

21.10. November 03 2018

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Walla 5-6-2L
Company:	Confluence Resources	TVD Reference:	RKB=5041+25 @ 5066.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5041+25 @ 5066.00ft
Site:	Section 31-T01N-R65W	North Reference:	Grid
Well:	Walla 5-6-2L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

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 31-T01N-R65W				
Site Position:		Northing:	14,527,926.57 usft	Latitude:	40° 0' 10.404000 N
From:	Lat/Long	Easting:	1,724,232.45 usft	Longitude:	104° 42' 2.520000 W
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.19 °

Well	Walla 5-6-2L, Surf Loc: 861 FSL 480 FWL Sec31-T01N-R65W					
Well Position	+N/-S	2.57 ft	Northing:	14,527,929.14 usft	Latitude:	40° 0' 10.413670 N
	+E/-W	473.53 ft	Easting:	1,724,705.98 usft	Longitude:	104° 41' 56.432560 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,041.00 ft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	7/16/2017	8.27	66.43	52,136.30000000

Design	plan2			
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	165.92

Plan Survey Tool Program	Date	11/3/2018		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,311.07	plan2 (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	
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,555.12	55.51	107.97	5,472.26	-76.66	236.41	10.00	10.00	0.00	107.97	
8,261.73	55.51	107.97	7,004.84	-764.79	2,358.53	0.00	0.00	0.00	0.00	
9,016.42	89.99	180.25	7,256.00	-1,320.89	2,704.22	10.00	4.57	9.58	79.76	LP Walla 5-6-2L 470 F
18,311.07	89.99	180.25	7,258.00	-10,615.45	2,663.24	0.00	0.00	0.00	0.00	BHL Walla 5-6-2L 470

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Well:	Walla 5-6-2L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

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
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP Begin 10°/100' build									
5,100.00	10.00	107.97	5,099.49	-2.68	8.28	4.62	10.00	10.00	0.00
5,200.00	20.00	107.97	5,195.96	-10.66	32.87	18.34	10.00	10.00	0.00

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Well:	Walla 5-6-2L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

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)
5,300.00	30.00	107.97	5,286.48	-23.68	73.02	40.73	10.00	10.00	0.00
5,400.00	40.00	107.97	5,368.29	-41.35	127.51	71.13	10.00	10.00	0.00
5,500.00	50.00	107.97	5,438.91	-63.13	194.69	108.61	10.00	10.00	0.00
5,555.12	55.51	107.97	5,472.26	-76.66	236.41	131.88	10.00	10.00	0.00
Begin 55.51° tangent									
5,600.00	55.51	107.97	5,497.67	-88.07	271.60	151.51	0.00	0.00	0.00
5,700.00	55.51	107.97	5,554.29	-113.49	350.00	195.25	0.00	0.00	0.00
5,800.00	55.51	107.97	5,610.92	-138.92	428.41	238.99	0.00	0.00	0.00
5,900.00	55.51	107.97	5,667.54	-164.34	506.82	282.73	0.00	0.00	0.00
6,000.00	55.51	107.97	5,724.17	-189.77	585.22	326.47	0.00	0.00	0.00
6,100.00	55.51	107.97	5,780.79	-215.19	663.63	370.21	0.00	0.00	0.00
6,200.00	55.51	107.97	5,837.41	-240.61	742.03	413.95	0.00	0.00	0.00
6,300.00	55.51	107.97	5,894.04	-266.04	820.44	457.69	0.00	0.00	0.00
6,400.00	55.51	107.97	5,950.66	-291.46	898.84	501.43	0.00	0.00	0.00
6,500.00	55.51	107.97	6,007.28	-316.89	977.25	545.16	0.00	0.00	0.00
6,600.00	55.51	107.97	6,063.91	-342.31	1,055.65	588.90	0.00	0.00	0.00
6,700.00	55.51	107.97	6,120.53	-367.73	1,134.06	632.64	0.00	0.00	0.00
6,800.00	55.51	107.97	6,177.16	-393.16	1,212.46	676.38	0.00	0.00	0.00
6,900.00	55.51	107.97	6,233.78	-418.58	1,290.87	720.12	0.00	0.00	0.00
7,000.00	55.51	107.97	6,290.40	-444.01	1,369.27	763.86	0.00	0.00	0.00
7,100.00	55.51	107.97	6,347.03	-469.43	1,447.68	807.60	0.00	0.00	0.00
7,200.00	55.51	107.97	6,403.65	-494.85	1,526.08	851.34	0.00	0.00	0.00
7,300.00	55.51	107.97	6,460.27	-520.28	1,604.49	895.08	0.00	0.00	0.00
7,400.00	55.51	107.97	6,516.90	-545.70	1,682.89	938.82	0.00	0.00	0.00
7,500.00	55.51	107.97	6,573.52	-571.12	1,761.30	982.55	0.00	0.00	0.00
7,600.00	55.51	107.97	6,630.15	-596.55	1,839.70	1,026.29	0.00	0.00	0.00
7,700.00	55.51	107.97	6,686.77	-621.97	1,918.11	1,070.03	0.00	0.00	0.00
7,800.00	55.51	107.97	6,743.39	-647.40	1,996.51	1,113.77	0.00	0.00	0.00
7,900.00	55.51	107.97	6,800.02	-672.82	2,074.92	1,157.51	0.00	0.00	0.00
8,000.00	55.51	107.97	6,856.64	-698.24	2,153.32	1,201.25	0.00	0.00	0.00
8,100.00	55.51	107.97	6,913.27	-723.67	2,231.73	1,244.99	0.00	0.00	0.00
8,200.00	55.51	107.97	6,969.89	-749.09	2,310.13	1,288.73	0.00	0.00	0.00
8,261.73	55.51	107.97	7,004.84	-764.79	2,358.53	1,315.73	0.00	0.00	0.00
Begin 10°/100' build/turn									
8,300.00	56.28	112.50	7,026.31	-775.74	2,388.25	1,333.59	10.00	2.00	11.83
8,400.00	59.02	123.89	7,079.95	-815.66	2,462.45	1,390.35	10.00	2.74	11.39
8,500.00	62.69	134.54	7,128.75	-870.86	2,529.86	1,460.31	10.00	3.68	10.66
8,600.00	67.12	144.45	7,171.24	-939.68	2,588.46	1,541.31	10.00	4.43	9.91
8,700.00	72.12	153.69	7,206.12	-1,020.02	2,636.45	1,630.92	10.00	5.00	9.24
8,800.00	77.53	162.41	7,232.33	-1,109.44	2,672.39	1,726.40	10.00	5.41	8.72
8,900.00	83.21	170.76	7,249.08	-1,205.23	2,695.16	1,824.85	10.00	5.68	8.35
9,000.00	89.03	178.92	7,255.86	-1,304.47	2,704.10	1,923.28	10.00	5.82	8.16
9,016.42	89.99	180.25	7,256.00	-1,320.89	2,704.22	1,939.23	10.00	5.85	8.11
LP Begin 89.99° lateral section									
9,100.00	89.99	180.25	7,256.02	-1,404.47	2,703.85	2,020.21	0.00	0.00	0.00
9,200.00	89.99	180.25	7,256.04	-1,504.47	2,703.41	2,117.10	0.00	0.00	0.00
9,300.00	89.99	180.25	7,256.06	-1,604.47	2,702.97	2,213.98	0.00	0.00	0.00
9,400.00	89.99	180.25	7,256.08	-1,704.47	2,702.52	2,310.87	0.00	0.00	0.00
9,500.00	89.99	180.25	7,256.10	-1,804.47	2,702.08	2,407.75	0.00	0.00	0.00
9,600.00	89.99	180.25	7,256.13	-1,904.46	2,701.64	2,504.64	0.00	0.00	0.00
9,700.00	89.99	180.25	7,256.15	-2,004.46	2,701.20	2,601.53	0.00	0.00	0.00
9,800.00	89.99	180.25	7,256.17	-2,104.46	2,700.76	2,698.41	0.00	0.00	0.00
9,900.00	89.99	180.25	7,256.19	-2,204.46	2,700.32	2,795.30	0.00	0.00	0.00

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Well:	Walla 5-6-2L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

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	89.99	180.25	7,256.21	-2,304.46	2,699.88	2,892.18	0.00	0.00	0.00
10,100.00	89.99	180.25	7,256.23	-2,404.46	2,699.44	2,989.07	0.00	0.00	0.00
10,200.00	89.99	180.25	7,256.25	-2,504.46	2,699.00	3,085.95	0.00	0.00	0.00
10,300.00	89.99	180.25	7,256.28	-2,604.46	2,698.56	3,182.84	0.00	0.00	0.00
10,400.00	89.99	180.25	7,256.30	-2,704.46	2,698.12	3,279.73	0.00	0.00	0.00
10,500.00	89.99	180.25	7,256.32	-2,804.46	2,697.67	3,376.61	0.00	0.00	0.00
10,600.00	89.99	180.25	7,256.34	-2,904.46	2,697.23	3,473.50	0.00	0.00	0.00
10,700.00	89.99	180.25	7,256.36	-3,004.45	2,696.79	3,570.38	0.00	0.00	0.00
10,800.00	89.99	180.25	7,256.38	-3,104.45	2,696.35	3,667.27	0.00	0.00	0.00
10,900.00	89.99	180.25	7,256.41	-3,204.45	2,695.91	3,764.16	0.00	0.00	0.00
11,000.00	89.99	180.25	7,256.43	-3,304.45	2,695.47	3,861.04	0.00	0.00	0.00
11,100.00	89.99	180.25	7,256.45	-3,404.45	2,695.03	3,957.93	0.00	0.00	0.00
11,200.00	89.99	180.25	7,256.47	-3,504.45	2,694.59	4,054.81	0.00	0.00	0.00
11,300.00	89.99	180.25	7,256.49	-3,604.45	2,694.15	4,151.70	0.00	0.00	0.00
11,400.00	89.99	180.25	7,256.51	-3,704.45	2,693.71	4,248.58	0.00	0.00	0.00
11,500.00	89.99	180.25	7,256.53	-3,804.45	2,693.27	4,345.47	0.00	0.00	0.00
11,600.00	89.99	180.25	7,256.56	-3,904.45	2,692.82	4,442.36	0.00	0.00	0.00
11,700.00	89.99	180.25	7,256.58	-4,004.44	2,692.38	4,539.24	0.00	0.00	0.00
11,800.00	89.99	180.25	7,256.60	-4,104.44	2,691.94	4,636.13	0.00	0.00	0.00
11,900.00	89.99	180.25	7,256.62	-4,204.44	2,691.50	4,733.01	0.00	0.00	0.00
12,000.00	89.99	180.25	7,256.64	-4,304.44	2,691.06	4,829.90	0.00	0.00	0.00
12,100.00	89.99	180.25	7,256.66	-4,404.44	2,690.62	4,926.79	0.00	0.00	0.00
12,200.00	89.99	180.25	7,256.69	-4,504.44	2,690.18	5,023.67	0.00	0.00	0.00
12,300.00	89.99	180.25	7,256.71	-4,604.44	2,689.74	5,120.56	0.00	0.00	0.00
12,400.00	89.99	180.25	7,256.73	-4,704.44	2,689.30	5,217.44	0.00	0.00	0.00
12,500.00	89.99	180.25	7,256.75	-4,804.44	2,688.86	5,314.33	0.00	0.00	0.00
12,600.00	89.99	180.25	7,256.77	-4,904.44	2,688.42	5,411.21	0.00	0.00	0.00
12,700.00	89.99	180.25	7,256.79	-5,004.43	2,687.97	5,508.10	0.00	0.00	0.00
12,800.00	89.99	180.25	7,256.81	-5,104.43	2,687.53	5,604.99	0.00	0.00	0.00
12,900.00	89.99	180.25	7,256.84	-5,204.43	2,687.09	5,701.87	0.00	0.00	0.00
13,000.00	89.99	180.25	7,256.86	-5,304.43	2,686.65	5,798.76	0.00	0.00	0.00
13,100.00	89.99	180.25	7,256.88	-5,404.43	2,686.21	5,895.64	0.00	0.00	0.00
13,200.00	89.99	180.25	7,256.90	-5,504.43	2,685.77	5,992.53	0.00	0.00	0.00
13,300.00	89.99	180.25	7,256.92	-5,604.43	2,685.33	6,089.42	0.00	0.00	0.00
13,400.00	89.99	180.25	7,256.94	-5,704.43	2,684.89	6,186.30	0.00	0.00	0.00
13,500.00	89.99	180.25	7,256.96	-5,804.43	2,684.45	6,283.19	0.00	0.00	0.00
13,600.00	89.99	180.25	7,256.99	-5,904.43	2,684.01	6,380.07	0.00	0.00	0.00
13,700.00	89.99	180.25	7,257.01	-6,004.42	2,683.57	6,476.96	0.00	0.00	0.00
13,800.00	89.99	180.25	7,257.03	-6,104.42	2,683.12	6,573.84	0.00	0.00	0.00
13,900.00	89.99	180.25	7,257.05	-6,204.42	2,682.68	6,670.73	0.00	0.00	0.00
14,000.00	89.99	180.25	7,257.07	-6,304.42	2,682.24	6,767.62	0.00	0.00	0.00
14,100.00	89.99	180.25	7,257.09	-6,404.42	2,681.80	6,864.50	0.00	0.00	0.00
14,200.00	89.99	180.25	7,257.12	-6,504.42	2,681.36	6,961.39	0.00	0.00	0.00
14,300.00	89.99	180.25	7,257.14	-6,604.42	2,680.92	7,058.27	0.00	0.00	0.00
14,400.00	89.99	180.25	7,257.16	-6,704.42	2,680.48	7,155.16	0.00	0.00	0.00
14,500.00	89.99	180.25	7,257.18	-6,804.42	2,680.04	7,252.05	0.00	0.00	0.00
14,600.00	89.99	180.25	7,257.20	-6,904.42	2,679.60	7,348.93	0.00	0.00	0.00
14,700.00	89.99	180.25	7,257.22	-7,004.42	2,679.16	7,445.82	0.00	0.00	0.00
14,800.00	89.99	180.25	7,257.24	-7,104.41	2,678.72	7,542.70	0.00	0.00	0.00
14,900.00	89.99	180.25	7,257.27	-7,204.41	2,678.27	7,639.59	0.00	0.00	0.00
15,000.00	89.99	180.25	7,257.29	-7,304.41	2,677.83	7,736.47	0.00	0.00	0.00
15,100.00	89.99	180.25	7,257.31	-7,404.41	2,677.39	7,833.36	0.00	0.00	0.00
15,200.00	89.99	180.25	7,257.33	-7,504.41	2,676.95	7,930.25	0.00	0.00	0.00
15,300.00	89.99	180.25	7,257.35	-7,604.41	2,676.51	8,027.13	0.00	0.00	0.00

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Walla 5-6-2L
Company:	Confluence Resources	TVD Reference:	RKB=5041+25 @ 5066.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5041+25 @ 5066.00ft
Site:	Section 31-T01N-R65W	North Reference:	Grid
Well:	Walla 5-6-2L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

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	89.99	180.25	7,257.37	-7,704.41	2,676.07	8,124.02	0.00	0.00	0.00
15,500.00	89.99	180.25	7,257.40	-7,804.41	2,675.63	8,220.90	0.00	0.00	0.00
15,600.00	89.99	180.25	7,257.42	-7,904.41	2,675.19	8,317.79	0.00	0.00	0.00
15,700.00	89.99	180.25	7,257.44	-8,004.41	2,674.75	8,414.68	0.00	0.00	0.00
15,800.00	89.99	180.25	7,257.46	-8,104.40	2,674.31	8,511.56	0.00	0.00	0.00
15,900.00	89.99	180.25	7,257.48	-8,204.40	2,673.87	8,608.45	0.00	0.00	0.00
16,000.00	89.99	180.25	7,257.50	-8,304.40	2,673.42	8,705.33	0.00	0.00	0.00
16,100.00	89.99	180.25	7,257.52	-8,404.40	2,672.98	8,802.22	0.00	0.00	0.00
16,200.00	89.99	180.25	7,257.55	-8,504.40	2,672.54	8,899.10	0.00	0.00	0.00
16,300.00	89.99	180.25	7,257.57	-8,604.40	2,672.10	8,995.99	0.00	0.00	0.00
16,400.00	89.99	180.25	7,257.59	-8,704.40	2,671.66	9,092.88	0.00	0.00	0.00
16,500.00	89.99	180.25	7,257.61	-8,804.40	2,671.22	9,189.76	0.00	0.00	0.00
16,600.00	89.99	180.25	7,257.63	-8,904.40	2,670.78	9,286.65	0.00	0.00	0.00
16,700.00	89.99	180.25	7,257.65	-9,004.40	2,670.34	9,383.53	0.00	0.00	0.00
16,800.00	89.99	180.25	7,257.68	-9,104.39	2,669.90	9,480.42	0.00	0.00	0.00
16,900.00	89.99	180.25	7,257.70	-9,204.39	2,669.46	9,577.31	0.00	0.00	0.00
17,000.00	89.99	180.25	7,257.72	-9,304.39	2,669.02	9,674.19	0.00	0.00	0.00
17,100.00	89.99	180.25	7,257.74	-9,404.39	2,668.57	9,771.08	0.00	0.00	0.00
17,200.00	89.99	180.25	7,257.76	-9,504.39	2,668.13	9,867.96	0.00	0.00	0.00
17,300.00	89.99	180.25	7,257.78	-9,604.39	2,667.69	9,964.85	0.00	0.00	0.00
17,400.00	89.99	180.25	7,257.80	-9,704.39	2,667.25	10,061.73	0.00	0.00	0.00
17,500.00	89.99	180.25	7,257.83	-9,804.39	2,666.81	10,158.62	0.00	0.00	0.00
17,600.00	89.99	180.25	7,257.85	-9,904.39	2,666.37	10,255.51	0.00	0.00	0.00
17,700.00	89.99	180.25	7,257.87	-10,004.39	2,665.93	10,352.39	0.00	0.00	0.00
17,800.00	89.99	180.25	7,257.89	-10,104.39	2,665.49	10,449.28	0.00	0.00	0.00
17,900.00	89.99	180.25	7,257.91	-10,204.38	2,665.05	10,546.16	0.00	0.00	0.00
18,000.00	89.99	180.25	7,257.93	-10,304.38	2,664.61	10,643.05	0.00	0.00	0.00
18,100.00	89.99	180.25	7,257.95	-10,404.38	2,664.17	10,739.94	0.00	0.00	0.00
18,200.00	89.99	180.25	7,257.98	-10,504.38	2,663.73	10,836.82	0.00	0.00	0.00
18,300.00	89.99	180.25	7,258.00	-10,604.38	2,663.28	10,933.71	0.00	0.00	0.00
18,311.07	89.99	180.25	7,258.00	-10,615.45	2,663.24	10,944.43	0.00	0.00	0.00
PBHL/TD 18311.07 MD/7258.00 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
LP Walla 5-6-2L 470 FNI - plan hits target center - Point	0.00	0.00	7,256.00	-1,320.89	2,704.22	14,526,608.25	1,727,410.19	39° 59' 57.263426 N 104° 41' 21.728683 W	
BHL Walla 5-6-2L 470 F: - plan hits target center - Point	0.00	0.00	7,258.00	-10,615.45	2,663.24	14,517,313.71	1,727,369.21	39° 58' 25.377397 N 104° 41' 22.671358 W	

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Walla 5-6-2L
Company:	Confluence Resources	TVD Reference:	RKB=5041+25 @ 5066.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5041+25 @ 5066.00ft
Site:	Section 31-T01N-R65W	North Reference:	Grid
Well:	Walla 5-6-2L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
5,000.00	5,000.00	0.00	0.00	KOP Begin 10°/100' build	
5,555.12	5,472.26	-76.66	236.41	Begin 55.51° tangent	
8,261.73	7,004.84	-764.79	2,358.53	Begin 10°/100' build/turn	
9,016.42	7,256.00	-1,320.89	2,704.22	LP Begin 89.99° lateral section	
18,311.07	7,258.00	-10,615.45	2,663.24	PBHL/TD 18311.07 MD/7258.00 TVD	

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Walla 5-6-2L
Company:	Confluence Resources	TVD Reference:	RKB=5041+25 @ 5066.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5041+25 @ 5066.00ft
Site:	Section 31-T01N-R65W	North Reference:	Grid
Well:	Walla 5-6-2L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

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 31-T01N-R65W			
Site Position:		Northing:	14,527,926.57 usft	Latitude:	40° 0' 10.404000 N
From:	Lat/Long	Easting:	1,724,232.45 usft	Longitude:	104° 42' 2.520000 W
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.19 °

Well	Walla 5-6-2L, Surf Loc: 861 FSL 480 FWL Sec31-T01N-R65W					
Well Position	+N/-S	0.00 ft	Northing:	14,527,929.14 usft	Latitude:	40° 0' 10.413670 N
	+E/-W	0.00 ft	Easting:	1,724,705.98 usft	Longitude:	104° 41' 56.432560 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,041.00 ft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	7/16/2017	8.27	66.43	52,136.30000000

Design	plan2			
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	165.92

Plan Survey Tool Program	Date	11/3/2018		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,311.07 plan2 (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	
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,555.12	55.51	107.97	5,472.26	-76.66	236.41	10.00	10.00	0.00	107.97	
8,261.73	55.51	107.97	7,004.84	-764.79	2,358.53	0.00	0.00	0.00	0.00	
9,016.42	89.99	180.25	7,256.00	-1,320.89	2,704.22	10.00	4.57	9.58	79.76	LP Walla 5-6-2L 470 F
18,311.07	89.99	180.25	7,258.00	-10,615.45	2,663.24	0.00	0.00	0.00	0.00	BHL Walla 5-6-2L 470

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Walla 5-6-2L
Company:	Confluence Resources	TVD Reference:	RKB=5041+25 @ 5066.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5041+25 @ 5066.00ft
Site:	Section 31-T01N-R65W	North Reference:	Grid
Well:	Walla 5-6-2L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

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	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
100.00	0.00	0.00	100.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
200.00	0.00	0.00	200.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
300.00	0.00	0.00	300.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
400.00	0.00	0.00	400.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
500.00	0.00	0.00	500.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
600.00	0.00	0.00	600.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
700.00	0.00	0.00	700.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
800.00	0.00	0.00	800.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
900.00	0.00	0.00	900.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
1,100.00	0.00	0.00	1,100.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
1,200.00	0.00	0.00	1,200.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
1,300.00	0.00	0.00	1,300.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
1,400.00	0.00	0.00	1,400.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
1,500.00	0.00	0.00	1,500.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
1,600.00	0.00	0.00	1,600.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
1,700.00	0.00	0.00	1,700.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
1,800.00	0.00	0.00	1,800.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
1,900.00	0.00	0.00	1,900.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
2,000.00	0.00	0.00	2,000.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
2,100.00	0.00	0.00	2,100.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
2,200.00	0.00	0.00	2,200.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
2,300.00	0.00	0.00	2,300.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
2,400.00	0.00	0.00	2,400.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
2,500.00	0.00	0.00	2,500.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
2,600.00	0.00	0.00	2,600.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
2,700.00	0.00	0.00	2,700.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
2,800.00	0.00	0.00	2,800.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
2,900.00	0.00	0.00	2,900.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
3,000.00	0.00	0.00	3,000.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
3,100.00	0.00	0.00	3,100.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
3,200.00	0.00	0.00	3,200.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
3,300.00	0.00	0.00	3,300.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
3,400.00	0.00	0.00	3,400.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
3,500.00	0.00	0.00	3,500.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
3,600.00	0.00	0.00	3,600.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
3,700.00	0.00	0.00	3,700.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
3,800.00	0.00	0.00	3,800.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
3,900.00	0.00	0.00	3,900.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
4,000.00	0.00	0.00	4,000.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
4,100.00	0.00	0.00	4,100.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
4,200.00	0.00	0.00	4,200.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
4,300.00	0.00	0.00	4,300.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
4,400.00	0.00	0.00	4,400.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
4,500.00	0.00	0.00	4,500.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
4,600.00	0.00	0.00	4,600.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
4,700.00	0.00	0.00	4,700.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
4,800.00	0.00	0.00	4,800.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
4,900.00	0.00	0.00	4,900.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
5,000.00	0.00	0.00	5,000.00	0.00	0.00	14,527,929.14	1,724,705.98	40° 0' 10.413670 N	104° 41' 56.432560 W
KOP Begin 10°/100' build									
5,100.00	10.00	107.97	5,099.49	-2.68	8.28	14,527,926.46	1,724,714.26	40° 0' 10.386850 N	104° 41' 56.326235 W
5,200.00	20.00	107.97	5,195.96	-10.66	32.87	14,527,918.49	1,724,738.85	40° 0' 10.307205 N	104° 41' 56.010491 W

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Walla 5-6-2L
Company:	Confluence Resources	TVD Reference:	RKB=5041+25 @ 5066.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5041+25 @ 5066.00ft
Site:	Section 31-T01N-R65W	North Reference:	Grid
Well:	Walla 5-6-2L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

Planned Survey										
Measured			Vertical			Map	Map			
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)			
5,300.00	30.00	107.97	5,286.48	-23.68	73.02	14,527,905.47	1,724,779.00	40° 0' 10.177154 N	104° 41' 55.494921 W	
5,400.00	40.00	107.97	5,368.29	-41.35	127.51	14,527,887.80	1,724,833.49	40° 0' 10.000648 N	104° 41' 54.795192 W	
5,500.00	50.00	107.97	5,438.91	-63.13	194.69	14,527,866.01	1,724,900.67	40° 0' 9.783049 N	104° 41' 53.932565 W	
5,555.12	55.51	107.97	5,472.26	-76.66	236.41	14,527,852.49	1,724,942.39	40° 0' 9.647899 N	104° 41' 53.396794 W	
Begin 55.51° tangent										
5,600.00	55.51	107.97	5,497.67	-88.07	271.60	14,527,841.07	1,724,977.58	40° 0' 9.533917 N	104° 41' 52.944943 W	
5,700.00	55.51	107.97	5,554.29	-113.49	350.00	14,527,815.65	1,725,055.98	40° 0' 9.279945 N	104° 41' 51.938146 W	
5,800.00	55.51	107.97	5,610.92	-138.92	428.41	14,527,790.23	1,725,134.39	40° 0' 9.025971 N	104° 41' 50.931350 W	
5,900.00	55.51	107.97	5,667.54	-164.34	506.82	14,527,764.80	1,725,212.79	40° 0' 8.771995 N	104° 41' 49.924557 W	
6,000.00	55.51	107.97	5,724.17	-189.77	585.22	14,527,739.38	1,725,291.20	40° 0' 8.518016 N	104° 41' 48.917765 W	
6,100.00	55.51	107.97	5,780.79	-215.19	663.63	14,527,713.96	1,725,369.60	40° 0' 8.264034 N	104° 41' 47.910976 W	
6,200.00	55.51	107.97	5,837.41	-240.61	742.03	14,527,688.53	1,725,448.01	40° 0' 8.010051 N	104° 41' 46.904189 W	
6,300.00	55.51	107.97	5,894.04	-266.04	820.44	14,527,663.11	1,725,526.41	40° 0' 7.756064 N	104° 41' 45.897404 W	
6,400.00	55.51	107.97	5,950.66	-291.46	898.84	14,527,637.68	1,725,604.82	40° 0' 7.502076 N	104° 41' 44.890621 W	
6,500.00	55.51	107.97	6,007.28	-316.89	977.25	14,527,612.26	1,725,683.22	40° 0' 7.248085 N	104° 41' 43.883840 W	
6,600.00	55.51	107.97	6,063.91	-342.31	1,055.65	14,527,586.84	1,725,761.63	40° 0' 6.994091 N	104° 41' 42.877062 W	
6,700.00	55.51	107.97	6,120.53	-367.73	1,134.06	14,527,561.41	1,725,840.03	40° 0' 6.740095 N	104° 41' 41.870285 W	
6,800.00	55.51	107.97	6,177.16	-393.16	1,212.46	14,527,535.99	1,725,918.44	40° 0' 6.486097 N	104° 41' 40.863510 W	
6,900.00	55.51	107.97	6,233.78	-418.58	1,290.87	14,527,510.56	1,725,996.84	40° 0' 6.232096 N	104° 41' 39.856738 W	
7,000.00	55.51	107.97	6,290.40	-444.01	1,369.27	14,527,485.14	1,726,075.25	40° 0' 5.978093 N	104° 41' 38.849968 W	
7,100.00	55.51	107.97	6,347.03	-469.43	1,447.68	14,527,459.72	1,726,153.65	40° 0' 5.724087 N	104° 41' 37.843199 W	
7,200.00	55.51	107.97	6,403.65	-494.85	1,526.08	14,527,434.29	1,726,232.06	40° 0' 5.470079 N	104° 41' 36.836433 W	
7,300.00	55.51	107.97	6,460.27	-520.28	1,604.49	14,527,408.87	1,726,310.46	40° 0' 5.216068 N	104° 41' 35.829669 W	
7,400.00	55.51	107.97	6,516.90	-545.70	1,682.89	14,527,383.44	1,726,388.87	40° 0' 4.962055 N	104° 41' 34.822907 W	
7,500.00	55.51	107.97	6,573.52	-571.12	1,761.30	14,527,358.02	1,726,467.27	40° 0' 4.708040 N	104° 41' 33.816147 W	
7,600.00	55.51	107.97	6,630.15	-596.55	1,839.70	14,527,332.60	1,726,545.68	40° 0' 4.454022 N	104° 41' 32.809389 W	
7,700.00	55.51	107.97	6,686.77	-621.97	1,918.11	14,527,307.17	1,726,624.08	40° 0' 4.200002 N	104° 41' 31.802633 W	
7,800.00	55.51	107.97	6,743.39	-647.40	1,996.51	14,527,281.75	1,726,702.49	40° 0' 3.945979 N	104° 41' 30.795880 W	
7,900.00	55.51	107.97	6,800.02	-672.82	2,074.92	14,527,256.33	1,726,780.89	40° 0' 3.691954 N	104° 41' 29.789128 W	
8,000.00	55.51	107.97	6,856.64	-698.24	2,153.32	14,527,230.90	1,726,859.30	40° 0' 3.437927 N	104° 41' 28.782378 W	
8,100.00	55.51	107.97	6,913.27	-723.67	2,231.73	14,527,205.48	1,726,937.70	40° 0' 3.183897 N	104° 41' 27.775631 W	
8,200.00	55.51	107.97	6,969.89	-749.09	2,310.13	14,527,180.05	1,727,016.11	40° 0' 2.929865 N	104° 41' 26.768886 W	
8,261.73	55.51	107.97	7,004.84	-764.79	2,358.53	14,527,164.36	1,727,064.51	40° 0' 2.773049 N	104° 41' 26.147423 W	
Begin 10°/100' build/turn										
8,300.00	56.28	112.50	7,026.31	-775.74	2,388.25	14,527,153.40	1,727,094.22	40° 0' 2.663696 N	104° 41' 25.765896 W	
8,400.00	59.02	123.89	7,079.95	-815.66	2,462.45	14,527,113.49	1,727,168.42	40° 0' 2.266565 N	104° 41' 24.813935 W	
8,500.00	62.69	134.54	7,128.75	-870.86	2,529.86	14,527,058.28	1,727,235.84	40° 0' 1.718493 N	104° 41' 23.949745 W	
8,600.00	67.12	144.45	7,171.24	-939.68	2,588.46	14,526,989.47	1,727,294.43	40° 0' 1.036134 N	104° 41' 23.199583 W	
8,700.00	72.12	153.69	7,206.12	-1,020.02	2,636.45	14,526,909.13	1,727,342.43	40° 0' 0.240222 N	104° 41' 22.586244 W	
8,800.00	77.53	162.41	7,232.33	-1,109.44	2,672.39	14,526,819.70	1,727,378.36	39° 59' 59.354941 N	104° 41' 22.128362 W	
8,900.00	83.21	170.76	7,249.08	-1,205.23	2,695.16	14,526,723.92	1,727,401.14	39° 59' 58.407190 N	104° 41' 21.839849 W	
9,000.00	89.03	178.92	7,255.86	-1,304.47	2,704.10	14,526,624.68	1,727,410.07	39° 59' 57.425766 N	104° 41' 21.729470 W	
9,016.42	89.99	180.25	7,256.00	-1,320.89	2,704.22	14,526,608.26	1,727,410.19	39° 59' 57.263448 N	104° 41' 21.728682 W	
LP Begin 89.99° lateral section										
9,100.00	89.99	180.25	7,256.02	-1,404.47	2,703.85	14,526,524.68	1,727,409.82	39° 59' 56.437186 N	104° 41' 21.737164 W	
9,200.00	89.99	180.25	7,256.04	-1,504.47	2,703.41	14,526,424.68	1,727,409.38	39° 59' 55.448597 N	104° 41' 21.747310 W	
9,300.00	89.99	180.25	7,256.06	-1,604.47	2,702.97	14,526,324.68	1,727,408.94	39° 59' 54.460009 N	104° 41' 21.757457 W	
9,400.00	89.99	180.25	7,256.08	-1,704.47	2,702.52	14,526,224.68	1,727,408.50	39° 59' 53.471420 N	104° 41' 21.767604 W	
9,500.00	89.99	180.25	7,256.10	-1,804.47	2,702.08	14,526,124.68	1,727,408.06	39° 59' 52.482831 N	104° 41' 21.777751 W	
9,600.00	89.99	180.25	7,256.13	-1,904.46	2,701.64	14,526,024.68	1,727,407.62	39° 59' 51.494243 N	104° 41' 21.787897 W	
9,700.00	89.99	180.25	7,256.15	-2,004.46	2,701.20	14,525,924.68	1,727,407.17	39° 59' 50.505654 N	104° 41' 21.798044 W	
9,800.00	89.99	180.25	7,256.17	-2,104.46	2,700.76	14,525,824.69	1,727,406.73	39° 59' 49.517065 N	104° 41' 21.808190 W	
9,900.00	89.99	180.25	7,256.19	-2,204.46	2,700.32	14,525,724.69	1,727,406.29	39° 59' 48.528476 N	104° 41' 21.818336 W	
10,000.00	89.99	180.25	7,256.21	-2,304.46	2,699.88	14,525,624.69	1,727,405.85	39° 59' 47.539888 N	104° 41' 21.828482 W	

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Walla 5-6-2L
Company:	Confluence Resources	TVD Reference:	RKB=5041+25 @ 5066.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5041+25 @ 5066.00ft
Site:	Section 31-T01N-R65W	North Reference:	Grid
Well:	Walla 5-6-2L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

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	89.99	180.25	7,256.23	-2,404.46	2,699.44	14,525,524.69	1,727,405.41	39° 59' 46.551299 N	104° 41' 21.838628 W	
10,200.00	89.99	180.25	7,256.25	-2,504.46	2,699.00	14,525,424.69	1,727,404.97	39° 59' 45.562710 N	104° 41' 21.848774 W	
10,300.00	89.99	180.25	7,256.28	-2,604.46	2,698.56	14,525,324.69	1,727,404.53	39° 59' 44.574121 N	104° 41' 21.858920 W	
10,400.00	89.99	180.25	7,256.30	-2,704.46	2,698.12	14,525,224.69	1,727,404.09	39° 59' 43.585532 N	104° 41' 21.869066 W	
10,500.00	89.99	180.25	7,256.32	-2,804.46	2,697.67	14,525,124.69	1,727,403.65	39° 59' 42.596943 N	104° 41' 21.879211 W	
10,600.00	89.99	180.25	7,256.34	-2,904.46	2,697.23	14,525,024.70	1,727,403.21	39° 59' 41.608354 N	104° 41' 21.889357 W	
10,700.00	89.99	180.25	7,256.36	-3,004.45	2,696.79	14,524,924.70	1,727,402.77	39° 59' 40.619764 N	104° 41' 21.899502 W	
10,800.00	89.99	180.25	7,256.38	-3,104.45	2,696.35	14,524,824.70	1,727,402.32	39° 59' 39.631175 N	104° 41' 21.909647 W	
10,900.00	89.99	180.25	7,256.41	-3,204.45	2,695.91	14,524,724.70	1,727,401.88	39° 59' 38.642586 N	104° 41' 21.919792 W	
11,000.00	89.99	180.25	7,256.43	-3,304.45	2,695.47	14,524,624.70	1,727,401.44	39° 59' 37.653996 N	104° 41' 21.929937 W	
11,100.00	89.99	180.25	7,256.45	-3,404.45	2,695.03	14,524,524.70	1,727,401.00	39° 59' 36.665407 N	104° 41' 21.940082 W	
11,200.00	89.99	180.25	7,256.47	-3,504.45	2,694.59	14,524,424.70	1,727,400.56	39° 59' 35.676818 N	104° 41' 21.950227 W	
11,300.00	89.99	180.25	7,256.49	-3,604.45	2,694.15	14,524,324.70	1,727,400.12	39° 59' 34.688228 N	104° 41' 21.960372 W	
11,400.00	89.99	180.25	7,256.51	-3,704.45	2,693.71	14,524,224.70	1,727,399.68	39° 59' 33.699639 N	104° 41' 21.970516 W	
11,500.00	89.99	180.25	7,256.53	-3,804.45	2,693.27	14,524,124.71	1,727,399.24	39° 59' 32.711049 N	104° 41' 21.980661 W	
11,600.00	89.99	180.25	7,256.56	-3,904.45	2,692.82	14,524,024.71	1,727,398.80	39° 59' 31.722460 N	104° 41' 21.990805 W	
11,700.00	89.99	180.25	7,256.58	-4,004.44	2,692.38	14,523,924.71	1,727,398.36	39° 59' 30.733870 N	104° 41' 22.000949 W	
11,800.00	89.99	180.25	7,256.60	-4,104.44	2,691.94	14,523,824.71	1,727,397.92	39° 59' 29.745280 N	104° 41' 22.011094 W	
11,900.00	89.99	180.25	7,256.62	-4,204.44	2,691.50	14,523,724.71	1,727,397.47	39° 59' 28.756690 N	104° 41' 22.021238 W	
12,000.00	89.99	180.25	7,256.64	-4,304.44	2,691.06	14,523,624.71	1,727,397.03	39° 59' 27.768101 N	104° 41' 22.031382 W	
12,100.00	89.99	180.25	7,256.66	-4,404.44	2,690.62	14,523,524.71	1,727,396.59	39° 59' 26.779511 N	104° 41' 22.041525 W	
12,200.00	89.99	180.25	7,256.69	-4,504.44	2,690.18	14,523,424.71	1,727,396.15	39° 59' 25.790921 N	104° 41' 22.051669 W	
12,300.00	89.99	180.25	7,256.71	-4,604.44	2,689.74	14,523,324.72	1,727,395.71	39° 59' 24.802331 N	104° 41' 22.061813 W	
12,400.00	89.99	180.25	7,256.73	-4,704.44	2,689.30	14,523,224.72	1,727,395.27	39° 59' 23.813741 N	104° 41' 22.071956 W	
12,500.00	89.99	180.25	7,256.75	-4,804.44	2,688.86	14,523,124.72	1,727,394.83	39° 59' 22.825151 N	104° 41' 22.082100 W	
12,600.00	89.99	180.25	7,256.77	-4,904.44	2,688.42	14,523,024.72	1,727,394.39	39° 59' 21.836561 N	104° 41' 22.092243 W	
12,700.00	89.99	180.25	7,256.79	-5,004.43	2,687.97	14,522,924.72	1,727,393.95	39° 59' 20.847971 N	104° 41' 22.102386 W	
12,800.00	89.99	180.25	7,256.81	-5,104.43	2,687.53	14,522,824.72	1,727,393.51	39° 59' 19.859381 N	104° 41' 22.112529 W	
12,900.00	89.99	180.25	7,256.84	-5,204.43	2,687.09	14,522,724.72	1,727,393.07	39° 59' 18.870790 N	104° 41' 22.122672 W	
13,000.00	89.99	180.25	7,256.86	-5,304.43	2,686.65	14,522,624.72	1,727,392.63	39° 59' 17.882200 N	104° 41' 22.132815 W	
13,100.00	89.99	180.25	7,256.88	-5,404.43	2,686.21	14,522,524.72	1,727,392.18	39° 59' 16.893610 N	104° 41' 22.142958 W	
13,200.00	89.99	180.25	7,256.90	-5,504.43	2,685.77	14,522,424.73	1,727,391.74	39° 59' 15.905019 N	104° 41' 22.153101 W	
13,300.00	89.99	180.25	7,256.92	-5,604.43	2,685.33	14,522,324.73	1,727,391.30	39° 59' 14.916429 N	104° 41' 22.163243 W	
13,400.00	89.99	180.25	7,256.94	-5,704.43	2,684.89	14,522,224.73	1,727,390.86	39° 59' 13.927838 N	104° 41' 22.173386 W	
13,500.00	89.99	180.25	7,256.96	-5,804.43	2,684.45	14,522,124.73	1,727,390.42	39° 59' 12.939248 N	104° 41' 22.183528 W	
13,600.00	89.99	180.25	7,256.99	-5,904.43	2,684.01	14,522,024.73	1,727,389.98	39° 59' 11.950657 N	104° 41' 22.193670 W	
13,700.00	89.99	180.25	7,257.01	-6,004.42	2,683.57	14,521,924.73	1,727,389.54	39° 59' 10.962067 N	104° 41' 22.203812 W	
13,800.00	89.99	180.25	7,257.03	-6,104.42	2,683.12	14,521,824.73	1,727,389.10	39° 59' 9.973476 N	104° 41' 22.213955 W	
13,900.00	89.99	180.25	7,257.05	-6,204.42	2,682.68	14,521,724.73	1,727,388.66	39° 59' 8.984885 N	104° 41' 22.224096 W	
14,000.00	89.99	180.25	7,257.07	-6,304.42	2,682.24	14,521,624.74	1,727,388.22	39° 59' 7.996295 N	104° 41' 22.234238 W	
14,100.00	89.99	180.25	7,257.09	-6,404.42	2,681.80	14,521,524.74	1,727,387.78	39° 59' 7.007704 N	104° 41' 22.244380 W	
14,200.00	89.99	180.25	7,257.12	-6,504.42	2,681.36	14,521,424.74	1,727,387.33	39° 59' 6.019113 N	104° 41' 22.254522 W	
14,300.00	89.99	180.25	7,257.14	-6,604.42	2,680.92	14,521,324.74	1,727,386.89	39° 59' 5.030522 N	104° 41' 22.264663 W	
14,400.00	89.99	180.25	7,257.16	-6,704.42	2,680.48	14,521,224.74	1,727,386.45	39° 59' 4.041931 N	104° 41' 22.274804 W	
14,500.00	89.99	180.25	7,257.18	-6,804.42	2,680.04	14,521,124.74	1,727,386.01	39° 59' 3.053340 N	104° 41' 22.284946 W	
14,600.00	89.99	180.25	7,257.20	-6,904.42	2,679.60	14,521,024.74	1,727,385.57	39° 59' 2.064749 N	104° 41' 22.295087 W	
14,700.00	89.99	180.25	7,257.22	-7,004.42	2,679.16	14,520,924.74	1,727,385.13	39° 59' 1.076158 N	104° 41' 22.305228 W	
14,800.00	89.99	180.25	7,257.24	-7,104.41	2,678.72	14,520,824.74	1,727,384.69	39° 59' 0.087567 N	104° 41' 22.315369 W	
14,900.00	89.99	180.25	7,257.27	-7,204.41	2,678.27	14,520,724.75	1,727,384.25	39° 58' 59.098976 N	104° 41' 22.325510 W	
15,000.00	89.99	180.25	7,257.29	-7,304.41	2,677.83	14,520,624.75	1,727,383.81	39° 58' 58.110385 N	104° 41' 22.335651 W	
15,100.00	89.99	180.25	7,257.31	-7,404.41	2,677.39	14,520,524.75	1,727,383.37	39° 58' 57.121794 N	104° 41' 22.345791 W	
15,200.00	89.99	180.25	7,257.33	-7,504.41	2,676.95	14,520,424.75	1,727,382.93	39° 58' 56.133202 N	104° 41' 22.355932 W	
15,300.00	89.99	180.25	7,257.35	-7,604.41	2,676.51	14,520,324.75	1,727,382.48	39° 58' 55.144611 N	104° 41' 22.366072 W	
15,400.00	89.99	180.25	7,257.37	-7,704.41	2,676.07	14,520,224.75	1,727,382.04	39° 58' 54.156019 N	104° 41' 22.376213 W	
15,500.00	89.99	180.25	7,257.40	-7,804.41	2,675.63	14,520,124.75	1,727,381.60	39° 58' 53.167428 N	104° 41' 22.386353 W	

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Walla 5-6-2L
Company:	Confluence Resources	TVD Reference:	RKB=5041+25 @ 5066.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5041+25 @ 5066.00ft
Site:	Section 31-T01N-R65W	North Reference:	Grid
Well:	Walla 5-6-2L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

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	89.99	180.25	7,257.42	-7,904.41	2,675.19	14,520,024.75	1,727,381.16	39° 58' 52.178836 N	104° 41' 22.396493 W	
15,700.00	89.99	180.25	7,257.44	-8,004.41	2,674.75	14,519,924.76	1,727,380.72	39° 58' 51.190245 N	104° 41' 22.406633 W	
15,800.00	89.99	180.25	7,257.46	-8,104.40	2,674.31	14,519,824.76	1,727,380.28	39° 58' 50.201653 N	104° 41' 22.416773 W	
15,900.00	89.99	180.25	7,257.48	-8,204.40	2,673.87	14,519,724.76	1,727,379.84	39° 58' 49.213062 N	104° 41' 22.426913 W	
16,000.00	89.99	180.25	7,257.50	-8,304.40	2,673.42	14,519,624.76	1,727,379.40	39° 58' 48.224470 N	104° 41' 22.437052 W	
16,100.00	89.99	180.25	7,257.52	-8,404.40	2,672.98	14,519,524.76	1,727,378.96	39° 58' 47.235878 N	104° 41' 22.447192 W	
16,200.00	89.99	180.25	7,257.55	-8,504.40	2,672.54	14,519,424.76	1,727,378.52	39° 58' 46.247286 N	104° 41' 22.457331 W	
16,300.00	89.99	180.25	7,257.57	-8,604.40	2,672.10	14,519,324.76	1,727,378.08	39° 58' 45.258695 N	104° 41' 22.467471 W	
16,400.00	89.99	180.25	7,257.59	-8,704.40	2,671.66	14,519,224.76	1,727,377.63	39° 58' 44.270103 N	104° 41' 22.477610 W	
16,500.00	89.99	180.25	7,257.61	-8,804.40	2,671.22	14,519,124.76	1,727,377.19	39° 58' 43.281511 N	104° 41' 22.487749 W	
16,600.00	89.99	180.25	7,257.63	-8,904.40	2,670.78	14,519,024.77	1,727,376.75	39° 58' 42.292919 N	104° 41' 22.497888 W	
16,700.00	89.99	180.25	7,257.65	-9,004.40	2,670.34	14,518,924.77	1,727,376.31	39° 58' 41.304327 N	104° 41' 22.508027 W	
16,800.00	89.99	180.25	7,257.68	-9,104.39	2,669.90	14,518,824.77	1,727,375.87	39° 58' 40.315735 N	104° 41' 22.518166 W	
16,900.00	89.99	180.25	7,257.70	-9,204.39	2,669.46	14,518,724.77	1,727,375.43	39° 58' 39.327143 N	104° 41' 22.528305 W	
17,000.00	89.99	180.25	7,257.72	-9,304.39	2,669.02	14,518,624.77	1,727,374.99	39° 58' 38.338550 N	104° 41' 22.538443 W	
17,100.00	89.99	180.25	7,257.74	-9,404.39	2,668.57	14,518,524.77	1,727,374.55	39° 58' 37.349958 N	104° 41' 22.548582 W	
17,200.00	89.99	180.25	7,257.76	-9,504.39	2,668.13	14,518,424.77	1,727,374.11	39° 58' 36.361366 N	104° 41' 22.558720 W	
17,300.00	89.99	180.25	7,257.78	-9,604.39	2,667.69	14,518,324.77	1,727,373.67	39° 58' 35.372774 N	104° 41' 22.568858 W	
17,400.00	89.99	180.25	7,257.80	-9,704.39	2,667.25	14,518,224.78	1,727,373.23	39° 58' 34.384181 N	104° 41' 22.578997 W	
17,500.00	89.99	180.25	7,257.83	-9,804.39	2,666.81	14,518,124.78	1,727,372.78	39° 58' 33.395589 N	104° 41' 22.589135 W	
17,600.00	89.99	180.25	7,257.85	-9,904.39	2,666.37	14,518,024.78	1,727,372.34	39° 58' 32.406996 N	104° 41' 22.599273 W	
17,700.00	89.99	180.25	7,257.87	-10,004.39	2,665.93	14,517,924.78	1,727,371.90	39° 58' 31.418404 N	104° 41' 22.609411 W	
17,800.00	89.99	180.25	7,257.89	-10,104.39	2,665.49	14,517,824.78	1,727,371.46	39° 58' 30.429811 N	104° 41' 22.619548 W	
17,900.00	89.99	180.25	7,257.91	-10,204.38	2,665.05	14,517,724.78	1,727,371.02	39° 58' 29.441219 N	104° 41' 22.629686 W	
18,000.00	89.99	180.25	7,257.93	-10,304.38	2,664.61	14,517,624.78	1,727,370.58	39° 58' 28.452626 N	104° 41' 22.639823 W	
18,100.00	89.99	180.25	7,257.95	-10,404.38	2,664.17	14,517,524.78	1,727,370.14	39° 58' 27.464033 N	104° 41' 22.649961 W	
18,200.00	89.99	180.25	7,257.98	-10,504.38	2,663.73	14,517,424.78	1,727,369.70	39° 58' 26.475441 N	104° 41' 22.660098 W	
18,300.00	89.99	180.25	7,258.00	-10,604.38	2,663.28	14,517,324.79	1,727,369.26	39° 58' 25.486848 N	104° 41' 22.670235 W	
18,311.07	89.99	180.25	7,258.00	-10,615.45	2,663.24	14,517,313.72	1,727,369.21	39° 58' 25.377411 N	104° 41' 22.671358 W	
PBHL/TD 18311.07 MD/7258.00 TVD										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
LP Walla 5-6-2L 470 FNI - hit/miss target - Shape - Point	0.00	0.00	7,256.00	-1,320.89	2,704.22	14,526,608.25	1,727,410.19	39° 59' 57.263426 N	104° 41' 21.728683 W	
BHL Walla 5-6-2L 470 F: - plan hits target center - Point	0.00	0.00	7,258.00	-10,615.45	2,663.24	14,517,313.71	1,727,369.21	39° 58' 25.377397 N	104° 41' 22.671358 W	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
5,000.00	5,000.00	0.00	0.00	KOP Begin 10°/100' build	
5,555.12	5,472.26	-76.66	236.41	Begin 55.51° tangent	
8,261.73	7,004.84	-764.79	2,358.53	Begin 10°/100' build/turn	
9,016.42	7,256.00	-1,320.89	2,704.22	LP Begin 89.99° lateral section	
18,311.07	7,258.00	-10,615.45	2,663.24	PBHL/TD 18311.07 MD/7258.00 TVD	