



Well: Silverton 5-06-3L
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	2796.14	15.92	352.45	2785.93	108.96	-14.44	2.00	26.63	Begin 15.92° tangent section
4	6084.85	15.92	352.45	5948.46	1003.37	-132.99	0.00	245.26	Begin 10°/100' build/turn
5	6964.28	90.00	269.97	6480.00	1153.40	-705.66	10.00	831.19	LP Begin 90° lateral
6	16378.51	90.00	269.97	6480.00	1148.24	-10119.89	0.00	10184.82	PBHL/TD 16378.51 MD 6480.00 TVD

DESIGN TARGET DETAILS

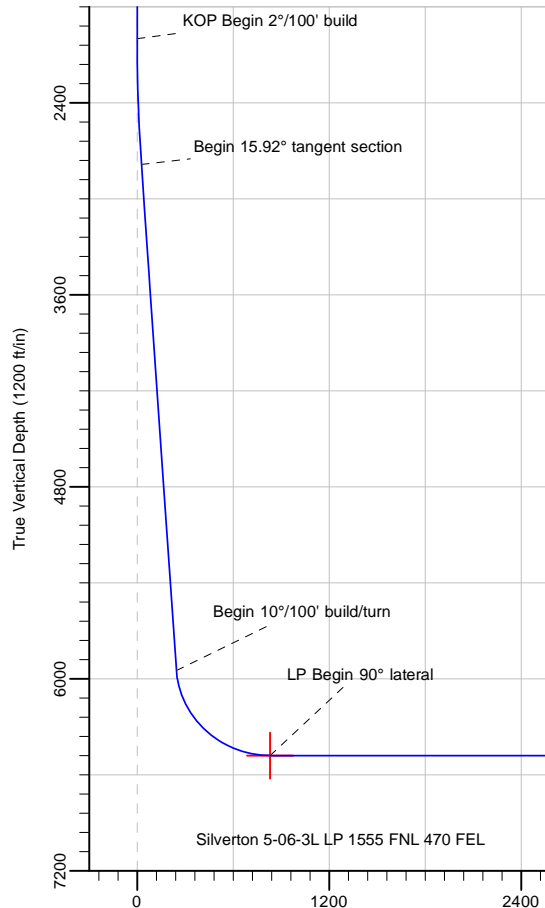
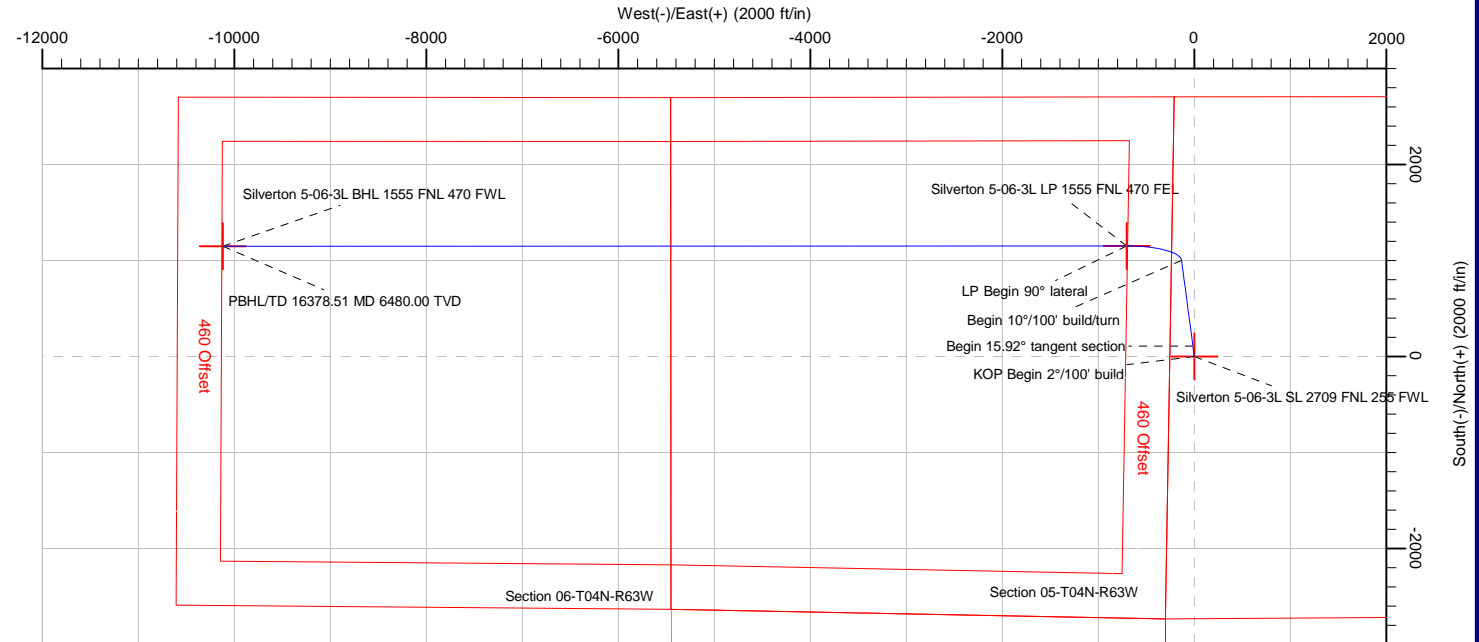
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Silverton 5-06-3L SL 2709 FNL 255 FWL	24.00	0.00	0.00	14651482.20	1793252.14	40.34127357	-104.45151945
Silverton 5-06-3L BHL 1555 FNL 470 FWL	6480.00	1148.24	-10119.89	14652567.70	1783125.35	40.34442088	-104.48783748
Silverton 5-06-3L LP 1555 FNL 470 FEL	6480.00	1153.40	-705.66	14652631.20	1792539.35	40.34444071	-104.45405189

Silverton 5-06-3L Surf loc: 2709 FNL 255 FWL Section 04-T04N-R63W			
NAD83 Colorado - HARN Universal Transverse Mercator (US Survey Feet) Zone 13N (108 W to 102 W) RKB=4629+24 @ 4653.00ft			
Northing 14651482.20	Easting 1793252.14	Latitude 40.34127357	Longitude -104.45151945



Azimuths to True North
Magnetic North: 8.08°

Magnetic Field
Strength: 52227.9snT
Dip Angle: 66.90°
Date: 5/29/2018
Model: HDGM



Vertical Section at 276.47° (1200 ft/in)

PBHL/TD 16378.51 MD 6480.00 TVD

Silverton 5-06-3L BHL 1555 FNL 470 FWL

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 5-06-3L
Company:	Confluence Resources	TVD Reference:	RKB=4629+24 @ 4653.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=4629+24 @ 4653.00ft
Site:	Section 04-T04N-R63W	North Reference:	True
Well:	Silverton 5-06-3L	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 5-06-3L, Surf loc: 2709 FNL 255 FWL Section 04-T04N-R63W					
Well Position	+N/-S	0.00 ft	Northing:	14,651,482.20 usft	Latitude:	40.34127356
	+E/-W	0.00 ft	Easting:	1,793,252.14 usft	Longitude:	-104.45151945
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,629.00 ft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	5/29/2018	8.08	66.90	52,227.90000000

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	276.47

Plan Survey Tool Program	Date	5/29/2018		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	16,378.51 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	
2,796.14	15.92	352.45	2,785.93	108.96	-14.44	2.00	2.00	0.00	352.45	
6,084.85	15.92	352.45	5,948.46	1,003.37	-132.99	0.00	0.00	0.00	0.00	
6,964.28	90.00	269.97	6,480.00	1,153.40	-705.66	10.00	8.42	-9.38	-82.77	Silverton 5-06-3L LP
16,378.51	90.00	269.97	6,480.00	1,148.24	-10,119.89	0.00	0.00	0.00	0.00	Silverton 5-06-3L BHL

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-06-3L
Company:	Confluence Resources	TVD Reference:	RKB=4629+24 @ 4653.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=4629+24 @ 4653.00ft
Site:	Section 04-T04N-R63W	North Reference:	True
Well:	Silverton 5-06-3L	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	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
100.00	0.00	0.00	100.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
200.00	0.00	0.00	200.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
300.00	0.00	0.00	300.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
400.00	0.00	0.00	400.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
500.00	0.00	0.00	500.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
600.00	0.00	0.00	600.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
700.00	0.00	0.00	700.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
800.00	0.00	0.00	800.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
900.00	0.00	0.00	900.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
1,100.00	0.00	0.00	1,100.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
1,200.00	0.00	0.00	1,200.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
1,300.00	0.00	0.00	1,300.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
1,400.00	0.00	0.00	1,400.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
1,500.00	0.00	0.00	1,500.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
1,600.00	0.00	0.00	1,600.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
1,700.00	0.00	0.00	1,700.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
1,800.00	0.00	0.00	1,800.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
1,900.00	0.00	0.00	1,900.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
2,000.00	0.00	0.00	2,000.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
KOP Begin 2°/100' build									
2,100.00	2.00	352.45	2,099.98	1.73	-0.23	14,651,483.93	1,793,251.90	40.34127831	-104.45152027
2,200.00	4.00	352.45	2,199.84	6.92	-0.92	14,651,489.11	1,793,251.18	40.34129256	-104.45152274
2,300.00	6.00	352.45	2,299.45	15.56	-2.06	14,651,497.74	1,793,249.98	40.34131628	-104.45152685
2,400.00	8.00	352.45	2,398.70	27.64	-3.66	14,651,509.81	1,793,248.31	40.34134945	-104.45153260
2,500.00	10.00	352.45	2,497.47	43.15	-5.72	14,651,525.31	1,793,246.15	40.34139204	-104.45153997
2,600.00	12.00	352.45	2,595.62	62.06	-8.23	14,651,544.20	1,793,243.53	40.34144397	-104.45154897
2,700.00	14.00	352.45	2,693.06	84.36	-11.18	14,651,566.49	1,793,240.44	40.34150521	-104.45155957
2,796.14	15.92	352.45	2,785.93	108.96	-14.44	14,651,591.07	1,793,237.02	40.34157277	-104.45157128
Begin 15.92° tangent section									
2,800.00	15.92	352.45	2,789.64	110.01	-14.58	14,651,592.12	1,793,236.88	40.34157565	-104.45157178
2,900.00	15.92	352.45	2,885.81	137.21	-18.19	14,651,619.29	1,793,233.10	40.34165033	-104.45158471
3,000.00	15.92	352.45	2,981.97	164.41	-21.79	14,651,646.46	1,793,229.33	40.34172501	-104.45159765
3,100.00	15.92	352.45	3,078.13	191.60	-25.39	14,651,673.64	1,793,225.56	40.34179969	-104.45161058
3,200.00	15.92	352.45	3,174.30	218.80	-29.00	14,651,700.81	1,793,221.79	40.34187437	-104.45162352
3,300.00	15.92	352.45	3,270.46	245.99	-32.60	14,651,727.98	1,793,218.01	40.34194905	-104.45163645
3,400.00	15.92	352.45	3,366.62	273.19	-36.21	14,651,755.16	1,793,214.24	40.34202373	-104.45164939
3,500.00	15.92	352.45	3,462.79	300.39	-39.81	14,651,782.33	1,793,210.47	40.34209841	-104.45166233
3,600.00	15.92	352.45	3,558.95	327.58	-43.42	14,651,809.51	1,793,206.69	40.34217309	-104.45167526
3,700.00	15.92	352.45	3,655.11	354.78	-47.02	14,651,836.68	1,793,202.92	40.34224777	-104.45168820
3,800.00	15.92	352.45	3,751.28	381.98	-50.63	14,651,863.85	1,793,199.15	40.34232245	-104.45170113
3,900.00	15.92	352.45	3,847.44	409.17	-54.23	14,651,891.03	1,793,195.37	40.34239713	-104.45171407
4,000.00	15.92	352.45	3,943.60	436.37	-57.84	14,651,918.20	1,793,191.60	40.34247181	-104.45172701
4,100.00	15.92	352.45	4,039.77	463.57	-61.44	14,651,945.37	1,793,187.83	40.34254649	-104.45173994
4,200.00	15.92	352.45	4,135.93	490.76	-65.05	14,651,972.55	1,793,184.05	40.34262117	-104.45175288
4,300.00	15.92	352.45	4,232.09	517.96	-68.65	14,651,999.72	1,793,180.28	40.34269585	-104.45176581
4,400.00	15.92	352.45	4,328.26	545.15	-72.25	14,652,026.89	1,793,176.51	40.34277053	-104.45177875
4,500.00	15.92	352.45	4,424.42	572.35	-75.86	14,652,054.07	1,793,172.74	40.34284521	-104.45179169
4,600.00	15.92	352.45	4,520.58	599.55	-79.46	14,652,081.24	1,793,168.96	40.34291989	-104.45180462
4,700.00	15.92	352.45	4,616.74	626.74	-83.07	14,652,108.41	1,793,165.19	40.34299457	-104.45181756
4,800.00	15.92	352.45	4,712.91	653.94	-86.67	14,652,135.59	1,793,161.42	40.34306925	-104.45183049
4,900.00	15.92	352.45	4,809.07	681.14	-90.28	14,652,162.76	1,793,157.64	40.34314393	-104.45184343
5,000.00	15.92	352.45	4,905.23	708.33	-93.88	14,652,189.93	1,793,153.87	40.34321861	-104.45185637

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-06-3L
Company:	Confluence Resources	TVD Reference:	RKB=4629+24 @ 4653.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=4629+24 @ 4653.00ft
Site:	Section 04-T04N-R63W	North Reference:	True
Well:	Silverton 5-06-3L	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
5,100.00	15.92	352.45	5,001.40	735.53	-97.49	14,652,217.11	1,793,150.10	40.34329329	-104.45186930
5,200.00	15.92	352.45	5,097.56	762.73	-101.09	14,652,244.28	1,793,146.32	40.34336797	-104.45188224
5,300.00	15.92	352.45	5,193.72	789.92	-104.70	14,652,271.45	1,793,142.55	40.34344265	-104.45189517
5,400.00	15.92	352.45	5,289.89	817.12	-108.30	14,652,298.63	1,793,138.78	40.34351733	-104.45190811
5,500.00	15.92	352.45	5,386.05	844.32	-111.90	14,652,325.80	1,793,135.01	40.34359201	-104.45192105
5,600.00	15.92	352.45	5,482.21	871.51	-115.51	14,652,352.97	1,793,131.23	40.34366669	-104.45193398
5,700.00	15.92	352.45	5,578.38	898.71	-119.11	14,652,380.15	1,793,127.46	40.34374137	-104.45194692
5,800.00	15.92	352.45	5,674.54	925.90	-122.72	14,652,407.32	1,793,123.69	40.34381605	-104.45195986
5,900.00	15.92	352.45	5,770.70	953.10	-126.32	14,652,434.50	1,793,119.91	40.34389073	-104.45197279
6,000.00	15.92	352.45	5,866.87	980.30	-129.93	14,652,461.67	1,793,116.14	40.34396541	-104.45198573
6,084.85	15.92	352.45	5,948.46	1,003.37	-132.99	14,652,484.73	1,793,112.94	40.34402877	-104.45199671
Begin 10°/100' build/turn									
6,100.00	16.18	347.05	5,963.02	1,007.49	-133.73	14,652,488.84	1,793,112.17	40.34404008	-104.45199938
6,200.00	20.71	318.39	6,058.05	1,034.36	-148.63	14,652,515.61	1,793,097.10	40.34411386	-104.45205286
6,300.00	28.12	301.92	6,149.15	1,060.11	-180.46	14,652,541.17	1,793,065.12	40.34418457	-104.45216707
6,400.00	36.70	292.27	6,233.55	1,083.95	-228.24	14,652,564.71	1,793,017.19	40.34425004	-104.45233854
6,500.00	45.80	285.93	6,308.68	1,105.17	-290.52	14,652,585.54	1,792,954.78	40.34430830	-104.45256206
6,600.00	55.15	281.33	6,372.27	1,123.12	-365.41	14,652,603.02	1,792,879.78	40.34435757	-104.45283083
6,700.00	64.64	277.67	6,422.38	1,137.24	-450.64	14,652,616.62	1,792,794.46	40.34439636	-104.45313670
6,800.00	74.21	274.56	6,457.49	1,147.12	-543.62	14,652,625.92	1,792,701.43	40.34442348	-104.45347037
6,900.00	83.82	271.72	6,476.53	1,152.45	-641.51	14,652,630.65	1,792,603.50	40.34443812	-104.45382170
6,964.28	90.00	269.97	6,480.00	1,153.40	-705.66	14,652,631.20	1,792,539.35	40.34444071	-104.45405189
LP Begin 90° lateral									
7,000.00	90.00	269.97	6,480.00	1,153.38	-741.38	14,652,630.96	1,792,503.63	40.34444065	-104.45418009
7,100.00	90.00	269.97	6,480.00	1,153.32	-841.38	14,652,630.28	1,792,403.63	40.34444049	-104.45453897
7,200.00	90.00	269.97	6,480.00	1,153.27	-941.38	14,652,629.61	1,792,303.63	40.34444033	-104.45489785
7,300.00	90.00	269.97	6,480.00	1,153.21	-1,041.38	14,652,628.93	1,792,203.64	40.34444017	-104.45525672
7,400.00	90.00	269.97	6,480.00	1,153.16	-1,141.38	14,652,628.26	1,792,103.64	40.34444001	-104.45561560
7,500.00	90.00	269.97	6,480.00	1,153.10	-1,241.38	14,652,627.58	1,792,003.64	40.34443984	-104.45597448
7,600.00	90.00	269.97	6,480.00	1,153.05	-1,341.38	14,652,626.91	1,791,903.64	40.34443968	-104.45633336
7,700.00	90.00	269.97	6,480.00	1,152.99	-1,441.38	14,652,626.23	1,791,803.65	40.34443951	-104.45669223
7,800.00	90.00	269.97	6,480.00	1,152.94	-1,541.38	14,652,625.56	1,791,703.65	40.34443935	-104.45705111
7,900.00	90.00	269.97	6,480.00	1,152.88	-1,641.38	14,652,624.89	1,791,603.65	40.34443918	-104.45740999
8,000.00	90.00	269.97	6,480.00	1,152.83	-1,741.38	14,652,624.21	1,791,503.65	40.34443901	-104.45776887
8,100.00	90.00	269.97	6,480.00	1,152.78	-1,841.38	14,652,623.54	1,791,403.66	40.34443884	-104.45812774
8,200.00	90.00	269.97	6,480.00	1,152.72	-1,941.38	14,652,622.86	1,791,303.66	40.34443867	-104.45848662
8,300.00	90.00	269.97	6,480.00	1,152.67	-2,041.38	14,652,622.19	1,791,203.66	40.34443849	-104.45884550
8,400.00	90.00	269.97	6,480.00	1,152.61	-2,141.38	14,652,621.51	1,791,103.66	40.34443832	-104.45920438
8,500.00	90.00	269.97	6,480.00	1,152.56	-2,241.38	14,652,620.84	1,791,003.67	40.34443815	-104.45956325
8,600.00	90.00	269.97	6,480.00	1,152.50	-2,341.38	14,652,620.16	1,790,903.67	40.34443797	-104.45992213
8,700.00	90.00	269.97	6,480.00	1,152.45	-2,441.38	14,652,619.49	1,790,803.67	40.34443779	-104.46028101
8,800.00	90.00	269.97	6,480.00	1,152.39	-2,541.38	14,652,618.82	1,790,703.67	40.34443761	-104.46063989
8,900.00	90.00	269.97	6,480.00	1,152.34	-2,641.38	14,652,618.14	1,790,603.68	40.34443743	-104.46099876
9,000.00	90.00	269.97	6,480.00	1,152.28	-2,741.38	14,652,617.47	1,790,503.68	40.34443725	-104.46135764
9,100.00	90.00	269.97	6,480.00	1,152.23	-2,841.38	14,652,616.79	1,790,403.68	40.34443707	-104.46171652
9,200.00	90.00	269.97	6,480.00	1,152.17	-2,941.38	14,652,616.12	1,790,303.68	40.34443689	-104.46207540
9,300.00	90.00	269.97	6,480.00	1,152.12	-3,041.38	14,652,615.44	1,790,203.69	40.34443671	-104.46243427
9,400.00	90.00	269.97	6,480.00	1,152.06	-3,141.38	14,652,614.77	1,790,103.69	40.34443652	-104.46279315
9,500.00	90.00	269.97	6,480.00	1,152.01	-3,241.38	14,652,614.09	1,790,003.69	40.34443634	-104.46315203
9,600.00	90.00	269.97	6,480.00	1,151.95	-3,341.38	14,652,613.42	1,789,903.69	40.34443615	-104.46351091
9,700.00	90.00	269.97	6,480.00	1,151.90	-3,441.38	14,652,612.74	1,789,803.70	40.34443596	-104.46386978
9,800.00	90.00	269.97	6,480.00	1,151.84	-3,541.38	14,652,612.07	1,789,703.70	40.34443577	-104.46422866
9,900.00	90.00	269.97	6,480.00	1,151.79	-3,641.38	14,652,611.40	1,789,603.70	40.34443558	-104.46458754
10,000.00	90.00	269.97	6,480.00	1,151.73	-3,741.38	14,652,610.72	1,789,503.70	40.34443539	-104.46494642

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-06-3L
Company:	Confluence Resources	TVD Reference:	RKB=4629+24 @ 4653.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=4629+24 @ 4653.00ft
Site:	Section 04-T04N-R63W	North Reference:	True
Well:	Silverton 5-06-3L	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	6,480.00	1,151.68	-3,841.38	14,652,610.05	1,789,403.71	40.34443520	-104.46530529
10,200.00	90.00	269.97	6,480.00	1,151.62	-3,941.38	14,652,609.37	1,789,303.71	40.34443500	-104.46566417
10,300.00	90.00	269.97	6,480.00	1,151.57	-4,041.38	14,652,608.70	1,789,203.71	40.34443481	-104.46602305
10,400.00	90.00	269.97	6,480.00	1,151.52	-4,141.38	14,652,608.02	1,789,103.71	40.34443461	-104.46638193
10,500.00	90.00	269.97	6,480.00	1,151.46	-4,241.38	14,652,607.35	1,789,003.72	40.34443441	-104.46674080
10,600.00	90.00	269.97	6,480.00	1,151.41	-4,341.38	14,652,606.67	1,788,903.72	40.34443422	-104.46709968
10,700.00	90.00	269.97	6,480.00	1,151.35	-4,441.38	14,652,606.00	1,788,803.72	40.34443402	-104.46745856
10,800.00	90.00	269.97	6,480.00	1,151.30	-4,541.38	14,652,605.33	1,788,703.72	40.34443382	-104.46781744
10,900.00	90.00	269.97	6,480.00	1,151.24	-4,641.38	14,652,604.65	1,788,603.73	40.34443362	-104.46817632
11,000.00	90.00	269.97	6,480.00	1,151.19	-4,741.38	14,652,603.98	1,788,503.73	40.34443341	-104.46853519
11,100.00	90.00	269.97	6,480.00	1,151.13	-4,841.38	14,652,603.30	1,788,403.73	40.34443321	-104.46889407
11,200.00	90.00	269.97	6,480.00	1,151.08	-4,941.38	14,652,602.63	1,788,303.73	40.34443300	-104.46925295
11,300.00	90.00	269.97	6,480.00	1,151.02	-5,041.38	14,652,601.95	1,788,203.74	40.34443280	-104.46961183
11,400.00	90.00	269.97	6,480.00	1,150.97	-5,141.38	14,652,601.28	1,788,103.74	40.34443259	-104.46997070
11,500.00	90.00	269.97	6,480.00	1,150.91	-5,241.38	14,652,600.60	1,788,003.74	40.34443238	-104.47032958
11,600.00	90.00	269.97	6,480.00	1,150.86	-5,341.38	14,652,599.93	1,787,903.74	40.34443217	-104.47068846
11,700.00	90.00	269.97	6,480.00	1,150.80	-5,441.38	14,652,599.25	1,787,803.75	40.34443196	-104.47104734
11,800.00	90.00	269.97	6,480.00	1,150.75	-5,541.38	14,652,598.58	1,787,703.75	40.34443175	-104.47140622
11,900.00	90.00	269.97	6,480.00	1,150.69	-5,641.38	14,652,597.91	1,787,603.75	40.34443154	-104.47176509
12,000.00	90.00	269.97	6,480.00	1,150.64	-5,741.38	14,652,597.23	1,787,503.75	40.34443132	-104.47212397
12,100.00	90.00	269.97	6,480.00	1,150.58	-5,841.38	14,652,596.56	1,787,403.76	40.34443111	-104.47248285
12,200.00	90.00	269.97	6,480.00	1,150.53	-5,941.38	14,652,595.88	1,787,303.76	40.34443089	-104.47284173
12,300.00	90.00	269.97	6,480.00	1,150.47	-6,041.38	14,652,595.21	1,787,203.76	40.34443068	-104.47320061
12,400.00	90.00	269.97	6,480.00	1,150.42	-6,141.38	14,652,594.53	1,787,103.76	40.34443046	-104.47355948
12,500.00	90.00	269.97	6,480.00	1,150.36	-6,241.38	14,652,593.86	1,787,003.77	40.34443024	-104.47391836
12,600.00	90.00	269.97	6,480.00	1,150.31	-6,341.38	14,652,593.18	1,786,903.77	40.34443002	-104.47427724
12,700.00	90.00	269.97	6,480.00	1,150.26	-6,441.38	14,652,592.51	1,786,803.77	40.34442980	-104.47463612
12,800.00	90.00	269.97	6,480.00	1,150.20	-6,541.38	14,652,591.83	1,786,703.77	40.34442957	-104.47499499
12,900.00	90.00	269.97	6,480.00	1,150.15	-6,641.38	14,652,591.16	1,786,603.78	40.34442935	-104.47535387
13,000.00	90.00	269.97	6,480.00	1,150.09	-6,741.38	14,652,590.49	1,786,503.78	40.34442913	-104.47571275
13,100.00	90.00	269.97	6,480.00	1,150.04	-6,841.38	14,652,589.81	1,786,403.78	40.34442890	-104.47607163
13,200.00	90.00	269.97	6,480.00	1,149.98	-6,941.38	14,652,589.14	1,786,303.78	40.34442867	-104.47643051
13,300.00	90.00	269.97	6,480.00	1,149.93	-7,041.38	14,652,588.46	1,786,203.79	40.34442844	-104.47678938
13,400.00	90.00	269.97	6,480.00	1,149.87	-7,141.38	14,652,587.79	1,786,103.79	40.34442821	-104.47714826
13,500.00	90.00	269.97	6,480.00	1,149.82	-7,241.38	14,652,587.11	1,786,003.79	40.34442798	-104.47750714
13,600.00	90.00	269.97	6,480.00	1,149.76	-7,341.38	14,652,586.44	1,785,903.79	40.34442775	-104.47786602
13,700.00	90.00	269.97	6,480.00	1,149.71	-7,441.38	14,652,585.76	1,785,803.80	40.34442752	-104.47822490
13,800.00	90.00	269.97	6,480.00	1,149.65	-7,541.38	14,652,585.09	1,785,703.80	40.34442729	-104.47858377
13,900.00	90.00	269.97	6,480.00	1,149.60	-7,641.38	14,652,584.42	1,785,603.80	40.34442705	-104.47894265
14,000.00	90.00	269.97	6,480.00	1,149.54	-7,741.38	14,652,583.74	1,785,503.80	40.34442681	-104.47930153
14,100.00	90.00	269.97	6,480.00	1,149.49	-7,841.38	14,652,583.07	1,785,403.80	40.34442658	-104.47966041
14,200.00	90.00	269.97	6,480.00	1,149.43	-7,941.38	14,652,582.39	1,785,303.81	40.34442634	-104.48001929
14,300.00	90.00	269.97	6,480.00	1,149.38	-8,041.38	14,652,581.72	1,785,203.81	40.34442610	-104.48037816
14,400.00	90.00	269.97	6,480.00	1,149.32	-8,141.38	14,652,581.04	1,785,103.81	40.34442586	-104.48073704
14,500.00	90.00	269.97	6,480.00	1,149.27	-8,241.38	14,652,580.37	1,785,003.81	40.34442562	-104.48109592
14,600.00	90.00	269.97	6,480.00	1,149.21	-8,341.38	14,652,579.69	1,784,903.82	40.34442538	-104.48145480
14,700.00	90.00	269.97	6,480.00	1,149.16	-8,441.38	14,652,579.02	1,784,803.82	40.34442513	-104.48181368
14,800.00	90.00	269.97	6,480.00	1,149.10	-8,541.38	14,652,578.34	1,784,703.82	40.34442489	-104.48217256
14,900.00	90.00	269.97	6,480.00	1,149.05	-8,641.38	14,652,577.67	1,784,603.82	40.34442464	-104.48253143
15,000.00	90.00	269.97	6,480.00	1,149.00	-8,741.38	14,652,577.00	1,784,503.83	40.34442439	-104.48289031
15,100.00	90.00	269.97	6,480.00	1,148.94	-8,841.38	14,652,576.32	1,784,403.83	40.34442414	-104.48324919
15,200.00	90.00	269.97	6,480.00	1,148.89	-8,941.38	14,652,575.65	1,784,303.83	40.34442390	-104.48360807
15,300.00	90.00	269.97	6,480.00	1,148.83	-9,041.38	14,652,574.97	1,784,203.83	40.34442364	-104.48396695
15,400.00	90.00	269.97	6,480.00	1,148.78	-9,141.38	14,652,574.30	1,784,103.84	40.34442339	-104.48432581
15,500.00	90.00	269.97	6,480.00	1,148.72	-9,241.38	14,652,573.62	1,784,003.84	40.34442314	-104.48468469

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-06-3L
Company:	Confluence Resources	TVD Reference:	RKB=4629+24 @ 4653.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=4629+24 @ 4653.00ft
Site:	Section 04-T04N-R63W	North Reference:	True
Well:	Silverton 5-06-3L	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	6,480.00	1,148.67	-9,341.38	14,652,572.95	1,783,903.84	40.34442289	-104.48504357
15,700.00	90.00	269.97	6,480.00	1,148.61	-9,441.38	14,652,572.27	1,783,803.84	40.34442263	-104.48540245
15,800.00	90.00	269.97	6,480.00	1,148.56	-9,541.38	14,652,571.60	1,783,703.85	40.34442238	-104.48576133
15,900.00	90.00	269.97	6,480.00	1,148.50	-9,641.38	14,652,570.93	1,783,603.85	40.34442212	-104.48612020
16,000.00	90.00	269.97	6,480.00	1,148.45	-9,741.38	14,652,570.25	1,783,503.85	40.34442186	-104.48647908
16,100.00	90.00	269.97	6,480.00	1,148.39	-9,841.38	14,652,569.58	1,783,403.85	40.34442160	-104.48683796
16,200.00	90.00	269.97	6,480.00	1,148.34	-9,941.38	14,652,568.90	1,783,303.86	40.34442134	-104.48719684
16,300.00	90.00	269.97	6,480.00	1,148.28	-10,041.38	14,652,568.23	1,783,203.86	40.34442108	-104.48755572
16,378.51	90.00	269.97	6,480.00	1,148.24	-10,119.89	14,652,567.70	1,783,125.35	40.34442087	-104.48783748
PBHL/TD 16378.51 MD 6480.00 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 5-06-3L SL 27C - plan hits target center - Point	0.00	0.00	24.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
Silverton 5-06-3L LP 15C - plan hits target center - Point	0.00	0.00	6,480.00	1,153.40	-705.66	14,652,631.20	1,792,539.35	40.34444071	-104.45405189
Silverton 5-06-3L BHL 1A - plan hits target center - Point	0.00	0.00	6,480.00	1,148.24	-10,119.89	14,652,567.70	1,783,125.35	40.34442087	-104.48783748

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
2,796.14	2,785.93	108.96	-14.44	Begin 15.92° tangent section
6,084.85	5,948.46	1,003.37	-132.99	Begin 10°/100' build/turn
6,964.28	6,480.00	1,153.40	-705.66	LP Begin 90° lateral
16,378.51	6,480.00	1,148.24	-10,119.89	PBHL/TD 16378.51 MD 6480.00 TVD

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-06-3L
Company:	Confluence Resources	TVD Reference:	RKB=4629+24 @ 4653.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=4629+24 @ 4653.00ft
Site:	Section 04-T04N-R63W	North Reference:	True
Well:	Silverton 5-06-3L	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 5-06-3L, Surf loc: 2709 FNL 255 FWL Section 04-T04N-R63W					
Well Position	+N/-S	1,408.59 ft	Northing:	14,651,482.20 usft	Latitude:	40.34127356
	+E/-W	-41.26 ft	Easting:	1,793,252.14 usft	Longitude:	-104.45151945
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,629.00 ft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	5/29/2018	8.08	66.90	52,227.90000000

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	276.47

Plan Survey Tool Program	Date	5/29/2018		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	16,378.51	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	
2,796.14	15.92	352.45	2,785.93	108.96	-14.44	2.00	2.00	0.00	352.45	
6,084.85	15.92	352.45	5,948.46	1,003.37	-132.99	0.00	0.00	0.00	0.00	
6,964.28	90.00	269.97	6,480.00	1,153.40	-705.66	10.00	8.42	-9.38	-82.77	Silverton 5-06-3L LP
16,378.51	90.00	269.97	6,480.00	1,148.24	-10,119.89	0.00	0.00	0.00	0.00	Silverton 5-06-3L BHL

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-06-3L
Company:	Confluence Resources	TVD Reference:	RKB=4629+24 @ 4653.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=4629+24 @ 4653.00ft
Site:	Section 04-T04N-R63W	North Reference:	True
Well:	Silverton 5-06-3L	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	352.45	2,099.98	1.73	-0.23	0.42	2.00	2.00	0.00
2,200.00	4.00	352.45	2,199.84	6.92	-0.92	1.69	2.00	2.00	0.00
2,300.00	6.00	352.45	2,299.45	15.56	-2.06	3.80	2.00	2.00	0.00
2,400.00	8.00	352.45	2,398.70	27.64	-3.66	6.76	2.00	2.00	0.00
2,500.00	10.00	352.45	2,497.47	43.15	-5.72	10.55	2.00	2.00	0.00
2,600.00	12.00	352.45	2,595.62	62.06	-8.23	15.17	2.00	2.00	0.00
2,700.00	14.00	352.45	2,693.06	84.36	-11.18	20.62	2.00	2.00	0.00
2,796.14	15.92	352.45	2,785.93	108.96	-14.44	26.63	2.00	2.00	0.00
Begin 15.92° tangent section									
2,800.00	15.92	352.45	2,789.64	110.01	-14.58	26.89	0.00	0.00	0.00
2,900.00	15.92	352.45	2,885.81	137.21	-18.19	33.54	0.00	0.00	0.00
3,000.00	15.92	352.45	2,981.97	164.41	-21.79	40.19	0.00	0.00	0.00
3,100.00	15.92	352.45	3,078.13	191.60	-25.39	46.83	0.00	0.00	0.00
3,200.00	15.92	352.45	3,174.30	218.80	-29.00	53.48	0.00	0.00	0.00
3,300.00	15.92	352.45	3,270.46	245.99	-32.60	60.13	0.00	0.00	0.00
3,400.00	15.92	352.45	3,366.62	273.19	-36.21	66.78	0.00	0.00	0.00
3,500.00	15.92	352.45	3,462.79	300.39	-39.81	73.42	0.00	0.00	0.00
3,600.00	15.92	352.45	3,558.95	327.58	-43.42	80.07	0.00	0.00	0.00
3,700.00	15.92	352.45	3,655.11	354.78	-47.02	86.72	0.00	0.00	0.00
3,800.00	15.92	352.45	3,751.28	381.98	-50.63	93.37	0.00	0.00	0.00
3,900.00	15.92	352.45	3,847.44	409.17	-54.23	100.02	0.00	0.00	0.00
4,000.00	15.92	352.45	3,943.60	436.37	-57.84	106.66	0.00	0.00	0.00
4,100.00	15.92	352.45	4,039.77	463.57	-61.44	113.31	0.00	0.00	0.00
4,200.00	15.92	352.45	4,135.93	490.76	-65.05	119.96	0.00	0.00	0.00
4,300.00	15.92	352.45	4,232.09	517.96	-68.65	126.61	0.00	0.00	0.00
4,400.00	15.92	352.45	4,328.26	545.15	-72.25	133.25	0.00	0.00	0.00
4,500.00	15.92	352.45	4,424.42	572.35	-75.86	139.90	0.00	0.00	0.00
4,600.00	15.92	352.45	4,520.58	599.55	-79.46	146.55	0.00	0.00	0.00
4,700.00	15.92	352.45	4,616.74	626.74	-83.07	153.20	0.00	0.00	0.00
4,800.00	15.92	352.45	4,712.91	653.94	-86.67	159.85	0.00	0.00	0.00
4,900.00	15.92	352.45	4,809.07	681.14	-90.28	166.49	0.00	0.00	0.00

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-06-3L
Company:	Confluence Resources	TVD Reference:	RKB=4629+24 @ 4653.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=4629+24 @ 4653.00ft
Site:	Section 04-T04N-R63W	North Reference:	True
Well:	Silverton 5-06-3L	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	15.92	352.45	4,905.23	708.33	-93.88	173.14	0.00	0.00	0.00
5,100.00	15.92	352.45	5,001.40	735.53	-97.49	179.79	0.00	0.00	0.00
5,200.00	15.92	352.45	5,097.56	762.73	-101.09	186.44	0.00	0.00	0.00
5,300.00	15.92	352.45	5,193.72	789.92	-104.70	193.08	0.00	0.00	0.00
5,400.00	15.92	352.45	5,289.89	817.12	-108.30	199.73	0.00	0.00	0.00
5,500.00	15.92	352.45	5,386.05	844.32	-111.90	206.38	0.00	0.00	0.00
5,600.00	15.92	352.45	5,482.21	871.51	-115.51	213.03	0.00	0.00	0.00
5,700.00	15.92	352.45	5,578.38	898.71	-119.11	219.68	0.00	0.00	0.00
5,800.00	15.92	352.45	5,674.54	925.90	-122.72	226.32	0.00	0.00	0.00
5,900.00	15.92	352.45	5,770.70	953.10	-126.32	232.97	0.00	0.00	0.00
6,000.00	15.92	352.45	5,866.87	980.30	-129.93	239.62	0.00	0.00	0.00
6,084.85	15.92	352.45	5,948.46	1,003.37	-132.99	245.26	0.00	0.00	0.00
Begin 10°/100' build/turn									
6,100.00	16.18	347.05	5,963.02	1,007.49	-133.73	246.46	10.00	1.71	-35.65
6,200.00	20.71	318.39	6,058.05	1,034.36	-148.63	264.30	10.00	4.53	-28.65
6,300.00	28.12	301.92	6,149.15	1,060.11	-180.46	298.82	10.00	7.41	-16.47
6,400.00	36.70	292.27	6,233.55	1,083.95	-228.24	348.99	10.00	8.58	-9.66
6,500.00	45.80	285.93	6,308.68	1,105.17	-290.52	413.26	10.00	9.10	-6.33
6,600.00	55.15	281.33	6,372.27	1,123.12	-365.41	489.70	10.00	9.35	-4.61
6,700.00	64.64	277.67	6,422.38	1,137.24	-450.64	575.98	10.00	9.49	-3.65
6,800.00	74.21	274.56	6,457.49	1,147.12	-543.62	669.48	10.00	9.57	-3.12
6,900.00	83.82	271.72	6,476.53	1,152.45	-641.51	767.35	10.00	9.61	-2.83
6,964.28	90.00	269.97	6,480.00	1,153.40	-705.66	831.19	10.00	9.62	-2.73
LP Begin 90° lateral									
7,000.00	90.00	269.97	6,480.00	1,153.38	-741.38	866.68	0.00	0.00	0.00
7,100.00	90.00	269.97	6,480.00	1,153.32	-841.38	966.04	0.00	0.00	0.00
7,200.00	90.00	269.97	6,480.00	1,153.27	-941.38	1,065.40	0.00	0.00	0.00
7,300.00	90.00	269.97	6,480.00	1,153.21	-1,041.38	1,164.75	0.00	0.00	0.00
7,400.00	90.00	269.97	6,480.00	1,153.16	-1,141.38	1,264.11	0.00	0.00	0.00
7,500.00	90.00	269.97	6,480.00	1,153.10	-1,241.38	1,363.47	0.00	0.00	0.00
7,600.00	90.00	269.97	6,480.00	1,153.05	-1,341.38	1,462.82	0.00	0.00	0.00
7,700.00	90.00	269.97	6,480.00	1,152.99	-1,441.38	1,562.18	0.00	0.00	0.00
7,800.00	90.00	269.97	6,480.00	1,152.94	-1,541.38	1,661.53	0.00	0.00	0.00
7,900.00	90.00	269.97	6,480.00	1,152.88	-1,641.38	1,760.89	0.00	0.00	0.00
8,000.00	90.00	269.97	6,480.00	1,152.83	-1,741.38	1,860.25	0.00	0.00	0.00
8,100.00	90.00	269.97	6,480.00	1,152.78	-1,841.38	1,959.60	0.00	0.00	0.00
8,200.00	90.00	269.97	6,480.00	1,152.72	-1,941.38	2,058.96	0.00	0.00	0.00
8,300.00	90.00	269.97	6,480.00	1,152.67	-2,041.38	2,158.32	0.00	0.00	0.00
8,400.00	90.00	269.97	6,480.00	1,152.61	-2,141.38	2,257.67	0.00	0.00	0.00
8,500.00	90.00	269.97	6,480.00	1,152.56	-2,241.38	2,357.03	0.00	0.00	0.00
8,600.00	90.00	269.97	6,480.00	1,152.50	-2,341.38	2,456.38	0.00	0.00	0.00
8,700.00	90.00	269.97	6,480.00	1,152.45	-2,441.38	2,555.74	0.00	0.00	0.00
8,800.00	90.00	269.97	6,480.00	1,152.39	-2,541.38	2,655.10	0.00	0.00	0.00
8,900.00	90.00	269.97	6,480.00	1,152.34	-2,641.38	2,754.45	0.00	0.00	0.00
9,000.00	90.00	269.97	6,480.00	1,152.28	-2,741.38	2,853.81	0.00	0.00	0.00
9,100.00	90.00	269.97	6,480.00	1,152.23	-2,841.38	2,953.17	0.00	0.00	0.00
9,200.00	90.00	269.97	6,480.00	1,152.17	-2,941.38	3,052.52	0.00	0.00	0.00
9,300.00	90.00	269.97	6,480.00	1,152.12	-3,041.38	3,151.88	0.00	0.00	0.00
9,400.00	90.00	269.97	6,480.00	1,152.06	-3,141.38	3,251.23	0.00	0.00	0.00
9,500.00	90.00	269.97	6,480.00	1,152.01	-3,241.38	3,350.59	0.00	0.00	0.00
9,600.00	90.00	269.97	6,480.00	1,151.95	-3,341.38	3,449.95	0.00	0.00	0.00
9,700.00	90.00	269.97	6,480.00	1,151.90	-3,441.38	3,549.30	0.00	0.00	0.00
9,800.00	90.00	269.97	6,480.00	1,151.84	-3,541.38	3,648.66	0.00	0.00	0.00
9,900.00	90.00	269.97	6,480.00	1,151.79	-3,641.38	3,748.02	0.00	0.00	0.00

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-06-3L
Company:	Confluence Resources	TVD Reference:	RKB=4629+24 @ 4653.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=4629+24 @ 4653.00ft
Site:	Section 04-T04N-R63W	North Reference:	True
Well:	Silverton 5-06-3L	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	6,480.00	1,151.73	-3,741.38	3,847.37	0.00	0.00	0.00
10,100.00	90.00	269.97	6,480.00	1,151.68	-3,841.38	3,946.73	0.00	0.00	0.00
10,200.00	90.00	269.97	6,480.00	1,151.62	-3,941.38	4,046.08	0.00	0.00	0.00
10,300.00	90.00	269.97	6,480.00	1,151.57	-4,041.38	4,145.44	0.00	0.00	0.00
10,400.00	90.00	269.97	6,480.00	1,151.52	-4,141.38	4,244.80	0.00	0.00	0.00
10,500.00	90.00	269.97	6,480.00	1,151.46	-4,241.38	4,344.15	0.00	0.00	0.00
10,600.00	90.00	269.97	6,480.00	1,151.41	-4,341.38	4,443.51	0.00	0.00	0.00
10,700.00	90.00	269.97	6,480.00	1,151.35	-4,441.38	4,542.87	0.00	0.00	0.00
10,800.00	90.00	269.97	6,480.00	1,151.30	-4,541.38	4,642.22	0.00	0.00	0.00
10,900.00	90.00	269.97	6,480.00	1,151.24	-4,641.38	4,741.58	0.00	0.00	0.00
11,000.00	90.00	269.97	6,480.00	1,151.19	-4,741.38	4,840.93	0.00	0.00	0.00
11,100.00	90.00	269.97	6,480.00	1,151.13	-4,841.38	4,940.29	0.00	0.00	0.00
11,200.00	90.00	269.97	6,480.00	1,151.08	-4,941.38	5,039.65	0.00	0.00	0.00
11,300.00	90.00	269.97	6,480.00	1,151.02	-5,041.38	5,139.00	0.00	0.00	0.00
11,400.00	90.00	269.97	6,480.00	1,150.97	-5,141.38	5,238.36	0.00	0.00	0.00
11,500.00	90.00	269.97	6,480.00	1,150.91	-5,241.38	5,337.72	0.00	0.00	0.00
11,600.00	90.00	269.97	6,480.00	1,150.86	-5,341.38	5,437.07	0.00	0.00	0.00
11,700.00	90.00	269.97	6,480.00	1,150.80	-5,441.38	5,536.43	0.00	0.00	0.00
11,800.00	90.00	269.97	6,480.00	1,150.75	-5,541.38	5,635.78	0.00	0.00	0.00
11,900.00	90.00	269.97	6,480.00	1,150.69	-5,641.38	5,735.14	0.00	0.00	0.00
12,000.00	90.00	269.97	6,480.00	1,150.64	-5,741.38	5,834.50	0.00	0.00	0.00
12,100.00	90.00	269.97	6,480.00	1,150.58	-5,841.38	5,933.85	0.00	0.00	0.00
12,200.00	90.00	269.97	6,480.00	1,150.53	-5,941.38	6,033.21	0.00	0.00	0.00
12,300.00	90.00	269.97	6,480.00	1,150.47	-6,041.38	6,132.57	0.00	0.00	0.00
12,400.00	90.00	269.97	6,480.00	1,150.42	-6,141.38	6,231.92	0.00	0.00	0.00
12,500.00	90.00	269.97	6,480.00	1,150.36	-6,241.38	6,331.28	0.00	0.00	0.00
12,600.00	90.00	269.97	6,480.00	1,150.31	-6,341.38	6,430.63	0.00	0.00	0.00
12,700.00	90.00	269.97	6,480.00	1,150.26	-6,441.38	6,529.99	0.00	0.00	0.00
12,800.00	90.00	269.97	6,480.00	1,150.20	-6,541.38	6,629.35	0.00	0.00	0.00
12,900.00	90.00	269.97	6,480.00	1,150.15	-6,641.38	6,728.70	0.00	0.00	0.00
13,000.00	90.00	269.97	6,480.00	1,150.09	-6,741.38	6,828.06	0.00	0.00	0.00
13,100.00	90.00	269.97	6,480.00	1,150.04	-6,841.38	6,927.42	0.00	0.00	0.00
13,200.00	90.00	269.97	6,480.00	1,149.98	-6,941.38	7,026.77	0.00	0.00	0.00
13,300.00	90.00	269.97	6,480.00	1,149.93	-7,041.38	7,126.13	0.00	0.00	0.00
13,400.00	90.00	269.97	6,480.00	1,149.87	-7,141.38	7,225.48	0.00	0.00	0.00
13,500.00	90.00	269.97	6,480.00	1,149.82	-7,241.38	7,324.84	0.00	0.00	0.00
13,600.00	90.00	269.97	6,480.00	1,149.76	-7,341.38	7,424.20	0.00	0.00	0.00
13,700.00	90.00	269.97	6,480.00	1,149.71	-7,441.38	7,523.55	0.00	0.00	0.00
13,800.00	90.00	269.97	6,480.00	1,149.65	-7,541.38	7,622.91	0.00	0.00	0.00
13,900.00	90.00	269.97	6,480.00	1,149.60	-7,641.38	7,722.27	0.00	0.00	0.00
14,000.00	90.00	269.97	6,480.00	1,149.54	-7,741.38	7,821.62	0.00	0.00	0.00
14,100.00	90.00	269.97	6,480.00	1,149.49	-7,841.38	7,920.98	0.00	0.00	0.00
14,200.00	90.00	269.97	6,480.00	1,149.43	-7,941.38	8,020.33	0.00	0.00	0.00
14,300.00	90.00	269.97	6,480.00	1,149.38	-8,041.38	8,119.69	0.00	0.00	0.00
14,400.00	90.00	269.97	6,480.00	1,149.32	-8,141.38	8,219.05	0.00	0.00	0.00
14,500.00	90.00	269.97	6,480.00	1,149.27	-8,241.38	8,318.40	0.00	0.00	0.00
14,600.00	90.00	269.97	6,480.00	1,149.21	-8,341.38	8,417.76	0.00	0.00	0.00
14,700.00	90.00	269.97	6,480.00	1,149.16	-8,441.38	8,517.12	0.00	0.00	0.00
14,800.00	90.00	269.97	6,480.00	1,149.10	-8,541.38	8,616.47	0.00	0.00	0.00
14,900.00	90.00	269.97	6,480.00	1,149.05	-8,641.38	8,715.83	0.00	0.00	0.00
15,000.00	90.00	269.97	6,480.00	1,149.00	-8,741.38	8,815.18	0.00	0.00	0.00
15,100.00	90.00	269.97	6,480.00	1,148.94	-8,841.38	8,914.54	0.00	0.00	0.00
15,200.00	90.00	269.97	6,480.00	1,148.89	-8,941.38	9,013.90	0.00	0.00	0.00
15,300.00	90.00	269.97	6,480.00	1,148.83	-9,041.38	9,113.25	0.00	0.00	0.00

Database:	DB_Aug0116_LT_v14	Local Co-ordinate Reference:	Well Silverton 5-06-3L
Company:	Confluence Resources	TVD Reference:	RKB=4629+24 @ 4653.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=4629+24 @ 4653.00ft
Site:	Section 04-T04N-R63W	North Reference:	True
Well:	Silverton 5-06-3L	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	6,480.00	1,148.78	-9,141.38	9,212.61	0.00	0.00	0.00
15,500.00	90.00	269.97	6,480.00	1,148.72	-9,241.38	9,311.97	0.00	0.00	0.00
15,600.00	90.00	269.97	6,480.00	1,148.67	-9,341.38	9,411.32	0.00	0.00	0.00
15,700.00	90.00	269.97	6,480.00	1,148.61	-9,441.38	9,510.68	0.00	0.00	0.00
15,800.00	90.00	269.97	6,480.00	1,148.56	-9,541.38	9,610.04	0.00	0.00	0.00
15,900.00	90.00	269.97	6,480.00	1,148.50	-9,641.38	9,709.39	0.00	0.00	0.00
16,000.00	90.00	269.97	6,480.00	1,148.45	-9,741.38	9,808.75	0.00	0.00	0.00
16,100.00	90.00	269.97	6,480.00	1,148.39	-9,841.38	9,908.10	0.00	0.00	0.00
16,200.00	90.00	269.97	6,480.00	1,148.34	-9,941.38	10,007.46	0.00	0.00	0.00
16,300.00	90.00	269.97	6,480.00	1,148.28	-10,041.38	10,106.82	0.00	0.00	0.00
16,378.51	90.00	269.97	6,480.00	1,148.24	-10,119.89	10,184.82	0.00	0.00	0.00
PBHL/TD 16378.51 MD 6480.00 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 5-06-3L SL 27C - plan hits target center - Point	0.00	0.00	24.00	0.00	0.00	14,651,482.20	1,793,252.14	40.34127356	-104.45151945
Silverton 5-06-3L LP 15E - plan hits target center - Point	0.00	0.00	6,480.00	1,153.40	-705.66	14,652,631.20	1,792,539.35	40.34444071	-104.45405189
Silverton 5-06-3L BHL 1L - plan hits target center - Point	0.00	0.00	6,480.00	1,148.24	-10,119.89	14,652,567.70	1,783,125.35	40.34442087	-104.48783748

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
2,796.14	2,785.93	108.96	-14.44	Begin 15.92° tangent section
6,084.85	5,948.46	1,003.37	-132.99	Begin 10°/100' build/turn
6,964.28	6,480.00	1,153.40	-705.66	LP Begin 90° lateral
16,378.51	6,480.00	1,148.24	-10,119.89	PBHL/TD 16378.51 MD 6480.00 TVD