



Weld County, Colorado  
Section 34-T01N-R65W  
Buford 33-02-2L  
plan1

Azimuth Corrections:

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

Buford 33-02-2L Surf loc: 770 FSL 944 FWL Section 34-T01N-R65W			
NAD83 Colorado - HARN Universal Transverse Mercator (US Survey Feet) Zone 13N (108 W to 102 W) RKB=5137+25 @ 5162.00ft			
Northing	Easting	Latitude	Longitude
14527893.50	1736700.30	40.00267567	-104.65617938

Section Details

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Vsect	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	5431.65	43.17	232.17	5391.96	-95.09	-122.47	10.00	-73.01	Begin 43.17° tangent section
4	7173.57	43.17	232.17	6662.49	-825.88	-1063.75	0.00	-634.15	Begin 10°/100' build/turn
5	8319.21	89.93	359.68	7314.00	-308.20	-1550.61	10.00	-41.62	LP Begin 89.93° lateral section
6	17979.38	89.93	359.68	7325.00	9351.82	-1604.10	0.00	9488.40	PBHL/TD 17979.38 MD 7325.00 TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LP Buford 33-02-2L 470 FSL 610 FEL	7314.00	-308.20	-1550.61	14527585.30	1735149.69	40.00184560	-104.66172056
BHL Buford 33-02-2L 470 FNL 610 FEL	7325.00	9351.82	-1604.10	14537245.30	1735096.20	40.02837385	-104.66178064

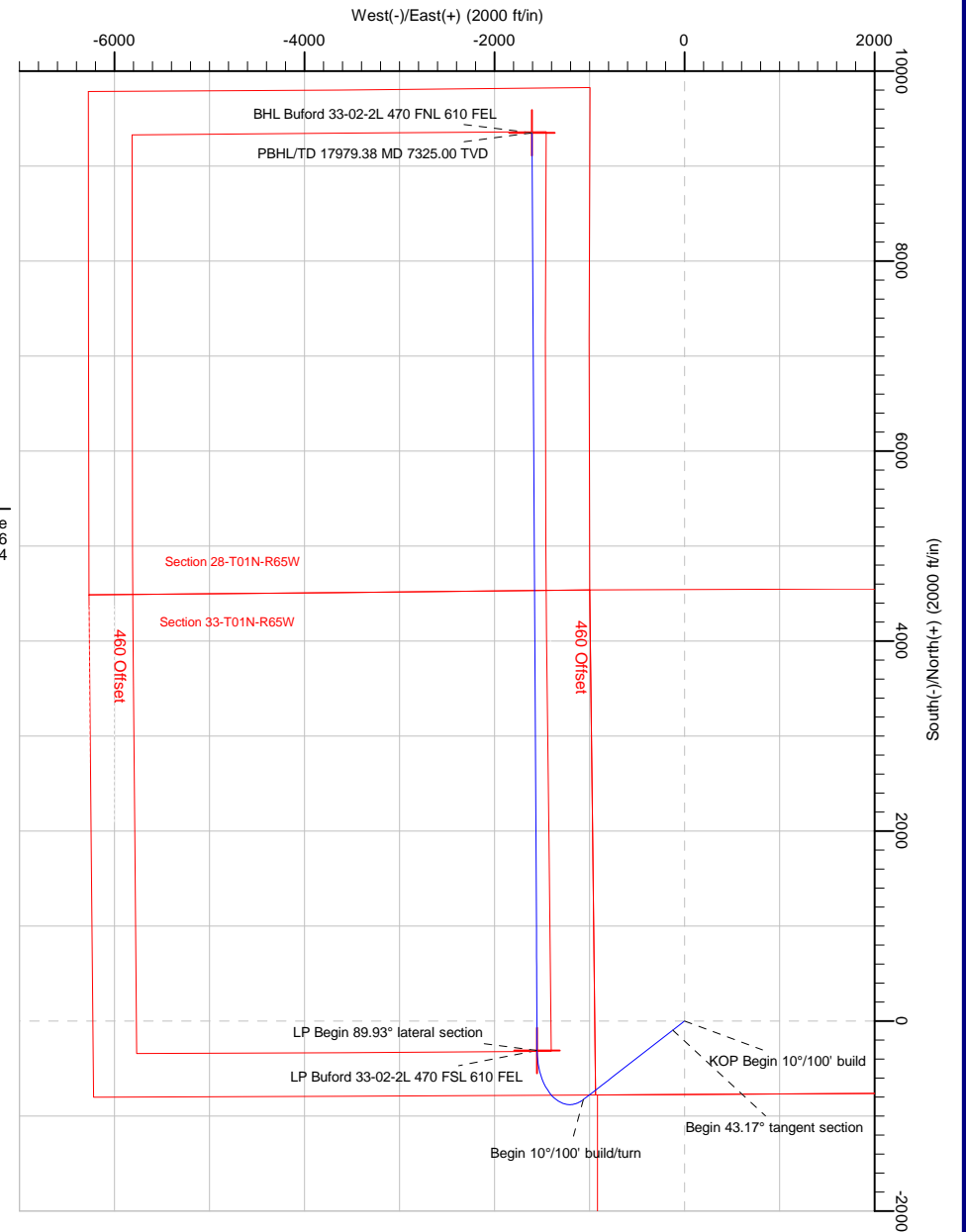
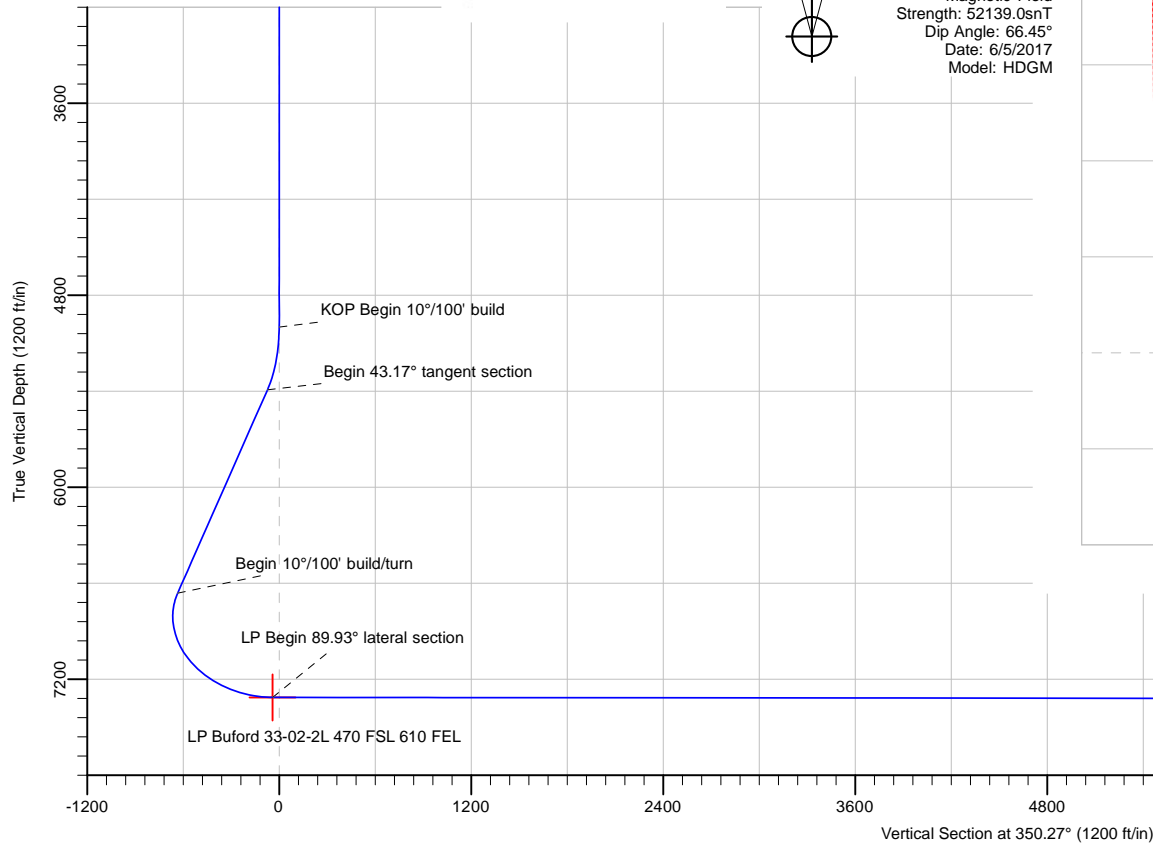


PRODIRECTIONAL



Azimuths to Grid North  
True North: -0.22°  
Magnetic North: 8.06°

Magnetic Field  
Strength: 52139.0snT  
Dip Angle: 66.45°  
Date: 6/5/2017  
Model: HDGM



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

<b>Database:</b>	DB_Aug0116_LT_v14	<b>Local Co-ordinate Reference:</b>	Well Buford 33-02-2L
<b>Company:</b>	Confluence Resources	<b>TVD Reference:</b>	RKB=5137+25 @ 5162.00ft
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	RKB=5137+25 @ 5162.00ft
<b>Site:</b>	Section 34-T01N-R65W	<b>North Reference:</b>	Grid
<b>Well:</b>	Buford 33-02-2L	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original hole		
<b>Design:</b>	plan1		

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

Site		Section 34-T01N-R65W			
Site Position:		Northing:	14,527,892.80 usft	Latitude:	40.00267560
From:	Map	Easting:	1,736,525.30 usft	Longitude:	-104.65680429
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.22 °

Well	Buford 33-02-2L, Surf loc: 770 FSL 944 FWL Section 34-T01N-R65W					
Well Position	+N/-S	0.70 ft	Northing:	14,527,893.50 usft	Latitude:	40.00267567
	+E/-W	175.00 ft	Easting:	1,736,700.30 usft	Longitude:	-104.65617938
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,137.00 ft

<b>Wellbore</b>	Original hole				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HDGM	6/5/2017	8.28	66.45	52,139.00000000

<b>Design</b>	plan1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	350.27

<b>Plan Survey Tool Program</b>	<b>Date</b>	6/5/2017		
<b>Depth From (ft)</b>	<b>Depth To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	17,979.38	plan1 (Original hole)	

<b>Plan Sections</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	<b>TFO (°)</b>	<b>Target</b>
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	
5,431.65	43.17	232.17	5,391.96	-95.09	-122.47	10.00	10.00	0.00	232.17	
7,173.57	43.17	232.17	6,662.49	-825.88	-1,063.75	0.00	0.00	0.00	0.00	
8,319.21	89.93	359.68	7,314.00	-308.20	-1,550.61	10.00	4.08	11.13	119.28	LP Buford 33-02-2L 4'
17,979.38	89.93	359.68	7,325.00	9,351.82	-1,604.10	0.00	0.00	0.00	0.00	BHL Buford 33-02-2L

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<b>Company:</b>	Confluence Resources	<b>TVD Reference:</b>	RKB=5137+25 @ 5162.00ft
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	RKB=5137+25 @ 5162.00ft
<b>Site:</b>	Section 34-T01N-R65W	<b>North Reference:</b>	Grid
<b>Well:</b>	Buford 33-02-2L	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original hole		
<b>Design:</b>	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	232.17	5,000.01	0.00	0.00	0.00	0.00	0.00	0.00
5,100.01	10.00	232.17	5,099.50	-5.34	-6.88	-4.10	10.00	10.00	0.00

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<b>Company:</b>	Confluence Resources	<b>TVD Reference:</b>	RKB=5137+25 @ 5162.00ft
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	RKB=5137+25 @ 5162.00ft
<b>Site:</b>	Section 34-T01N-R65W	<b>North Reference:</b>	Grid
<b>Well:</b>	Buford 33-02-2L	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original hole		
<b>Design:</b>	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	232.17	5,195.97	-21.19	-27.30	-16.27	10.00	10.00	0.00
5,300.01	30.00	232.17	5,286.49	-47.08	-60.64	-36.15	10.00	10.00	0.00
5,400.01	40.00	232.17	5,368.30	-82.21	-105.89	-63.12	10.00	10.00	0.00
5,431.65	43.17	232.17	5,391.96	-95.09	-122.47	-73.01	10.00	10.00	0.00
<b>Begin 43.17° tangent section</b>									
5,500.01	43.17	232.17	5,441.82	-123.76	-159.41	-95.03	0.00	0.00	0.00
5,600.01	43.17	232.17	5,514.76	-165.72	-213.45	-127.25	0.00	0.00	0.00
5,700.01	43.17	232.17	5,587.70	-207.67	-267.49	-159.46	0.00	0.00	0.00
5,800.01	43.17	232.17	5,660.64	-249.62	-321.52	-191.67	0.00	0.00	0.00
5,900.01	43.17	232.17	5,733.58	-291.58	-375.56	-223.89	0.00	0.00	0.00
6,000.01	43.17	232.17	5,806.51	-333.53	-429.60	-256.10	0.00	0.00	0.00
6,100.01	43.17	232.17	5,879.45	-375.48	-483.63	-288.32	0.00	0.00	0.00
6,200.01	43.17	232.17	5,952.39	-417.44	-537.67	-320.53	0.00	0.00	0.00
6,300.01	43.17	232.17	6,025.33	-459.39	-591.71	-352.74	0.00	0.00	0.00
6,400.01	43.17	232.17	6,098.27	-501.34	-645.74	-384.96	0.00	0.00	0.00
6,500.01	43.17	232.17	6,171.21	-543.30	-699.78	-417.17	0.00	0.00	0.00
6,600.01	43.17	232.17	6,244.14	-585.25	-753.82	-449.39	0.00	0.00	0.00
6,700.01	43.17	232.17	6,317.08	-627.20	-807.85	-481.60	0.00	0.00	0.00
6,800.01	43.17	232.17	6,390.02	-669.16	-861.89	-513.81	0.00	0.00	0.00
6,900.01	43.17	232.17	6,462.96	-711.11	-915.93	-546.03	0.00	0.00	0.00
7,000.01	43.17	232.17	6,535.90	-753.06	-969.96	-578.24	0.00	0.00	0.00
7,100.01	43.17	232.17	6,608.83	-795.02	-1,024.00	-610.46	0.00	0.00	0.00
7,173.57	43.17	232.17	6,662.49	-825.88	-1,063.75	-634.15	0.00	0.00	0.00
<b>Begin 10°/100' build/turn</b>									
7,200.01	41.92	235.63	6,681.97	-836.41	-1,078.19	-642.10	9.99	-4.70	13.05
7,300.01	38.29	250.12	6,758.61	-865.88	-1,135.04	-661.53	10.00	-3.64	14.49
7,400.01	36.68	266.38	6,838.16	-878.33	-1,194.13	-663.81	10.00	-1.61	16.26
7,500.02	37.38	282.98	6,918.20	-873.38	-1,253.66	-648.87	10.00	0.70	16.60
7,600.02	40.25	298.30	6,996.29	-851.19	-1,311.83	-617.16	10.00	2.88	15.32
7,700.02	44.88	311.43	7,070.07	-812.43	-1,366.87	-569.65	10.00	4.63	13.13
7,800.02	50.77	322.36	7,137.28	-758.27	-1,417.10	-507.78	10.00	5.89	10.93
7,900.02	57.52	331.48	7,195.90	-690.36	-1,461.01	-433.42	10.00	6.75	9.12
8,000.02	64.83	339.28	7,244.13	-610.77	-1,497.24	-348.85	10.00	7.31	7.80
8,100.02	72.50	346.18	7,280.52	-521.91	-1,524.72	-256.63	10.00	7.67	6.89
8,200.02	80.39	352.50	7,303.95	-426.48	-1,542.59	-159.55	10.00	7.89	6.33
8,300.02	88.39	358.54	7,313.72	-327.39	-1,550.32	-60.58	10.00	8.00	6.03
8,319.21	89.93	359.68	7,314.00	-308.20	-1,550.61	-41.62	10.01	8.03	5.97
<b>LP Begin 89.93° lateral section</b>									
8,400.02	89.93	359.68	7,314.09	-227.39	-1,551.06	38.10	0.00	0.00	0.00
8,500.02	89.93	359.68	7,314.21	-127.39	-1,551.61	136.75	0.00	0.00	0.00
8,600.02	89.93	359.68	7,314.32	-27.40	-1,552.17	235.41	0.00	0.00	0.00
8,700.02	89.93	359.68	7,314.43	72.60	-1,552.72	334.06	0.00	0.00	0.00
8,800.02	89.93	359.68	7,314.55	172.60	-1,553.28	432.71	0.00	0.00	0.00
8,900.02	89.93	359.68	7,314.66	272.60	-1,553.83	531.37	0.00	0.00	0.00
9,000.02	89.93	359.68	7,314.78	372.60	-1,554.38	630.02	0.00	0.00	0.00
9,100.02	89.93	359.68	7,314.89	472.60	-1,554.94	728.67	0.00	0.00	0.00
9,200.02	89.93	359.68	7,315.00	572.60	-1,555.49	827.32	0.00	0.00	0.00
9,300.02	89.93	359.68	7,315.12	672.59	-1,556.04	925.98	0.00	0.00	0.00
9,400.02	89.93	359.68	7,315.23	772.59	-1,556.60	1,024.63	0.00	0.00	0.00
9,500.02	89.93	359.68	7,315.34	872.59	-1,557.15	1,123.28	0.00	0.00	0.00
9,600.02	89.93	359.68	7,315.46	972.59	-1,557.71	1,221.94	0.00	0.00	0.00
9,700.02	89.93	359.68	7,315.57	1,072.59	-1,558.26	1,320.59	0.00	0.00	0.00
9,800.02	89.93	359.68	7,315.69	1,172.59	-1,558.81	1,419.24	0.00	0.00	0.00

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<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	RKB=5137+25 @ 5162.00ft
<b>Site:</b>	Section 34-T01N-R65W	<b>North Reference:</b>	Grid
<b>Well:</b>	Buford 33-02-2L	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original hole		
<b>Design:</b>	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	89.93	359.68	7,315.80	1,272.59	-1,559.37	1,517.89	0.00	0.00	0.00
10,000.02	89.93	359.68	7,315.91	1,372.58	-1,559.92	1,616.55	0.00	0.00	0.00
10,100.02	89.93	359.68	7,316.03	1,472.58	-1,560.47	1,715.20	0.00	0.00	0.00
10,200.02	89.93	359.68	7,316.14	1,572.58	-1,561.03	1,813.85	0.00	0.00	0.00
10,300.02	89.93	359.68	7,316.26	1,672.58	-1,561.58	1,912.51	0.00	0.00	0.00
10,400.02	89.93	359.68	7,316.37	1,772.58	-1,562.13	2,011.16	0.00	0.00	0.00
10,500.02	89.93	359.68	7,316.48	1,872.58	-1,562.69	2,109.81	0.00	0.00	0.00
10,600.02	89.93	359.68	7,316.60	1,972.58	-1,563.24	2,208.46	0.00	0.00	0.00
10,700.02	89.93	359.68	7,316.71	2,072.58	-1,563.80	2,307.12	0.00	0.00	0.00
10,800.02	89.93	359.68	7,316.83	2,172.57	-1,564.35	2,405.77	0.00	0.00	0.00
10,900.02	89.93	359.68	7,316.94	2,272.57	-1,564.90	2,504.42	0.00	0.00	0.00
11,000.02	89.93	359.68	7,317.05	2,372.57	-1,565.46	2,603.08	0.00	0.00	0.00
11,100.02	89.93	359.68	7,317.17	2,472.57	-1,566.01	2,701.73	0.00	0.00	0.00
11,200.02	89.93	359.68	7,317.28	2,572.57	-1,566.56	2,800.38	0.00	0.00	0.00
11,300.02	89.93	359.68	7,317.39	2,672.57	-1,567.12	2,899.03	0.00	0.00	0.00
11,400.02	89.93	359.68	7,317.51	2,772.57	-1,567.67	2,997.69	0.00	0.00	0.00
11,500.02	89.93	359.68	7,317.62	2,872.56	-1,568.23	3,096.34	0.00	0.00	0.00
11,600.02	89.93	359.68	7,317.74	2,972.56	-1,568.78	3,194.99	0.00	0.00	0.00
11,700.02	89.93	359.68	7,317.85	3,072.56	-1,569.33	3,293.65	0.00	0.00	0.00
11,800.02	89.93	359.68	7,317.96	3,172.56	-1,569.89	3,392.30	0.00	0.00	0.00
11,900.02	89.93	359.68	7,318.08	3,272.56	-1,570.44	3,490.95	0.00	0.00	0.00
12,000.02	89.93	359.68	7,318.19	3,372.56	-1,570.99	3,589.60	0.00	0.00	0.00
12,100.02	89.93	359.68	7,318.31	3,472.56	-1,571.55	3,688.26	0.00	0.00	0.00
12,200.02	89.93	359.68	7,318.42	3,572.55	-1,572.10	3,786.91	0.00	0.00	0.00
12,300.02	89.93	359.68	7,318.53	3,672.55	-1,572.66	3,885.56	0.00	0.00	0.00
12,400.03	89.93	359.68	7,318.65	3,772.55	-1,573.21	3,984.21	0.00	0.00	0.00
12,500.03	89.93	359.68	7,318.76	3,872.55	-1,573.76	4,082.87	0.00	0.00	0.00
12,600.03	89.93	359.68	7,318.87	3,972.55	-1,574.32	4,181.52	0.00	0.00	0.00
12,700.03	89.93	359.68	7,318.99	4,072.55	-1,574.87	4,280.17	0.00	0.00	0.00
12,800.03	89.93	359.68	7,319.10	4,172.55	-1,575.42	4,378.83	0.00	0.00	0.00
12,900.03	89.93	359.68	7,319.22	4,272.54	-1,575.98	4,477.48	0.00	0.00	0.00
13,000.03	89.93	359.68	7,319.33	4,372.54	-1,576.53	4,576.13	0.00	0.00	0.00
13,100.03	89.93	359.68	7,319.44	4,472.54	-1,577.09	4,674.78	0.00	0.00	0.00
13,200.03	89.93	359.68	7,319.56	4,572.54	-1,577.64	4,773.44	0.00	0.00	0.00
13,300.03	89.93	359.68	7,319.67	4,672.54	-1,578.19	4,872.09	0.00	0.00	0.00
13,400.03	89.93	359.68	7,319.79	4,772.54	-1,578.75	4,970.74	0.00	0.00	0.00
13,500.03	89.93	359.68	7,319.90	4,872.54	-1,579.30	5,069.40	0.00	0.00	0.00
13,600.03	89.93	359.68	7,320.01	4,972.53	-1,579.85	5,168.05	0.00	0.00	0.00
13,700.03	89.93	359.68	7,320.13	5,072.53	-1,580.41	5,266.70	0.00	0.00	0.00
13,800.03	89.93	359.68	7,320.24	5,172.53	-1,580.96	5,365.35	0.00	0.00	0.00
13,900.03	89.93	359.68	7,320.36	5,272.53	-1,581.52	5,464.01	0.00	0.00	0.00
14,000.03	89.93	359.68	7,320.47	5,372.53	-1,582.07	5,562.66	0.00	0.00	0.00
14,100.03	89.93	359.68	7,320.58	5,472.53	-1,582.62	5,661.31	0.00	0.00	0.00
14,200.03	89.93	359.68	7,320.70	5,572.53	-1,583.18	5,759.97	0.00	0.00	0.00
14,300.03	89.93	359.68	7,320.81	5,672.52	-1,583.73	5,858.62	0.00	0.00	0.00
14,400.03	89.93	359.68	7,320.92	5,772.52	-1,584.28	5,957.27	0.00	0.00	0.00
14,500.03	89.93	359.68	7,321.04	5,872.52	-1,584.84	6,055.92	0.00	0.00	0.00
14,600.03	89.93	359.68	7,321.15	5,972.52	-1,585.39	6,154.58	0.00	0.00	0.00
14,700.03	89.93	359.68	7,321.27	6,072.52	-1,585.94	6,253.23	0.00	0.00	0.00
14,800.03	89.93	359.68	7,321.38	6,172.52	-1,586.50	6,351.88	0.00	0.00	0.00
14,900.03	89.93	359.68	7,321.49	6,272.52	-1,587.05	6,450.54	0.00	0.00	0.00
15,000.03	89.93	359.68	7,321.61	6,372.52	-1,587.61	6,549.19	0.00	0.00	0.00
15,100.03	89.93	359.68	7,321.72	6,472.51	-1,588.16	6,647.84	0.00	0.00	0.00
15,200.03	89.93	359.68	7,321.84	6,572.51	-1,588.71	6,746.49	0.00	0.00	0.00

<b>Database:</b>	DB_Aug0116_LT_v14	<b>Local Co-ordinate Reference:</b>	Well Buford 33-02-2L
<b>Company:</b>	Confluence Resources	<b>TVD Reference:</b>	RKB=5137+25 @ 5162.00ft
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	RKB=5137+25 @ 5162.00ft
<b>Site:</b>	Section 34-T01N-R65W	<b>North Reference:</b>	Grid
<b>Well:</b>	Buford 33-02-2L	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original hole		
<b>Design:</b>	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	89.93	359.68	7,321.95	6,672.51	-1,589.27	6,845.15	0.00	0.00	0.00	
15,400.03	89.93	359.68	7,322.06	6,772.51	-1,589.82	6,943.80	0.00	0.00	0.00	
15,500.03	89.93	359.68	7,322.18	6,872.51	-1,590.37	7,042.45	0.00	0.00	0.00	
15,600.03	89.93	359.68	7,322.29	6,972.51	-1,590.93	7,141.11	0.00	0.00	0.00	
15,700.03	89.93	359.68	7,322.40	7,072.51	-1,591.48	7,239.76	0.00	0.00	0.00	
15,800.03	89.93	359.68	7,322.52	7,172.50	-1,592.04	7,338.41	0.00	0.00	0.00	
15,900.03	89.93	359.68	7,322.63	7,272.50	-1,592.59	7,437.06	0.00	0.00	0.00	
16,000.03	89.93	359.68	7,322.75	7,372.50	-1,593.14	7,535.72	0.00	0.00	0.00	
16,100.03	89.93	359.68	7,322.86	7,472.50	-1,593.70	7,634.37	0.00	0.00	0.00	
16,200.03	89.93	359.68	7,322.97	7,572.50	-1,594.25	7,733.02	0.00	0.00	0.00	
16,300.03	89.93	359.68	7,323.09	7,672.50	-1,594.80	7,831.67	0.00	0.00	0.00	
16,400.03	89.93	359.68	7,323.20	7,772.50	-1,595.36	7,930.33	0.00	0.00	0.00	
16,500.03	89.93	359.68	7,323.32	7,872.49	-1,595.91	8,028.98	0.00	0.00	0.00	
16,600.03	89.93	359.68	7,323.43	7,972.49	-1,596.47	8,127.63	0.00	0.00	0.00	
16,700.03	89.93	359.68	7,323.54	8,072.49	-1,597.02	8,226.29	0.00	0.00	0.00	
16,800.03	89.93	359.68	7,323.66	8,172.49	-1,597.57	8,324.94	0.00	0.00	0.00	
16,900.03	89.93	359.68	7,323.77	8,272.49	-1,598.13	8,423.59	0.00	0.00	0.00	
17,000.03	89.93	359.68	7,323.88	8,372.49	-1,598.68	8,522.24	0.00	0.00	0.00	
17,100.03	89.93	359.68	7,324.00	8,472.49	-1,599.23	8,620.90	0.00	0.00	0.00	
17,200.03	89.93	359.68	7,324.11	8,572.48	-1,599.79	8,719.55	0.00	0.00	0.00	
17,300.03	89.93	359.68	7,324.23	8,672.48	-1,600.34	8,818.20	0.00	0.00	0.00	
17,400.04	89.93	359.68	7,324.34	8,772.48	-1,600.90	8,916.86	0.00	0.00	0.00	
17,500.04	89.93	359.68	7,324.45	8,872.48	-1,601.45	9,015.51	0.00	0.00	0.00	
17,600.04	89.93	359.68	7,324.57	8,972.48	-1,602.00	9,114.16	0.00	0.00	0.00	
17,700.04	89.93	359.68	7,324.68	9,072.48	-1,602.56	9,212.81	0.00	0.00	0.00	
17,800.04	89.93	359.68	7,324.80	9,172.48	-1,603.11	9,311.47	0.00	0.00	0.00	
17,900.04	89.93	359.68	7,324.91	9,272.47	-1,603.66	9,410.12	0.00	0.00	0.00	
17,979.38	89.93	359.68	7,325.00	9,351.82	-1,604.10	9,488.40	0.00	0.00	0.00	
PBHL/TD 17979.38 MD 7325.00 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 Buford 33-02-2L 470 - plan hits target center - Point	0.00	0.00	7,314.00	-308.20	-1,550.61	14,527,585.30	1,735,149.69	40.00184560		-104.66172056
BHL Buford 33-02-2L 47 - plan hits target center - Point	0.00	0.00	7,325.00	9,351.82	-1,604.10	14,537,245.30	1,735,096.20	40.02837386		-104.66178063

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
5,000.00	5,000.00	0.00	0.00	KOP Begin 10°/100' build	
5,431.65	5,391.96	-95.09	-122.47	Begin 43.17° tangent section	
7,173.57	6,662.49	-825.88	-1,063.75	Begin 10°/100' build/turn	
8,319.21	7,314.00	-308.20	-1,550.61	LP Begin 89.93° lateral section	
17,979.38	7,325.00	9,351.82	-1,604.10	PBHL/TD 17979.38 MD 7325.00 TVD	

<b>Database:</b>	DB_Aug0116_LT_v14	<b>Local Co-ordinate Reference:</b>	Well Buford 33-02-2L
<b>Company:</b>	Confluence Resources	<b>TVD Reference:</b>	RKB=5137+25 @ 5162.00ft
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	RKB=5137+25 @ 5162.00ft
<b>Site:</b>	Section 34-T01N-R65W	<b>North Reference:</b>	Grid
<b>Well:</b>	Buford 33-02-2L	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original hole		
<b>Design:</b>	plan1		

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

Site		Section 34-T01N-R65W			
Site Position:		Northing:	14,527,892.80 usft	Latitude:	40.00267560
From:	Map	Easting:	1,736,525.30 usft	Longitude:	-104.65680429
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.22 °

Well	Buford 33-02-2L, Surf loc: 770 FSL 944 FWL Section 34-T01N-R65W					
Well Position	+N/-S	0.00 ft	Northing:	14,527,893.50 usft	Latitude:	40.00267567
	+E/-W	0.00 ft	Easting:	1,736,700.30 usft	Longitude:	-104.65617938
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,137.00 ft

<b>Wellbore</b>	Original hole				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HDGM	6/5/2017	8.28	66.45	52,139.00000000

<b>Design</b>	plan1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	350.27

<b>Plan Survey Tool Program</b>	<b>Date</b>	6/5/2017		
<b>Depth From (ft)</b>	<b>Depth To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	17,979.38 plan1 (Original hole)		

<b>Plan Sections</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	<b>TFO (°)</b>	<b>Target</b>
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	
5,431.65	43.17	232.17	5,391.96	-95.09	-122.47	10.00	10.00	0.00	232.17	
7,173.57	43.17	232.17	6,662.49	-825.88	-1,063.75	0.00	0.00	0.00	0.00	
8,319.21	89.93	359.68	7,314.00	-308.20	-1,550.61	10.00	4.08	11.13	119.28	LP Buford 33-02-2L 4'
17,979.38	89.93	359.68	7,325.00	9,351.82	-1,604.10	0.00	0.00	0.00	0.00	BHL Buford 33-02-2L



<b>Database:</b>	DB_Aug0116_LT_v14	<b>Local Co-ordinate Reference:</b>	Well Buford 33-02-2L
<b>Company:</b>	Confluence Resources	<b>TVD Reference:</b>	RKB=5137+25 @ 5162.00ft
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	RKB=5137+25 @ 5162.00ft
<b>Site:</b>	Section 34-T01N-R65W	<b>North Reference:</b>	Grid
<b>Well:</b>	Buford 33-02-2L	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original hole		
<b>Design:</b>	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	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
100.00	0.00	0.00	100.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
200.00	0.00	0.00	200.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
300.00	0.00	0.00	300.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
400.00	0.00	0.00	400.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
500.00	0.00	0.00	500.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
600.00	0.00	0.00	600.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
700.00	0.00	0.00	700.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
800.00	0.00	0.00	800.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
900.00	0.00	0.00	900.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
1,100.00	0.00	0.00	1,100.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
1,200.00	0.00	0.00	1,200.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
1,300.00	0.00	0.00	1,300.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
1,400.00	0.00	0.00	1,400.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
1,500.00	0.00	0.00	1,500.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
1,600.00	0.00	0.00	1,600.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
1,700.00	0.00	0.00	1,700.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
1,800.00	0.00	0.00	1,800.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
1,900.00	0.00	0.00	1,900.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
2,000.00	0.00	0.00	2,000.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
2,100.00	0.00	0.00	2,100.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
2,200.00	0.00	0.00	2,200.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
2,300.00	0.00	0.00	2,300.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
2,400.00	0.00	0.00	2,400.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
2,500.01	0.00	0.00	2,500.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
2,600.01	0.00	0.00	2,600.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
2,700.01	0.00	0.00	2,700.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
2,800.01	0.00	0.00	2,800.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
2,900.01	0.00	0.00	2,900.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
3,000.01	0.00	0.00	3,000.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
3,100.01	0.00	0.00	3,100.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
3,200.01	0.00	0.00	3,200.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
3,300.01	0.00	0.00	3,300.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
3,400.01	0.00	0.00	3,400.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
3,500.01	0.00	0.00	3,500.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
3,600.01	0.00	0.00	3,600.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
3,700.01	0.00	0.00	3,700.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
3,800.01	0.00	0.00	3,800.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
3,900.01	0.00	0.00	3,900.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
4,000.01	0.00	0.00	4,000.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
4,100.01	0.00	0.00	4,100.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
4,200.01	0.00	0.00	4,200.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
4,300.01	0.00	0.00	4,300.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
4,400.01	0.00	0.00	4,400.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
4,500.01	0.00	0.00	4,500.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
4,600.01	0.00	0.00	4,600.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
4,700.01	0.00	0.00	4,700.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
4,800.01	0.00	0.00	4,800.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
4,900.01	0.00	0.00	4,900.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
5,000.00	0.00	0.00	5,000.00	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
KOP Begin 10°/100' build									
5,000.01	0.00	232.17	5,000.01	0.00	0.00	14,527,893.50	1,736,700.30	40.00267567	-104.65617938
5,100.01	10.00	232.17	5,099.50	-5.34	-6.88	14,527,888.17	1,736,693.42	40.00266108	-104.65620401



<b>Database:</b>	DB_Aug0116_LT_v14	<b>Local Co-ordinate Reference:</b>	Well Buford 33-02-2L
<b>Company:</b>	Confluence Resources	<b>TVD Reference:</b>	RKB=5137+25 @ 5162.00ft
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	RKB=5137+25 @ 5162.00ft
<b>Site:</b>	Section 34-T01N-R65W	<b>North Reference:</b>	Grid
<b>Well:</b>	Buford 33-02-2L	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original hole		
<b>Design:</b>	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	232.17	5,195.97	-21.19	-27.30	14,527,872.31	1,736,673.00	40.00261776	-104.65627714
5,300.01	30.00	232.17	5,286.49	-47.08	-60.64	14,527,846.43	1,736,639.66	40.00254703	-104.65639655
5,400.01	40.00	232.17	5,368.30	-82.21	-105.89	14,527,811.30	1,736,594.41	40.00245104	-104.65655861
5,431.65	43.17	232.17	5,391.96	-95.09	-122.47	14,527,798.42	1,736,577.82	40.00241585	-104.65661802
<b>Begin 43.17° tangent section</b>									
5,500.01	43.17	232.17	5,441.82	-123.76	-159.41	14,527,769.74	1,736,540.89	40.00233748	-104.65675031
5,600.01	43.17	232.17	5,514.76	-165.72	-213.45	14,527,727.79	1,736,486.85	40.00222285	-104.65694385
5,700.01	43.17	232.17	5,587.70	-207.67	-267.49	14,527,685.83	1,736,432.81	40.00210821	-104.65713738
5,800.01	43.17	232.17	5,660.64	-249.62	-321.52	14,527,643.88	1,736,378.78	40.00199357	-104.65733091
5,900.01	43.17	232.17	5,733.58	-291.58	-375.56	14,527,601.93	1,736,324.74	40.00187893	-104.65752444
6,000.01	43.17	232.17	5,806.51	-333.53	-429.60	14,527,559.97	1,736,270.70	40.00176429	-104.65771797
6,100.01	43.17	232.17	5,879.45	-375.48	-483.63	14,527,518.02	1,736,216.67	40.00164965	-104.65791150
6,200.01	43.17	232.17	5,952.39	-417.44	-537.67	14,527,476.07	1,736,162.63	40.00153501	-104.65810503
6,300.01	43.17	232.17	6,025.33	-459.39	-591.71	14,527,434.11	1,736,108.59	40.00142037	-104.65829856
6,400.01	43.17	232.17	6,098.27	-501.34	-645.74	14,527,392.16	1,736,054.56	40.00130573	-104.65849209
6,500.01	43.17	232.17	6,171.21	-543.30	-699.78	14,527,350.21	1,736,000.52	40.00119109	-104.65868561
6,600.01	43.17	232.17	6,244.14	-585.25	-753.82	14,527,308.26	1,735,946.48	40.00107645	-104.65887914
6,700.01	43.17	232.17	6,317.08	-627.20	-807.85	14,527,266.30	1,735,892.45	40.00096180	-104.65907266
6,800.01	43.17	232.17	6,390.02	-669.16	-861.89	14,527,224.35	1,735,838.41	40.00084716	-104.65926619
6,900.01	43.17	232.17	6,462.96	-711.11	-915.93	14,527,182.40	1,735,784.37	40.00073252	-104.65945971
7,000.01	43.17	232.17	6,535.90	-753.06	-969.96	14,527,140.44	1,735,730.34	40.00061788	-104.65965324
7,100.01	43.17	232.17	6,608.83	-795.02	-1,024.00	14,527,098.49	1,735,676.30	40.00050323	-104.65984676
7,173.57	43.17	232.17	6,662.49	-825.88	-1,063.75	14,527,067.63	1,735,636.55	40.00041891	-104.65998911
<b>Begin 10°/100' build/turn</b>									
7,200.01	41.92	235.63	6,681.97	-836.41	-1,078.19	14,527,057.09	1,735,622.11	40.00039012	-104.66004081
7,300.01	38.29	250.12	6,758.61	-865.88	-1,135.04	14,527,027.63	1,735,565.26	40.00030980	-104.66024421
7,400.01	36.68	266.38	6,838.16	-878.33	-1,194.13	14,527,015.18	1,735,506.17	40.00027623	-104.66045537
7,500.02	37.38	282.98	6,918.20	-873.38	-1,253.66	14,527,020.12	1,735,446.64	40.00029043	-104.66066789
7,600.02	40.25	298.30	6,996.29	-851.19	-1,311.83	14,527,042.32	1,735,388.47	40.00035199	-104.66087530
7,700.02	44.88	311.43	7,070.07	-812.43	-1,366.87	14,527,081.08	1,735,333.43	40.00045901	-104.66107129
7,800.02	50.77	322.36	7,137.28	-758.27	-1,417.10	14,527,135.24	1,735,283.20	40.00060827	-104.66124993
7,900.02	57.52	331.48	7,195.90	-690.36	-1,461.01	14,527,203.15	1,735,239.30	40.00079521	-104.66140577
8,000.02	64.83	339.28	7,244.13	-610.77	-1,497.24	14,527,282.74	1,735,203.06	40.00101416	-104.66153409
8,100.02	72.50	346.18	7,280.52	-521.91	-1,524.72	14,527,371.60	1,735,175.59	40.00125847	-104.66163098
8,200.02	80.39	352.50	7,303.95	-426.48	-1,542.59	14,527,467.03	1,735,157.71	40.00152071	-104.66169350
8,300.02	88.39	358.54	7,313.72	-327.39	-1,550.32	14,527,566.12	1,735,149.99	40.00179291	-104.66171975
8,319.21	89.93	359.68	7,314.00	-308.20	-1,550.61	14,527,585.30	1,735,149.69	40.00184560	-104.66172056
<b>LP Begin 89.93° lateral section</b>									
8,400.02	89.93	359.68	7,314.09	-227.39	-1,551.06	14,527,666.11	1,735,149.24	40.00206752	-104.66172106
8,500.02	89.93	359.68	7,314.21	-127.39	-1,551.61	14,527,766.11	1,735,148.69	40.00234213	-104.66172168
8,600.02	89.93	359.68	7,314.32	-27.40	-1,552.17	14,527,866.11	1,735,148.13	40.00261675	-104.66172230
8,700.02	89.93	359.68	7,314.43	72.60	-1,552.72	14,527,966.11	1,735,147.58	40.00289137	-104.66172293
8,800.02	89.93	359.68	7,314.55	172.60	-1,553.28	14,528,066.11	1,735,147.03	40.00316598	-104.66172355
8,900.02	89.93	359.68	7,314.66	272.60	-1,553.83	14,528,166.10	1,735,146.47	40.00344060	-104.66172417
9,000.02	89.93	359.68	7,314.78	372.60	-1,554.38	14,528,266.10	1,735,145.92	40.00371521	-104.66172479
9,100.02	89.93	359.68	7,314.89	472.60	-1,554.94	14,528,366.10	1,735,145.37	40.00398983	-104.66172541
9,200.02	89.93	359.68	7,315.00	572.60	-1,555.49	14,528,466.10	1,735,144.81	40.00426444	-104.66172604
9,300.02	89.93	359.68	7,315.12	672.59	-1,556.04	14,528,566.10	1,735,144.26	40.00453906	-104.66172666
9,400.02	89.93	359.68	7,315.23	772.59	-1,556.60	14,528,666.10	1,735,143.70	40.00481368	-104.66172728
9,500.02	89.93	359.68	7,315.34	872.59	-1,557.15	14,528,766.09	1,735,143.15	40.00508829	-104.66172790
9,600.02	89.93	359.68	7,315.46	972.59	-1,557.71	14,528,866.09	1,735,142.60	40.00536291	-104.66172852
9,700.02	89.93	359.68	7,315.57	1,072.59	-1,558.26	14,528,966.09	1,735,142.04	40.00563752	-104.66172915
9,800.02	89.93	359.68	7,315.69	1,172.59	-1,558.81	14,529,066.09	1,735,141.49	40.00591214	-104.66172977
9,900.02	89.93	359.68	7,315.80	1,272.59	-1,559.37	14,529,166.09	1,735,140.94	40.00618675	-104.66173039

<b>Database:</b>	DB_Aug0116_LT_v14	<b>Local Co-ordinate Reference:</b>	Well Buford 33-02-2L
<b>Company:</b>	Confluence Resources	<b>TVD Reference:</b>	RKB=5137+25 @ 5162.00ft
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	RKB=5137+25 @ 5162.00ft
<b>Site:</b>	Section 34-T01N-R65W	<b>North Reference:</b>	Grid
<b>Well:</b>	Buford 33-02-2L	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original hole		
<b>Design:</b>	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	89.93	359.68	7,315.91	1,372.58	-1,559.92	14,529,266.09	1,735,140.38	40.00646137	-104.66173101
10,100.02	89.93	359.68	7,316.03	1,472.58	-1,560.47	14,529,366.09	1,735,139.83	40.00673598	-104.66173163
10,200.02	89.93	359.68	7,316.14	1,572.58	-1,561.03	14,529,466.08	1,735,139.27	40.00701060	-104.66173226
10,300.02	89.93	359.68	7,316.26	1,672.58	-1,561.58	14,529,566.08	1,735,138.72	40.00728522	-104.66173288
10,400.02	89.93	359.68	7,316.37	1,772.58	-1,562.13	14,529,666.08	1,735,138.17	40.00755983	-104.66173350
10,500.02	89.93	359.68	7,316.48	1,872.58	-1,562.69	14,529,766.08	1,735,137.61	40.00783445	-104.66173412
10,600.02	89.93	359.68	7,316.60	1,972.58	-1,563.24	14,529,866.08	1,735,137.06	40.00810906	-104.66173474
10,700.02	89.93	359.68	7,316.71	2,072.58	-1,563.80	14,529,966.08	1,735,136.51	40.00838368	-104.66173537
10,800.02	89.93	359.68	7,316.83	2,172.57	-1,564.35	14,530,066.07	1,735,135.95	40.00865829	-104.66173599
10,900.02	89.93	359.68	7,316.94	2,272.57	-1,564.90	14,530,166.07	1,735,135.40	40.00893291	-104.66173661
11,000.02	89.93	359.68	7,317.05	2,372.57	-1,565.46	14,530,266.07	1,735,134.84	40.00920752	-104.66173723
11,100.02	89.93	359.68	7,317.17	2,472.57	-1,566.01	14,530,366.07	1,735,134.29	40.00948214	-104.66173785
11,200.02	89.93	359.68	7,317.28	2,572.57	-1,566.56	14,530,466.07	1,735,133.74	40.00975676	-104.66173848
11,300.02	89.93	359.68	7,317.39	2,672.57	-1,567.12	14,530,566.07	1,735,133.18	40.01003137	-104.66173910
11,400.02	89.93	359.68	7,317.51	2,772.57	-1,567.67	14,530,666.06	1,735,132.63	40.01030599	-104.66173972
11,500.02	89.93	359.68	7,317.62	2,872.56	-1,568.23	14,530,766.06	1,735,132.08	40.01058060	-104.66174034
11,600.02	89.93	359.68	7,317.74	2,972.56	-1,568.78	14,530,866.06	1,735,131.52	40.01085522	-104.66174096
11,700.02	89.93	359.68	7,317.85	3,072.56	-1,569.33	14,530,966.06	1,735,130.97	40.01112983	-104.66174159
11,800.02	89.93	359.68	7,317.96	3,172.56	-1,569.89	14,531,066.06	1,735,130.41	40.01140445	-104.66174221
11,900.02	89.93	359.68	7,318.08	3,272.56	-1,570.44	14,531,166.06	1,735,129.86	40.01167906	-104.66174283
12,000.02	89.93	359.68	7,318.19	3,372.56	-1,570.99	14,531,266.06	1,735,129.31	40.01195368	-104.66174345
12,100.02	89.93	359.68	7,318.31	3,472.56	-1,571.55	14,531,366.05	1,735,128.75	40.01222829	-104.66174407
12,200.02	89.93	359.68	7,318.42	3,572.55	-1,572.10	14,531,466.05	1,735,128.20	40.01250291	-104.66174470
12,300.02	89.93	359.68	7,318.53	3,672.55	-1,572.66	14,531,566.05	1,735,127.65	40.01277753	-104.66174532
12,400.03	89.93	359.68	7,318.65	3,772.55	-1,573.21	14,531,666.05	1,735,127.09	40.01305214	-104.66174594
12,500.03	89.93	359.68	7,318.76	3,872.55	-1,573.76	14,531,766.05	1,735,126.54	40.01332676	-104.66174656
12,600.03	89.93	359.68	7,318.87	3,972.55	-1,574.32	14,531,866.05	1,735,125.99	40.01360137	-104.66174718
12,700.03	89.93	359.68	7,318.99	4,072.55	-1,574.87	14,531,966.04	1,735,125.43	40.01387599	-104.66174780
12,800.03	89.93	359.68	7,319.10	4,172.55	-1,575.42	14,532,066.04	1,735,124.88	40.01415060	-104.66174843
12,900.03	89.93	359.68	7,319.22	4,272.54	-1,575.98	14,532,166.04	1,735,124.32	40.01442522	-104.66174905
13,000.03	89.93	359.68	7,319.33	4,372.54	-1,576.53	14,532,266.04	1,735,123.77	40.01469983	-104.66174967
13,100.03	89.93	359.68	7,319.44	4,472.54	-1,577.09	14,532,366.04	1,735,123.22	40.01497445	-104.66175029
13,200.03	89.93	359.68	7,319.56	4,572.54	-1,577.64	14,532,466.04	1,735,122.66	40.01524906	-104.66175091
13,300.03	89.93	359.68	7,319.67	4,672.54	-1,578.19	14,532,566.03	1,735,122.11	40.01552368	-104.66175154
13,400.03	89.93	359.68	7,319.79	4,772.54	-1,578.75	14,532,666.03	1,735,121.56	40.01579829	-104.66175216
13,500.03	89.93	359.68	7,319.90	4,872.54	-1,579.30	14,532,766.03	1,735,121.00	40.01607291	-104.66175278
13,600.03	89.93	359.68	7,320.01	4,972.53	-1,579.85	14,532,866.03	1,735,120.45	40.01634752	-104.66175340
13,700.03	89.93	359.68	7,320.13	5,072.53	-1,580.41	14,532,966.03	1,735,119.89	40.01662214	-104.66175402
13,800.03	89.93	359.68	7,320.24	5,172.53	-1,580.96	14,533,066.03	1,735,119.34	40.01689675	-104.66175465
13,900.03	89.93	359.68	7,320.36	5,272.53	-1,581.52	14,533,166.02	1,735,118.79	40.01717137	-104.66175527
14,000.03	89.93	359.68	7,320.47	5,372.53	-1,582.07	14,533,266.02	1,735,118.23	40.01744598	-104.66175589
14,100.03	89.93	359.68	7,320.58	5,472.53	-1,582.62	14,533,366.02	1,735,117.68	40.01772060	-104.66175651
14,200.03	89.93	359.68	7,320.70	5,572.53	-1,583.18	14,533,466.02	1,735,117.13	40.01799521	-104.66175713
14,300.03	89.93	359.68	7,320.81	5,672.52	-1,583.73	14,533,566.02	1,735,116.57	40.01826983	-104.66175775
14,400.03	89.93	359.68	7,320.92	5,772.52	-1,584.28	14,533,666.02	1,735,116.02	40.01854444	-104.66175838
14,500.03	89.93	359.68	7,321.04	5,872.52	-1,584.84	14,533,766.02	1,735,115.46	40.01881906	-104.66175900
14,600.03	89.93	359.68	7,321.15	5,972.52	-1,585.39	14,533,866.01	1,735,114.91	40.01909367	-104.66175962
14,700.03	89.93	359.68	7,321.27	6,072.52	-1,585.94	14,533,966.01	1,735,114.36	40.01936829	-104.66176024
14,800.03	89.93	359.68	7,321.38	6,172.52	-1,586.50	14,534,066.01	1,735,113.80	40.01964290	-104.66176086
14,900.03	89.93	359.68	7,321.49	6,272.52	-1,587.05	14,534,166.01	1,735,113.25	40.01991752	-104.66176149
15,000.03	89.93	359.68	7,321.61	6,372.52	-1,587.61	14,534,266.01	1,735,112.70	40.02019213	-104.66176211
15,100.03	89.93	359.68	7,321.72	6,472.51	-1,588.16	14,534,366.01	1,735,112.14	40.02046675	-104.66176273
15,200.03	89.93	359.68	7,321.84	6,572.51	-1,588.71	14,534,466.00	1,735,111.59	40.02074136	-104.66176335
15,300.03	89.93	359.68	7,321.95	6,672.51	-1,589.27	14,534,566.00	1,735,111.03	40.02101598	-104.66176397
15,400.03	89.93	359.68	7,322.06	6,772.51	-1,589.82	14,534,666.00	1,735,110.48	40.02129059	-104.66176460

<b>Database:</b>	DB_Aug0116_LT_v14	<b>Local Co-ordinate Reference:</b>	Well Buford 33-02-2L
<b>Company:</b>	Confluence Resources	<b>TVD Reference:</b>	RKB=5137+25 @ 5162.00ft
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	RKB=5137+25 @ 5162.00ft
<b>Site:</b>	Section 34-T01N-R65W	<b>North Reference:</b>	Grid
<b>Well:</b>	Buford 33-02-2L	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original hole		
<b>Design:</b>	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	89.93	359.68	7,322.18	6,872.51	-1,590.37	14,534,766.00	1,735,109.93	40.02156521	-104.66176522	
15,600.03	89.93	359.68	7,322.29	6,972.51	-1,590.93	14,534,866.00	1,735,109.37	40.02183982	-104.66176584	
15,700.03	89.93	359.68	7,322.40	7,072.51	-1,591.48	14,534,966.00	1,735,108.82	40.02211444	-104.66176646	
15,800.03	89.93	359.68	7,322.52	7,172.50	-1,592.04	14,535,065.99	1,735,108.27	40.02238905	-104.66176708	
15,900.03	89.93	359.68	7,322.63	7,272.50	-1,592.59	14,535,165.99	1,735,107.71	40.02266367	-104.66176770	
16,000.03	89.93	359.68	7,322.75	7,372.50	-1,593.14	14,535,265.99	1,735,107.16	40.02293828	-104.66176833	
16,100.03	89.93	359.68	7,322.86	7,472.50	-1,593.70	14,535,365.99	1,735,106.61	40.02321290	-104.66176895	
16,200.03	89.93	359.68	7,322.97	7,572.50	-1,594.25	14,535,465.99	1,735,106.05	40.02348751	-104.66176957	
16,300.03	89.93	359.68	7,323.09	7,672.50	-1,594.80	14,535,565.99	1,735,105.50	40.02376213	-104.66177019	
16,400.03	89.93	359.68	7,323.20	7,772.50	-1,595.36	14,535,665.98	1,735,104.94	40.02403674	-104.66177081	
16,500.03	89.93	359.68	7,323.32	7,872.49	-1,595.91	14,535,765.98	1,735,104.39	40.02431136	-104.66177144	
16,600.03	89.93	359.68	7,323.43	7,972.49	-1,596.47	14,535,865.98	1,735,103.84	40.02458597	-104.66177206	
16,700.03	89.93	359.68	7,323.54	8,072.49	-1,597.02	14,535,965.98	1,735,103.28	40.02486059	-104.66177268	
16,800.03	89.93	359.68	7,323.66	8,172.49	-1,597.57	14,536,065.98	1,735,102.73	40.02513520	-104.66177330	
16,900.03	89.93	359.68	7,323.77	8,272.49	-1,598.13	14,536,165.98	1,735,102.18	40.02540982	-104.66177392	
17,000.03	89.93	359.68	7,323.88	8,372.49	-1,598.68	14,536,265.98	1,735,101.62	40.02568443	-104.66177454	
17,100.03	89.93	359.68	7,324.00	8,472.49	-1,599.23	14,536,365.97	1,735,101.07	40.02595905	-104.66177517	
17,200.03	89.93	359.68	7,324.11	8,572.48	-1,599.79	14,536,465.97	1,735,100.51	40.02623366	-104.66177579	
17,300.03	89.93	359.68	7,324.23	8,672.48	-1,600.34	14,536,565.97	1,735,099.96	40.02650828	-104.66177641	
17,400.04	89.93	359.68	7,324.34	8,772.48	-1,600.90	14,536,665.97	1,735,099.41	40.02678289	-104.66177703	
17,500.04	89.93	359.68	7,324.45	8,872.48	-1,601.45	14,536,765.97	1,735,098.85	40.02705750	-104.66177765	
17,600.04	89.93	359.68	7,324.57	8,972.48	-1,602.00	14,536,865.97	1,735,098.30	40.02733212	-104.66177827	
17,700.04	89.93	359.68	7,324.68	9,072.48	-1,602.56	14,536,965.96	1,735,097.75	40.02760673	-104.66177890	
17,800.04	89.93	359.68	7,324.80	9,172.48	-1,603.11	14,537,065.96	1,735,097.19	40.02788135	-104.66177952	
17,900.04	89.93	359.68	7,324.91	9,272.47	-1,603.66	14,537,165.96	1,735,096.64	40.02815596	-104.66178014	
17,979.38	89.93	359.68	7,325.00	9,351.82	-1,604.10	14,537,245.30	1,735,096.20	40.02837386	-104.66178063	
PBHL/TD 17979.38 MD 7325.00 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										
LP Buford 33-02-2L 470 - plan hits target center - Point	0.00	0.00	7,314.00	-308.20	-1,550.61	14,527,585.30	1,735,149.69	40.00184560	-104.66172056	
BHL Buford 33-02-2L 47 - plan hits target center - Point	0.00	0.00	7,325.00	9,351.82	-1,604.10	14,537,245.30	1,735,096.20	40.02837386	-104.66178063	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
5,000.00	5,000.00	0.00	0.00	KOP Begin 10°/100' build	
5,431.65	5,391.96	-95.09	-122.47	Begin 43.17° tangent section	
7,173.57	6,662.49	-825.88	-1,063.75	Begin 10°/100' build/turn	
8,319.21	7,314.00	-308.20	-1,550.61	LP Begin 89.93° lateral section	
17,979.38	7,325.00	9,351.82	-1,604.10	PBHL/TD 17979.38 MD 7325.00 TVD	