26	6,048.33	0.00	0.00	0.00
12,400.00	90.00	269.97	6,479.00	1,701.55	-5,947.26	6,146.94	0.00	0.00	0.00
12,500.00	90.00	269.97	6,479.00	1,701.49	-6,047.26	6,245.54	0.00	0.00	0.00
12,600.00	90.00	269.97	6,479.00	1,701.44	-6,147.26	6,344.15	0.00	0.00	0.00
12,700.00	90.00	269.97	6,479.00	1,701.38	-6,247.26	6,442.76	0.00	0.00	0.00
12,800.00	90.00	269.97	6,479.00	1,701.33	-6,347.26	6,541.37	0.00	0.00	0.00
12,900.00	90.00	269.97	6,479.00	1,701.27	-6,447.26	6,639.98	0.00	0.00	0.00
13,000.00	90.00	269.97	6,479.00	1,701.22	-6,547.26	6,738.59	0.00	0.00	0.00
13,100.00	90.00	269.97	6,479.00	1,701.16	-6,647.26	6,837.20	0.00	0.00	0.00
13,200.00	90.00	269.97	6,479.00	1,701.11	-6,747.26	6,935.81	0.00	0.00	0.00
13,300.00	90.00	269.97	6,479.00	1,701.05	-6,847.26	7,034.42	0.00	0.00	0.00
13,400.00	90.00	269.97	6,479.00	1,701.00	-6,947.26	7,133.03	0.00	0.00	0.00
13,500.00	90.00	269.97	6,479.00	1,700.94	-7,047.26	7,231.64	0.00	0.00	0.00
13,600.00	90.00	269.97	6,479.00	1,700.89	-7,147.26	7,330.25	0.00	0.00	0.00
13,700.00	90.00	269.97	6,479.00	1,700.83	-7,247.26	7,428.86	0.00	0.00	0.00
13,800.00	90.00	269.97	6,479.00	1,700.78	-7,347.26	7,527.47	0.00	0.00	0.00
13,900.00	90.00	269.97	6,479.00	1,700.72	-7,447.26	7,626.08	0.00	0.00	0.00
14,000.00	90.00	269.97	6,479.00	1,700.67	-7,547.26	7,724.69	0.00	0.00	0.00
14,100.00	90.00	269.97	6,479.00	1,700.61	-7,647.26	7,823.30	0.00	0.00	0.00
14,200.00	90.00	269.97	6,479.00	1,700.55	-7,747.26	7,921.91	0.00	0.00	0.00
14,300.00	90.00	269.97	6,479.00	1,700.50	-7,847.26	8,020.52	0.00	0.00	0.00
14,400.00	90.00	269.97	6,479.00	1,700.44	-7,947.26	8,119.13	0.00	0.00	0.00
14,500.00	90.00	269.97	6,479.00	1,700.39	-8,047.26	8,217.74	0.00	0.00	0.00
14,600.00	90.00	269.97	6,479.00	1,700.33	-8,147.26	8,316.35	0.00	0.00	0.00
14,700.00	90.00	269.97	6,479.00	1,700.28	-8,247.26	8,414.96	0.00	0.00	0.00
14,800.00	90.00	269.97	6,479.00	1,700.22	-8,347.26	8,513.57	0.00	0.00	0.00
14,900.00	90.00	269.97	6,479.00	1,700.17	-8,447.26	8,612.18	0.00	0.00	0.00
15,000.00	90.00	269.97	6,479.00	1,700.11	-8,547.26	8,710.79	0.00	0.00	0.00
15,100.00	90.00	269.97	6,479.00	1,700.06	-8,647.26	8,809.40	0.00	0.00	0.00
15,200.00	90.00	269.97	6,479.00	1,700.00	-8,747.26	8,908.01	0.00	0.00	0.00
15,300.00	90.00	269.97	6,479.00	1,699.95	-8,847.26	9,006.62	0.00	0.00	0.00

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-03-3L
Company:	Confluence Resources	TVD Reference:	RKB=4628+24 @ 4652.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=4628+24 @ 4652.00ft
Site:	Section 04-T04N-R63W	North Reference:	True
Well:	Silverton 5-03-3L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original hole		
Design:	plan1		

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)	
15,400.00	90.00	269.97	6,479.00	1,699.89	-8,947.26	9,105.23	0.00	0.00	0.00	
15,500.00	90.00	269.97	6,479.00	1,699.84	-9,047.26	9,203.84	0.00	0.00	0.00	
15,600.00	90.00	269.97	6,479.00	1,699.78	-9,147.26	9,302.45	0.00	0.00	0.00	
15,700.00	90.00	269.97	6,479.00	1,699.73	-9,247.26	9,401.06	0.00	0.00	0.00	
15,800.00	90.00	269.97	6,479.00	1,699.67	-9,347.26	9,499.67	0.00	0.00	0.00	
15,900.00	90.00	269.97	6,479.00	1,699.62	-9,447.26	9,598.28	0.00	0.00	0.00	
16,000.00	90.00	269.97	6,479.00	1,699.56	-9,547.26	9,696.89	0.00	0.00	0.00	
16,100.00	90.00	269.97	6,479.00	1,699.50	-9,647.26	9,795.50	0.00	0.00	0.00	
16,200.00	90.00	269.97	6,479.00	1,699.45	-9,747.26	9,894.11	0.00	0.00	0.00	
16,300.00	90.00	269.97	6,479.00	1,699.39	-9,847.26	9,992.72	0.00	0.00	0.00	
16,400.00	90.00	269.97	6,479.00	1,699.34	-9,947.26	10,091.33	0.00	0.00	0.00	
16,500.00	90.00	269.97	6,479.00	1,699.28	-10,047.26	10,189.94	0.00	0.00	0.00	
16,571.27	90.00	269.97	6,479.00	1,699.24	-10,118.53	10,260.22	0.00	0.00	0.00	
PBHL/TD 16571.27 MD 6479.00 TVD										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude		Longitude
Silverton 5-03-3L SL 26C - hit/miss target - Shape - Point	0.00	0.00	24.00	0.00	0.00	14,651,582.20	1,793,253.21	40.34154813		-104.45151339
Silverton 5-03-3L BHL 9I - plan hits target center - Point	0.00	0.00	6,479.00	1,699.24	-10,118.53	14,653,218.70	1,783,124.36	40.34620848		-104.48782751
Silverton 5-03-3L LP 90C - plan hits target center - Point	0.00	0.00	6,479.00	1,704.45	-696.36	14,653,282.30	1,792,546.30	40.34622845		-104.45401254

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
2,000.00	2,000.00	0.00	0.00	KOP Begin 2°/100' build	
3,191.06	3,157.04	243.21	-20.29	Begin 23.82° tangent section	
6,268.21	5,972.05	1,481.72	-123.60	Begin 10°/100' build/turn	
7,149.10	6,479.00	1,704.45	-696.36	LP Begin 90° lateral	
16,571.27	6,479.00	1,699.24	-10,118.53	PBHL/TD 16571.27 MD 6479.00 TVD	