



Weld County, Colorado
Section 33-T01N-R65W
Walla 5-5-3L
plan1

Azimuth Corrections:

To convert a Magnetic Direction to a True Direction, Add 8.28° East

Walla 5-5-3L			
Surf loc: 885 FSL 300 FWL Sec33-T01N-R65W			
NAD83 Colorado - HARN			
Universal Transverse Mercator (US Survey Feet)			
Zone 13N (108 W to 102 W)			
RKB=5077+25 @ 5102.00ft			
Northing	Easting	Latitude	Longitude
14527976.11	1730772.32	40.00296339	-104.67734630

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	5000.00	0.00	0.00	5000.00	0.00	0.00	0.00	0.00	KOP Begin 10°/100' build
3	5553.56	55.36	252.39	5471.37	-74.80	-235.66	10.00	133.96	Begin 55.36° tangent section
4	8472.99	55.36	252.39	7131.01	-801.39	-2524.92	0.00	1435.35	Begin 10°/100' build/turn
5	9228.16	90.04	180.12	7383.00	-1355.60	-2873.79	10.00	2061.64	LP Begin 90.04° lateral section
6	18518.93	90.04	180.12	7377.00	-10646.35	-2892.52	0.00	11032.29	PBHL/TD 18518.93 MD/7377.00 TVD

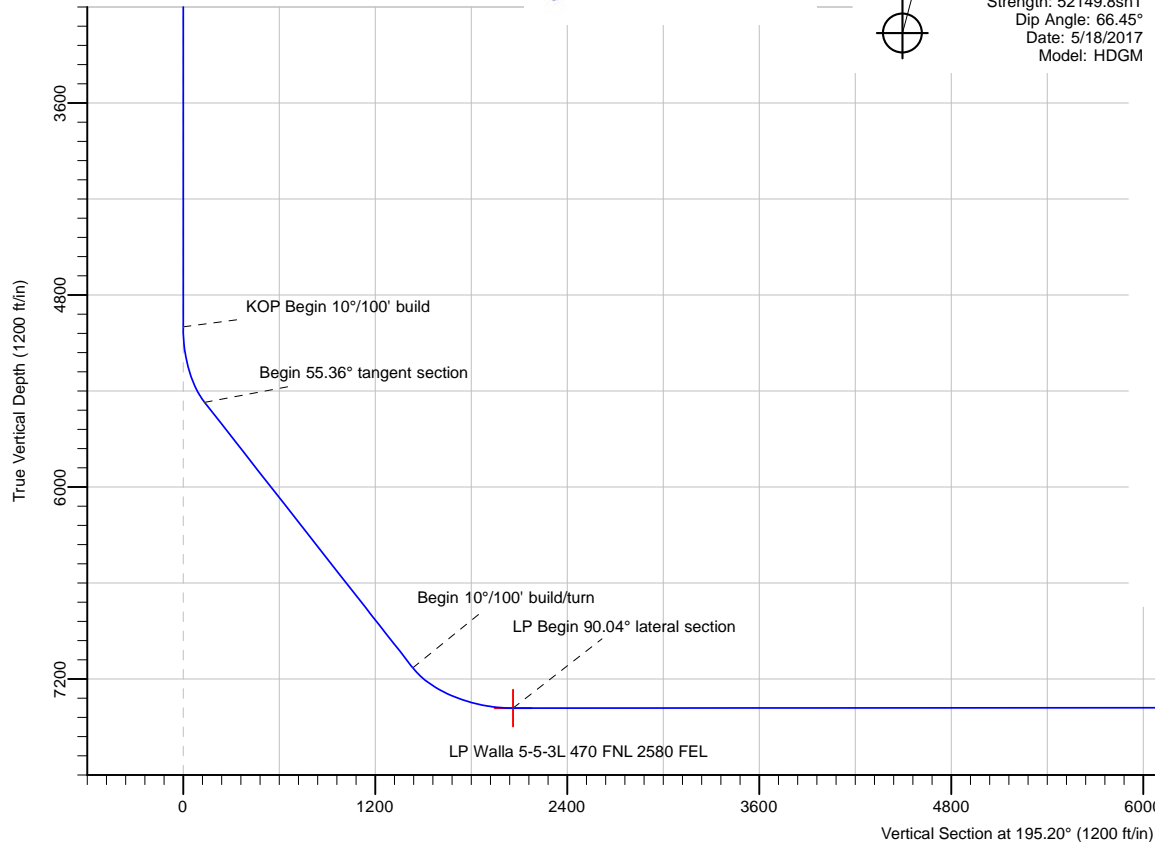
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	North	Easting	Latitude	Longitude
BHL Walla 5-5-3L 470 FSL 2580 FEL	7377.00	-10646.35	-2892.52	14517319.38	1727918.37	39.97372625	-104.68767071
LP Walla 5-5-3L 470 FNL 2580 FEL	7383.00	-1355.60	-2873.79	14526610.12	1727903.46	39.99924024	-104.68760774

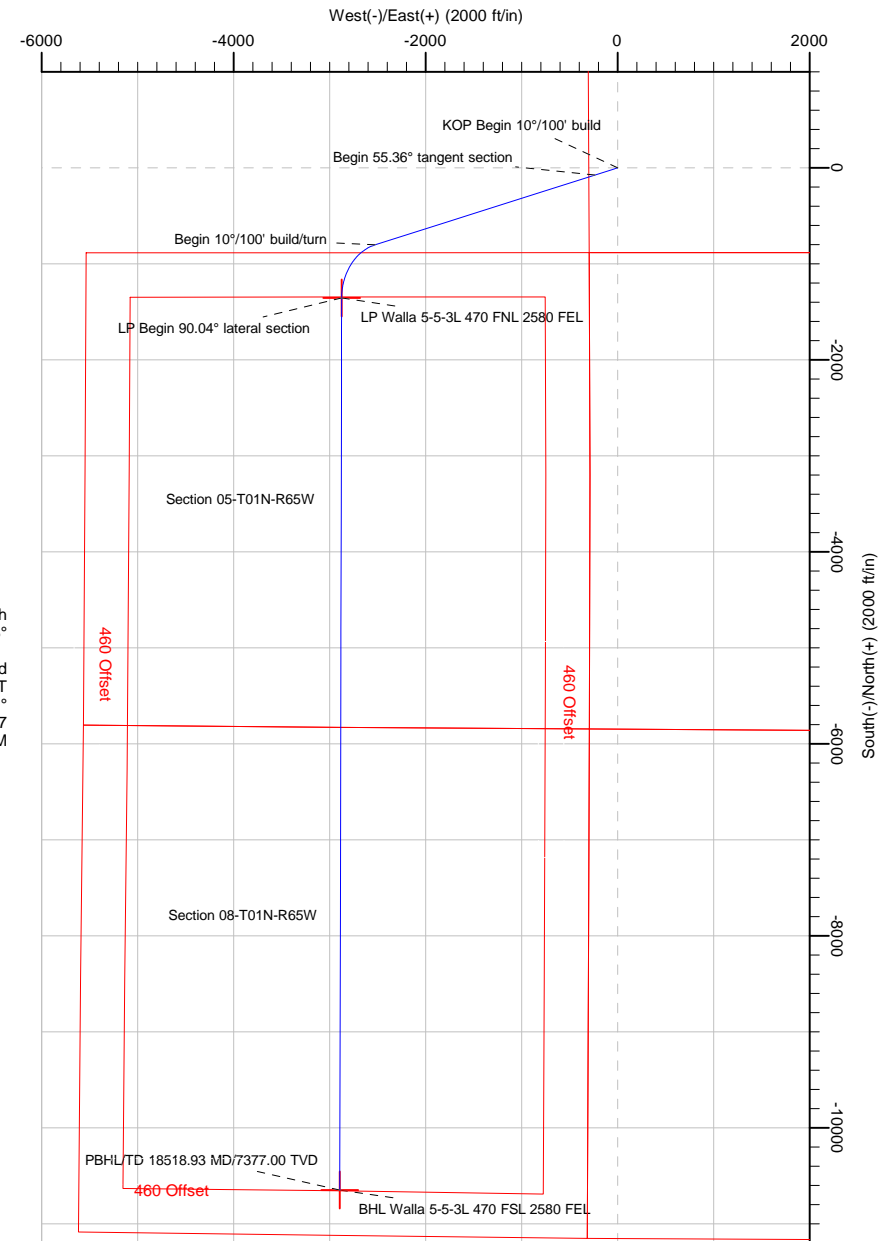


Azimuths to True North
Magnetic North: 8.28°

Magnetic Field
Strength: 52149.8snT
Dip Angle: 66.45°
Date: 5/18/2017
Model: HDGM



Date: 21:23, May 18 2017



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

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Walla 5-5-3L
Company:	Confluence Resources	TVD Reference:	RKB=5077+25 @ 5102.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5077+25 @ 5102.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Walla 5-5-3L	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 33-T01N-R65W			
Site Position:		Northing:	14,527,751.12 usft	Latitude:	40.00234552
From:	Map	Easting:	1,730,774.27 usft	Longitude:	-104.67734224
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.21 °

Well	Walla 5-5-3L, Surf loc: 885 FSL 300 FWL Sec33-T01N-R65W					
Well Position	+N/-S	225.00 ft	Northing:	14,527,976.11 usft	Latitude:	40.00296339
	+E/-W	-1.14 ft	Easting:	1,730,772.32 usft	Longitude:	-104.67734629
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,077.00 ft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	5/18/2017	8.28	66.45	52,149.80000000

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	195.20

Plan Survey Tool Program	Date	5/18/2017		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,518.93	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	
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,553.56	55.36	252.39	5,471.37	-74.80	-235.66	10.00	10.00	0.00	252.39	
8,472.99	55.36	252.39	7,131.01	-801.39	-2,524.92	0.00	0.00	0.00	0.00	
9,228.16	90.04	180.12	7,383.00	-1,355.60	-2,873.79	10.00	4.59	-9.57	-79.67	LP Walla 5-5-3L 470 F
18,518.93	90.04	180.12	7,377.00	-10,646.35	-2,892.52	0.00	0.00	0.00	0.00	BHL Walla 5-5-3L 470

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Walla 5-5-3L
Company:	Confluence Resources	TVD Reference:	RKB=5077+25 @ 5102.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5077+25 @ 5102.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Walla 5-5-3L	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
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
2,500.01	0.00	0.00	2,500.01	0.00	0.00	0.00	0.00	0.00	0.00
2,600.01	0.00	0.00	2,600.01	0.00	0.00	0.00	0.00	0.00	0.00
2,700.01	0.00	0.00	2,700.01	0.00	0.00	0.00	0.00	0.00	0.00
2,800.01	0.00	0.00	2,800.01	0.00	0.00	0.00	0.00	0.00	0.00
2,900.01	0.00	0.00	2,900.01	0.00	0.00	0.00	0.00	0.00	0.00
3,000.01	0.00	0.00	3,000.01	0.00	0.00	0.00	0.00	0.00	0.00
3,100.01	0.00	0.00	3,100.01	0.00	0.00	0.00	0.00	0.00	0.00
3,200.01	0.00	0.00	3,200.01	0.00	0.00	0.00	0.00	0.00	0.00
3,300.01	0.00	0.00	3,300.01	0.00	0.00	0.00	0.00	0.00	0.00
3,400.01	0.00	0.00	3,400.01	0.00	0.00	0.00	0.00	0.00	0.00
3,500.01	0.00	0.00	3,500.01	0.00	0.00	0.00	0.00	0.00	0.00
3,600.01	0.00	0.00	3,600.01	0.00	0.00	0.00	0.00	0.00	0.00
3,700.01	0.00	0.00	3,700.01	0.00	0.00	0.00	0.00	0.00	0.00
3,800.01	0.00	0.00	3,800.01	0.00	0.00	0.00	0.00	0.00	0.00
3,900.01	0.00	0.00	3,900.01	0.00	0.00	0.00	0.00	0.00	0.00
4,000.01	0.00	0.00	4,000.01	0.00	0.00	0.00	0.00	0.00	0.00
4,100.01	0.00	0.00	4,100.01	0.00	0.00	0.00	0.00	0.00	0.00
4,200.01	0.00	0.00	4,200.01	0.00	0.00	0.00	0.00	0.00	0.00
4,300.01	0.00	0.00	4,300.01	0.00	0.00	0.00	0.00	0.00	0.00
4,400.01	0.00	0.00	4,400.01	0.00	0.00	0.00	0.00	0.00	0.00
4,500.01	0.00	0.00	4,500.01	0.00	0.00	0.00	0.00	0.00	0.00
4,600.01	0.00	0.00	4,600.01	0.00	0.00	0.00	0.00	0.00	0.00
4,700.01	0.00	0.00	4,700.01	0.00	0.00	0.00	0.00	0.00	0.00
4,800.01	0.00	0.00	4,800.01	0.00	0.00	0.00	0.00	0.00	0.00
4,900.01	0.00	0.00	4,900.01	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									
5,000.01	0.00	252.39	5,000.01	0.00	0.00	0.00	0.00	0.00	0.00
5,100.01	10.00	252.39	5,099.50	-2.63	-8.30	4.72	10.00	10.00	0.00

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Walla 5-5-3L
Company:	Confluence Resources	TVD Reference:	RKB=5077+25 @ 5102.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5077+25 @ 5102.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Walla 5-5-3L	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)
5,200.01	20.00	252.39	5,195.97	-10.45	-32.94	18.72	10.00	10.00	0.00
5,300.01	30.00	252.39	5,286.49	-23.22	-73.17	41.60	10.00	10.00	0.00
5,400.01	40.00	252.39	5,368.30	-40.55	-127.77	72.64	10.00	10.00	0.00
5,500.01	50.00	252.39	5,438.92	-61.92	-195.09	110.90	10.00	10.00	0.00
5,553.56	55.36	252.39	5,471.37	-74.80	-235.66	133.96	10.00	10.00	0.00
Begin 55.36° tangent section									
5,600.01	55.36	252.39	5,497.78	-86.36	-272.08	154.67	0.00	0.00	0.00
5,700.01	55.36	252.39	5,554.63	-111.25	-350.50	199.25	0.00	0.00	0.00
5,800.01	55.36	252.39	5,611.48	-136.13	-428.91	243.83	0.00	0.00	0.00
5,900.01	55.36	252.39	5,668.32	-161.02	-507.33	288.40	0.00	0.00	0.00
6,000.01	55.36	252.39	5,725.17	-185.91	-585.74	332.98	0.00	0.00	0.00
6,100.01	55.36	252.39	5,782.02	-210.80	-664.16	377.56	0.00	0.00	0.00
6,200.01	55.36	252.39	5,838.87	-235.69	-742.57	422.13	0.00	0.00	0.00
6,300.01	55.36	252.39	5,895.72	-260.57	-820.99	466.71	0.00	0.00	0.00
6,400.01	55.36	252.39	5,952.57	-285.46	-899.40	511.29	0.00	0.00	0.00
6,500.01	55.36	252.39	6,009.41	-310.35	-977.82	555.86	0.00	0.00	0.00
6,600.01	55.36	252.39	6,066.26	-335.24	-1,056.23	600.44	0.00	0.00	0.00
6,700.01	55.36	252.39	6,123.11	-360.13	-1,134.65	645.02	0.00	0.00	0.00
6,800.01	55.36	252.39	6,179.96	-385.02	-1,213.06	689.60	0.00	0.00	0.00
6,900.01	55.36	252.39	6,236.81	-409.90	-1,291.48	734.17	0.00	0.00	0.00
7,000.01	55.36	252.39	6,293.66	-434.79	-1,369.89	778.75	0.00	0.00	0.00
7,100.01	55.36	252.39	6,350.50	-459.68	-1,448.31	823.33	0.00	0.00	0.00
7,200.01	55.36	252.39	6,407.35	-484.57	-1,526.72	867.90	0.00	0.00	0.00
7,300.01	55.36	252.39	6,464.20	-509.46	-1,605.14	912.48	0.00	0.00	0.00
7,400.01	55.36	252.39	6,521.05	-534.34	-1,683.55	957.06	0.00	0.00	0.00
7,500.02	55.36	252.39	6,577.90	-559.23	-1,761.97	1,001.63	0.00	0.00	0.00
7,600.02	55.36	252.39	6,634.75	-584.12	-1,840.38	1,046.21	0.00	0.00	0.00
7,700.02	55.36	252.39	6,691.59	-609.01	-1,918.80	1,090.79	0.00	0.00	0.00
7,800.02	55.36	252.39	6,748.44	-633.90	-1,997.21	1,135.36	0.00	0.00	0.00
7,900.02	55.36	252.39	6,805.29	-658.79	-2,075.63	1,179.94	0.00	0.00	0.00
8,000.02	55.36	252.39	6,862.14	-683.67	-2,154.04	1,224.52	0.00	0.00	0.00
8,100.02	55.36	252.39	6,918.99	-708.56	-2,232.46	1,269.09	0.00	0.00	0.00
8,200.02	55.36	252.39	6,975.83	-733.45	-2,310.87	1,313.67	0.00	0.00	0.00
8,300.02	55.36	252.39	7,032.68	-758.34	-2,389.29	1,358.25	0.00	0.00	0.00
8,400.02	55.36	252.39	7,089.53	-783.23	-2,467.70	1,402.82	0.00	0.00	0.00
8,472.99	55.36	252.39	7,131.01	-801.39	-2,524.92	1,435.35	0.00	0.00	0.00
Begin 10°/100' build/turn									
8,500.02	55.88	249.18	7,146.28	-808.73	-2,545.98	1,447.96	9.99	1.95	-11.88
8,600.02	58.52	237.70	7,200.57	-846.33	-2,620.90	1,503.89	10.00	2.64	-11.48
8,700.02	62.13	226.96	7,250.18	-899.42	-2,689.42	1,573.09	10.00	3.60	-10.74
8,800.02	66.50	216.97	7,293.60	-966.40	-2,749.45	1,653.46	10.00	4.38	-9.98
8,900.02	71.47	207.67	7,329.51	-1,045.22	-2,799.17	1,742.56	10.00	4.97	-9.30
9,000.02	76.87	198.92	7,356.82	-1,133.50	-2,837.07	1,837.69	10.00	5.40	-8.75
9,100.02	82.55	190.55	7,374.70	-1,228.54	-2,861.99	1,935.94	10.00	5.68	-8.37
9,200.02	88.38	182.39	7,382.61	-1,327.47	-2,873.18	2,034.34	10.00	5.83	-8.15
9,228.16	90.04	180.12	7,383.00	-1,355.60	-2,873.79	2,061.64	10.01	5.88	-8.10
LP Begin 90.04° lateral section									
9,300.02	90.04	180.12	7,382.95	-1,427.46	-2,873.94	2,131.03	0.00	0.00	0.00
9,400.02	90.04	180.12	7,382.89	-1,527.46	-2,874.14	2,227.59	0.00	0.00	0.00
9,500.02	90.04	180.12	7,382.82	-1,627.46	-2,874.34	2,324.14	0.00	0.00	0.00
9,600.02	90.04	180.12	7,382.76	-1,727.46	-2,874.54	2,420.70	0.00	0.00	0.00
9,700.02	90.04	180.12	7,382.70	-1,827.46	-2,874.74	2,517.25	0.00	0.00	0.00
9,800.02	90.04	180.12	7,382.63	-1,927.46	-2,874.94	2,613.80	0.00	0.00	0.00

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Company:	Confluence Resources	TVD Reference:	RKB=5077+25 @ 5102.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5077+25 @ 5102.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Walla 5-5-3L	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)
9,900.02	90.04	180.12	7,382.57	-2,027.46	-2,875.15	2,710.36	0.00	0.00	0.00
10,000.02	90.04	180.12	7,382.50	-2,127.46	-2,875.35	2,806.91	0.00	0.00	0.00
10,100.02	90.04	180.12	7,382.44	-2,227.46	-2,875.55	2,903.47	0.00	0.00	0.00
10,200.02	90.04	180.12	7,382.37	-2,327.46	-2,875.75	3,000.02	0.00	0.00	0.00
10,300.02	90.04	180.12	7,382.31	-2,427.46	-2,875.95	3,096.58	0.00	0.00	0.00
10,400.02	90.04	180.12	7,382.24	-2,527.46	-2,876.15	3,193.13	0.00	0.00	0.00
10,500.02	90.04	180.12	7,382.18	-2,627.46	-2,876.36	3,289.69	0.00	0.00	0.00
10,600.02	90.04	180.12	7,382.11	-2,727.46	-2,876.56	3,386.24	0.00	0.00	0.00
10,700.02	90.04	180.12	7,382.05	-2,827.46	-2,876.76	3,482.80	0.00	0.00	0.00
10,800.02	90.04	180.12	7,381.99	-2,927.46	-2,876.96	3,579.35	0.00	0.00	0.00
10,900.02	90.04	180.12	7,381.92	-3,027.46	-2,877.16	3,675.90	0.00	0.00	0.00
11,000.02	90.04	180.12	7,381.86	-3,127.46	-2,877.36	3,772.46	0.00	0.00	0.00
11,100.02	90.04	180.12	7,381.79	-3,227.46	-2,877.56	3,869.01	0.00	0.00	0.00
11,200.02	90.04	180.12	7,381.73	-3,327.46	-2,877.77	3,965.57	0.00	0.00	0.00
11,300.02	90.04	180.12	7,381.66	-3,427.46	-2,877.97	4,062.12	0.00	0.00	0.00
11,400.02	90.04	180.12	7,381.60	-3,527.46	-2,878.17	4,158.68	0.00	0.00	0.00
11,500.02	90.04	180.12	7,381.53	-3,627.46	-2,878.37	4,255.23	0.00	0.00	0.00
11,600.02	90.04	180.12	7,381.47	-3,727.46	-2,878.57	4,351.79	0.00	0.00	0.00
11,700.02	90.04	180.12	7,381.40	-3,827.46	-2,878.77	4,448.34	0.00	0.00	0.00
11,800.02	90.04	180.12	7,381.34	-3,927.46	-2,878.98	4,544.90	0.00	0.00	0.00
11,900.02	90.04	180.12	7,381.27	-4,027.46	-2,879.18	4,641.45	0.00	0.00	0.00
12,000.02	90.04	180.12	7,381.21	-4,127.46	-2,879.38	4,738.00	0.00	0.00	0.00
12,100.02	90.04	180.12	7,381.15	-4,227.46	-2,879.58	4,834.56	0.00	0.00	0.00
12,200.02	90.04	180.12	7,381.08	-4,327.46	-2,879.78	4,931.11	0.00	0.00	0.00
12,300.02	90.04	180.12	7,381.02	-4,427.46	-2,879.98	5,027.67	0.00	0.00	0.00
12,400.03	90.04	180.12	7,380.95	-4,527.46	-2,880.18	5,124.22	0.00	0.00	0.00
12,500.03	90.04	180.12	7,380.89	-4,627.46	-2,880.39	5,220.78	0.00	0.00	0.00
12,600.03	90.04	180.12	7,380.82	-4,727.46	-2,880.59	5,317.33	0.00	0.00	0.00
12,700.03	90.04	180.12	7,380.76	-4,827.46	-2,880.79	5,413.89	0.00	0.00	0.00
12,800.03	90.04	180.12	7,380.69	-4,927.46	-2,880.99	5,510.44	0.00	0.00	0.00
12,900.03	90.04	180.12	7,380.63	-5,027.46	-2,881.19	5,607.00	0.00	0.00	0.00
13,000.03	90.04	180.12	7,380.56	-5,127.46	-2,881.39	5,703.55	0.00	0.00	0.00
13,100.03	90.04	180.12	7,380.50	-5,227.46	-2,881.60	5,800.10	0.00	0.00	0.00
13,200.03	90.04	180.12	7,380.44	-5,327.46	-2,881.80	5,896.66	0.00	0.00	0.00
13,300.03	90.04	180.12	7,380.37	-5,427.46	-2,882.00	5,993.21	0.00	0.00	0.00
13,400.03	90.04	180.12	7,380.31	-5,527.46	-2,882.20	6,089.77	0.00	0.00	0.00
13,500.03	90.04	180.12	7,380.24	-5,627.46	-2,882.40	6,186.32	0.00	0.00	0.00
13,600.03	90.04	180.12	7,380.18	-5,727.46	-2,882.60	6,282.88	0.00	0.00	0.00
13,700.03	90.04	180.12	7,380.11	-5,827.46	-2,882.80	6,379.43	0.00	0.00	0.00
13,800.03	90.04	180.12	7,380.05	-5,927.46	-2,883.01	6,475.99	0.00	0.00	0.00
13,900.03	90.04	180.12	7,379.98	-6,027.46	-2,883.21	6,572.54	0.00	0.00	0.00
14,000.03	90.04	180.12	7,379.92	-6,127.46	-2,883.41	6,669.10	0.00	0.00	0.00
14,100.03	90.04	180.12	7,379.85	-6,227.46	-2,883.61	6,765.65	0.00	0.00	0.00
14,200.03	90.04	180.12	7,379.79	-6,327.46	-2,883.81	6,862.20	0.00	0.00	0.00
14,300.03	90.04	180.12	7,379.72	-6,427.46	-2,884.01	6,958.76	0.00	0.00	0.00
14,400.03	90.04	180.12	7,379.66	-6,527.46	-2,884.22	7,055.31	0.00	0.00	0.00
14,500.03	90.04	180.12	7,379.60	-6,627.46	-2,884.42	7,151.87	0.00	0.00	0.00
14,600.03	90.04	180.12	7,379.53	-6,727.46	-2,884.62	7,248.42	0.00	0.00	0.00
14,700.03	90.04	180.12	7,379.47	-6,827.46	-2,884.82	7,344.98	0.00	0.00	0.00
14,800.03	90.04	180.12	7,379.40	-6,927.46	-2,885.02	7,441.53	0.00	0.00	0.00
14,900.03	90.04	180.12	7,379.34	-7,027.46	-2,885.22	7,538.09	0.00	0.00	0.00
15,000.03	90.04	180.12	7,379.27	-7,127.46	-2,885.42	7,634.64	0.00	0.00	0.00
15,100.03	90.04	180.12	7,379.21	-7,227.46	-2,885.63	7,731.20	0.00	0.00	0.00
15,200.03	90.04	180.12	7,379.14	-7,327.46	-2,885.83	7,827.75	0.00	0.00	0.00

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Walla 5-5-3L
Company:	Confluence Resources	TVD Reference:	RKB=5077+25 @ 5102.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5077+25 @ 5102.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Walla 5-5-3L	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)
15,300.03	90.04	180.12	7,379.08	-7,427.46	-2,886.03	7,924.30	0.00	0.00	0.00
15,400.03	90.04	180.12	7,379.01	-7,527.46	-2,886.23	8,020.86	0.00	0.00	0.00
15,500.03	90.04	180.12	7,378.95	-7,627.46	-2,886.43	8,117.41	0.00	0.00	0.00
15,600.03	90.04	180.12	7,378.89	-7,727.46	-2,886.63	8,213.97	0.00	0.00	0.00
15,700.03	90.04	180.12	7,378.82	-7,827.46	-2,886.84	8,310.52	0.00	0.00	0.00
15,800.03	90.04	180.12	7,378.76	-7,927.46	-2,887.04	8,407.08	0.00	0.00	0.00
15,900.03	90.04	180.12	7,378.69	-8,027.46	-2,887.24	8,503.63	0.00	0.00	0.00
16,000.03	90.04	180.12	7,378.63	-8,127.46	-2,887.44	8,600.19	0.00	0.00	0.00
16,100.03	90.04	180.12	7,378.56	-8,227.46	-2,887.64	8,696.74	0.00	0.00	0.00
16,200.03	90.04	180.12	7,378.50	-8,327.46	-2,887.84	8,793.30	0.00	0.00	0.00
16,300.03	90.04	180.12	7,378.43	-8,427.46	-2,888.04	8,889.85	0.00	0.00	0.00
16,400.03	90.04	180.12	7,378.37	-8,527.46	-2,888.25	8,986.40	0.00	0.00	0.00
16,500.03	90.04	180.12	7,378.30	-8,627.46	-2,888.45	9,082.96	0.00	0.00	0.00
16,600.03	90.04	180.12	7,378.24	-8,727.46	-2,888.65	9,179.51	0.00	0.00	0.00
16,700.03	90.04	180.12	7,378.17	-8,827.46	-2,888.85	9,276.07	0.00	0.00	0.00
16,800.03	90.04	180.12	7,378.11	-8,927.46	-2,889.05	9,372.62	0.00	0.00	0.00
16,900.03	90.04	180.12	7,378.05	-9,027.46	-2,889.25	9,469.18	0.00	0.00	0.00
17,000.03	90.04	180.12	7,377.98	-9,127.46	-2,889.46	9,565.73	0.00	0.00	0.00
17,100.03	90.04	180.12	7,377.92	-9,227.46	-2,889.66	9,662.29	0.00	0.00	0.00
17,200.03	90.04	180.12	7,377.85	-9,327.46	-2,889.86	9,758.84	0.00	0.00	0.00
17,300.03	90.04	180.12	7,377.79	-9,427.46	-2,890.06	9,855.40	0.00	0.00	0.00
17,400.04	90.04	180.12	7,377.72	-9,527.46	-2,890.26	9,951.95	0.00	0.00	0.00
17,500.04	90.04	180.12	7,377.66	-9,627.46	-2,890.46	10,048.50	0.00	0.00	0.00
17,600.04	90.04	180.12	7,377.59	-9,727.46	-2,890.66	10,145.06	0.00	0.00	0.00
17,700.04	90.04	180.12	7,377.53	-9,827.46	-2,890.87	10,241.61	0.00	0.00	0.00
17,800.04	90.04	180.12	7,377.46	-9,927.46	-2,891.07	10,338.17	0.00	0.00	0.00
17,900.04	90.04	180.12	7,377.40	-10,027.46	-2,891.27	10,434.72	0.00	0.00	0.00
18,000.04	90.04	180.12	7,377.34	-10,127.46	-2,891.47	10,531.28	0.00	0.00	0.00
18,100.04	90.04	180.12	7,377.27	-10,227.46	-2,891.67	10,627.83	0.00	0.00	0.00
18,200.04	90.04	180.12	7,377.21	-10,327.46	-2,891.87	10,724.39	0.00	0.00	0.00
18,300.04	90.04	180.12	7,377.14	-10,427.46	-2,892.08	10,820.94	0.00	0.00	0.00
18,400.04	90.04	180.12	7,377.08	-10,527.46	-2,892.28	10,917.50	0.00	0.00	0.00
18,500.04	90.04	180.12	7,377.01	-10,627.46	-2,892.48	11,014.05	0.00	0.00	0.00
18,518.93	90.04	180.12	7,377.00	-10,646.35	-2,892.52	11,032.29	0.00	0.00	0.00
PBHL/TD 18518.93 MD/7377.00 TVD									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
BHL Walla 5-5-3L 470 F: - plan hits target center - Point	0.00	0.00	7,377.00	-10,646.35	-2,892.52	14,517,319.38	1,727,918.37	39.97372625	-104.68767071
LP Walla 5-5-3L 470 FNI - plan hits target center - Point	0.00	0.00	7,383.00	-1,355.60	-2,873.79	14,526,610.12	1,727,903.46	39.99924024	-104.68760774

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Walla 5-5-3L
Company:	Confluence Resources	TVD Reference:	RKB=5077+25 @ 5102.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5077+25 @ 5102.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Walla 5-5-3L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan1		

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	
5,553.56	5,471.37	-74.80	-235.66	Begin 55.36° tangent section	
8,472.99	7,131.01	-801.39	-2,524.92	Begin 10°/100' build/turn	
9,228.16	7,383.00	-1,355.60	-2,873.79	LP Begin 90.04° lateral section	
18,518.93	7,377.00	-10,646.35	-2,892.52	PBHL/TD 18518.93 MD/7377.00 TVD	

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Walla 5-5-3L
Company:	Confluence Resources	TVD Reference:	RKB=5077+25 @ 5102.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5077+25 @ 5102.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Walla 5-5-3L	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 33-T01N-R65W			
Site Position:		Northing:	14,527,751.12 usft	Latitude:	40.00234552
From:	Map	Easting:	1,730,774.27 usft	Longitude:	-104.67734224
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.21 °

Well	Walla 5-5-3L, Surf loc: 885 FSL 300 FWL Sec33-T01N-R65W					
Well Position	+N/-S	0.00 ft	Northing:	14,527,976.11 usft	Latitude:	40.00296339
	+E/-W	0.00 ft	Easting:	1,730,772.32 usft	Longitude:	-104.67734629
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,077.00 ft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	5/18/2017	8.28	66.45	52,149.80000000

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	195.20

Plan Survey Tool Program	Date	5/18/2017		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,518.93 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	
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,553.56	55.36	252.39	5,471.37	-74.80	-235.66	10.00	10.00	0.00	252.39	
8,472.99	55.36	252.39	7,131.01	-801.39	-2,524.92	0.00	0.00	0.00	0.00	
9,228.16	90.04	180.12	7,383.00	-1,355.60	-2,873.79	10.00	4.59	-9.57	-79.67	LP Walla 5-5-3L 470 F
18,518.93	90.04	180.12	7,377.00	-10,646.35	-2,892.52	0.00	0.00	0.00	0.00	BHL Walla 5-5-3L 470

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Walla 5-5-3L
Company:	Confluence Resources	TVD Reference:	RKB=5077+25 @ 5102.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5077+25 @ 5102.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Walla 5-5-3L	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	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
100.00	0.00	0.00	100.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
200.00	0.00	0.00	200.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
300.00	0.00	0.00	300.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
400.00	0.00	0.00	400.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
500.00	0.00	0.00	500.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
600.00	0.00	0.00	600.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
700.00	0.00	0.00	700.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
800.00	0.00	0.00	800.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
900.00	0.00	0.00	900.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
1,100.00	0.00	0.00	1,100.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
1,200.00	0.00	0.00	1,200.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
1,300.00	0.00	0.00	1,300.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
1,400.00	0.00	0.00	1,400.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
1,500.00	0.00	0.00	1,500.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
1,600.00	0.00	0.00	1,600.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
1,700.00	0.00	0.00	1,700.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
1,800.00	0.00	0.00	1,800.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
1,900.00	0.00	0.00	1,900.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
2,000.00	0.00	0.00	2,000.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
2,100.00	0.00	0.00	2,100.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
2,200.00	0.00	0.00	2,200.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
2,300.00	0.00	0.00	2,300.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
2,400.00	0.00	0.00	2,400.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
2,500.01	0.00	0.00	2,500.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
2,600.01	0.00	0.00	2,600.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
2,700.01	0.00	0.00	2,700.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
2,800.01	0.00	0.00	2,800.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
2,900.01	0.00	0.00	2,900.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
3,000.01	0.00	0.00	3,000.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
3,100.01	0.00	0.00	3,100.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
3,200.01	0.00	0.00	3,200.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
3,300.01	0.00	0.00	3,300.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
3,400.01	0.00	0.00	3,400.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
3,500.01	0.00	0.00	3,500.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
3,600.01	0.00	0.00	3,600.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
3,700.01	0.00	0.00	3,700.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
3,800.01	0.00	0.00	3,800.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
3,900.01	0.00	0.00	3,900.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
4,000.01	0.00	0.00	4,000.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
4,100.01	0.00	0.00	4,100.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
4,200.01	0.00	0.00	4,200.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
4,300.01	0.00	0.00	4,300.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
4,400.01	0.00	0.00	4,400.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
4,500.01	0.00	0.00	4,500.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
4,600.01	0.00	0.00	4,600.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
4,700.01	0.00	0.00	4,700.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
4,800.01	0.00	0.00	4,800.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
4,900.01	0.00	0.00	4,900.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
5,000.00	0.00	0.00	5,000.00	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
KOP Begin 10°/100' build									
5,000.01	0.00	252.39	5,000.01	0.00	0.00	14,527,976.11	1,730,772.32	40.00296339	-104.67734629
5,100.01	10.00	252.39	5,099.50	-2.63	-8.30	14,527,973.45	1,730,764.03	40.00295616	-104.67737592

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Walla 5-5-3L
Company:	Confluence Resources	TVD Reference:	RKB=5077+25 @ 5102.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5077+25 @ 5102.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Walla 5-5-3L	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
5,200.01	20.00	252.39	5,195.97	-10.45	-32.94	14,527,965.54	1,730,739.42	40.00293469	-104.67746391
5,300.01	30.00	252.39	5,286.49	-23.22	-73.17	14,527,952.63	1,730,699.23	40.00289962	-104.67760757
5,400.01	40.00	252.39	5,368.30	-40.55	-127.77	14,527,935.10	1,730,644.69	40.00285203	-104.67780255
5,500.01	50.00	252.39	5,438.92	-61.92	-195.09	14,527,913.49	1,730,577.46	40.00279335	-104.67804292
5,553.56	55.36	252.39	5,471.37	-74.80	-235.66	14,527,900.47	1,730,536.93	40.00275799	-104.67818779
Begin 55.36° tangent section									
5,600.01	55.36	252.39	5,497.78	-86.36	-272.08	14,527,888.77	1,730,500.55	40.00272624	-104.67831787
5,700.01	55.36	252.39	5,554.63	-111.25	-350.50	14,527,863.60	1,730,422.22	40.00265789	-104.67859788
5,800.01	55.36	252.39	5,611.48	-136.13	-428.91	14,527,838.43	1,730,343.90	40.00258954	-104.67887789
5,900.01	55.36	252.39	5,668.32	-161.02	-507.33	14,527,813.26	1,730,265.58	40.00252119	-104.67915790
6,000.01	55.36	252.39	5,725.17	-185.91	-585.74	14,527,788.09	1,730,187.25	40.00245284	-104.67943791
6,100.01	55.36	252.39	5,782.02	-210.80	-664.16	14,527,762.91	1,730,108.93	40.00238448	-104.67971791
6,200.01	55.36	252.39	5,838.87	-235.69	-742.57	14,527,737.74	1,730,030.60	40.00231613	-104.67999792
6,300.01	55.36	252.39	5,895.72	-260.57	-820.99	14,527,712.57	1,729,952.28	40.00224778	-104.68027792
6,400.01	55.36	252.39	5,952.57	-285.46	-899.40	14,527,687.40	1,729,873.96	40.00217942	-104.68055793
6,500.01	55.36	252.39	6,009.41	-310.35	-977.82	14,527,662.23	1,729,795.63	40.00211107	-104.68083793
6,600.01	55.36	252.39	6,066.26	-335.24	-1,056.23	14,527,637.05	1,729,717.31	40.00204271	-104.68111794
6,700.01	55.36	252.39	6,123.11	-360.13	-1,134.65	14,527,611.88	1,729,638.98	40.00197435	-104.68139794
6,800.01	55.36	252.39	6,179.96	-385.02	-1,213.06	14,527,586.71	1,729,560.66	40.00190600	-104.68167794
6,900.01	55.36	252.39	6,236.81	-409.90	-1,291.48	14,527,561.54	1,729,482.34	40.00183764	-104.68195794
7,000.01	55.36	252.39	6,293.66	-434.79	-1,369.89	14,527,536.37	1,729,404.01	40.00176928	-104.68223795
7,100.01	55.36	252.39	6,350.50	-459.68	-1,448.31	14,527,511.20	1,729,325.69	40.00170092	-104.68251795
7,200.01	55.36	252.39	6,407.35	-484.57	-1,526.72	14,527,486.02	1,729,247.36	40.00163256	-104.68279795
7,300.01	55.36	252.39	6,464.20	-509.46	-1,605.14	14,527,460.85	1,729,169.04	40.00156420	-104.68307795
7,400.01	55.36	252.39	6,521.05	-534.34	-1,683.55	14,527,435.68	1,729,090.72	40.00149584	-104.68335795
7,500.02	55.36	252.39	6,577.90	-559.23	-1,761.97	14,527,410.51	1,729,012.39	40.00142748	-104.68363795
7,600.02	55.36	252.39	6,634.75	-584.12	-1,840.38	14,527,385.34	1,728,934.07	40.00135912	-104.68391794
7,700.02	55.36	252.39	6,691.59	-609.01	-1,918.80	14,527,360.16	1,728,855.74	40.00129075	-104.68419794
7,800.02	55.36	252.39	6,748.44	-633.90	-1,997.21	14,527,334.99	1,728,777.42	40.00122239	-104.68447794
7,900.02	55.36	252.39	6,805.29	-658.79	-2,075.63	14,527,309.82	1,728,699.09	40.00115402	-104.68475794
8,000.02	55.36	252.39	6,862.14	-683.67	-2,154.04	14,527,284.65	1,728,620.77	40.00108566	-104.68503793
8,100.02	55.36	252.39	6,918.99	-708.56	-2,232.46	14,527,259.48	1,728,542.45	40.00101729	-104.68531793
8,200.02	55.36	252.39	6,975.83	-733.45	-2,310.87	14,527,234.31	1,728,464.12	40.00094893	-104.68559792
8,300.02	55.36	252.39	7,032.68	-758.34	-2,389.29	14,527,209.13	1,728,385.80	40.00088056	-104.68587792
8,400.02	55.36	252.39	7,089.53	-783.23	-2,467.70	14,527,183.96	1,728,307.47	40.00081219	-104.68615791
8,472.99	55.36	252.39	7,131.01	-801.39	-2,524.92	14,527,165.59	1,728,250.32	40.00076230	-104.68636222
Begin 10°/100' build/turn									
8,500.02	55.88	249.18	7,146.28	-808.73	-2,545.98	14,527,158.18	1,728,229.29	40.00074213	-104.68643742
8,600.02	58.52	237.70	7,200.57	-846.33	-2,620.90	14,527,120.31	1,728,154.50	40.00063886	-104.68670495
8,700.02	62.13	226.96	7,250.18	-899.42	-2,689.42	14,527,066.96	1,728,086.17	40.00049304	-104.68694959
8,800.02	66.50	216.97	7,293.60	-966.40	-2,749.45	14,526,999.77	1,728,026.39	40.00030909	-104.68716392
8,900.02	71.47	207.67	7,329.51	-1,045.22	-2,799.17	14,526,920.77	1,727,976.95	40.00009261	-104.68734142
9,000.02	76.87	198.92	7,356.82	-1,133.50	-2,837.07	14,526,832.36	1,727,939.38	39.99985018	-104.68747669
9,100.02	82.55	190.55	7,374.70	-1,228.54	-2,861.99	14,526,737.22	1,727,914.80	39.99958916	-104.68756564
9,200.02	88.38	182.39	7,382.61	-1,327.47	-2,873.18	14,526,638.25	1,727,903.97	39.99931748	-104.68760555
9,228.16	90.04	180.12	7,383.00	-1,355.60	-2,873.79	14,526,610.12	1,727,903.46	39.99924024	-104.68760774
LP Begin 90.04° lateral section									
9,300.02	90.04	180.12	7,382.95	-1,427.46	-2,873.94	14,526,538.26	1,727,903.57	39.99904290	-104.68760823
9,400.02	90.04	180.12	7,382.89	-1,527.46	-2,874.14	14,526,438.26	1,727,903.73	39.99876828	-104.68760890
9,500.02	90.04	180.12	7,382.82	-1,627.46	-2,874.34	14,526,338.26	1,727,903.89	39.99849366	-104.68760958
9,600.02	90.04	180.12	7,382.76	-1,727.46	-2,874.54	14,526,238.26	1,727,904.06	39.99821905	-104.68761026
9,700.02	90.04	180.12	7,382.70	-1,827.46	-2,874.74	14,526,138.26	1,727,904.22	39.99794443	-104.68761094
9,800.02	90.04	180.12	7,382.63	-1,927.46	-2,874.94	14,526,038.26	1,727,904.38	39.99766982	-104.68761162
9,900.02	90.04	180.12	7,382.57	-2,027.46	-2,875.15	14,525,938.26	1,727,904.54	39.99739520	-104.68761230

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Walla 5-5-3L
Company:	Confluence Resources	TVD Reference:	RKB=5077+25 @ 5102.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5077+25 @ 5102.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Walla 5-5-3L	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
10,000.02	90.04	180.12	7,382.50	-2,127.46	-2,875.35	14,525,838.26	1,727,904.70	39.99712058	-104.68761297
10,100.02	90.04	180.12	7,382.44	-2,227.46	-2,875.55	14,525,738.26	1,727,904.86	39.99684597	-104.68761365
10,200.02	90.04	180.12	7,382.37	-2,327.46	-2,875.75	14,525,638.26	1,727,905.02	39.99657135	-104.68761433
10,300.02	90.04	180.12	7,382.31	-2,427.46	-2,875.95	14,525,538.26	1,727,905.18	39.99629673	-104.68761501
10,400.02	90.04	180.12	7,382.24	-2,527.46	-2,876.15	14,525,438.26	1,727,905.34	39.99602212	-104.68761569
10,500.02	90.04	180.12	7,382.18	-2,627.46	-2,876.36	14,525,338.26	1,727,905.50	39.99574750	-104.68761637
10,600.02	90.04	180.12	7,382.11	-2,727.46	-2,876.56	14,525,238.26	1,727,905.66	39.99547288	-104.68761704
10,700.02	90.04	180.12	7,382.05	-2,827.46	-2,876.76	14,525,138.26	1,727,905.82	39.99519827	-104.68761772
10,800.02	90.04	180.12	7,381.99	-2,927.46	-2,876.96	14,525,038.26	1,727,905.98	39.99492365	-104.68761840
10,900.02	90.04	180.12	7,381.92	-3,027.46	-2,877.16	14,524,938.26	1,727,906.14	39.99464903	-104.68761908
11,000.02	90.04	180.12	7,381.86	-3,127.46	-2,877.36	14,524,838.26	1,727,906.30	39.99437442	-104.68761976
11,100.02	90.04	180.12	7,381.79	-3,227.46	-2,877.56	14,524,738.26	1,727,906.46	39.99409980	-104.68762043
11,200.02	90.04	180.12	7,381.73	-3,327.46	-2,877.77	14,524,638.26	1,727,906.62	39.99382518	-104.68762111
11,300.02	90.04	180.12	7,381.66	-3,427.46	-2,877.97	14,524,538.26	1,727,906.78	39.99355057	-104.68762179
11,400.02	90.04	180.12	7,381.60	-3,527.46	-2,878.17	14,524,438.27	1,727,906.94	39.99327595	-104.68762247
11,500.02	90.04	180.12	7,381.53	-3,627.46	-2,878.37	14,524,338.27	1,727,907.10	39.99300133	-104.68762315
11,600.02	90.04	180.12	7,381.47	-3,727.46	-2,878.57	14,524,238.27	1,727,907.27	39.99272672	-104.68762383
11,700.02	90.04	180.12	7,381.40	-3,827.46	-2,878.77	14,524,138.27	1,727,907.43	39.99245210	-104.68762450
11,800.02	90.04	180.12	7,381.34	-3,927.46	-2,878.98	14,524,038.27	1,727,907.59	39.99217748	-104.68762518
11,900.02	90.04	180.12	7,381.27	-4,027.46	-2,879.18	14,523,938.27	1,727,907.75	39.99190287	-104.68762586
12,000.02	90.04	180.12	7,381.21	-4,127.46	-2,879.38	14,523,838.27	1,727,907.91	39.99162825	-104.68762654
12,100.02	90.04	180.12	7,381.15	-4,227.46	-2,879.58	14,523,738.27	1,727,908.07	39.99135363	-104.68762722
12,200.02	90.04	180.12	7,381.08	-4,327.46	-2,879.78	14,523,638.27	1,727,908.23	39.99107902	-104.68762789
12,300.02	90.04	180.12	7,381.02	-4,427.46	-2,879.98	14,523,538.27	1,727,908.39	39.99080440	-104.68762857
12,400.03	90.04	180.12	7,380.95	-4,527.46	-2,880.18	14,523,438.27	1,727,908.55	39.99052978	-104.68762925
12,500.03	90.04	180.12	7,380.89	-4,627.46	-2,880.39	14,523,338.27	1,727,908.71	39.99025517	-104.68762993
12,600.03	90.04	180.12	7,380.82	-4,727.46	-2,880.59	14,523,238.27	1,727,908.87	39.98998055	-104.68763061
12,700.03	90.04	180.12	7,380.76	-4,827.46	-2,880.79	14,523,138.27	1,727,909.03	39.98970593	-104.68763128
12,800.03	90.04	180.12	7,380.69	-4,927.46	-2,880.99	14,523,038.27	1,727,909.19	39.98943131	-104.68763196
12,900.03	90.04	180.12	7,380.63	-5,027.46	-2,881.19	14,522,938.27	1,727,909.35	39.98915670	-104.68763264
13,000.03	90.04	180.12	7,380.56	-5,127.46	-2,881.39	14,522,838.27	1,727,909.51	39.98888208	-104.68763332
13,100.03	90.04	180.12	7,380.50	-5,227.46	-2,881.60	14,522,738.27	1,727,909.67	39.98860746	-104.68763399
13,200.03	90.04	180.12	7,380.44	-5,327.46	-2,881.80	14,522,638.27	1,727,909.83	39.98833285	-104.68763467
13,300.03	90.04	180.12	7,380.37	-5,427.46	-2,882.00	14,522,538.27	1,727,909.99	39.98805823	-104.68763535
13,400.03	90.04	180.12	7,380.31	-5,527.46	-2,882.20	14,522,438.27	1,727,910.15	39.98778361	-104.68763603
13,500.03	90.04	180.12	7,380.24	-5,627.46	-2,882.40	14,522,338.27	1,727,910.31	39.98750900	-104.68763671
13,600.03	90.04	180.12	7,380.18	-5,727.46	-2,882.60	14,522,238.27	1,727,910.47	39.98723438	-104.68763738
13,700.03	90.04	180.12	7,380.11	-5,827.46	-2,882.80	14,522,138.27	1,727,910.64	39.98695976	-104.68763806
13,800.03	90.04	180.12	7,380.05	-5,927.46	-2,883.01	14,522,038.27	1,727,910.80	39.98668515	-104.68763874
13,900.03	90.04	180.12	7,379.98	-6,027.46	-2,883.21	14,521,938.27	1,727,910.96	39.98641053	-104.68763942
14,000.03	90.04	180.12	7,379.92	-6,127.46	-2,883.41	14,521,838.27	1,727,911.12	39.98613591	-104.68764010
14,100.03	90.04	180.12	7,379.85	-6,227.46	-2,883.61	14,521,738.27	1,727,911.28	39.98586129	-104.68764077
14,200.03	90.04	180.12	7,379.79	-6,327.46	-2,883.81	14,521,638.27	1,727,911.44	39.98558668	-104.68764145
14,300.03	90.04	180.12	7,379.72	-6,427.46	-2,884.01	14,521,538.27	1,727,911.60	39.98531206	-104.68764213
14,400.03	90.04	180.12	7,379.66	-6,527.46	-2,884.22	14,521,438.27	1,727,911.76	39.98503744	-104.68764281
14,500.03	90.04	180.12	7,379.60	-6,627.46	-2,884.42	14,521,338.27	1,727,911.92	39.98476283	-104.68764348
14,600.03	90.04	180.12	7,379.53	-6,727.46	-2,884.62	14,521,238.27	1,727,912.08	39.98448821	-104.68764416
14,700.03	90.04	180.12	7,379.47	-6,827.46	-2,884.82	14,521,138.27	1,727,912.24	39.98421359	-104.68764484
14,800.03	90.04	180.12	7,379.40	-6,927.46	-2,885.02	14,521,038.27	1,727,912.40	39.98393897	-104.68764552
14,900.03	90.04	180.12	7,379.34	-7,027.46	-2,885.22	14,520,938.27	1,727,912.56	39.98366436	-104.68764619
15,000.03	90.04	180.12	7,379.27	-7,127.46	-2,885.42	14,520,838.27	1,727,912.72	39.98338974	-104.68764687
15,100.03	90.04	180.12	7,379.21	-7,227.46	-2,885.63	14,520,738.27	1,727,912.88	39.98311512	-104.68764755
15,200.03	90.04	180.12	7,379.14	-7,327.46	-2,885.83	14,520,638.27	1,727,913.04	39.98284051	-104.68764823
15,300.03	90.04	180.12	7,379.08	-7,427.46	-2,886.03	14,520,538.27	1,727,913.20	39.98256589	-104.68764890
15,400.03	90.04	180.12	7,379.01	-7,527.46	-2,886.23	14,520,438.27	1,727,913.36	39.98229127	-104.68764958

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Walla 5-5-3L
Company:	Confluence Resources	TVD Reference:	RKB=5077+25 @ 5102.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5077+25 @ 5102.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Walla 5-5-3L	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
15,500.03	90.04	180.12	7,378.95	-7,627.46	-2,886.43	14,520,338.27	1,727,913.52	39.98201665	-104.68765026
15,600.03	90.04	180.12	7,378.89	-7,727.46	-2,886.63	14,520,238.27	1,727,913.68	39.98174204	-104.68765094
15,700.03	90.04	180.12	7,378.82	-7,827.46	-2,886.84	14,520,138.27	1,727,913.84	39.98146742	-104.68765162
15,800.03	90.04	180.12	7,378.76	-7,927.46	-2,887.04	14,520,038.27	1,727,914.01	39.98119280	-104.68765229
15,900.03	90.04	180.12	7,378.69	-8,027.46	-2,887.24	14,519,938.27	1,727,914.17	39.98091818	-104.68765297
16,000.03	90.04	180.12	7,378.63	-8,127.46	-2,887.44	14,519,838.27	1,727,914.33	39.98064357	-104.68765365
16,100.03	90.04	180.12	7,378.56	-8,227.46	-2,887.64	14,519,738.27	1,727,914.49	39.98036895	-104.68765433
16,200.03	90.04	180.12	7,378.50	-8,327.46	-2,887.84	14,519,638.27	1,727,914.65	39.98009433	-104.68765500
16,300.03	90.04	180.12	7,378.43	-8,427.46	-2,888.04	14,519,538.27	1,727,914.81	39.97981972	-104.68765568
16,400.03	90.04	180.12	7,378.37	-8,527.46	-2,888.25	14,519,438.27	1,727,914.97	39.97954510	-104.68765636
16,500.03	90.04	180.12	7,378.30	-8,627.46	-2,888.45	14,519,338.27	1,727,915.13	39.97927048	-104.68765704
16,600.03	90.04	180.12	7,378.24	-8,727.46	-2,888.65	14,519,238.27	1,727,915.29	39.97899586	-104.68765771
16,700.03	90.04	180.12	7,378.17	-8,827.46	-2,888.85	14,519,138.27	1,727,915.45	39.97872125	-104.68765839
16,800.03	90.04	180.12	7,378.11	-8,927.46	-2,889.05	14,519,038.27	1,727,915.61	39.97844663	-104.68765907
16,900.03	90.04	180.12	7,378.05	-9,027.46	-2,889.25	14,518,938.27	1,727,915.77	39.97817201	-104.68765974
17,000.03	90.04	180.12	7,377.98	-9,127.46	-2,889.46	14,518,838.27	1,727,915.93	39.97789739	-104.68766042
17,100.03	90.04	180.12	7,377.92	-9,227.46	-2,889.66	14,518,738.27	1,727,916.09	39.97762278	-104.68766110
17,200.03	90.04	180.12	7,377.85	-9,327.46	-2,889.86	14,518,638.27	1,727,916.25	39.97734816	-104.68766178
17,300.03	90.04	180.12	7,377.79	-9,427.46	-2,890.06	14,518,538.27	1,727,916.41	39.97707354	-104.68766245
17,400.04	90.04	180.12	7,377.72	-9,527.46	-2,890.26	14,518,438.27	1,727,916.57	39.97679892	-104.68766313
17,500.04	90.04	180.12	7,377.66	-9,627.46	-2,890.46	14,518,338.27	1,727,916.73	39.97652431	-104.68766381
17,600.04	90.04	180.12	7,377.59	-9,727.46	-2,890.66	14,518,238.27	1,727,916.89	39.97624969	-104.68766449
17,700.04	90.04	180.12	7,377.53	-9,827.46	-2,890.87	14,518,138.27	1,727,917.05	39.97597507	-104.68766516
17,800.04	90.04	180.12	7,377.46	-9,927.46	-2,891.07	14,518,038.27	1,727,917.21	39.97570045	-104.68766584
17,900.04	90.04	180.12	7,377.40	-10,027.46	-2,891.27	14,517,938.27	1,727,917.38	39.97542584	-104.68766652
18,000.04	90.04	180.12	7,377.34	-10,127.46	-2,891.47	14,517,838.27	1,727,917.54	39.97515122	-104.68766720
18,100.04	90.04	180.12	7,377.27	-10,227.46	-2,891.67	14,517,738.27	1,727,917.70	39.97487660	-104.68766787
18,200.04	90.04	180.12	7,377.21	-10,327.46	-2,891.87	14,517,638.28	1,727,917.86	39.97460198	-104.68766855
18,300.04	90.04	180.12	7,377.14	-10,427.46	-2,892.08	14,517,538.28	1,727,918.02	39.97432737	-104.68766923
18,400.04	90.04	180.12	7,377.08	-10,527.46	-2,892.28	14,517,438.28	1,727,918.18	39.97405275	-104.68766990
18,500.04	90.04	180.12	7,377.01	-10,627.46	-2,892.48	14,517,338.28	1,727,918.34	39.97377813	-104.68767058
18,518.93	90.04	180.12	7,377.00	-10,646.35	-2,892.52	14,517,319.38	1,727,918.37	39.97372625	-104.68767071
PBHL/TD 18518.93 MD/7377.00 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
BHL Walla 5-5-3L 470 F: - plan hits target center - Point	0.00	0.00	7,377.00	-10,646.35	-2,892.52	14,517,319.38	1,727,918.37	39.97372625	-104.68767071
LP Walla 5-5-3L 470 FNI - plan hits target center - Point	0.00	0.00	7,383.00	-1,355.60	-2,873.79	14,526,610.12	1,727,903.46	39.99924024	-104.68760774

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Walla 5-5-3L
Company:	Confluence Resources	TVD Reference:	RKB=5077+25 @ 5102.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5077+25 @ 5102.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Walla 5-5-3L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan1		

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
5,553.56	5,471.37	-74.80	-235.66	Begin 55.36° tangent section
8,472.99	7,131.01	-801.39	-2,524.92	Begin 10°/100' build/turn
9,228.16	7,383.00	-1,355.60	-2,873.79	LP Begin 90.04° lateral section
18,518.93	7,377.00	-10,646.35	-2,892.52	PBHL/TD 18518.93 MD/7377.00 TVD