



Well: Silverton 5-02-2L
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	3358.34	27.17	355.81	3308.01	315.20	-23.07	2.00	80.59	Begin 27.17° tangent section
4	6277.17	27.17	355.81	5904.84	1644.33	-120.35	0.00	420.42	Begin 10°/100' build/turn
5	7158.22	90.00	269.97	6398.00	1896.44	-693.13	10.00	1029.78	LP Begin 90° lateral
6	16583.02	90.00	269.97	6398.00	1891.24	-10117.93	0.00	10293.17	PBHL/TD 16583.02 MD 6398.00 TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Silverton 5-02-2L SL 2584 FNL 255 FWL	24.00	0.00	0.00	14651607.20	1793253.48	40.34161678	-104.45151186
Silverton 5-02-2L BHL 687 FNL 470 FWL	6398.00	1891.24	-10117.93	14653435.70	1783124.04	40.34680435	-104.48782416
Silverton 5-02-2L LP 687 FNL 470 FEL	6398.00	1896.44	-693.13	14653499.30	1792548.61	40.34682427	-104.45399944

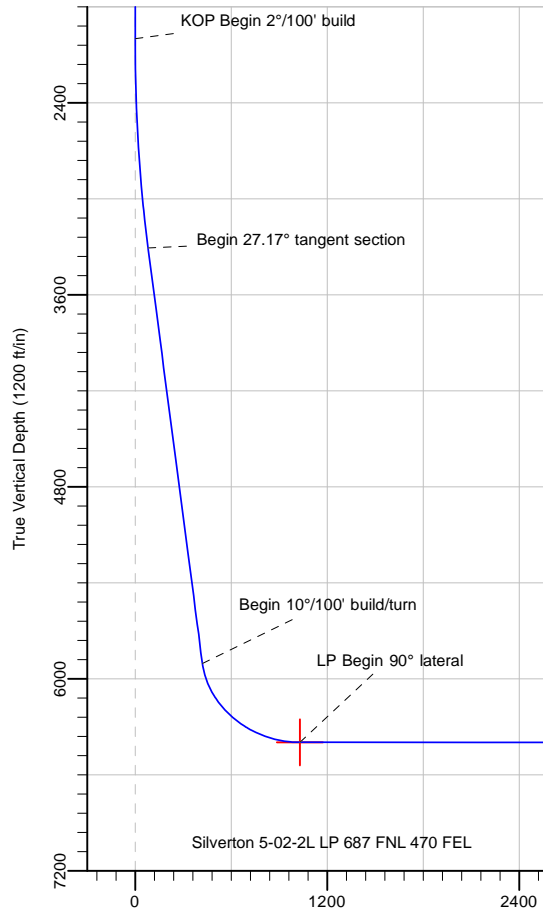
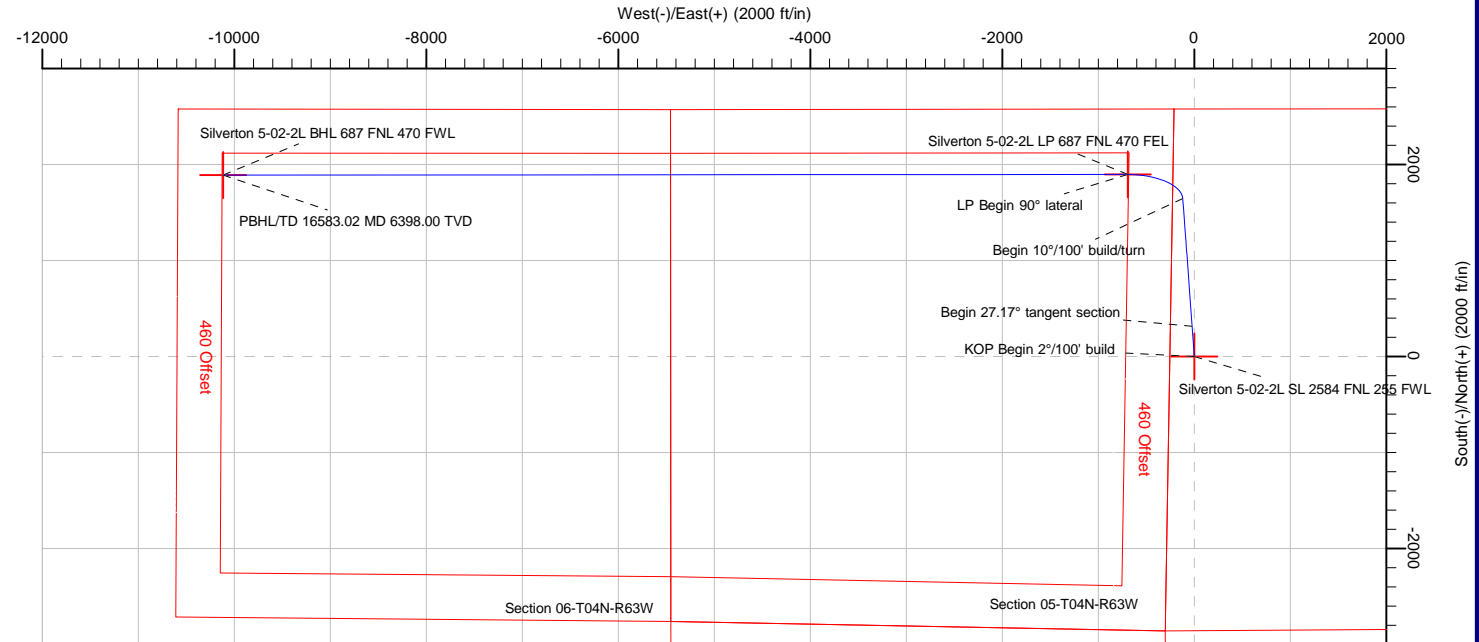
Silverton 5-02-2L Surf loc: 2584 FNL 255 FWL Section 04-T04N-R63W			
NAD83 Colorado - HARN Universal Transverse Mercator (US Survey Feet) Zone 13N (108 W to 102 W) RKB=4628+24 @ 4652.00ft			
Northing 14651607.20	Easting 1793253.48	Latitude 40.34161678	Longitude -104.45151186



Azimuths to True North
Magnetic North: 8.08°

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

PRODIRECTIONAL



Vertical Section at 280.59° (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 5-02-2L
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 5-02-2L	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 5-02-2L, Surf loc: 2584 FNL 255 FWL Section 04-T04N-R63W					
Well Position	+N/-S	0.00 ft	Northing:	14,651,607.20 usft	Latitude:	40.34161678
	+E/-W	0.00 ft	Easting:	1,793,253.48 usft	Longitude:	-104.45151186
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	280.59

Plan Survey Tool Program	Date	5/29/2018		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	16,583.02 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	
3,358.34	27.17	355.81	3,308.01	315.20	-23.07	2.00	2.00	0.00	355.81	
6,277.17	27.17	355.81	5,904.84	1,644.33	-120.35	0.00	0.00	0.00	0.00	
7,158.22	90.00	269.97	6,398.00	1,896.44	-693.13	10.00	7.13	-9.74	-86.30	Silverton 5-02-2L LP 6
16,583.02	90.00	269.97	6,398.00	1,891.24	-10,117.93	0.00	0.00	0.00	0.00	Silverton 5-02-2L BHL

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-02-2L
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 5-02-2L	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	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
100.00	0.00	0.00	100.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
200.00	0.00	0.00	200.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
300.00	0.00	0.00	300.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
400.00	0.00	0.00	400.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
500.00	0.00	0.00	500.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
600.00	0.00	0.00	600.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
700.00	0.00	0.00	700.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
800.00	0.00	0.00	800.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
900.00	0.00	0.00	900.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
1,100.00	0.00	0.00	1,100.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
1,200.00	0.00	0.00	1,200.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
1,300.00	0.00	0.00	1,300.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
1,400.00	0.00	0.00	1,400.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
1,500.00	0.00	0.00	1,500.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
1,600.00	0.00	0.00	1,600.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
1,700.00	0.00	0.00	1,700.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
1,800.00	0.00	0.00	1,800.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
1,900.00	0.00	0.00	1,900.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
2,000.00	0.00	0.00	2,000.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
KOP Begin 2°/100' build									
2,100.00	2.00	355.81	2,099.98	1.74	-0.13	14,651,608.94	1,793,253.34	40.34162156	-104.45151232
2,200.00	4.00	355.81	2,199.84	6.96	-0.51	14,651,614.15	1,793,252.93	40.34163589	-104.45151369
2,300.00	6.00	355.81	2,299.45	15.65	-1.15	14,651,622.84	1,793,252.24	40.34165976	-104.45151597
2,400.00	8.00	355.81	2,398.70	27.81	-2.04	14,651,634.99	1,793,251.27	40.34169313	-104.45151917
2,500.00	10.00	355.81	2,497.47	43.41	-3.18	14,651,650.58	1,793,250.03	40.34173597	-104.45152326
2,600.00	12.00	355.81	2,595.62	62.44	-4.57	14,651,669.60	1,793,248.52	40.34178822	-104.45152826
2,700.00	14.00	355.81	2,693.06	84.87	-6.21	14,651,692.03	1,793,246.74	40.34184982	-104.45153415
2,800.00	16.00	355.81	2,789.64	110.68	-8.10	14,651,717.83	1,793,244.69	40.34192070	-104.45154093
2,900.00	18.00	355.81	2,885.27	139.84	-10.23	14,651,746.97	1,793,242.38	40.34200077	-104.45154859
3,000.00	20.00	355.81	2,979.82	172.31	-12.61	14,651,779.42	1,793,239.80	40.34208992	-104.45155712
3,100.00	22.00	355.81	3,073.17	208.05	-15.23	14,651,815.15	1,793,236.96	40.34218806	-104.45156651
3,200.00	24.00	355.81	3,165.21	247.01	-18.08	14,651,854.09	1,793,233.87	40.34229506	-104.45157674
3,300.00	26.00	355.81	3,255.84	289.16	-21.16	14,651,896.22	1,793,230.52	40.34241080	-104.45158781
3,358.34	27.17	355.81	3,308.01	315.20	-23.07	14,651,922.24	1,793,228.46	40.34248229	-104.45159465
Begin 27.17° tangent section									
3,400.00	27.17	355.81	3,345.08	334.17	-24.46	14,651,941.21	1,793,226.95	40.34253439	-104.45159963
3,500.00	27.17	355.81	3,434.04	379.70	-27.79	14,651,986.72	1,793,223.34	40.34265943	-104.45161159
3,600.00	27.17	355.81	3,523.01	425.24	-31.12	14,652,032.24	1,793,219.72	40.34278447	-104.45162355
3,700.00	27.17	355.81	3,611.98	470.78	-34.46	14,652,077.75	1,793,216.11	40.34290951	-104.45163552
3,800.00	27.17	355.81	3,700.95	516.31	-37.79	14,652,123.27	1,793,212.49	40.34303455	-104.45164748
3,900.00	27.17	355.81	3,789.92	561.85	-41.12	14,652,168.78	1,793,208.88	40.34315959	-104.45165944
4,000.00	27.17	355.81	3,878.89	607.39	-44.45	14,652,214.30	1,793,205.26	40.34328463	-104.45167140
4,100.00	27.17	355.81	3,967.85	652.92	-47.79	14,652,259.81	1,793,201.65	40.34340967	-104.45168336
4,200.00	27.17	355.81	4,056.82	698.46	-51.12	14,652,305.33	1,793,198.03	40.34353471	-104.45169532
4,300.00	27.17	355.81	4,145.79	744.00	-54.45	14,652,350.84	1,793,194.42	40.34365975	-104.45170728
4,400.00	27.17	355.81	4,234.76	789.53	-57.79	14,652,396.35	1,793,190.80	40.34378479	-104.45171924
4,500.00	27.17	355.81	4,323.73	835.07	-61.12	14,652,441.87	1,793,187.19	40.34390983	-104.45173120
4,600.00	27.17	355.81	4,412.69	880.60	-64.45	14,652,487.38	1,793,183.57	40.34403487	-104.45174316
4,700.00	27.17	355.81	4,501.66	926.14	-67.78	14,652,532.90	1,793,179.96	40.34415992	-104.45175512
4,800.00	27.17	355.81	4,590.63	971.68	-71.12	14,652,578.41	1,793,176.34	40.34428496	-104.45176709
4,900.00	27.17	355.81	4,679.60	1,017.21	-74.45	14,652,623.93	1,793,172.73	40.34441000	-104.45177905
5,000.00	27.17	355.81	4,768.57	1,062.75	-77.78	14,652,669.44	1,793,169.11	40.34453504	-104.45179101

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-02-2L
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 5-02-2L	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
5,100.00	27.17	355.81	4,857.53	1,108.29	-81.12	14,652,714.96	1,793,165.50	40.34466008	-104.45180297
5,200.00	27.17	355.81	4,946.50	1,153.82	-84.45	14,652,760.47	1,793,161.88	40.34478512	-104.45181493
5,300.00	27.17	355.81	5,035.47	1,199.36	-87.78	14,652,805.99	1,793,158.27	40.34491016	-104.45182689
5,400.00	27.17	355.81	5,124.44	1,244.90	-91.11	14,652,851.50	1,793,154.65	40.34503520	-104.45183885
5,500.00	27.17	355.81	5,213.41	1,290.43	-94.45	14,652,897.02	1,793,151.04	40.34516024	-104.45185081
5,600.00	27.17	355.81	5,302.38	1,335.97	-97.78	14,652,942.53	1,793,147.42	40.34528528	-104.45186278
5,700.00	27.17	355.81	5,391.34	1,381.51	-101.11	14,652,988.05	1,793,143.81	40.34541032	-104.45187474
5,800.00	27.17	355.81	5,480.31	1,427.04	-104.45	14,653,033.56	1,793,140.19	40.34553536	-104.45188670
5,900.00	27.17	355.81	5,569.28	1,472.58	-107.78	14,653,079.08	1,793,136.58	40.34566040	-104.45189866
6,000.00	27.17	355.81	5,658.25	1,518.11	-111.11	14,653,124.59	1,793,132.96	40.34578544	-104.45191062
6,100.00	27.17	355.81	5,747.22	1,563.65	-114.44	14,653,170.11	1,793,129.35	40.34591049	-104.45192258
6,200.00	27.17	355.81	5,836.18	1,609.19	-117.78	14,653,215.62	1,793,125.73	40.34603553	-104.45193455
6,277.17	27.17	355.81	5,904.84	1,644.33	-120.35	14,653,250.75	1,793,122.94	40.34613202	-104.45194378
Begin 10°/100' build/turn									
6,300.00	27.40	350.86	5,925.13	1,654.71	-121.56	14,653,261.12	1,793,121.66	40.34616054	-104.45194814
6,400.00	30.34	330.96	6,012.90	1,699.63	-137.52	14,653,305.94	1,793,105.43	40.34628387	-104.45200540
6,500.00	35.70	315.39	6,096.87	1,742.59	-170.35	14,653,348.69	1,793,072.33	40.34640184	-104.45212324
6,600.00	42.57	303.83	6,174.49	1,782.29	-219.07	14,653,388.10	1,793,023.37	40.34651087	-104.45229806
6,700.00	50.33	295.09	6,243.41	1,817.53	-282.18	14,653,422.94	1,792,960.04	40.34660763	-104.45252457
6,800.00	58.60	288.17	6,301.52	1,847.24	-357.77	14,653,452.18	1,792,884.27	40.34668920	-104.45279587
6,900.00	67.19	282.40	6,347.08	1,870.51	-443.55	14,653,474.92	1,792,798.34	40.34675309	-104.45310373
7,000.00	75.95	277.33	6,378.68	1,886.63	-536.91	14,653,490.46	1,792,704.89	40.34679736	-104.45343879
7,100.00	84.82	272.63	6,395.37	1,895.12	-635.02	14,653,498.34	1,792,606.73	40.34682066	-104.45379087
7,158.22	90.00	269.97	6,398.00	1,896.44	-693.13	14,653,499.30	1,792,548.61	40.34682427	-104.45399944
LP Begin 90° lateral									
7,200.00	90.00	269.97	6,398.00	1,896.41	-734.92	14,653,499.02	1,792,506.83	40.34682420	-104.45414940
7,300.00	90.00	269.97	6,398.00	1,896.36	-834.92	14,653,498.34	1,792,406.83	40.34682404	-104.45450829
7,400.00	90.00	269.97	6,398.00	1,896.30	-934.92	14,653,497.67	1,792,306.83	40.34682388	-104.45486718
7,500.00	90.00	269.97	6,398.00	1,896.25	-1,034.92	14,653,496.99	1,792,206.83	40.34682372	-104.45522607
7,600.00	90.00	269.97	6,398.00	1,896.19	-1,134.92	14,653,496.32	1,792,106.84	40.34682356	-104.45558496
7,700.00	90.00	269.97	6,398.00	1,896.14	-1,234.92	14,653,495.64	1,792,006.84	40.34682339	-104.45594385
7,800.00	90.00	269.97	6,398.00	1,896.08	-1,334.92	14,653,494.97	1,791,906.84	40.34682323	-104.45630274
7,900.00	90.00	269.97	6,398.00	1,896.03	-1,434.92	14,653,494.29	1,791,806.84	40.34682306	-104.45666163
8,000.00	90.00	269.97	6,398.00	1,895.97	-1,534.92	14,653,493.62	1,791,706.85	40.34682289	-104.45702052
8,100.00	90.00	269.97	6,398.00	1,895.92	-1,634.92	14,653,492.94	1,791,606.85	40.34682272	-104.45737941
8,200.00	90.00	269.97	6,398.00	1,895.86	-1,734.92	14,653,492.27	1,791,506.85	40.34682255	-104.45773830
8,300.00	90.00	269.97	6,398.00	1,895.81	-1,834.92	14,653,491.59	1,791,406.85	40.34682238	-104.45809719
8,400.00	90.00	269.97	6,398.00	1,895.75	-1,934.92	14,653,490.92	1,791,306.86	40.34682221	-104.45845608
8,500.00	90.00	269.97	6,398.00	1,895.70	-2,034.92	14,653,490.24	1,791,206.86	40.34682204	-104.45881497
8,600.00	90.00	269.97	6,398.00	1,895.64	-2,134.92	14,653,489.57	1,791,106.86	40.34682186	-104.45917386
8,700.00	90.00	269.97	6,398.00	1,895.59	-2,234.92	14,653,488.89	1,791,006.86	40.34682169	-104.45953275
8,800.00	90.00	269.97	6,398.00	1,895.53	-2,334.92	14,653,488.22	1,790,906.87	40.34682151	-104.45989164
8,900.00	90.00	269.97	6,398.00	1,895.48	-2,434.92	14,653,487.54	1,790,806.87	40.34682133	-104.46025053
9,000.00	90.00	269.97	6,398.00	1,895.42	-2,534.92	14,653,486.87	1,790,706.87	40.34682115	-104.46060942
9,100.00	90.00	269.97	6,398.00	1,895.37	-2,634.92	14,653,486.19	1,790,606.87	40.34682097	-104.46096831
9,200.00	90.00	269.97	6,398.00	1,895.31	-2,734.92	14,653,485.52	1,790,506.88	40.34682079	-104.46132720
9,300.00	90.00	269.97	6,398.00	1,895.26	-2,834.92	14,653,484.84	1,790,406.88	40.34682061	-104.46168609
9,400.00	90.00	269.97	6,398.00	1,895.20	-2,934.92	14,653,484.17	1,790,306.88	40.34682043	-104.46204498
9,500.00	90.00	269.97	6,398.00	1,895.15	-3,034.92	14,653,483.49	1,790,206.88	40.34682024	-104.46240387
9,600.00	90.00	269.97	6,398.00	1,895.09	-3,134.92	14,653,482.82	1,790,106.89	40.34682006	-104.46276276
9,700.00	90.00	269.97	6,398.00	1,895.04	-3,234.92	14,653,482.15	1,790,006.89	40.34681987	-104.46312166
9,800.00	90.00	269.97	6,398.00	1,894.98	-3,334.92	14,653,481.47	1,789,906.89	40.34681968	-104.46348055
9,900.00	90.00	269.97	6,398.00	1,894.93	-3,434.92	14,653,480.80	1,789,806.89	40.34681950	-104.46383944
10,000.00	90.00	269.97	6,398.00	1,894.87	-3,534.92	14,653,480.12	1,789,706.90	40.34681931	-104.46419833

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-02-2L
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 5-02-2L	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	6,398.00	1,894.82	-3,634.92	14,653,479.45	1,789,606.90	40.34681911	-104.46455722
10,200.00	90.00	269.97	6,398.00	1,894.76	-3,734.92	14,653,478.77	1,789,506.90	40.34681892	-104.46491611
10,300.00	90.00	269.97	6,398.00	1,894.71	-3,834.92	14,653,478.10	1,789,406.90	40.34681873	-104.46527500
10,400.00	90.00	269.97	6,398.00	1,894.65	-3,934.92	14,653,477.42	1,789,306.91	40.34681853	-104.46563389
10,500.00	90.00	269.97	6,398.00	1,894.60	-4,034.92	14,653,476.75	1,789,206.91	40.34681834	-104.46599278
10,600.00	90.00	269.97	6,398.00	1,894.54	-4,134.92	14,653,476.07	1,789,106.91	40.34681814	-104.46635167
10,700.00	90.00	269.97	6,398.00	1,894.49	-4,234.92	14,653,475.40	1,789,006.91	40.34681794	-104.46671056
10,800.00	90.00	269.97	6,398.00	1,894.43	-4,334.92	14,653,474.72	1,788,906.92	40.34681775	-104.46706945
10,900.00	90.00	269.97	6,398.00	1,894.38	-4,434.92	14,653,474.05	1,788,806.92	40.34681755	-104.46742834
11,000.00	90.00	269.97	6,398.00	1,894.32	-4,534.92	14,653,473.37	1,788,706.92	40.34681734	-104.46778723
11,100.00	90.00	269.97	6,398.00	1,894.26	-4,634.92	14,653,472.70	1,788,606.92	40.34681714	-104.46814612
11,200.00	90.00	269.97	6,398.00	1,894.21	-4,734.92	14,653,472.02	1,788,506.93	40.34681694	-104.46850501
11,300.00	90.00	269.97	6,398.00	1,894.15	-4,834.92	14,653,471.35	1,788,406.93	40.34681673	-104.46886390
11,400.00	90.00	269.97	6,398.00	1,894.10	-4,934.92	14,653,470.67	1,788,306.93	40.34681653	-104.46922279
11,500.00	90.00	269.97	6,398.00	1,894.04	-5,034.92	14,653,470.00	1,788,206.93	40.34681632	-104.46958168
11,600.00	90.00	269.97	6,398.00	1,893.99	-5,134.92	14,653,469.32	1,788,106.94	40.34681611	-104.46994057
11,700.00	90.00	269.97	6,398.00	1,893.93	-5,234.92	14,653,468.65	1,788,006.94	40.34681591	-104.47029946
11,800.00	90.00	269.97	6,398.00	1,893.88	-5,334.92	14,653,467.97	1,787,906.94	40.34681570	-104.47065835
11,900.00	90.00	269.97	6,398.00	1,893.82	-5,434.92	14,653,467.30	1,787,806.94	40.34681548	-104.47101724
12,000.00	90.00	269.97	6,398.00	1,893.77	-5,534.92	14,653,466.62	1,787,706.95	40.34681527	-104.47137613
12,100.00	90.00	269.97	6,398.00	1,893.71	-5,634.92	14,653,465.95	1,787,606.95	40.34681506	-104.47173502
12,200.00	90.00	269.97	6,398.00	1,893.66	-5,734.92	14,653,465.27	1,787,506.95	40.34681484	-104.47209391
12,300.00	90.00	269.97	6,398.00	1,893.60	-5,834.92	14,653,464.60	1,787,406.95	40.34681463	-104.47245280
12,400.00	90.00	269.97	6,398.00	1,893.55	-5,934.92	14,653,463.93	1,787,306.96	40.34681441	-104.47281170
12,500.00	90.00	269.97	6,398.00	1,893.49	-6,034.92	14,653,463.25	1,787,206.96	40.34681419	-104.47317059
12,600.00	90.00	269.97	6,398.00	1,893.44	-6,134.92	14,653,462.58	1,787,106.96	40.34681398	-104.47352948
12,700.00	90.00	269.97	6,398.00	1,893.38	-6,234.92	14,653,461.90	1,787,006.96	40.34681376	-104.47388837
12,800.00	90.00	269.97	6,398.00	1,893.33	-6,334.92	14,653,461.23	1,786,906.97	40.34681353	-104.47424726
12,900.00	90.00	269.97	6,398.00	1,893.27	-6,434.92	14,653,460.55	1,786,806.97	40.34681331	-104.47460615
13,000.00	90.00	269.97	6,398.00	1,893.22	-6,534.92	14,653,459.88	1,786,706.97	40.34681309	-104.47496504
13,100.00	90.00	269.97	6,398.00	1,893.16	-6,634.92	14,653,459.20	1,786,606.97	40.34681286	-104.47532393
13,200.00	90.00	269.97	6,398.00	1,893.11	-6,734.92	14,653,458.53	1,786,506.98	40.34681264	-104.47568282
13,300.00	90.00	269.97	6,398.00	1,893.05	-6,834.92	14,653,457.85	1,786,406.98	40.34681241	-104.47604171
13,400.00	90.00	269.97	6,398.00	1,893.00	-6,934.92	14,653,457.18	1,786,306.98	40.34681218	-104.47640060
13,500.00	90.00	269.97	6,398.00	1,892.94	-7,034.92	14,653,456.50	1,786,206.98	40.34681195	-104.47675949
13,600.00	90.00	269.97	6,398.00	1,892.89	-7,134.92	14,653,455.83	1,786,106.99	40.34681172	-104.47711838
13,700.00	90.00	269.97	6,398.00	1,892.83	-7,234.92	14,653,455.15	1,786,006.99	40.34681149	-104.47747727
13,800.00	90.00	269.97	6,398.00	1,892.78	-7,334.92	14,653,454.48	1,785,906.99	40.34681126	-104.47783616
13,900.00	90.00	269.97	6,398.00	1,892.72	-7,434.92	14,653,453.80	1,785,806.99	40.34681103	-104.47819505
14,000.00	90.00	269.97	6,398.00	1,892.67	-7,534.92	14,653,453.13	1,785,707.00	40.34681079	-104.47855394
14,100.00	90.00	269.97	6,398.00	1,892.61	-7,634.92	14,653,452.45	1,785,607.00	40.34681056	-104.47891284
14,200.00	90.00	269.97	6,398.00	1,892.56	-7,734.92	14,653,451.78	1,785,507.00	40.34681032	-104.47927173
14,300.00	90.00	269.97	6,398.00	1,892.50	-7,834.92	14,653,451.10	1,785,407.00	40.34681008	-104.47963062
14,400.00	90.00	269.97	6,398.00	1,892.45	-7,934.92	14,653,450.43	1,785,307.00	40.34680984	-104.47998951
14,500.00	90.00	269.97	6,398.00	1,892.39	-8,034.92	14,653,449.75	1,785,207.01	40.34680960	-104.48034840
14,600.00	90.00	269.97	6,398.00	1,892.34	-8,134.92	14,653,449.08	1,785,107.01	40.34680936	-104.48070729
14,700.00	90.00	269.97	6,398.00	1,892.28	-8,234.92	14,653,448.40	1,785,007.01	40.34680912	-104.48106618
14,800.00	90.00	269.97	6,398.00	1,892.23	-8,334.92	14,653,447.73	1,784,907.01	40.34680888	-104.48142507
14,900.00	90.00	269.97	6,398.00	1,892.17	-8,434.92	14,653,447.05	1,784,807.02	40.34680863	-104.48178396
15,000.00	90.00	269.97	6,398.00	1,892.12	-8,534.92	14,653,446.38	1,784,707.02	40.34680839	-104.48214285
15,100.00	90.00	269.97	6,398.00	1,892.06	-8,634.92	14,653,445.71	1,784,607.02	40.34680814	-104.48250174
15,200.00	90.00	269.97	6,398.00	1,892.01	-8,734.92	14,653,445.03	1,784,507.02	40.34680789	-104.48286063
15,300.00	90.00	269.97	6,398.00	1,891.95	-8,834.92	14,653,444.36	1,784,407.03	40.34680764	-104.48321952
15,400.00	90.00	269.97	6,398.00	1,891.90	-8,934.91	14,653,443.68	1,784,307.03	40.34680739	-104.48357841
15,500.00	90.00	269.97	6,398.00	1,891.84	-9,034.91	14,653,443.01	1,784,207.03	40.34680714	-104.48393731

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-02-2L
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 5-02-2L	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	6,398.00	1,891.79	-9,134.91	14,653,442.33	1,784,107.03	40.34680689	-104.48429619
15,700.00	90.00	269.97	6,398.00	1,891.73	-9,234.91	14,653,441.66	1,784,007.04	40.34680664	-104.48465508
15,800.00	90.00	269.97	6,398.00	1,891.68	-9,334.91	14,653,440.98	1,783,907.04	40.34680638	-104.48501397
15,900.00	90.00	269.97	6,398.00	1,891.62	-9,434.91	14,653,440.31	1,783,807.04	40.34680613	-104.48537286
16,000.00	90.00	269.97	6,398.00	1,891.57	-9,534.91	14,653,439.63	1,783,707.04	40.34680587	-104.48573175
16,100.00	90.00	269.97	6,398.00	1,891.51	-9,634.91	14,653,438.96	1,783,607.05	40.34680561	-104.48609064
16,200.00	90.00	269.97	6,398.00	1,891.46	-9,734.91	14,653,438.28	1,783,507.05	40.34680535	-104.48644953
16,300.00	90.00	269.97	6,398.00	1,891.40	-9,834.91	14,653,437.61	1,783,407.05	40.34680509	-104.48680842
16,400.00	90.00	269.97	6,398.00	1,891.35	-9,934.91	14,653,436.93	1,783,307.05	40.34680483	-104.48716731
16,500.00	90.00	269.97	6,398.00	1,891.29	-10,034.91	14,653,436.26	1,783,207.06	40.34680457	-104.48752620
16,583.02	90.00	269.97	6,398.00	1,891.24	-10,117.93	14,653,435.70	1,783,124.04	40.34680435	-104.48782415
PBHL/TD 16583.02 MD 6398.00 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 5-02-2L SL 25£ - plan hits target center - Point	0.00	0.00	24.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
Silverton 5-02-2L BHL 6i - plan hits target center - Point	0.00	0.00	6,398.00	1,891.24	-10,117.93	14,653,435.70	1,783,124.04	40.34680435	-104.48782415
Silverton 5-02-2L LP 687 - plan hits target center - Point	0.00	0.00	6,398.00	1,896.44	-693.13	14,653,499.30	1,792,548.61	40.34682427	-104.45399944

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
3,358.34	3,308.01	315.20	-23.07	Begin 27.17° tangent section
6,277.17	5,904.84	1,644.33	-120.35	Begin 10°/100' build/turn
7,158.22	6,398.00	1,896.44	-693.13	LP Begin 90° lateral
16,583.02	6,398.00	1,891.24	-10,117.93	PBHL/TD 16583.02 MD 6398.00 TVD

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-02-2L
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 5-02-2L	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 5-02-2L, Surf loc: 2584 FNL 255 FWL Section 04-T04N-R63W					
Well Position	+N/-S	1,533.58 ft	Northing:	14,651,607.20 usft	Latitude:	40.34161678
	+E/-W	-39.15 ft	Easting:	1,793,253.48 usft	Longitude:	-104.45151186
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	280.59

Plan Survey Tool Program	Date	5/29/2018		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	16,583.02	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	
3,358.34	27.17	355.81	3,308.01	315.20	-23.07	2.00	2.00	0.00	355.81	
6,277.17	27.17	355.81	5,904.84	1,644.33	-120.35	0.00	0.00	0.00	0.00	
7,158.22	90.00	269.97	6,398.00	1,896.44	-693.13	10.00	7.13	-9.74	-86.30	Silverton 5-02-2L LP €
16,583.02	90.00	269.97	6,398.00	1,891.24	-10,117.93	0.00	0.00	0.00	0.00	Silverton 5-02-2L BHL

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-02-2L
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 5-02-2L	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	355.81	2,099.98	1.74	-0.13	0.45	2.00	2.00	0.00
2,200.00	4.00	355.81	2,199.84	6.96	-0.51	1.78	2.00	2.00	0.00
2,300.00	6.00	355.81	2,299.45	15.65	-1.15	4.00	2.00	2.00	0.00
2,400.00	8.00	355.81	2,398.70	27.81	-2.04	7.11	2.00	2.00	0.00
2,500.00	10.00	355.81	2,497.47	43.41	-3.18	11.10	2.00	2.00	0.00
2,600.00	12.00	355.81	2,595.62	62.44	-4.57	15.96	2.00	2.00	0.00
2,700.00	14.00	355.81	2,693.06	84.87	-6.21	21.70	2.00	2.00	0.00
2,800.00	16.00	355.81	2,789.64	110.68	-8.10	28.30	2.00	2.00	0.00
2,900.00	18.00	355.81	2,885.27	139.84	-10.23	35.75	2.00	2.00	0.00
3,000.00	20.00	355.81	2,979.82	172.31	-12.61	44.06	2.00	2.00	0.00
3,100.00	22.00	355.81	3,073.17	208.05	-15.23	53.19	2.00	2.00	0.00
3,200.00	24.00	355.81	3,165.21	247.01	-18.08	63.16	2.00	2.00	0.00
3,300.00	26.00	355.81	3,255.84	289.16	-21.16	73.93	2.00	2.00	0.00
3,358.34	27.17	355.81	3,308.01	315.20	-23.07	80.59	2.00	2.00	0.00
Begin 27.17° tangent section									
3,400.00	27.17	355.81	3,345.08	334.17	-24.46	85.44	0.00	0.00	0.00
3,500.00	27.17	355.81	3,434.04	379.70	-27.79	97.08	0.00	0.00	0.00
3,600.00	27.17	355.81	3,523.01	425.24	-31.12	108.73	0.00	0.00	0.00
3,700.00	27.17	355.81	3,611.98	470.78	-34.46	120.37	0.00	0.00	0.00
3,800.00	27.17	355.81	3,700.95	516.31	-37.79	132.01	0.00	0.00	0.00
3,900.00	27.17	355.81	3,789.92	561.85	-41.12	143.65	0.00	0.00	0.00
4,000.00	27.17	355.81	3,878.89	607.39	-44.45	155.30	0.00	0.00	0.00
4,100.00	27.17	355.81	3,967.85	652.92	-47.79	166.94	0.00	0.00	0.00
4,200.00	27.17	355.81	4,056.82	698.46	-51.12	178.58	0.00	0.00	0.00
4,300.00	27.17	355.81	4,145.79	744.00	-54.45	190.23	0.00	0.00	0.00
4,400.00	27.17	355.81	4,234.76	789.53	-57.79	201.87	0.00	0.00	0.00
4,500.00	27.17	355.81	4,323.73	835.07	-61.12	213.51	0.00	0.00	0.00
4,600.00	27.17	355.81	4,412.69	880.60	-64.45	225.15	0.00	0.00	0.00
4,700.00	27.17	355.81	4,501.66	926.14	-67.78	236.80	0.00	0.00	0.00
4,800.00	27.17	355.81	4,590.63	971.68	-71.12	248.44	0.00	0.00	0.00
4,900.00	27.17	355.81	4,679.60	1,017.21	-74.45	260.08	0.00	0.00	0.00

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-02-2L
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 5-02-2L	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	27.17	355.81	4,768.57	1,062.75	-77.78	271.73	0.00	0.00	0.00
5,100.00	27.17	355.81	4,857.53	1,108.29	-81.12	283.37	0.00	0.00	0.00
5,200.00	27.17	355.81	4,946.50	1,153.82	-84.45	295.01	0.00	0.00	0.00
5,300.00	27.17	355.81	5,035.47	1,199.36	-87.78	306.65	0.00	0.00	0.00
5,400.00	27.17	355.81	5,124.44	1,244.90	-91.11	318.30	0.00	0.00	0.00
5,500.00	27.17	355.81	5,213.41	1,290.43	-94.45	329.94	0.00	0.00	0.00
5,600.00	27.17	355.81	5,302.38	1,335.97	-97.78	341.58	0.00	0.00	0.00
5,700.00	27.17	355.81	5,391.34	1,381.51	-101.11	353.23	0.00	0.00	0.00
5,800.00	27.17	355.81	5,480.31	1,427.04	-104.45	364.87	0.00	0.00	0.00
5,900.00	27.17	355.81	5,569.28	1,472.58	-107.78	376.51	0.00	0.00	0.00
6,000.00	27.17	355.81	5,658.25	1,518.11	-111.11	388.15	0.00	0.00	0.00
6,100.00	27.17	355.81	5,747.22	1,563.65	-114.44	399.80	0.00	0.00	0.00
6,200.00	27.17	355.81	5,836.18	1,609.19	-117.78	411.44	0.00	0.00	0.00
6,277.17	27.17	355.81	5,904.84	1,644.33	-120.35	420.42	0.00	0.00	0.00
Begin 10°/100' build/turn									
6,300.00	27.40	350.86	5,925.13	1,654.71	-121.56	423.53	10.00	1.03	-21.70
6,400.00	30.34	330.96	6,012.90	1,699.63	-137.52	447.46	10.00	2.94	-19.90
6,500.00	35.70	315.39	6,096.87	1,742.59	-170.35	487.63	10.00	5.36	-15.57
6,600.00	42.57	303.83	6,174.49	1,782.29	-219.07	542.81	10.00	6.87	-11.56
6,700.00	50.33	295.09	6,243.41	1,817.53	-282.18	611.32	10.00	7.76	-8.74
6,800.00	58.60	288.17	6,301.52	1,847.24	-357.77	691.09	10.00	8.27	-6.92
6,900.00	67.19	282.40	6,347.08	1,870.51	-443.55	779.69	10.00	8.58	-5.77
7,000.00	75.95	277.33	6,378.68	1,886.63	-536.91	874.42	10.00	8.77	-5.08
7,100.00	84.82	272.63	6,395.37	1,895.12	-635.02	972.41	10.00	8.87	-4.70
7,158.22	90.00	269.97	6,398.00	1,896.44	-693.13	1,029.78	10.00	8.90	-4.57
LP Begin 90° lateral									
7,200.00	90.00	269.97	6,398.00	1,896.41	-734.92	1,070.85	0.00	0.00	0.00
7,300.00	90.00	269.97	6,398.00	1,896.36	-834.92	1,169.13	0.00	0.00	0.00
7,400.00	90.00	269.97	6,398.00	1,896.30	-934.92	1,267.42	0.00	0.00	0.00
7,500.00	90.00	269.97	6,398.00	1,896.25	-1,034.92	1,365.71	0.00	0.00	0.00
7,600.00	90.00	269.97	6,398.00	1,896.19	-1,134.92	1,464.00	0.00	0.00	0.00
7,700.00	90.00	269.97	6,398.00	1,896.14	-1,234.92	1,562.28	0.00	0.00	0.00
7,800.00	90.00	269.97	6,398.00	1,896.08	-1,334.92	1,660.57	0.00	0.00	0.00
7,900.00	90.00	269.97	6,398.00	1,896.03	-1,434.92	1,758.86	0.00	0.00	0.00
8,000.00	90.00	269.97	6,398.00	1,895.97	-1,534.92	1,857.15	0.00	0.00	0.00
8,100.00	90.00	269.97	6,398.00	1,895.92	-1,634.92	1,955.43	0.00	0.00	0.00
8,200.00	90.00	269.97	6,398.00	1,895.86	-1,734.92	2,053.72	0.00	0.00	0.00
8,300.00	90.00	269.97	6,398.00	1,895.81	-1,834.92	2,152.01	0.00	0.00	0.00
8,400.00	90.00	269.97	6,398.00	1,895.75	-1,934.92	2,250.30	0.00	0.00	0.00
8,500.00	90.00	269.97	6,398.00	1,895.70	-2,034.92	2,348.58	0.00	0.00	0.00
8,600.00	90.00	269.97	6,398.00	1,895.64	-2,134.92	2,446.87	0.00	0.00	0.00
8,700.00	90.00	269.97	6,398.00	1,895.59	-2,234.92	2,545.16	0.00	0.00	0.00
8,800.00	90.00	269.97	6,398.00	1,895.53	-2,334.92	2,643.45	0.00	0.00	0.00
8,900.00	90.00	269.97	6,398.00	1,895.48	-2,434.92	2,741.73	0.00	0.00	0.00
9,000.00	90.00	269.97	6,398.00	1,895.42	-2,534.92	2,840.02	0.00	0.00	0.00
9,100.00	90.00	269.97	6,398.00	1,895.37	-2,634.92	2,938.31	0.00	0.00	0.00
9,200.00	90.00	269.97	6,398.00	1,895.31	-2,734.92	3,036.59	0.00	0.00	0.00
9,300.00	90.00	269.97	6,398.00	1,895.26	-2,834.92	3,134.88	0.00	0.00	0.00
9,400.00	90.00	269.97	6,398.00	1,895.20	-2,934.92	3,233.17	0.00	0.00	0.00
9,500.00	90.00	269.97	6,398.00	1,895.15	-3,034.92	3,331.46	0.00	0.00	0.00
9,600.00	90.00	269.97	6,398.00	1,895.09	-3,134.92	3,429.74	0.00	0.00	0.00
9,700.00	90.00	269.97	6,398.00	1,895.04	-3,234.92	3,528.03	0.00	0.00	0.00
9,800.00	90.00	269.97	6,398.00	1,894.98	-3,334.92	3,626.32	0.00	0.00	0.00
9,900.00	90.00	269.97	6,398.00	1,894.93	-3,434.92	3,724.61	0.00	0.00	0.00

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-02-2L
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 5-02-2L	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	6,398.00	1,894.87	-3,534.92	3,822.89	0.00	0.00	0.00
10,100.00	90.00	269.97	6,398.00	1,894.82	-3,634.92	3,921.18	0.00	0.00	0.00
10,200.00	90.00	269.97	6,398.00	1,894.76	-3,734.92	4,019.47	0.00	0.00	0.00
10,300.00	90.00	269.97	6,398.00	1,894.71	-3,834.92	4,117.76	0.00	0.00	0.00
10,400.00	90.00	269.97	6,398.00	1,894.65	-3,934.92	4,216.04	0.00	0.00	0.00
10,500.00	90.00	269.97	6,398.00	1,894.60	-4,034.92	4,314.33	0.00	0.00	0.00
10,600.00	90.00	269.97	6,398.00	1,894.54	-4,134.92	4,412.62	0.00	0.00	0.00
10,700.00	90.00	269.97	6,398.00	1,894.49	-4,234.92	4,510.91	0.00	0.00	0.00
10,800.00	90.00	269.97	6,398.00	1,894.43	-4,334.92	4,609.19	0.00	0.00	0.00
10,900.00	90.00	269.97	6,398.00	1,894.38	-4,434.92	4,707.48	0.00	0.00	0.00
11,000.00	90.00	269.97	6,398.00	1,894.32	-4,534.92	4,805.77	0.00	0.00	0.00
11,100.00	90.00	269.97	6,398.00	1,894.26	-4,634.92	4,904.06	0.00	0.00	0.00
11,200.00	90.00	269.97	6,398.00	1,894.21	-4,734.92	5,002.34	0.00	0.00	0.00
11,300.00	90.00	269.97	6,398.00	1,894.15	-4,834.92	5,100.63	0.00	0.00	0.00
11,400.00	90.00	269.97	6,398.00	1,894.10	-4,934.92	5,198.92	0.00	0.00	0.00
11,500.00	90.00	269.97	6,398.00	1,894.04	-5,034.92	5,297.21	0.00	0.00	0.00
11,600.00	90.00	269.97	6,398.00	1,893.99	-5,134.92	5,395.49	0.00	0.00	0.00
11,700.00	90.00	269.97	6,398.00	1,893.93	-5,234.92	5,493.78	0.00	0.00	0.00
11,800.00	90.00	269.97	6,398.00	1,893.88	-5,334.92	5,592.07	0.00	0.00	0.00
11,900.00	90.00	269.97	6,398.00	1,893.82	-5,434.92	5,690.35	0.00	0.00	0.00
12,000.00	90.00	269.97	6,398.00	1,893.77	-5,534.92	5,788.64	0.00	0.00	0.00
12,100.00	90.00	269.97	6,398.00	1,893.71	-5,634.92	5,886.93	0.00	0.00	0.00
12,200.00	90.00	269.97	6,398.00	1,893.66	-5,734.92	5,985.22	0.00	0.00	0.00
12,300.00	90.00	269.97	6,398.00	1,893.60	-5,834.92	6,083.50	0.00	0.00	0.00
12,400.00	90.00	269.97	6,398.00	1,893.55	-5,934.92	6,181.79	0.00	0.00	0.00
12,500.00	90.00	269.97	6,398.00	1,893.49	-6,034.92	6,280.08	0.00	0.00	0.00
12,600.00	90.00	269.97	6,398.00	1,893.44	-6,134.92	6,378.37	0.00	0.00	0.00
12,700.00	90.00	269.97	6,398.00	1,893.38	-6,234.92	6,476.65	0.00	0.00	0.00
12,800.00	90.00	269.97	6,398.00	1,893.33	-6,334.92	6,574.94	0.00	0.00	0.00
12,900.00	90.00	269.97	6,398.00	1,893.27	-6,434.92	6,673.23	0.00	0.00	0.00
13,000.00	90.00	269.97	6,398.00	1,893.22	-6,534.92	6,771.52	0.00	0.00	0.00
13,100.00	90.00	269.97	6,398.00	1,893.16	-6,634.92	6,869.80	0.00	0.00	0.00
13,200.00	90.00	269.97	6,398.00	1,893.11	-6,734.92	6,968.09	0.00	0.00	0.00
13,300.00	90.00	269.97	6,398.00	1,893.05	-6,834.92	7,066.38	0.00	0.00	0.00
13,400.00	90.00	269.97	6,398.00	1,893.00	-6,934.92	7,164.67	0.00	0.00	0.00
13,500.00	90.00	269.97	6,398.00	1,892.94	-7,034.92	7,262.95	0.00	0.00	0.00
13,600.00	90.00	269.97	6,398.00	1,892.89	-7,134.92	7,361.24	0.00	0.00	0.00
13,700.00	90.00	269.97	6,398.00	1,892.83	-7,234.92	7,459.53	0.00	0.00	0.00
13,800.00	90.00	269.97	6,398.00	1,892.78	-7,334.92	7,557.82	0.00	0.00	0.00
13,900.00	90.00	269.97	6,398.00	1,892.72	-7,434.92	7,656.10	0.00	0.00	0.00
14,000.00	90.00	269.97	6,398.00	1,892.67	-7,534.92	7,754.39	0.00	0.00	0.00
14,100.00	90.00	269.97	6,398.00	1,892.61	-7,634.92	7,852.68	0.00	0.00	0.00
14,200.00	90.00	269.97	6,398.00	1,892.56	-7,734.92	7,950.96	0.00	0.00	0.00
14,300.00	90.00	269.97	6,398.00	1,892.50	-7,834.92	8,049.25	0.00	0.00	0.00
14,400.00	90.00	269.97	6,398.00	1,892.45	-7,934.92	8,147.54	0.00	0.00	0.00
14,500.00	90.00	269.97	6,398.00	1,892.39	-8,034.92	8,245.83	0.00	0.00	0.00
14,600.00	90.00	269.97	6,398.00	1,892.34	-8,134.92	8,344.11	0.00	0.00	0.00
14,700.00	90.00	269.97	6,398.00	1,892.28	-8,234.92	8,442.40	0.00	0.00	0.00
14,800.00	90.00	269.97	6,398.00	1,892.23	-8,334.92	8,540.69	0.00	0.00	0.00
14,900.00	90.00	269.97	6,398.00	1,892.17	-8,434.92	8,638.98	0.00	0.00	0.00
15,000.00	90.00	269.97	6,398.00	1,892.12	-8,534.92	8,737.26	0.00	0.00	0.00
15,100.00	90.00	269.97	6,398.00	1,892.06	-8,634.92	8,835.55	0.00	0.00	0.00
15,200.00	90.00	269.97	6,398.00	1,892.01	-8,734.92	8,933.84	0.00	0.00	0.00
15,300.00	90.00	269.97	6,398.00	1,891.95	-8,834.92	9,032.13	0.00	0.00	0.00

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-02-2L
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 5-02-2L	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	6,398.00	1,891.90	-8,934.91	9,130.41	0.00	0.00	0.00
15,500.00	90.00	269.97	6,398.00	1,891.84	-9,034.91	9,228.70	0.00	0.00	0.00
15,600.00	90.00	269.97	6,398.00	1,891.79	-9,134.91	9,326.99	0.00	0.00	0.00
15,700.00	90.00	269.97	6,398.00	1,891.73	-9,234.91	9,425.28	0.00	0.00	0.00
15,800.00	90.00	269.97	6,398.00	1,891.68	-9,334.91	9,523.56	0.00	0.00	0.00
15,900.00	90.00	269.97	6,398.00	1,891.62	-9,434.91	9,621.85	0.00	0.00	0.00
16,000.00	90.00	269.97	6,398.00	1,891.57	-9,534.91	9,720.14	0.00	0.00	0.00
16,100.00	90.00	269.97	6,398.00	1,891.51	-9,634.91	9,818.43	0.00	0.00	0.00
16,200.00	90.00	269.97	6,398.00	1,891.46	-9,734.91	9,916.71	0.00	0.00	0.00
16,300.00	90.00	269.97	6,398.00	1,891.40	-9,834.91	10,015.00	0.00	0.00	0.00
16,400.00	90.00	269.97	6,398.00	1,891.35	-9,934.91	10,113.29	0.00	0.00	0.00
16,500.00	90.00	269.97	6,398.00	1,891.29	-10,034.91	10,211.57	0.00	0.00	0.00
16,583.02	90.00	269.97	6,398.00	1,891.24	-10,117.93	10,293.17	0.00	0.00	0.00
PBHL/TD 16583.02 MD 6398.00 TVD									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Silverton 5-02-2L SL 25E - hit/miss target - Shape - Point	0.00	0.00	24.00	0.00	0.00	14,651,607.20	1,793,253.48	40.34161678	-104.45151186
Silverton 5-02-2L BHL 6E - plan hits target center - Point	0.00	0.00	6,398.00	1,891.24	-10,117.93	14,653,435.70	1,783,124.04	40.34680435	-104.48782415
Silverton 5-02-2L LP 68E - plan hits target center - Point	0.00	0.00	6,398.00	1,896.44	-693.13	14,653,499.30	1,792,548.61	40.34682427	-104.45399944

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
3,358.34	3,308.01	315.20	-23.07	Begin 27.17° tangent section
6,277.17	5,904.84	1,644.33	-120.35	Begin 10°/100' build/turn
7,158.22	6,398.00	1,896.44	-693.13	LP Begin 90° lateral
16,583.02	6,398.00	1,891.24	-10,117.93	PBHL/TD 16583.02 MD 6398.00 TVD