



Weld County, Colorado
Section 33-T01N-R65W
Buford 33-06-4L
plan1

Azimuth Corrections:

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

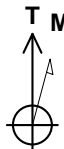
Buford 33-06-4L			
Surf Loc: 1010 FSL 450 FWL Sect 33-T01N-R65W			
NAD83 Colorado - HARN			
Universal Transverse Mercator (US Survey Feet)			
Zone 13N (108 W to 102 W)			
RKB=5081+26 @ 5107.00ft			
Northing	Easting	Latitude	Longitude
14528101.67	1730921.24	40.00330672	-104.67681289

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	5492.20	49.22	124.02	5433.86	-111.18	164.72	10.00	-71.00	Begin 49.22° tangent section
4	7729.04	49.22	124.02	6894.85	-1058.82	1568.61	0.00	-676.16	Begin 10°/100' build/turn
5	8879.83	89.95	359.92	7484.00	-539.68	2132.75	10.00	-42.78	LP Begin 89.95° lateral section
6	18539.82	89.95	359.92	7493.00	9120.30	2120.02	0.00	9363.46	PBHL/TD 18539.82 MD/7493.00 TVD

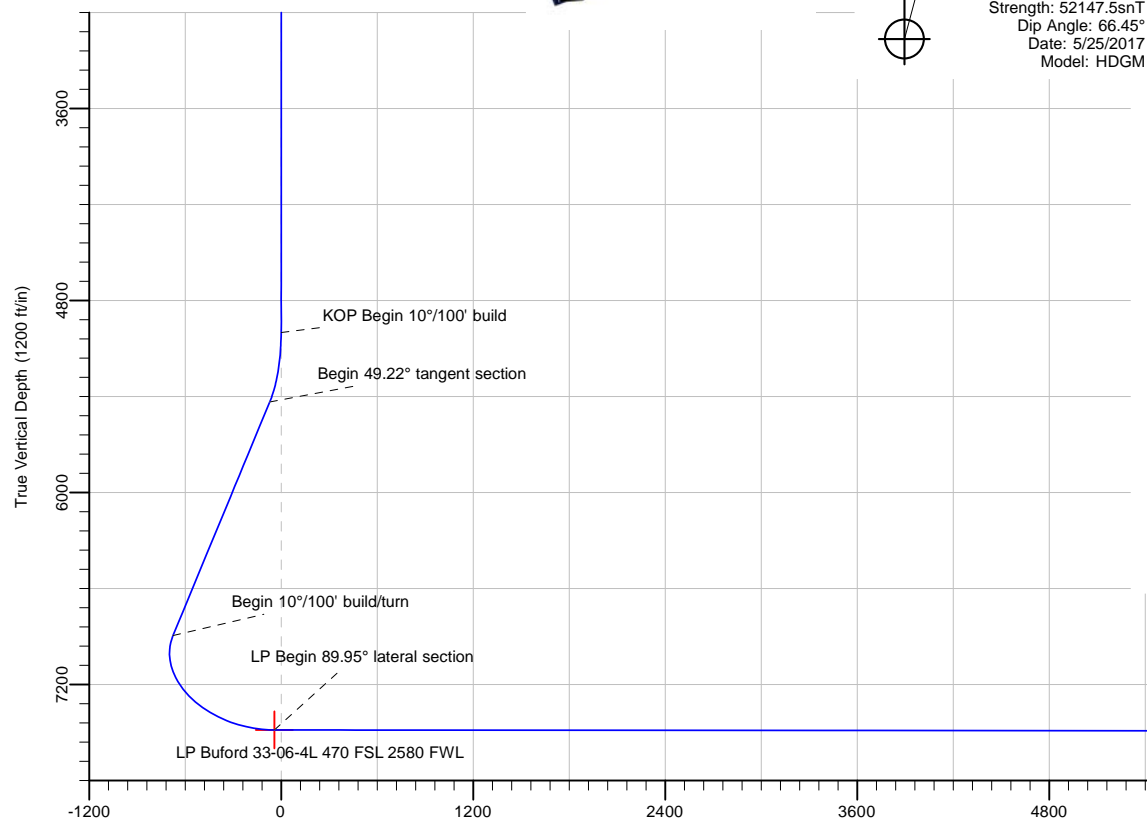
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LP Buford 33-06-4L 470 FSL 2580 FWL	7484.00	-539.68	2132.75	14527569.73	1733055.93	40.00182442	-104.66919720
BHL Buford 33-06-4L 470 FNL 2580 FWL	7493.00	9120.30	2120.02	14537229.58	1733008.17	40.02835221	-104.66923970



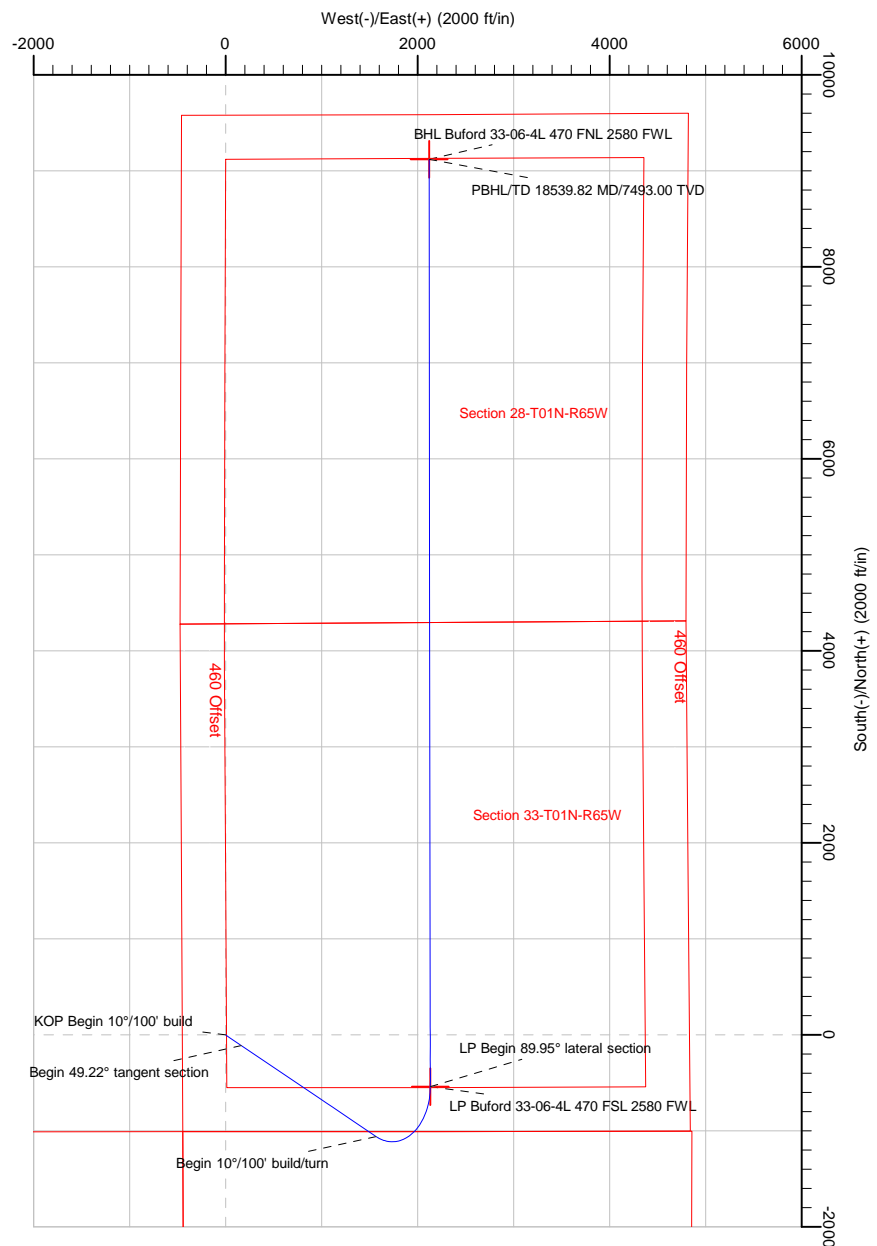
Azimuths to True North
Magnetic North: 8.28°

Magnetic Field
Strength: 52147.5snT
Dip Angle: 66.45°
Date: 5/25/2017
Model: HDGM



Date: 23:35, May 25 2017

Vertical Section at 13.09° (1200 ft/in)



PBHL/TD 18539.82 MD/7493.00 TVD

BHL Buford 33-06-4L 470 FNL 2580 FWL

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 Buford 33-06-4L
Company:	Confluence Resources	TVD Reference:	RKB=5081+26 @ 5107.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5081+26 @ 5107.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Buford 33-06-4L	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	Buford 33-06-4L, Surf Loc: 1010 FSL 450 FWL Sect 33-T01N-R65W					
Well Position	+N/-S	350.02 ft	Northing:	14,528,101.67 usft	Latitude:	40.00330672
	+E/-W	148.24 ft	Easting:	1,730,921.24 usft	Longitude:	-104.67681289
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,081.00 ft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	5/25/2017	8.28	66.45	52,147.50000000

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	13.09

Plan Survey Tool Program	Date	5/25/2017		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,539.82	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	
5,492.20	49.22	124.02	5,433.86	-111.18	164.72	10.00	10.00	0.00	124.02	
7,729.04	49.22	124.02	6,894.85	-1,058.82	1,568.61	0.00	0.00	0.00	0.00	
8,879.83	89.95	359.92	7,484.00	-539.68	2,132.75	10.00	3.54	-10.78	-113.89	LP Buford 33-06-4L 4'
18,539.82	89.95	359.92	7,493.00	9,120.30	2,120.02	0.00	0.00	0.00	0.00	BHL Buford 33-06-4L

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Buford 33-06-4L
Company:	Confluence Resources	TVD Reference:	RKB=5081+26 @ 5107.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5081+26 @ 5107.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Buford 33-06-4L	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
2,500.00	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	124.02	5,099.49	-4.87	7.21	-3.11	10.00	10.00	0.00
5,200.00	20.00	124.02	5,195.96	-19.33	28.64	-12.35	10.00	10.00	0.00

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Company:	Confluence Resources	TVD Reference:	RKB=5081+26 @ 5107.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5081+26 @ 5107.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Buford 33-06-4L	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)
5,300.00	30.00	124.02	5,286.48	-42.95	63.62	-27.43	10.00	10.00	0.00
5,400.00	40.00	124.02	5,368.29	-75.00	111.10	-47.89	10.00	10.00	0.00
5,492.20	49.22	124.02	5,433.86	-111.18	164.72	-71.00	10.00	10.00	0.00
Begin 49.22° tangent section									
5,500.00	49.22	124.02	5,438.95	-114.49	169.61	-73.11	0.00	0.00	0.00
5,600.00	49.22	124.02	5,504.27	-156.85	232.37	-100.17	0.00	0.00	0.00
5,700.00	49.22	124.02	5,569.58	-199.22	295.14	-127.22	0.00	0.00	0.00
5,800.00	49.22	124.02	5,634.90	-241.58	357.90	-154.27	0.00	0.00	0.00
5,900.00	49.22	124.02	5,700.21	-283.95	420.66	-181.33	0.00	0.00	0.00
6,000.00	49.22	124.02	5,765.53	-326.31	483.42	-208.38	0.00	0.00	0.00
6,100.00	49.22	124.02	5,830.84	-368.68	546.19	-235.44	0.00	0.00	0.00
6,200.00	49.22	124.02	5,896.16	-411.04	608.95	-262.49	0.00	0.00	0.00
6,300.00	49.22	124.02	5,961.47	-453.41	671.71	-289.55	0.00	0.00	0.00
6,400.00	49.22	124.02	6,026.79	-495.77	734.47	-316.60	0.00	0.00	0.00
6,500.00	49.22	124.02	6,092.10	-538.14	797.24	-343.66	0.00	0.00	0.00
6,600.00	49.22	124.02	6,157.42	-580.50	860.00	-370.71	0.00	0.00	0.00
6,700.00	49.22	124.02	6,222.73	-622.87	922.76	-397.76	0.00	0.00	0.00
6,800.00	49.22	124.02	6,288.05	-665.23	985.53	-424.82	0.00	0.00	0.00
6,900.00	49.22	124.02	6,353.36	-707.60	1,048.29	-451.87	0.00	0.00	0.00
7,000.00	49.22	124.02	6,418.68	-749.96	1,111.05	-478.93	0.00	0.00	0.00
7,100.00	49.22	124.02	6,483.99	-792.33	1,173.81	-505.98	0.00	0.00	0.00
7,200.00	49.22	124.02	6,549.31	-834.69	1,236.58	-533.04	0.00	0.00	0.00
7,300.00	49.22	124.02	6,614.62	-877.06	1,299.34	-560.09	0.00	0.00	0.00
7,400.00	49.22	124.02	6,679.94	-919.42	1,362.10	-587.14	0.00	0.00	0.00
7,500.00	49.22	124.02	6,745.25	-961.78	1,424.86	-614.20	0.00	0.00	0.00
7,600.00	49.22	124.02	6,810.57	-1,004.15	1,487.63	-641.25	0.00	0.00	0.00
7,700.00	49.22	124.02	6,875.88	-1,046.51	1,550.39	-668.31	0.00	0.00	0.00
7,729.04	49.22	124.02	6,894.85	-1,058.82	1,568.61	-676.16	0.00	0.00	0.00
Begin 10°/100' build/turn									
7,800.00	46.68	115.09	6,942.43	-1,084.83	1,614.32	-691.15	10.00	-3.58	-12.59
7,900.00	44.40	101.43	7,012.63	-1,107.24	1,681.73	-697.72	10.00	-2.28	-13.66
8,000.00	43.85	87.07	7,084.59	-1,112.41	1,750.79	-687.12	10.00	-0.55	-14.36
8,100.00	45.09	72.88	7,156.13	-1,100.19	1,819.40	-659.68	10.00	1.24	-14.18
8,200.00	47.99	59.68	7,225.07	-1,070.94	1,885.48	-616.22	10.00	2.89	-13.21
8,300.00	52.24	47.87	7,289.31	-1,025.55	1,947.02	-558.08	10.00	4.26	-11.81
8,400.00	57.54	37.49	7,346.91	-965.40	2,002.15	-487.01	10.00	5.30	-10.38
8,500.00	63.59	28.33	7,396.11	-892.32	2,049.20	-405.18	10.00	6.05	-9.15
8,600.00	70.16	20.13	7,435.42	-808.53	2,086.73	-315.07	10.00	6.57	-8.20
8,700.00	77.08	12.59	7,463.64	-716.57	2,113.61	-219.41	10.00	6.92	-7.53
8,800.00	84.20	5.47	7,479.92	-619.25	2,129.01	-121.13	10.00	7.12	-7.12
8,879.83	89.95	359.92	7,484.00	-539.68	2,132.75	-42.78	10.00	7.20	-6.95
LP Begin 89.95° lateral section									
8,900.00	89.95	359.92	7,484.02	-519.50	2,132.72	-23.13	0.00	0.00	0.00
9,000.00	89.95	359.92	7,484.11	-419.50	2,132.59	74.24	0.00	0.00	0.00
9,100.00	89.95	359.92	7,484.21	-319.50	2,132.46	171.61	0.00	0.00	0.00
9,200.00	89.95	359.92	7,484.30	-219.50	2,132.33	268.99	0.00	0.00	0.00
9,300.00	89.95	359.92	7,484.39	-119.50	2,132.20	366.36	0.00	0.00	0.00
9,400.00	89.95	359.92	7,484.48	-19.50	2,132.07	463.73	0.00	0.00	0.00
9,500.00	89.95	359.92	7,484.58	80.50	2,131.93	561.11	0.00	0.00	0.00
9,600.00	89.95	359.92	7,484.67	180.50	2,131.80	658.48	0.00	0.00	0.00
9,700.00	89.95	359.92	7,484.76	280.50	2,131.67	755.85	0.00	0.00	0.00
9,800.00	89.95	359.92	7,484.86	380.49	2,131.54	853.22	0.00	0.00	0.00
9,900.00	89.95	359.92	7,484.95	480.49	2,131.41	950.60	0.00	0.00	0.00

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Project:	Weld County, Colorado	MD Reference:	RKB=5081+26 @ 5107.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Buford 33-06-4L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,000.00	89.95	359.92	7,485.04	580.49	2,131.28	1,047.97	0.00	0.00	0.00
10,100.00	89.95	359.92	7,485.14	680.49	2,131.14	1,145.34	0.00	0.00	0.00
10,200.00	89.95	359.92	7,485.23	780.49	2,131.01	1,242.72	0.00	0.00	0.00
10,300.00	89.95	359.92	7,485.32	880.49	2,130.88	1,340.09	0.00	0.00	0.00
10,400.00	89.95	359.92	7,485.42	980.49	2,130.75	1,437.46	0.00	0.00	0.00
10,500.00	89.95	359.92	7,485.51	1,080.49	2,130.62	1,534.84	0.00	0.00	0.00
10,600.00	89.95	359.92	7,485.60	1,180.49	2,130.48	1,632.21	0.00	0.00	0.00
10,700.00	89.95	359.92	7,485.70	1,280.49	2,130.35	1,729.58	0.00	0.00	0.00
10,800.00	89.95	359.92	7,485.79	1,380.49	2,130.22	1,826.96	0.00	0.00	0.00
10,900.00	89.95	359.92	7,485.88	1,480.49	2,130.09	1,924.33	0.00	0.00	0.00
11,000.00	89.95	359.92	7,485.98	1,580.49	2,129.96	2,021.70	0.00	0.00	0.00
11,100.00	89.95	359.92	7,486.07	1,680.49	2,129.83	2,119.08	0.00	0.00	0.00
11,200.00	89.95	359.92	7,486.16	1,780.49	2,129.69	2,216.45	0.00	0.00	0.00
11,300.00	89.95	359.92	7,486.25	1,880.49	2,129.56	2,313.82	0.00	0.00	0.00
11,400.00	89.95	359.92	7,486.35	1,980.49	2,129.43	2,411.19	0.00	0.00	0.00
11,500.00	89.95	359.92	7,486.44	2,080.49	2,129.30	2,508.57	0.00	0.00	0.00
11,600.00	89.95	359.92	7,486.53	2,180.49	2,129.17	2,605.94	0.00	0.00	0.00
11,700.00	89.95	359.92	7,486.63	2,280.49	2,129.03	2,703.31	0.00	0.00	0.00
11,800.00	89.95	359.92	7,486.72	2,380.49	2,128.90	2,800.69	0.00	0.00	0.00
11,900.00	89.95	359.92	7,486.81	2,480.49	2,128.77	2,898.06	0.00	0.00	0.00
12,000.00	89.95	359.92	7,486.91	2,580.49	2,128.64	2,995.43	0.00	0.00	0.00
12,100.00	89.95	359.92	7,487.00	2,680.49	2,128.51	3,092.81	0.00	0.00	0.00
12,200.00	89.95	359.92	7,487.09	2,780.49	2,128.38	3,190.18	0.00	0.00	0.00
12,300.00	89.95	359.92	7,487.19	2,880.49	2,128.24	3,287.55	0.00	0.00	0.00
12,400.00	89.95	359.92	7,487.28	2,980.49	2,128.11	3,384.93	0.00	0.00	0.00
12,500.00	89.95	359.92	7,487.37	3,080.49	2,127.98	3,482.30	0.00	0.00	0.00
12,600.00	89.95	359.92	7,487.47	3,180.49	2,127.85	3,579.67	0.00	0.00	0.00
12,700.00	89.95	359.92	7,487.56	3,280.49	2,127.72	3,677.05	0.00	0.00	0.00
12,800.00	89.95	359.92	7,487.65	3,380.49	2,127.58	3,774.42	0.00	0.00	0.00
12,900.00	89.95	359.92	7,487.75	3,480.49	2,127.45	3,871.79	0.00	0.00	0.00
13,000.00	89.95	359.92	7,487.84	3,580.49	2,127.32	3,969.17	0.00	0.00	0.00
13,100.00	89.95	359.92	7,487.93	3,680.49	2,127.19	4,066.54	0.00	0.00	0.00
13,200.00	89.95	359.92	7,488.03	3,780.49	2,127.06	4,163.91	0.00	0.00	0.00
13,300.00	89.95	359.92	7,488.12	3,880.49	2,126.93	4,261.28	0.00	0.00	0.00
13,400.00	89.95	359.92	7,488.21	3,980.49	2,126.79	4,358.66	0.00	0.00	0.00
13,500.00	89.95	359.92	7,488.30	4,080.49	2,126.66	4,456.03	0.00	0.00	0.00
13,600.00	89.95	359.92	7,488.40	4,180.49	2,126.53	4,553.40	0.00	0.00	0.00
13,700.00	89.95	359.92	7,488.49	4,280.49	2,126.40	4,650.78	0.00	0.00	0.00
13,800.00	89.95	359.92	7,488.58	4,380.49	2,126.27	4,748.15	0.00	0.00	0.00
13,900.00	89.95	359.92	7,488.68	4,480.49	2,126.14	4,845.52	0.00	0.00	0.00
14,000.00	89.95	359.92	7,488.77	4,580.49	2,126.00	4,942.90	0.00	0.00	0.00
14,100.00	89.95	359.92	7,488.86	4,680.49	2,125.87	5,040.27	0.00	0.00	0.00
14,200.00	89.95	359.92	7,488.96	4,780.49	2,125.74	5,137.64	0.00	0.00	0.00
14,300.00	89.95	359.92	7,489.05	4,880.49	2,125.61	5,235.02	0.00	0.00	0.00
14,400.00	89.95	359.92	7,489.14	4,980.49	2,125.48	5,332.39	0.00	0.00	0.00
14,500.00	89.95	359.92	7,489.24	5,080.49	2,125.34	5,429.76	0.00	0.00	0.00
14,600.00	89.95	359.92	7,489.33	5,180.49	2,125.21	5,527.14	0.00	0.00	0.00
14,700.00	89.95	359.92	7,489.42	5,280.49	2,125.08	5,624.51	0.00	0.00	0.00
14,800.00	89.95	359.92	7,489.52	5,380.49	2,124.95	5,721.88	0.00	0.00	0.00
14,900.00	89.95	359.92	7,489.61	5,480.49	2,124.82	5,819.26	0.00	0.00	0.00
15,000.00	89.95	359.92	7,489.70	5,580.49	2,124.69	5,916.63	0.00	0.00	0.00
15,100.00	89.95	359.92	7,489.80	5,680.49	2,124.55	6,014.00	0.00	0.00	0.00
15,200.00	89.95	359.92	7,489.89	5,780.49	2,124.42	6,111.37	0.00	0.00	0.00
15,300.00	89.95	359.92	7,489.98	5,880.49	2,124.29	6,208.75	0.00	0.00	0.00

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Buford 33-06-4L
Company:	Confluence Resources	TVD Reference:	RKB=5081+26 @ 5107.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5081+26 @ 5107.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Buford 33-06-4L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
15,400.00	89.95	359.92	7,490.07	5,980.49	2,124.16	6,306.12	0.00	0.00	0.00	
15,500.00	89.95	359.92	7,490.17	6,080.49	2,124.03	6,403.49	0.00	0.00	0.00	
15,600.00	89.95	359.92	7,490.26	6,180.49	2,123.89	6,500.87	0.00	0.00	0.00	
15,700.00	89.95	359.92	7,490.35	6,280.49	2,123.76	6,598.24	0.00	0.00	0.00	
15,800.00	89.95	359.92	7,490.45	6,380.49	2,123.63	6,695.61	0.00	0.00	0.00	
15,900.00	89.95	359.92	7,490.54	6,480.49	2,123.50	6,792.99	0.00	0.00	0.00	
16,000.00	89.95	359.92	7,490.63	6,580.49	2,123.37	6,890.36	0.00	0.00	0.00	
16,100.00	89.95	359.92	7,490.73	6,680.49	2,123.24	6,987.73	0.00	0.00	0.00	
16,200.00	89.95	359.92	7,490.82	6,780.49	2,123.10	7,085.11	0.00	0.00	0.00	
16,300.00	89.95	359.92	7,490.91	6,880.49	2,122.97	7,182.48	0.00	0.00	0.00	
16,400.00	89.95	359.92	7,491.01	6,980.49	2,122.84	7,279.85	0.00	0.00	0.00	
16,500.00	89.95	359.92	7,491.10	7,080.49	2,122.71	7,377.23	0.00	0.00	0.00	
16,600.00	89.95	359.92	7,491.19	7,180.49	2,122.58	7,474.60	0.00	0.00	0.00	
16,700.00	89.95	359.92	7,491.29	7,280.49	2,122.45	7,571.97	0.00	0.00	0.00	
16,800.00	89.95	359.92	7,491.38	7,380.49	2,122.31	7,669.34	0.00	0.00	0.00	
16,900.00	89.95	359.92	7,491.47	7,480.49	2,122.18	7,766.72	0.00	0.00	0.00	
17,000.00	89.95	359.92	7,491.57	7,580.49	2,122.05	7,864.09	0.00	0.00	0.00	
17,100.00	89.95	359.92	7,491.66	7,680.49	2,121.92	7,961.46	0.00	0.00	0.00	
17,200.00	89.95	359.92	7,491.75	7,780.49	2,121.79	8,058.84	0.00	0.00	0.00	
17,300.00	89.95	359.92	7,491.85	7,880.49	2,121.65	8,156.21	0.00	0.00	0.00	
17,400.00	89.95	359.92	7,491.94	7,980.49	2,121.52	8,253.58	0.00	0.00	0.00	
17,500.00	89.95	359.92	7,492.03	8,080.49	2,121.39	8,350.96	0.00	0.00	0.00	
17,600.00	89.95	359.92	7,492.12	8,180.48	2,121.26	8,448.33	0.00	0.00	0.00	
17,700.00	89.95	359.92	7,492.22	8,280.48	2,121.13	8,545.70	0.00	0.00	0.00	
17,800.00	89.95	359.92	7,492.31	8,380.48	2,121.00	8,643.08	0.00	0.00	0.00	
17,900.00	89.95	359.92	7,492.40	8,480.48	2,120.86	8,740.45	0.00	0.00	0.00	
18,000.00	89.95	359.92	7,492.50	8,580.48	2,120.73	8,837.82	0.00	0.00	0.00	
18,100.00	89.95	359.92	7,492.59	8,680.48	2,120.60	8,935.20	0.00	0.00	0.00	
18,200.00	89.95	359.92	7,492.68	8,780.48	2,120.47	9,032.57	0.00	0.00	0.00	
18,300.00	89.95	359.92	7,492.78	8,880.48	2,120.34	9,129.94	0.00	0.00	0.00	
18,400.00	89.95	359.92	7,492.87	8,980.48	2,120.20	9,227.32	0.00	0.00	0.00	
18,500.00	89.95	359.92	7,492.96	9,080.48	2,120.07	9,324.69	0.00	0.00	0.00	
18,539.82	89.95	359.92	7,493.00	9,120.30	2,120.02	9,363.46	0.00	0.00	0.00	
PBHL/TD 18539.82 MD/7493.00 TVD										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude		Longitude
LP Buford 33-06-4L 470 - hit/miss target - Shape - Point	0.00	0.00	7,484.00	-539.68	2,132.75	14,527,569.73	1,733,055.93	40.00182443		-104.66919719
BHL Buford 33-06-4L 47 - plan hits target center - Point	0.00	0.00	7,493.00	9,120.30	2,120.02	14,537,229.58	1,733,008.17	40.02835222		-104.66923970

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Buford 33-06-4L
Company:	Confluence Resources	TVD Reference:	RKB=5081+26 @ 5107.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5081+26 @ 5107.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Buford 33-06-4L	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	
5,492.20	5,433.86	-111.18	164.72	Begin 49.22° tangent section	
7,729.04	6,894.85	-1,058.82	1,568.61	Begin 10°/100' build/turn	
8,879.83	7,484.00	-539.68	2,132.75	LP Begin 89.95° lateral section	
18,539.82	7,493.00	9,120.30	2,120.02	PBHL/TD 18539.82 MD/7493.00 TVD	

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Buford 33-06-4L
Company:	Confluence Resources	TVD Reference:	RKB=5081+26 @ 5107.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5081+26 @ 5107.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Buford 33-06-4L	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	Buford 33-06-4L, Surf Loc: 1010 FSL 450 FWL Sect 33-T01N-R65W					
Well Position	+N/-S	0.00 ft	Northing:	14,528,101.67 usft	Latitude:	40.00330672
	+E/-W	0.00 ft	Easting:	1,730,921.24 usft	Longitude:	-104.67681289
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,081.00 ft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	5/25/2017	8.28	66.45	52,147.50000000

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	13.09

Plan Survey Tool Program	Date	5/25/2017		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,539.82 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	
5,492.20	49.22	124.02	5,433.86	-111.18	164.72	10.00	10.00	0.00	124.02	
7,729.04	49.22	124.02	6,894.85	-1,058.82	1,568.61	0.00	0.00	0.00	0.00	
8,879.83	89.95	359.92	7,484.00	-539.68	2,132.75	10.00	3.54	-10.78	-113.89	LP Buford 33-06-4L 4'
18,539.82	89.95	359.92	7,493.00	9,120.30	2,120.02	0.00	0.00	0.00	0.00	BHL Buford 33-06-4L

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Buford 33-06-4L
Company:	Confluence Resources	TVD Reference:	RKB=5081+26 @ 5107.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5081+26 @ 5107.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Buford 33-06-4L	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	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
100.00	0.00	0.00	100.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
200.00	0.00	0.00	200.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
300.00	0.00	0.00	300.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
400.00	0.00	0.00	400.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
500.00	0.00	0.00	500.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
600.00	0.00	0.00	600.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
700.00	0.00	0.00	700.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
800.00	0.00	0.00	800.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
900.00	0.00	0.00	900.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
1,100.00	0.00	0.00	1,100.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
1,200.00	0.00	0.00	1,200.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
1,300.00	0.00	0.00	1,300.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
1,400.00	0.00	0.00	1,400.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
1,500.00	0.00	0.00	1,500.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
1,600.00	0.00	0.00	1,600.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
1,700.00	0.00	0.00	1,700.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
1,800.00	0.00	0.00	1,800.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
1,900.00	0.00	0.00	1,900.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
2,000.00	0.00	0.00	2,000.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
2,100.00	0.00	0.00	2,100.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
2,200.00	0.00	0.00	2,200.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
2,300.00	0.00	0.00	2,300.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
2,400.00	0.00	0.00	2,400.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
2,500.00	0.00	0.00	2,500.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
2,600.00	0.00	0.00	2,600.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
2,700.00	0.00	0.00	2,700.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
2,800.00	0.00	0.00	2,800.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
2,900.00	0.00	0.00	2,900.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
3,000.00	0.00	0.00	3,000.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
3,100.00	0.00	0.00	3,100.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
3,200.00	0.00	0.00	3,200.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
3,300.00	0.00	0.00	3,300.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
3,400.00	0.00	0.00	3,400.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
3,500.00	0.00	0.00	3,500.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
3,600.00	0.00	0.00	3,600.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
3,700.00	0.00	0.00	3,700.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
3,800.00	0.00	0.00	3,800.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
3,900.00	0.00	0.00	3,900.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
4,000.00	0.00	0.00	4,000.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
4,100.00	0.00	0.00	4,100.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
4,200.00	0.00	0.00	4,200.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
4,300.00	0.00	0.00	4,300.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
4,400.00	0.00	0.00	4,400.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
4,500.00	0.00	0.00	4,500.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
4,600.00	0.00	0.00	4,600.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
4,700.00	0.00	0.00	4,700.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
4,800.00	0.00	0.00	4,800.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
4,900.00	0.00	0.00	4,900.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
5,000.00	0.00	0.00	5,000.00	0.00	0.00	14,528,101.67	1,730,921.24	40.00330672	-104.67681289
KOP Begin 10°/100' build									
5,100.00	10.00	124.02	5,099.49	-4.87	7.21	14,528,096.83	1,730,928.47	40.00329335	-104.67678713
5,200.00	20.00	124.02	5,195.96	-19.33	28.64	14,528,082.45	1,730,949.95	40.00325363	-104.67671062

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Buford 33-06-4L
Company:	Confluence Resources	TVD Reference:	RKB=5081+26 @ 5107.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5081+26 @ 5107.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Buford 33-06-4L	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
5,300.00	30.00	124.02	5,286.48	-42.95	63.62	14,528,058.96	1,730,985.02	40.00318878	-104.67658570
5,400.00	40.00	124.02	5,368.29	-75.00	111.10	14,528,027.08	1,731,032.61	40.00310077	-104.67641615
5,492.20	49.22	124.02	5,433.86	-111.18	164.72	14,527,991.09	1,731,086.36	40.00300139	-104.67622470
Begin 49.22° tangent section									
5,500.00	49.22	124.02	5,438.95	-114.49	169.61	14,527,987.80	1,731,091.26	40.00299232	-104.67620723
5,600.00	49.22	124.02	5,504.27	-156.85	232.37	14,527,945.67	1,731,154.18	40.00287598	-104.67598311
5,700.00	49.22	124.02	5,569.58	-199.22	295.14	14,527,903.53	1,731,217.09	40.00275963	-104.67575900
5,800.00	49.22	124.02	5,634.90	-241.58	357.90	14,527,861.39	1,731,280.01	40.00264329	-104.67553488
5,900.00	49.22	124.02	5,700.21	-283.95	420.66	14,527,819.26	1,731,342.93	40.00252695	-104.67531077
6,000.00	49.22	124.02	5,765.53	-326.31	483.42	14,527,777.12	1,731,405.84	40.00241060	-104.67508665
6,100.00	49.22	124.02	5,830.84	-368.68	546.19	14,527,734.98	1,731,468.76	40.00229426	-104.67486254
6,200.00	49.22	124.02	5,896.16	-411.04	608.95	14,527,692.85	1,731,531.67	40.00217791	-104.67463842
6,300.00	49.22	124.02	5,961.47	-453.41	671.71	14,527,650.71	1,731,594.59	40.00206157	-104.67441431
6,400.00	49.22	124.02	6,026.79	-495.77	734.47	14,527,608.57	1,731,657.50	40.00194522	-104.67419020
6,500.00	49.22	124.02	6,092.10	-538.14	797.24	14,527,566.43	1,731,720.42	40.00182888	-104.67396609
6,600.00	49.22	124.02	6,157.42	-580.50	860.00	14,527,524.30	1,731,783.34	40.00171253	-104.67374198
6,700.00	49.22	124.02	6,222.73	-622.87	922.76	14,527,482.16	1,731,846.25	40.00159618	-104.67351787
6,800.00	49.22	124.02	6,288.05	-665.23	985.53	14,527,440.02	1,731,909.17	40.00147984	-104.67329376
6,900.00	49.22	124.02	6,353.36	-707.60	1,048.29	14,527,397.89	1,731,972.08	40.00136349	-104.67306965
7,000.00	49.22	124.02	6,418.68	-749.96	1,111.05	14,527,355.75	1,732,035.00	40.00124714	-104.67284555
7,100.00	49.22	124.02	6,483.99	-792.33	1,173.81	14,527,313.61	1,732,097.92	40.00113079	-104.67262144
7,200.00	49.22	124.02	6,549.31	-834.69	1,236.58	14,527,271.48	1,732,160.83	40.00101444	-104.67239733
7,300.00	49.22	124.02	6,614.62	-877.06	1,299.34	14,527,229.34	1,732,223.75	40.00089809	-104.67217323
7,400.00	49.22	124.02	6,679.94	-919.42	1,362.10	14,527,187.20	1,732,286.66	40.00078174	-104.67194913
7,500.00	49.22	124.02	6,745.25	-961.78	1,424.86	14,527,145.07	1,732,349.58	40.00066539	-104.67172502
7,600.00	49.22	124.02	6,810.57	-1,004.15	1,487.63	14,527,102.93	1,732,412.49	40.00054904	-104.67150092
7,700.00	49.22	124.02	6,875.88	-1,046.51	1,550.39	14,527,060.79	1,732,475.41	40.00043269	-104.67127682
7,729.04	49.22	124.02	6,894.85	-1,058.82	1,568.61	14,527,048.56	1,732,493.68	40.00039891	-104.67121175
Begin 10°/100' build/turn									
7,800.00	46.68	115.09	6,942.43	-1,084.83	1,614.32	14,527,022.71	1,732,539.48	40.00032747	-104.67104854
7,900.00	44.40	101.43	7,012.63	-1,107.24	1,681.73	14,527,000.54	1,732,606.97	40.00026590	-104.67080785
8,000.00	43.85	87.07	7,084.59	-1,112.41	1,750.79	14,526,995.62	1,732,676.05	40.00025169	-104.67056126
8,100.00	45.09	72.88	7,156.13	-1,100.19	1,819.40	14,527,008.09	1,732,744.61	40.00028525	-104.67031626
8,200.00	47.99	59.68	7,225.07	-1,070.94	1,885.48	14,527,037.59	1,732,810.59	40.00036556	-104.67008029
8,300.00	52.24	47.87	7,289.31	-1,025.55	1,947.02	14,527,083.20	1,732,871.96	40.00049020	-104.66986054
8,400.00	57.54	37.49	7,346.91	-965.40	2,002.15	14,527,143.55	1,732,926.87	40.00065536	-104.66966366
8,500.00	63.59	28.33	7,396.11	-892.32	2,049.20	14,527,216.80	1,732,973.66	40.00085604	-104.66949565
8,600.00	70.16	20.13	7,435.42	-808.53	2,086.73	14,527,300.72	1,733,010.88	40.00108613	-104.66936161
8,700.00	77.08	12.59	7,463.64	-716.57	2,113.61	14,527,392.77	1,733,037.43	40.00133865	-104.66926561
8,800.00	84.20	5.47	7,479.92	-619.25	2,129.01	14,527,490.15	1,733,052.48	40.00160592	-104.66921057
8,879.83	89.95	359.92	7,484.00	-539.68	2,132.75	14,527,569.73	1,733,055.93	40.00182443	-104.66919719
LP Begin 89.95° lateral section									
8,900.00	89.95	359.92	7,484.02	-519.50	2,132.72	14,527,589.91	1,733,055.83	40.00187983	-104.66919728
9,000.00	89.95	359.92	7,484.11	-419.50	2,132.59	14,527,689.91	1,733,055.33	40.00215444	-104.66919772
9,100.00	89.95	359.92	7,484.21	-319.50	2,132.46	14,527,789.91	1,733,054.84	40.00242906	-104.66919816
9,200.00	89.95	359.92	7,484.30	-219.50	2,132.33	14,527,889.90	1,733,054.35	40.00270368	-104.66919860
9,300.00	89.95	359.92	7,484.39	-119.50	2,132.20	14,527,989.90	1,733,053.85	40.00297829	-104.66919904
9,400.00	89.95	359.92	7,484.48	-19.50	2,132.07	14,528,089.90	1,733,053.36	40.00325291	-104.66919948
9,500.00	89.95	359.92	7,484.58	80.50	2,131.93	14,528,189.90	1,733,052.86	40.00352752	-104.66919992
9,600.00	89.95	359.92	7,484.67	180.50	2,131.80	14,528,289.90	1,733,052.37	40.00380214	-104.66920036
9,700.00	89.95	359.92	7,484.76	280.50	2,131.67	14,528,389.90	1,733,051.87	40.00407675	-104.66920080
9,800.00	89.95	359.92	7,484.86	380.49	2,131.54	14,528,489.90	1,733,051.38	40.00435137	-104.66920124
9,900.00	89.95	359.92	7,484.95	480.49	2,131.41	14,528,589.89	1,733,050.88	40.00462599	-104.66920168
10,000.00	89.95	359.92	7,485.04	580.49	2,131.28	14,528,689.89	1,733,050.39	40.00490060	-104.66920212

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Buford 33-06-4L
Company:	Confluence Resources	TVD Reference:	RKB=5081+26 @ 5107.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5081+26 @ 5107.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Buford 33-06-4L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,100.00	89.95	359.92	7,485.14	680.49	2,131.14	14,528,789.89	1,733,049.90	40.00517522	-104.66920256
10,200.00	89.95	359.92	7,485.23	780.49	2,131.01	14,528,889.89	1,733,049.40	40.00544983	-104.66920300
10,300.00	89.95	359.92	7,485.32	880.49	2,130.88	14,528,989.89	1,733,048.91	40.00572445	-104.66920344
10,400.00	89.95	359.92	7,485.42	980.49	2,130.75	14,529,089.89	1,733,048.41	40.00599906	-104.66920388
10,500.00	89.95	359.92	7,485.51	1,080.49	2,130.62	14,529,189.89	1,733,047.92	40.00627368	-104.66920432
10,600.00	89.95	359.92	7,485.60	1,180.49	2,130.48	14,529,289.88	1,733,047.42	40.00654829	-104.66920476
10,700.00	89.95	359.92	7,485.70	1,280.49	2,130.35	14,529,389.88	1,733,046.93	40.00682291	-104.66920520
10,800.00	89.95	359.92	7,485.79	1,380.49	2,130.22	14,529,489.88	1,733,046.44	40.00709752	-104.66920564
10,900.00	89.95	359.92	7,485.88	1,480.49	2,130.09	14,529,589.88	1,733,045.94	40.00737214	-104.66920608
11,000.00	89.95	359.92	7,485.98	1,580.49	2,129.96	14,529,689.88	1,733,045.45	40.00764676	-104.66920652
11,100.00	89.95	359.92	7,486.07	1,680.49	2,129.83	14,529,789.88	1,733,044.95	40.00792137	-104.66920696
11,200.00	89.95	359.92	7,486.16	1,780.49	2,129.69	14,529,889.88	1,733,044.46	40.00819599	-104.66920741
11,300.00	89.95	359.92	7,486.25	1,880.49	2,129.56	14,529,989.87	1,733,043.96	40.00847060	-104.66920785
11,400.00	89.95	359.92	7,486.35	1,980.49	2,129.43	14,530,089.87	1,733,043.47	40.00874522	-104.66920829
11,500.00	89.95	359.92	7,486.44	2,080.49	2,129.30	14,530,189.87	1,733,042.97	40.00901983	-104.66920873
11,600.00	89.95	359.92	7,486.53	2,180.49	2,129.17	14,530,289.87	1,733,042.48	40.00929445	-104.66920917
11,700.00	89.95	359.92	7,486.63	2,280.49	2,129.03	14,530,389.87	1,733,041.99	40.00956906	-104.66920961
11,800.00	89.95	359.92	7,486.72	2,380.49	2,128.90	14,530,489.87	1,733,041.49	40.00984368	-104.66921005
11,900.00	89.95	359.92	7,486.81	2,480.49	2,128.77	14,530,589.87	1,733,041.00	40.01011829	-104.66921049
12,000.00	89.95	359.92	7,486.91	2,580.49	2,128.64	14,530,689.86	1,733,040.50	40.01039291	-104.66921093
12,100.00	89.95	359.92	7,487.00	2,680.49	2,128.51	14,530,789.86	1,733,040.01	40.01066752	-104.66921137
12,200.00	89.95	359.92	7,487.09	2,780.49	2,128.38	14,530,889.86	1,733,039.51	40.01094214	-104.66921181
12,300.00	89.95	359.92	7,487.19	2,880.49	2,128.24	14,530,989.86	1,733,039.02	40.01121675	-104.66921225
12,400.00	89.95	359.92	7,487.28	2,980.49	2,128.11	14,531,089.86	1,733,038.52	40.01149137	-104.66921269
12,500.00	89.95	359.92	7,487.37	3,080.49	2,127.98	14,531,189.86	1,733,038.03	40.01176599	-104.66921313
12,600.00	89.95	359.92	7,487.47	3,180.49	2,127.85	14,531,289.85	1,733,037.54	40.01204060	-104.66921357
12,700.00	89.95	359.92	7,487.56	3,280.49	2,127.72	14,531,389.85	1,733,037.04	40.01231522	-104.66921401
12,800.00	89.95	359.92	7,487.65	3,380.49	2,127.58	14,531,489.85	1,733,036.55	40.01258983	-104.66921445
12,900.00	89.95	359.92	7,487.75	3,480.49	2,127.45	14,531,589.85	1,733,036.05	40.01286445	-104.66921489
13,000.00	89.95	359.92	7,487.84	3,580.49	2,127.32	14,531,689.85	1,733,035.56	40.01313906	-104.66921533
13,100.00	89.95	359.92	7,487.93	3,680.49	2,127.19	14,531,789.85	1,733,035.06	40.01341368	-104.66921577
13,200.00	89.95	359.92	7,488.03	3,780.49	2,127.06	14,531,889.85	1,733,034.57	40.01368829	-104.66921621
13,300.00	89.95	359.92	7,488.12	3,880.49	2,126.93	14,531,989.84	1,733,034.07	40.01396291	-104.66921665
13,400.00	89.95	359.92	7,488.21	3,980.49	2,126.79	14,532,089.84	1,733,033.58	40.01423752	-104.66921709
13,500.00	89.95	359.92	7,488.30	4,080.49	2,126.66	14,532,189.84	1,733,033.09	40.01451214	-104.66921753
13,600.00	89.95	359.92	7,488.40	4,180.49	2,126.53	14,532,289.84	1,733,032.59	40.01478675	-104.66921797
13,700.00	89.95	359.92	7,488.49	4,280.49	2,126.40	14,532,389.84	1,733,032.10	40.01506137	-104.66921841
13,800.00	89.95	359.92	7,488.58	4,380.49	2,126.27	14,532,489.84	1,733,031.60	40.01533598	-104.66921885
13,900.00	89.95	359.92	7,488.68	4,480.49	2,126.14	14,532,589.84	1,733,031.11	40.01561060	-104.66921929
14,000.00	89.95	359.92	7,488.77	4,580.49	2,126.00	14,532,689.83	1,733,030.61	40.01588521	-104.66921973
14,100.00	89.95	359.92	7,488.86	4,680.49	2,125.87	14,532,789.83	1,733,030.12	40.01615983	-104.66922017
14,200.00	89.95	359.92	7,488.96	4,780.49	2,125.74	14,532,889.83	1,733,029.63	40.01643444	-104.66922061
14,300.00	89.95	359.92	7,489.05	4,880.49	2,125.61	14,532,989.83	1,733,029.13	40.01670906	-104.66922105
14,400.00	89.95	359.92	7,489.14	4,980.49	2,125.48	14,533,089.83	1,733,028.64	40.01698367	-104.66922149
14,500.00	89.95	359.92	7,489.24	5,080.49	2,125.34	14,533,189.83	1,733,028.14	40.01725829	-104.66922193
14,600.00	89.95	359.92	7,489.33	5,180.49	2,125.21	14,533,289.83	1,733,027.65	40.01753290	-104.66922237
14,700.00	89.95	359.92	7,489.42	5,280.49	2,125.08	14,533,389.82	1,733,027.15	40.01780752	-104.66922281
14,800.00	89.95	359.92	7,489.52	5,380.49	2,124.95	14,533,489.82	1,733,026.66	40.01808213	-104.66922325
14,900.00	89.95	359.92	7,489.61	5,480.49	2,124.82	14,533,589.82	1,733,026.16	40.01835675	-104.66922369
15,000.00	89.95	359.92	7,489.70	5,580.49	2,124.69	14,533,689.82	1,733,025.67	40.01863136	-104.66922413
15,100.00	89.95	359.92	7,489.80	5,680.49	2,124.55	14,533,789.82	1,733,025.18	40.01890598	-104.66922457
15,200.00	89.95	359.92	7,489.89	5,780.49	2,124.42	14,533,889.82	1,733,024.68	40.01918059	-104.66922501
15,300.00	89.95	359.92	7,489.98	5,880.49	2,124.29	14,533,989.82	1,733,024.19	40.01945521	-104.66922545
15,400.00	89.95	359.92	7,490.07	5,980.49	2,124.16	14,534,089.81	1,733,023.69	40.01972982	-104.66922589
15,500.00	89.95	359.92	7,490.17	6,080.49	2,124.03	14,534,189.81	1,733,023.20	40.02000444	-104.66922633

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Buford 33-06-4L
Company:	Confluence Resources	TVD Reference:	RKB=5081+26 @ 5107.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5081+26 @ 5107.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Buford 33-06-4L	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
15,600.00	89.95	359.92	7,490.26	6,180.49	2,123.89	14,534,289.81	1,733,022.70	40.02027905	-104.66922677
15,700.00	89.95	359.92	7,490.35	6,280.49	2,123.76	14,534,389.81	1,733,022.21	40.02055367	-104.66922721
15,800.00	89.95	359.92	7,490.45	6,380.49	2,123.63	14,534,489.81	1,733,021.71	40.02082828	-104.66922765
15,900.00	89.95	359.92	7,490.54	6,480.49	2,123.50	14,534,589.81	1,733,021.22	40.02110289	-104.66922809
16,000.00	89.95	359.92	7,490.63	6,580.49	2,123.37	14,534,689.81	1,733,020.73	40.02137751	-104.66922853
16,100.00	89.95	359.92	7,490.73	6,680.49	2,123.24	14,534,789.80	1,733,020.23	40.02165212	-104.66922897
16,200.00	89.95	359.92	7,490.82	6,780.49	2,123.10	14,534,889.80	1,733,019.74	40.02192674	-104.66922941
16,300.00	89.95	359.92	7,490.91	6,880.49	2,122.97	14,534,989.80	1,733,019.24	40.02220135	-104.66922985
16,400.00	89.95	359.92	7,491.01	6,980.49	2,122.84	14,535,089.80	1,733,018.75	40.02247597	-104.66923029
16,500.00	89.95	359.92	7,491.10	7,080.49	2,122.71	14,535,189.80	1,733,018.25	40.02275058	-104.66923073
16,600.00	89.95	359.92	7,491.19	7,180.49	2,122.58	14,535,289.80	1,733,017.76	40.02302520	-104.66923117
16,700.00	89.95	359.92	7,491.29	7,280.49	2,122.45	14,535,389.79	1,733,017.26	40.02329981	-104.66923160
16,800.00	89.95	359.92	7,491.38	7,380.49	2,122.31	14,535,489.79	1,733,016.77	40.02357443	-104.66923204
16,900.00	89.95	359.92	7,491.47	7,480.49	2,122.18	14,535,589.79	1,733,016.28	40.02384904	-104.66923248
17,000.00	89.95	359.92	7,491.57	7,580.49	2,122.05	14,535,689.79	1,733,015.78	40.02412366	-104.66923292
17,100.00	89.95	359.92	7,491.66	7,680.49	2,121.92	14,535,789.79	1,733,015.29	40.02439827	-104.66923336
17,200.00	89.95	359.92	7,491.75	7,780.49	2,121.79	14,535,889.79	1,733,014.79	40.02467289	-104.66923380
17,300.00	89.95	359.92	7,491.85	7,880.49	2,121.65	14,535,989.79	1,733,014.30	40.02494750	-104.66923424
17,400.00	89.95	359.92	7,491.94	7,980.49	2,121.52	14,536,089.78	1,733,013.80	40.02522212	-104.66923468
17,500.00	89.95	359.92	7,492.03	8,080.49	2,121.39	14,536,189.78	1,733,013.31	40.02549673	-104.66923512
17,600.00	89.95	359.92	7,492.12	8,180.48	2,121.26	14,536,289.78	1,733,012.82	40.02577134	-104.66923556
17,700.00	89.95	359.92	7,492.22	8,280.48	2,121.13	14,536,389.78	1,733,012.32	40.02604596	-104.66923600
17,800.00	89.95	359.92	7,492.31	8,380.48	2,121.00	14,536,489.78	1,733,011.83	40.02632057	-104.66923644
17,900.00	89.95	359.92	7,492.40	8,480.48	2,120.86	14,536,589.78	1,733,011.33	40.02659519	-104.66923688
18,000.00	89.95	359.92	7,492.50	8,580.48	2,120.73	14,536,689.78	1,733,010.84	40.02686980	-104.66923732
18,100.00	89.95	359.92	7,492.59	8,680.48	2,120.60	14,536,789.77	1,733,010.34	40.02714442	-104.66923776
18,200.00	89.95	359.92	7,492.68	8,780.48	2,120.47	14,536,889.77	1,733,009.85	40.02741903	-104.66923820
18,300.00	89.95	359.92	7,492.78	8,880.48	2,120.34	14,536,989.77	1,733,009.35	40.02769365	-104.66923864
18,400.00	89.95	359.92	7,492.87	8,980.48	2,120.20	14,537,089.77	1,733,008.86	40.02796826	-104.66923908
18,500.00	89.95	359.92	7,492.96	9,080.48	2,120.07	14,537,189.77	1,733,008.37	40.02824287	-104.66923952
18,539.82	89.95	359.92	7,493.00	9,120.30	2,120.02	14,537,229.58	1,733,008.17	40.02835222	-104.66923970
PBHL/TD 18539.82 MD/7493.00 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 33-06-4L 470 - plan hits target center - Point	0.00	0.00	7,484.00	-539.68	2,132.75	14,527,569.73	1,733,055.93	40.00182443	-104.66919719
BHL Buford 33-06-4L 47 - plan hits target center - Point	0.00	0.00	7,493.00	9,120.30	2,120.02	14,537,229.58	1,733,008.17	40.02835222	-104.66923970

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Buford 33-06-4L
Company:	Confluence Resources	TVD Reference:	RKB=5081+26 @ 5107.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5081+26 @ 5107.00ft
Site:	Section 33-T01N-R65W	North Reference:	True
Well:	Buford 33-06-4L	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
5,492.20	5,433.86	-111.18	164.72	Begin 49.22° tangent section
7,729.04	6,894.85	-1,058.82	1,568.61	Begin 10°/100' build/turn
8,879.83	7,484.00	-539.68	2,132.75	LP Begin 89.95° lateral section
18,539.82	7,493.00	9,120.30	2,120.02	PBHL/TD 18539.82 MD/7493.00 TVD