



Weld County, Colorado  
Section 10 & 15 T04N-R63W  
70 Ranch 10-7-1L  
plan1

Azimuth Corrections:

To convert a Magnetic Direction to a True Direction, Add 8.17° East

70 Ranch 10-7-1L Surf Loc: 82 FNL 1675 FWL Section 10-T04N-R63W			
NAD83 Colorado - HARN Universal Transverse Mercator (US Survey Feet) Zone 13N (108 W to 102 W) RKB=4605+25 @ 4630.01ft			
Northing	Easting	Latitude	Longitude
14648762.25	1799860.00	40.33369000	-104.42787000

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	5406.73	40.67	289.80	5373.42	46.89	-130.22	10.00	-37.08	Begin 40.67° tangent section
4	5960.03	40.67	289.80	5793.06	169.05	-469.51	0.00	-133.67	Begin 10°/100' build/turn
5	6994.78	90.16	179.05	6342.00	-396.93	-902.98	10.00	462.96	LP Begin 90.16° lateral section
6	16584.78	90.16	179.05	6315.00	-9985.58	-744.43	0.00	10013.29	PBHL/TD 16584.78 MD 6315.00 TVD

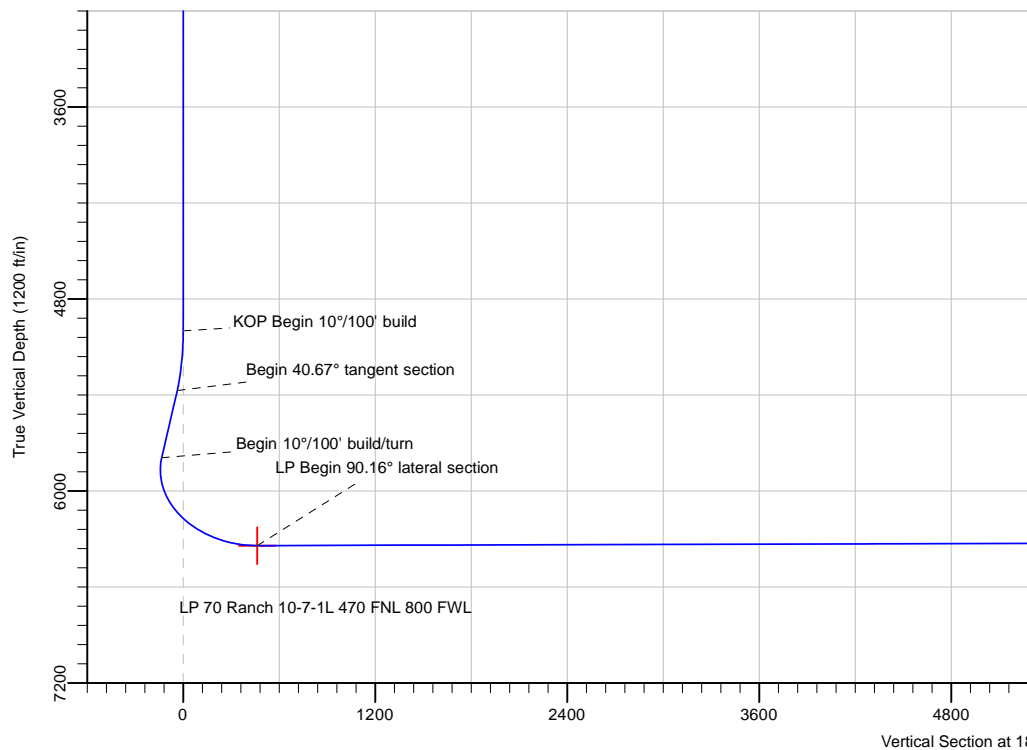
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
BHL 70 Ranch 10-7-1L 470 FSL 858 FWL	6315.00	-9985.58	-744.43	14638772.09	1799180.13	40.30627000	-104.43054000
LP 70 Ranch 10-7-1L 470 FNL 800 FWL	6342.00	-396.93	-902.98	14648359.49	1798959.61	40.33260000	-104.43111000

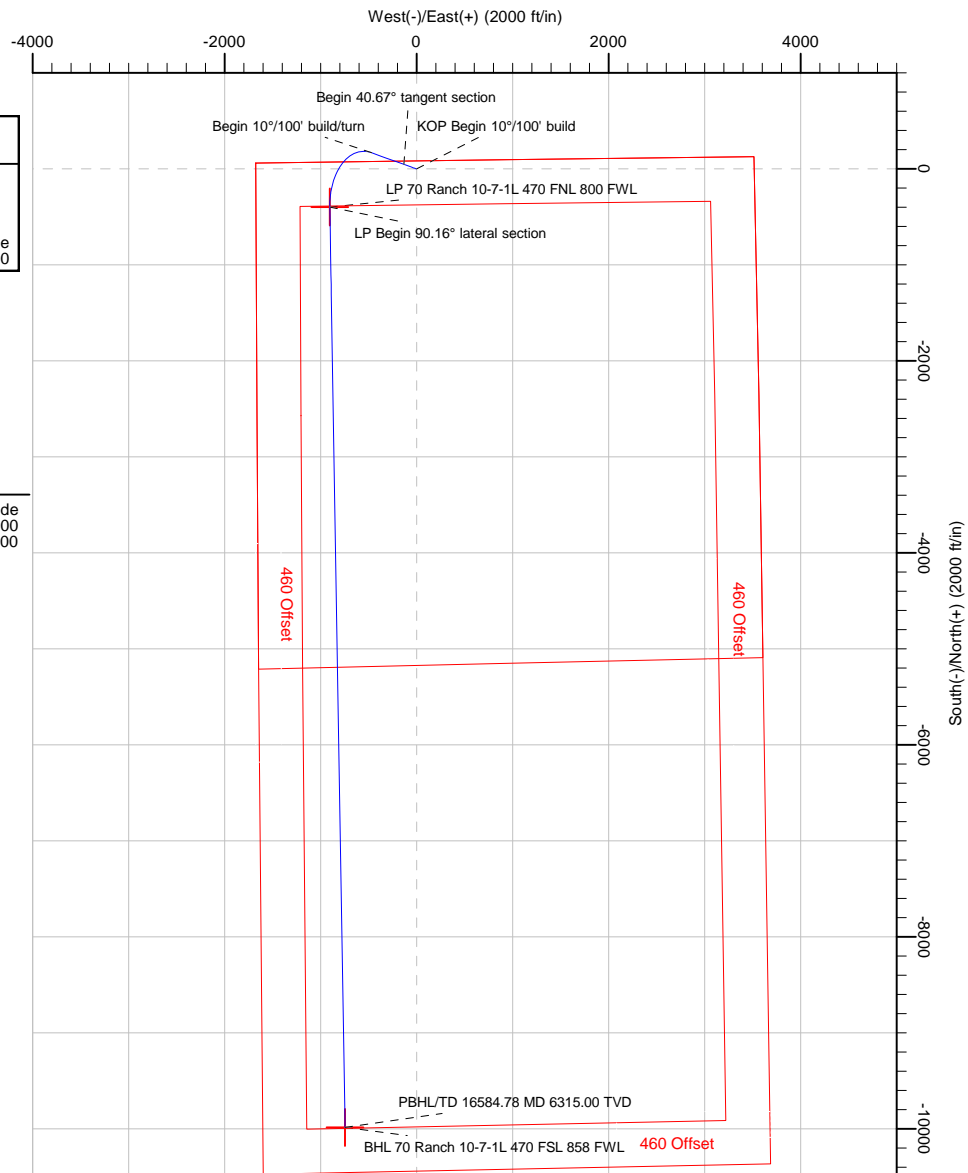


Azimuths to True North  
Magnetic North: 8.17°

Magnetic Field  
Strength: 52358.2snT  
Dip Angle: 66.97°  
Date: 5/7/2017  
Model: HDGM



Date: 12:41, May 09 2017



PBHL/TD 16584.78 MD 6315.00 TVD

BHL 70 Ranch 10-7-1L 470 FSL 858 FWL

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

<b>Database:</b>	DB_Jul2216dt_v14	<b>Local Co-ordinate Reference:</b>	Well 70 Ranch 10-7-1L
<b>Company:</b>	Confluence Resources	<b>TVD Reference:</b>	RKB=4605+25 @ 4630.01ft
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	RKB=4605+25 @ 4630.01ft
<b>Site:</b>	Section 10 & 15 T04N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	70 Ranch 10-7-1L	<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 10 & 15 T04N-R63W				
Site Position:		Northing:	14,648,687.65 usft	Latitude:	40.33348000
From:	Lat/Long	Easting:	1,800,150.33 usft	Longitude:	-104.42683000
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.37 °

Well	70 Ranch 10-7-1L, Surf Loc: 82 FNL 1675 FWL Section 10-T04N-R63W					
Well Position	+N/-S	76.48 ft	Northing:	14,648,762.25 usft	Latitude:	40.33369000
	+E/-W	-289.84 ft	Easting:	1,799,860.00 usft	Longitude:	-104.42787000
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,605.01 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	5/7/2017	8.17	66.97	52,358.20000000

<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	184.26

<b>Plan Survey Tool Program</b>	<b>Date</b>	5/9/2017		
<b>Depth From (ft)</b>	<b>Depth To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	16,584.78	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	
5,406.73	40.67	289.80	5,373.42	46.89	-130.22	10.00	10.00	0.00	289.80	
5,960.03	40.67	289.80	5,793.06	169.05	-469.51	0.00	0.00	0.00	0.00	
6,994.78	90.16	179.05	6,342.00	-396.93	-902.98	10.00	4.78	-10.70	-105.93	LP 70 Ranch 10-7-1L
16,584.78	90.16	179.05	6,315.00	-9,985.58	-744.43	0.00	0.00	0.00	0.00	BHL 70 Ranch 10-7-1

<b>Database:</b>	DB_Jul2216dt_v14	<b>Local Co-ordinate Reference:</b>	Well 70 Ranch 10-7-1L
<b>Company:</b>	Confluence Resources	<b>TVD Reference:</b>	RKB=4605+25 @ 4630.01ft
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	RKB=4605+25 @ 4630.01ft
<b>Site:</b>	Section 10 & 15 T04N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	70 Ranch 10-7-1L	<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	289.80	5,000.01	0.00	0.00	0.00	0.00	0.00	0.00
5,100.01	10.00	289.80	5,099.50	2.95	-8.19	-2.33	10.00	10.00	0.00

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<b>Company:</b>	Confluence Resources	<b>TVD Reference:</b>	RKB=4605+25 @ 4630.01ft
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	RKB=4605+25 @ 4630.01ft
<b>Site:</b>	Section 10 & 15 T04N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	70 Ranch 10-7-1L	<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	289.80	5,195.97	11.71	-32.51	-9.26	10.00	10.00	0.00
5,300.01	30.00	289.80	5,286.49	26.01	-72.23	-20.56	10.00	10.00	0.00
5,400.01	40.00	289.80	5,368.30	45.41	-126.13	-35.91	10.00	10.00	0.00
5,406.73	40.67	289.80	5,373.42	46.89	-130.22	-37.08	10.02	10.02	0.00
<b>Begin 40.67° tangent section</b>									
5,500.01	40.67	289.80	5,444.17	67.48	-187.42	-53.36	0.00	0.00	0.00
5,600.01	40.67	289.80	5,520.01	89.56	-248.74	-70.82	0.00	0.00	0.00
5,700.01	40.67	289.80	5,595.86	111.64	-310.06	-88.28	0.00	0.00	0.00
5,800.01	40.67	289.80	5,671.70	133.72	-371.38	-105.74	0.00	0.00	0.00
5,900.01	40.67	289.80	5,747.54	155.80	-432.70	-123.19	0.00	0.00	0.00
5,960.03	40.67	289.80	5,793.06	169.05	-469.51	-133.67	0.00	0.00	0.00
<b>Begin 10°/100' build/turn</b>									
6,000.01	39.73	283.78	5,823.61	176.51	-494.19	-139.28	10.00	-2.36	-15.06
6,100.01	38.81	268.02	5,901.22	183.05	-556.71	-141.16	10.00	-0.92	-15.76
6,200.01	40.04	252.36	5,978.66	172.19	-618.84	-125.71	10.00	1.22	-15.66
6,300.01	43.21	238.06	6,053.57	144.26	-678.69	-93.40	10.00	3.18	-14.30
6,400.01	47.95	225.70	6,123.68	100.10	-734.46	-45.22	10.00	4.73	-12.36
6,500.01	53.81	215.23	6,186.85	41.06	-784.43	17.37	10.00	5.86	-10.46
6,600.01	60.45	206.31	6,241.18	-31.07	-827.10	92.48	10.00	6.64	-8.92
6,700.01	67.60	198.54	6,285.00	-114.10	-861.16	177.81	10.00	7.16	-7.78
6,800.01	75.10	191.54	6,316.99	-205.51	-885.59	270.78	10.00	7.49	-7.00
6,900.01	82.79	185.02	6,336.17	-302.51	-899.64	368.56	10.00	7.69	-6.52
6,994.78	90.16	179.05	6,342.00	-396.93	-902.98	462.96	10.00	7.78	-6.30
<b>LP Begin 90.16° lateral section</b>									
7,000.01	90.16	179.05	6,341.99	-402.16	-902.89	468.18	0.00	0.00	0.00
7,100.01	90.16	179.05	6,341.70	-502.15	-901.24	567.76	0.00	0.00	0.00
7,200.01	90.16	179.05	6,341.42	-602.14	-899.58	667.35	0.00	0.00	0.00
7,300.01	90.16	179.05	6,341.14	-702.12	-897.93	766.93	0.00	0.00	0.00
7,400.01	90.16	179.05	6,340.86	-802.11	-896.28	866.52	0.00	0.00	0.00
7,500.02	90.16	179.05	6,340.58	-902.09	-894.62	966.11	0.00	0.00	0.00
7,600.02	90.16	179.05	6,340.30	-1,002.08	-892.97	1,065.69	0.00	0.00	0.00
7,700.02	90.16	179.05	6,340.01	-1,102.07	-891.32	1,165.28	0.00	0.00	0.00
7,800.02	90.16	179.05	6,339.73	-1,202.05	-889.66	1,264.87	0.00	0.00	0.00
7,900.02	90.16	179.05	6,339.45	-1,302.04	-888.01	1,364.45	0.00	0.00	0.00
8,000.02	90.16	179.05	6,339.17	-1,402.02	-886.36	1,464.04	0.00	0.00	0.00
8,100.02	90.16	179.05	6,338.89	-1,502.01	-884.70	1,563.63	0.00	0.00	0.00
8,200.02	90.16	179.05	6,338.61	-1,602.00	-883.05	1,663.21	0.00	0.00	0.00
8,300.02	90.16	179.05	6,338.33	-1,701.98	-881.40	1,762.80	0.00	0.00	0.00
8,400.02	90.16	179.05	6,338.04	-1,801.97	-879.74	1,862.39	0.00	0.00	0.00
8,500.02	90.16	179.05	6,337.76	-1,901.96	-878.09	1,961.97	0.00	0.00	0.00
8,600.02	90.16	179.05	6,337.48	-2,001.94	-876.44	2,061.56	0.00	0.00	0.00
8,700.02	90.16	179.05	6,337.20	-2,101.93	-874.78	2,161.15	0.00	0.00	0.00
8,800.02	90.16	179.05	6,336.92	-2,201.91	-873.13	2,260.73	0.00	0.00	0.00
8,900.02	90.16	179.05	6,336.64	-2,301.90	-871.48	2,360.32	0.00	0.00	0.00
9,000.02	90.16	179.05	6,336.35	-2,401.89	-869.82	2,459.91	0.00	0.00	0.00
9,100.02	90.16	179.05	6,336.07	-2,501.87	-868.17	2,559.49	0.00	0.00	0.00
9,200.02	90.16	179.05	6,335.79	-2,601.86	-866.52	2,659.08	0.00	0.00	0.00
9,300.02	90.16	179.05	6,335.51	-2,701.84	-864.86	2,758.67	0.00	0.00	0.00
9,400.02	90.16	179.05	6,335.23	-2,801.83	-863.21	2,858.25	0.00	0.00	0.00
9,500.02	90.16	179.05	6,334.95	-2,901.82	-861.56	2,957.84	0.00	0.00	0.00
9,600.02	90.16	179.05	6,334.67	-3,001.80	-859.90	3,057.42	0.00	0.00	0.00
9,700.02	90.16	179.05	6,334.38	-3,101.79	-858.25	3,157.01	0.00	0.00	0.00
9,800.02	90.16	179.05	6,334.10	-3,201.78	-856.60	3,256.60	0.00	0.00	0.00

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<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	RKB=4605+25 @ 4630.01ft
<b>Site:</b>	Section 10 & 15 T04N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	70 Ranch 10-7-1L	<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	90.16	179.05	6,333.82	-3,301.76	-854.94	3,356.18	0.00	0.00	0.00
10,000.02	90.16	179.05	6,333.54	-3,401.75	-853.29	3,455.77	0.00	0.00	0.00
10,100.02	90.16	179.05	6,333.26	-3,501.73	-851.64	3,555.36	0.00	0.00	0.00
10,200.02	90.16	179.05	6,332.98	-3,601.72	-849.99	3,654.94	0.00	0.00	0.00
10,300.02	90.16	179.05	6,332.69	-3,701.71	-848.33	3,754.53	0.00	0.00	0.00
10,400.02	90.16	179.05	6,332.41	-3,801.69	-846.68	3,854.12	0.00	0.00	0.00
10,500.02	90.16	179.05	6,332.13	-3,901.68	-845.03	3,953.70	0.00	0.00	0.00
10,600.02	90.16	179.05	6,331.85	-4,001.66	-843.37	4,053.29	0.00	0.00	0.00
10,700.02	90.16	179.05	6,331.57	-4,101.65	-841.72	4,152.88	0.00	0.00	0.00
10,800.02	90.16	179.05	6,331.29	-4,201.64	-840.07	4,252.46	0.00	0.00	0.00
10,900.02	90.16	179.05	6,331.01	-4,301.62	-838.41	4,352.05	0.00	0.00	0.00
11,000.02	90.16	179.05	6,330.72	-4,401.61	-836.76	4,451.64	0.00	0.00	0.00
11,100.02	90.16	179.05	6,330.44	-4,501.60	-835.11	4,551.22	0.00	0.00	0.00
11,200.02	90.16	179.05	6,330.16	-4,601.58	-833.45	4,650.81	0.00	0.00	0.00
11,300.02	90.16	179.05	6,329.88	-4,701.57	-831.80	4,750.40	0.00	0.00	0.00
11,400.02	90.16	179.05	6,329.60	-4,801.55	-830.15	4,849.98	0.00	0.00	0.00
11,500.02	90.16	179.05	6,329.32	-4,901.54	-828.49	4,949.57	0.00	0.00	0.00
11,600.02	90.16	179.05	6,329.03	-5,001.53	-826.84	5,049.16	0.00	0.00	0.00
11,700.02	90.16	179.05	6,328.75	-5,101.51	-825.19	5,148.74	0.00	0.00	0.00
11,800.02	90.16	179.05	6,328.47	-5,201.50	-823.53	5,248.33	0.00	0.00	0.00
11,900.02	90.16	179.05	6,328.19	-5,301.48	-821.88	5,347.92	0.00	0.00	0.00
12,000.02	90.16	179.05	6,327.91	-5,401.47	-820.23	5,447.50	0.00	0.00	0.00
12,100.02	90.16	179.05	6,327.63	-5,501.46	-818.57	5,547.09	0.00	0.00	0.00
12,200.02	90.16	179.05	6,327.35	-5,601.44	-816.92	5,646.67	0.00	0.00	0.00
12,300.02	90.16	179.05	6,327.06	-5,701.43	-815.27	5,746.26	0.00	0.00	0.00
12,400.03	90.16	179.05	6,326.78	-5,801.41	-813.61	5,845.85	0.00	0.00	0.00
12,500.03	90.16	179.05	6,326.50	-5,901.40	-811.96	5,945.43	0.00	0.00	0.00
12,600.03	90.16	179.05	6,326.22	-6,001.39	-810.31	6,045.02	0.00	0.00	0.00
12,700.03	90.16	179.05	6,325.94	-6,101.37	-808.65	6,144.61	0.00	0.00	0.00
12,800.03	90.16	179.05	6,325.66	-6,201.36	-807.00	6,244.19	0.00	0.00	0.00
12,900.03	90.16	179.05	6,325.37	-6,301.35	-805.35	6,343.78	0.00	0.00	0.00
13,000.03	90.16	179.05	6,325.09	-6,401.33	-803.69	6,443.37	0.00	0.00	0.00
13,100.03	90.16	179.05	6,324.81	-6,501.32	-802.04	6,542.95	0.00	0.00	0.00
13,200.03	90.16	179.05	6,324.53	-6,601.30	-800.39	6,642.54	0.00	0.00	0.00
13,300.03	90.16	179.05	6,324.25	-6,701.29	-798.73	6,742.13	0.00	0.00	0.00
13,400.03	90.16	179.05	6,323.97	-6,801.28	-797.08	6,841.71	0.00	0.00	0.00
13,500.03	90.16	179.05	6,323.69	-6,901.26	-795.43	6,941.30	0.00	0.00	0.00
13,600.03	90.16	179.05	6,323.40	-7,001.25	-793.77	7,040.89	0.00	0.00	0.00
13,700.03	90.16	179.05	6,323.12	-7,101.23	-792.12	7,140.47	0.00	0.00	0.00
13,800.03	90.16	179.05	6,322.84	-7,201.22	-790.47	7,240.06	0.00	0.00	0.00
13,900.03	90.16	179.05	6,322.56	-7,301.21	-788.82	7,339.65	0.00	0.00	0.00
14,000.03	90.16	179.05	6,322.28	-7,401.19	-787.16	7,439.23	0.00	0.00	0.00
14,100.03	90.16	179.05	6,322.00	-7,501.18	-785.51	7,538.82	0.00	0.00	0.00
14,200.03	90.16	179.05	6,321.71	-7,601.17	-783.86	7,638.41	0.00	0.00	0.00
14,300.03	90.16	179.05	6,321.43	-7,701.15	-782.20	7,737.99	0.00	0.00	0.00
14,400.03	90.16	179.05	6,321.15	-7,801.14	-780.55	7,837.58	0.00	0.00	0.00
14,500.03	90.16	179.05	6,320.87	-7,901.12	-778.90	7,937.16	0.00	0.00	0.00
14,600.03	90.16	179.05	6,320.59	-8,001.11	-777.24	8,036.75	0.00	0.00	0.00
14,700.03	90.16	179.05	6,320.31	-8,101.10	-775.59	8,136.34	0.00	0.00	0.00
14,800.03	90.16	179.05	6,320.02	-8,201.08	-773.94	8,235.92	0.00	0.00	0.00
14,900.03	90.16	179.05	6,319.74	-8,301.07	-772.28	8,335.51	0.00	0.00	0.00
15,000.03	90.16	179.05	6,319.46	-8,401.05	-770.63	8,435.10	0.00	0.00	0.00
15,100.03	90.16	179.05	6,319.18	-8,501.04	-768.98	8,534.68	0.00	0.00	0.00
15,200.03	90.16	179.05	6,318.90	-8,601.03	-767.32	8,634.27	0.00	0.00	0.00

<b>Database:</b>	DB_Jul2216dt_v14	<b>Local Co-ordinate Reference:</b>	Well 70 Ranch 10-7-1L
<b>Company:</b>	Confluence Resources	<b>TVD Reference:</b>	RKB=4605+25 @ 4630.01ft
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	RKB=4605+25 @ 4630.01ft
<b>Site:</b>	Section 10 & 15 T04N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	70 Ranch 10-7-1L	<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	90.16	179.05	6,318.62	-8,701.01	-765.67	8,733.86	0.00	0.00	0.00	
15,400.03	90.16	179.05	6,318.34	-8,801.00	-764.02	8,833.44	0.00	0.00	0.00	
15,500.03	90.16	179.05	6,318.05	-8,900.99	-762.36	8,933.03	0.00	0.00	0.00	
15,600.03	90.16	179.05	6,317.77	-9,000.97	-760.71	9,032.62	0.00	0.00	0.00	
15,700.03	90.16	179.05	6,317.49	-9,100.96	-759.06	9,132.20	0.00	0.00	0.00	
15,800.03	90.16	179.05	6,317.21	-9,200.94	-757.40	9,231.79	0.00	0.00	0.00	
15,900.03	90.16	179.05	6,316.93	-9,300.93	-755.75	9,331.38	0.00	0.00	0.00	
16,000.03	90.16	179.05	6,316.65	-9,400.92	-754.10	9,430.96	0.00	0.00	0.00	
16,100.03	90.16	179.05	6,316.36	-9,500.90	-752.44	9,530.55	0.00	0.00	0.00	
16,200.03	90.16	179.05	6,316.08	-9,600.89	-750.79	9,630.14	0.00	0.00	0.00	
16,300.03	90.16	179.05	6,315.80	-9,700.87	-749.14	9,729.72	0.00	0.00	0.00	
16,400.03	90.16	179.05	6,315.52	-9,800.86	-747.48	9,829.31	0.00	0.00	0.00	
16,500.03	90.16	179.05	6,315.24	-9,900.85	-745.83	9,928.90	0.00	0.00	0.00	
16,584.78	90.16	179.05	6,315.00	-9,985.58	-744.43	10,013.29	0.00	0.00	0.00	
PBHL/TD 16584.78 MD 6315.00 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 70 Ranch 10-7-1L 4	0.00	0.00	6,315.00	-9,985.58	-744.43	14,638,772.09	1,799,180.13	40.30627000	-104.43054000	
- plan hits target center										
- Point										
LP 70 Ranch 10-7-1L 47	0.00	0.00	6,342.00	-396.93	-902.98	14,648,359.49	1,798,959.61	40.33260000	-104.43111000	
- plan hits target center										
- Point										

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	
5,406.73	5,373.42	46.89	-130.22	Begin 40.67° tangent section	
5,960.03	5,793.06	169.05	-469.51	Begin 10°/100' build/turn	
6,994.78	6,342.00	-396.93	-902.98	LP Begin 90.16° lateral section	
16,584.78	6,315.00	-9,985.58	-744.43	PBHL/TD 16584.78 MD 6315.00 TVD	

<b>Database:</b>	DB_Jul2216dt_v14	<b>Local Co-ordinate Reference:</b>	Well 70 Ranch 10-7-1L
<b>Company:</b>	Confluence Resources	<b>TVD Reference:</b>	RKB=4605+25 @ 4630.01ft
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	RKB=4605+25 @ 4630.01ft
<b>Site:</b>	Section 10 & 15 T04N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	70 Ranch 10-7-1L	<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 10 & 15 T04N-R63W			
Site Position:		Northing:	14,648,687.65 usft	Latitude:	40.33348000
From:	Lat/Long	Easting:	1,800,150.33 usft	Longitude:	-104.42683000
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.37 °

Well	70 Ranch 10-7-1L, Surf Loc: 82 FNL 1675 FWL Section 10-T04N-R63W					
Well Position	+N/-S	0.00 ft	Northing:	14,648,762.25 usft	Latitude:	40.33369000
	+E/-W	0.00 ft	Easting:	1,799,860.00 usft	Longitude:	-104.42787000
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,605.01 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	5/7/2017	8.17	66.97	52,358.20000000

<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	184.26

<b>Plan Survey Tool Program</b>	<b>Date</b>	5/9/2017		
<b>Depth From (ft)</b>	<b>Depth To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	16,584.78 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	
5,406.73	40.67	289.80	5,373.42	46.89	-130.22	10.00	10.00	0.00	289.80	
5,960.03	40.67	289.80	5,793.06	169.05	-469.51	0.00	0.00	0.00	0.00	
6,994.78	90.16	179.05	6,342.00	-396.93	-902.98	10.00	4.78	-10.70	-105.93	LP 70 Ranch 10-7-1L
16,584.78	90.16	179.05	6,315.00	-9,985.58	-744.43	0.00	0.00	0.00	0.00	BHL 70 Ranch 10-7-1

<b>Database:</b>	DB_Jul2216dt_v14	<b>Local Co-ordinate Reference:</b>	Well 70 Ranch 10-7-1L
<b>Company:</b>	Confluence Resources	<b>TVD Reference:</b>	RKB=4605+25 @ 4630.01ft
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	RKB=4605+25 @ 4630.01ft
<b>Site:</b>	Section 10 & 15 T04N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	70 Ranch 10-7-1L	<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	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
100.00	0.00	0.00	100.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
200.00	0.00	0.00	200.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
300.00	0.00	0.00	300.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
400.00	0.00	0.00	400.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
500.00	0.00	0.00	500.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
600.00	0.00	0.00	600.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
700.00	0.00	0.00	700.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
800.00	0.00	0.00	800.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
900.00	0.00	0.00	900.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
1,100.00	0.00	0.00	1,100.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
1,200.00	0.00	0.00	1,200.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
1,300.00	0.00	0.00	1,300.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
1,400.00	0.00	0.00	1,400.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
1,500.00	0.00	0.00	1,500.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
1,600.00	0.00	0.00	1,600.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
1,700.00	0.00	0.00	1,700.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
1,800.00	0.00	0.00	1,800.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
1,900.00	0.00	0.00	1,900.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
2,000.00	0.00	0.00	2,000.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
2,100.00	0.00	0.00	2,100.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
2,200.00	0.00	0.00	2,200.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
2,300.00	0.00	0.00	2,300.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
2,400.00	0.00	0.00	2,400.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
2,500.01	0.00	0.00	2,500.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
2,600.01	0.00	0.00	2,600.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
2,700.01	0.00	0.00	2,700.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
2,800.01	0.00	0.00	2,800.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
2,900.01	0.00	0.00	2,900.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
3,000.01	0.00	0.00	3,000.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
3,100.01	0.00	0.00	3,100.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
3,200.01	0.00	0.00	3,200.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
3,300.01	0.00	0.00	3,300.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
3,400.01	0.00	0.00	3,400.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
3,500.01	0.00	0.00	3,500.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
3,600.01	0.00	0.00	3,600.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
3,700.01	0.00	0.00	3,700.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
3,800.01	0.00	0.00	3,800.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
3,900.01	0.00	0.00	3,900.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
4,000.01	0.00	0.00	4,000.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
4,100.01	0.00	0.00	4,100.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
4,200.01	0.00	0.00	4,200.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
4,300.01	0.00	0.00	4,300.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
4,400.01	0.00	0.00	4,400.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
4,500.01	0.00	0.00	4,500.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
4,600.01	0.00	0.00	4,600.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
4,700.01	0.00	0.00	4,700.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
4,800.01	0.00	0.00	4,800.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
4,900.01	0.00	0.00	4,900.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
5,000.00	0.00	0.00	5,000.00	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
KOP Begin 10°/100' build									
5,000.01	0.00	289.80	5,000.01	0.00	0.00	14,648,762.25	1,799,860.00	40.33369000	-104.42787000
5,100.01	10.00	289.80	5,099.50	2.95	-8.19	14,648,765.15	1,799,851.79	40.33369809	-104.42789940



<b>Database:</b>	DB_Jul2216dt_v14	<b>Local Co-ordinate Reference:</b>	Well 70 Ranch 10-7-1L
<b>Company:</b>	Confluence Resources	<b>TVD Reference:</b>	RKB=4605+25 @ 4630.01ft
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	RKB=4605+25 @ 4630.01ft
<b>Site:</b>	Section 10 & 15 T04N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	70 Ranch 10-7-1L	<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	289.80	5,195.97	11.71	-32.51	14,648,773.75	1,799,827.41	40.33372214	-104.42798667
5,300.01	30.00	289.80	5,286.49	26.01	-72.23	14,648,787.79	1,799,787.61	40.33376140	-104.42812917
5,400.01	40.00	289.80	5,368.30	45.41	-126.13	14,648,806.85	1,799,733.59	40.33381469	-104.42832257
5,406.73	40.67	289.80	5,373.42	46.89	-130.22	14,648,808.29	1,799,729.48	40.33381874	-104.42833727
<b>Begin 40.67° tangent section</b>									
5,500.01	40.67	289.80	5,444.17	67.48	-187.42	14,648,828.52	1,799,672.15	40.33387529	-104.42854251
5,600.01	40.67	289.80	5,520.01	89.56	-248.74	14,648,850.20	1,799,610.69	40.33393592	-104.42876254
5,700.01	40.67	289.80	5,595.86	111.64	-310.06	14,648,871.88	1,799,549.23	40.33399654	-104.42898257
5,800.01	40.67	289.80	5,671.70	133.72	-371.38	14,648,893.56	1,799,487.76	40.33405717	-104.42920261
5,900.01	40.67	289.80	5,747.54	155.80	-432.70	14,648,915.24	1,799,426.30	40.33411779	-104.42942264
5,960.03	40.67	289.80	5,793.06	169.05	-469.51	14,648,928.26	1,799,389.42	40.33415417	-104.42955469
<b>Begin 10°/100' build/turn</b>									
6,000.01	39.73	283.78	5,823.61	176.51	-494.19	14,648,935.56	1,799,364.69	40.33417466	-104.42964326
6,100.01	38.81	268.02	5,901.22	183.05	-556.71	14,648,941.70	1,799,302.13	40.33419263	-104.42986759
6,200.01	40.04	252.36	5,978.66	172.19	-618.84	14,648,930.44	1,799,240.07	40.33416280	-104.43009053
6,300.01	43.21	238.06	6,053.57	144.26	-678.69	14,648,902.12	1,799,180.39	40.33408609	-104.43030531
6,400.01	47.95	225.70	6,123.68	100.10	-734.46	14,648,857.60	1,799,124.92	40.33396483	-104.43050539
6,500.01	53.81	215.23	6,186.85	41.06	-784.43	14,648,798.24	1,799,075.32	40.33380270	-104.43068470
6,600.01	60.45	206.31	6,241.18	-31.07	-827.10	14,648,725.83	1,799,033.12	40.33360463	-104.43083779
6,700.01	67.60	198.54	6,285.00	-114.10	-861.16	14,648,642.58	1,798,999.60	40.33337663	-104.43096001
6,800.01	75.10	191.54	6,316.99	-205.51	-885.59	14,648,551.02	1,798,975.76	40.33312563	-104.43104765
6,900.01	82.79	185.02	6,336.17	-302.51	-899.64	14,648,453.93	1,798,962.34	40.33285927	-104.43109803
6,994.78	90.16	179.05	6,342.00	-396.93	-902.98	14,648,359.49	1,798,959.61	40.33260000	-104.43111000
<b>LP Begin 90.16° lateral section</b>									
7,000.01	90.16	179.05	6,341.99	-402.16	-902.89	14,648,354.26	1,798,959.73	40.33258563	-104.43110969
7,100.01	90.16	179.05	6,341.70	-502.15	-901.24	14,648,254.29	1,798,962.03	40.33231107	-104.43110375
7,200.01	90.16	179.05	6,341.42	-602.14	-899.58	14,648,154.31	1,798,964.33	40.33203651	-104.43109780
7,300.01	90.16	179.05	6,341.14	-702.12	-897.93	14,648,054.34	1,798,966.63	40.33176196	-104.43109186
7,400.01	90.16	179.05	6,340.86	-802.11	-896.28	14,647,954.37	1,798,968.93	40.33148740	-104.43108591
7,500.02	90.16	179.05	6,340.58	-902.09	-894.62	14,647,854.39	1,798,971.23	40.33121284	-104.43107997
7,600.02	90.16	179.05	6,340.30	-1,002.08	-892.97	14,647,754.42	1,798,973.53	40.33093829	-104.43107402
7,700.02	90.16	179.05	6,340.01	-1,102.07	-891.32	14,647,654.45	1,798,975.83	40.33066373	-104.43106808
7,800.02	90.16	179.05	6,339.73	-1,202.05	-889.66	14,647,554.47	1,798,978.13	40.33038917	-104.43106213
7,900.02	90.16	179.05	6,339.45	-1,302.04	-888.01	14,647,454.50	1,798,980.43	40.33011462	-104.43105619
8,000.02	90.16	179.05	6,339.17	-1,402.02	-886.36	14,647,354.53	1,798,982.73	40.32984006	-104.43105024
8,100.02	90.16	179.05	6,338.89	-1,502.01	-884.70	14,647,254.55	1,798,985.03	40.32956550	-104.43104430
8,200.02	90.16	179.05	6,338.61	-1,602.00	-883.05	14,647,154.58	1,798,987.33	40.32929094	-104.43103835
8,300.02	90.16	179.05	6,338.33	-1,701.98	-881.40	14,647,054.61	1,798,989.63	40.32901639	-104.43103241
8,400.02	90.16	179.05	6,338.04	-1,801.97	-879.74	14,646,954.64	1,798,991.93	40.32874183	-104.43102646
8,500.02	90.16	179.05	6,337.76	-1,901.96	-878.09	14,646,854.66	1,798,994.23	40.32846727	-104.43102052
8,600.02	90.16	179.05	6,337.48	-2,001.94	-876.44	14,646,754.69	1,798,996.53	40.32819272	-104.43101457
8,700.02	90.16	179.05	6,337.20	-2,101.93	-874.78	14,646,654.72	1,798,998.83	40.32791816	-104.43100863
8,800.02	90.16	179.05	6,336.92	-2,201.91	-873.13	14,646,554.74	1,799,001.12	40.32764360	-104.43100268
8,900.02	90.16	179.05	6,336.64	-2,301.90	-871.48	14,646,454.77	1,799,003.42	40.32736905	-104.43099674
9,000.02	90.16	179.05	6,336.35	-2,401.89	-869.82	14,646,354.80	1,799,005.72	40.32709449	-104.43099079
9,100.02	90.16	179.05	6,336.07	-2,501.87	-868.17	14,646,254.82	1,799,008.02	40.32681993	-104.43098485
9,200.02	90.16	179.05	6,335.79	-2,601.86	-866.52	14,646,154.85	1,799,010.32	40.32654537	-104.43097890
9,300.02	90.16	179.05	6,335.51	-2,701.84	-864.86	14,646,054.88	1,799,012.62	40.32627082	-104.43097296
9,400.02	90.16	179.05	6,335.23	-2,801.83	-863.21	14,645,954.90	1,799,014.92	40.32599626	-104.43096701
9,500.02	90.16	179.05	6,334.95	-2,901.82	-861.56	14,645,854.93	1,799,017.22	40.32572170	-104.43096107
9,600.02	90.16	179.05	6,334.67	-3,001.80	-859.90	14,645,754.96	1,799,019.52	40.32544715	-104.43095513
9,700.02	90.16	179.05	6,334.38	-3,101.79	-858.25	14,645,654.98	1,799,021.82	40.32517259	-104.43094918
9,800.02	90.16	179.05	6,334.10	-3,201.78	-856.60	14,645,555.01	1,799,024.12	40.32489803	-104.43094324
9,900.02	90.16	179.05	6,333.82	-3,301.76	-854.94	14,645,455.04	1,799,026.42	40.32462347	-104.43093729

<b>Database:</b>	DB_Jul2216dt_v14	<b>Local Co-ordinate Reference:</b>	Well 70 Ranch 10-7-1L
<b>Company:</b>	Confluence Resources	<b>TVD Reference:</b>	RKB=4605+25 @ 4630.01ft
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	RKB=4605+25 @ 4630.01ft
<b>Site:</b>	Section 10 & 15 T04N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	70 Ranch 10-7-1L	<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	90.16	179.05	6,333.54	-3,401.75	-853.29	14,645,355.06	1,799,028.72	40.32434892	-104.43093135
10,100.02	90.16	179.05	6,333.26	-3,501.73	-851.64	14,645,255.09	1,799,031.02	40.32407436	-104.43092540
10,200.02	90.16	179.05	6,332.98	-3,601.72	-849.99	14,645,155.12	1,799,033.32	40.32379980	-104.43091946
10,300.02	90.16	179.05	6,332.69	-3,701.71	-848.33	14,645,055.15	1,799,035.62	40.32352525	-104.43091351
10,400.02	90.16	179.05	6,332.41	-3,801.69	-846.68	14,644,955.17	1,799,037.92	40.32325069	-104.43090757
10,500.02	90.16	179.05	6,332.13	-3,901.68	-845.03	14,644,855.20	1,799,040.22	40.32297613	-104.43090163
10,600.02	90.16	179.05	6,331.85	-4,001.66	-843.37	14,644,755.23	1,799,042.51	40.32270157	-104.43089568
10,700.02	90.16	179.05	6,331.57	-4,101.65	-841.72	14,644,655.25	1,799,044.81	40.32242702	-104.43088974
10,800.02	90.16	179.05	6,331.29	-4,201.64	-840.07	14,644,555.28	1,799,047.11	40.32215246	-104.43088379
10,900.02	90.16	179.05	6,331.01	-4,301.62	-838.41	14,644,455.31	1,799,049.41	40.32187790	-104.43087785
11,000.02	90.16	179.05	6,330.72	-4,401.61	-836.76	14,644,355.33	1,799,051.71	40.32160334	-104.43087191
11,100.02	90.16	179.05	6,330.44	-4,501.60	-835.11	14,644,255.36	1,799,054.01	40.32132879	-104.43086596
11,200.02	90.16	179.05	6,330.16	-4,601.58	-833.45	14,644,155.39	1,799,056.31	40.32105423	-104.43086002
11,300.02	90.16	179.05	6,329.88	-4,701.57	-831.80	14,644,055.41	1,799,058.61	40.32077967	-104.43085407
11,400.02	90.16	179.05	6,329.60	-4,801.55	-830.15	14,643,955.44	1,799,060.91	40.32050511	-104.43084813
11,500.02	90.16	179.05	6,329.32	-4,901.54	-828.49	14,643,855.47	1,799,063.21	40.32023056	-104.43084219
11,600.02	90.16	179.05	6,329.03	-5,001.53	-826.84	14,643,755.49	1,799,065.51	40.31995600	-104.43083624
11,700.02	90.16	179.05	6,328.75	-5,101.51	-825.19	14,643,655.52	1,799,067.81	40.31968144	-104.43083030
11,800.02	90.16	179.05	6,328.47	-5,201.50	-823.53	14,643,555.55	1,799,070.11	40.31940688	-104.43082436
11,900.02	90.16	179.05	6,328.19	-5,301.48	-821.88	14,643,455.57	1,799,072.41	40.31913233	-104.43081841
12,000.02	90.16	179.05	6,327.91	-5,401.47	-820.23	14,643,355.60	1,799,074.71	40.31885777	-104.43081247
12,100.02	90.16	179.05	6,327.63	-5,501.46	-818.57	14,643,255.63	1,799,077.01	40.31858321	-104.43080652
12,200.02	90.16	179.05	6,327.35	-5,601.44	-816.92	14,643,155.65	1,799,079.31	40.31830865	-104.43080058
12,300.02	90.16	179.05	6,327.06	-5,701.43	-815.27	14,643,055.68	1,799,081.61	40.31803410	-104.43079464
12,400.03	90.16	179.05	6,326.78	-5,801.41	-813.61	14,642,955.71	1,799,083.91	40.31775954	-104.43078869
12,500.03	90.16	179.05	6,326.50	-5,901.40	-811.96	14,642,855.74	1,799,086.20	40.31748498	-104.43078275
12,600.03	90.16	179.05	6,326.22	-6,001.39	-810.31	14,642,755.76	1,799,088.50	40.31721042	-104.43077681
12,700.03	90.16	179.05	6,325.94	-6,101.37	-808.65	14,642,655.79	1,799,090.80	40.31693587	-104.43077086
12,800.03	90.16	179.05	6,325.66	-6,201.36	-807.00	14,642,555.82	1,799,093.10	40.31666131	-104.43076492
12,900.03	90.16	179.05	6,325.37	-6,301.35	-805.35	14,642,455.84	1,799,095.40	40.31638675	-104.43075898
13,000.03	90.16	179.05	6,325.09	-6,401.33	-803.69	14,642,355.87	1,799,097.70	40.31611219	-104.43075303
13,100.03	90.16	179.05	6,324.81	-6,501.32	-802.04	14,642,255.90	1,799,100.00	40.31583764	-104.43074709
13,200.03	90.16	179.05	6,324.53	-6,601.30	-800.39	14,642,155.92	1,799,102.30	40.31556308	-104.43074115
13,300.03	90.16	179.05	6,324.25	-6,701.29	-798.73	14,642,055.95	1,799,104.60	40.31528852	-104.43073520
13,400.03	90.16	179.05	6,323.97	-6,801.28	-797.08	14,641,955.98	1,799,106.90	40.31501396	-104.43072926
13,500.03	90.16	179.05	6,323.69	-6,901.26	-795.43	14,641,856.00	1,799,109.20	40.31473941	-104.43072332
13,600.03	90.16	179.05	6,323.40	-7,001.25	-793.77	14,641,756.03	1,799,111.50	40.31446485	-104.43071737
13,700.03	90.16	179.05	6,323.12	-7,101.23	-792.12	14,641,656.06	1,799,113.80	40.31419029	-104.43071143
13,800.03	90.16	179.05	6,322.84	-7,201.22	-790.47	14,641,556.08	1,799,116.10	40.31391573	-104.43070549
13,900.03	90.16	179.05	6,322.56	-7,301.21	-788.82	14,641,456.11	1,799,118.40	40.31364118	-104.43069955
14,000.03	90.16	179.05	6,322.28	-7,401.19	-787.16	14,641,356.14	1,799,120.70	40.31336662	-104.43069360
14,100.03	90.16	179.05	6,322.00	-7,501.18	-785.51	14,641,256.16	1,799,123.00	40.31309206	-104.43068766
14,200.03	90.16	179.05	6,321.71	-7,601.17	-783.86	14,641,156.19	1,799,125.30	40.31281751	-104.43068172
14,300.03	90.16	179.05	6,321.43	-7,701.15	-782.20	14,641,056.22	1,799,127.60	40.31254295	-104.43067577
14,400.03	90.16	179.05	6,321.15	-7,801.14	-780.55	14,640,956.25	1,799,129.89	40.31226840	-104.43066983
14,500.03	90.16	179.05	6,320.87	-7,901.12	-778.90	14,640,856.27	1,799,132.19	40.31199384	-104.43066389
14,600.03	90.16	179.05	6,320.59	-8,001.11	-777.24	14,640,756.30	1,799,134.49	40.31171928	-104.43065795
14,700.03	90.16	179.05	6,320.31	-8,101.10	-775.59	14,640,656.33	1,799,136.79	40.31144472	-104.43065200
14,800.03	90.16	179.05	6,320.02	-8,201.08	-773.94	14,640,556.35	1,799,139.09	40.31117016	-104.43064606
14,900.03	90.16	179.05	6,319.74	-8,301.07	-772.28	14,640,456.38	1,799,141.39	40.31089561	-104.43064012
15,000.03	90.16	179.05	6,319.46	-8,401.05	-770.63	14,640,356.41	1,799,143.69	40.31062105	-104.43063417
15,100.03	90.16	179.05	6,319.18	-8,501.04	-768.98	14,640,256.43	1,799,145.99	40.31034649	-104.43062823
15,200.03	90.16	179.05	6,318.90	-8,601.03	-767.32	14,640,156.46	1,799,148.29	40.31007193	-104.43062229
15,300.03	90.16	179.05	6,318.62	-8,701.01	-765.67	14,640,056.49	1,799,150.59	40.30979738	-104.43061635
15,400.03	90.16	179.05	6,318.34	-8,801.00	-764.02	14,639,956.51	1,799,152.89	40.30952282	-104.43061040

<b>Database:</b>	DB_Jul2216dt_v14	<b>Local Co-ordinate Reference:</b>	Well 70 Ranch 10-7-1L
<b>Company:</b>	Confluence Resources	<b>TVD Reference:</b>	RKB=4605+25 @ 4630.01ft
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	RKB=4605+25 @ 4630.01ft
<b>Site:</b>	Section 10 & 15 T04N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	70 Ranch 10-7-1L	<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	90.16	179.05	6,318.05	-8,900.99	-762.36	14,639,856.54	1,799,155.19	40.30924826	-104.43060446
15,600.03	90.16	179.05	6,317.77	-9,000.97	-760.71	14,639,756.57	1,799,157.49	40.30897370	-104.43059852
15,700.03	90.16	179.05	6,317.49	-9,100.96	-759.06	14,639,656.59	1,799,159.79	40.30869914	-104.43059258
15,800.03	90.16	179.05	6,317.21	-9,200.94	-757.40	14,639,556.62	1,799,162.09	40.30842459	-104.43058664
15,900.03	90.16	179.05	6,316.93	-9,300.93	-755.75	14,639,456.65	1,799,164.39	40.30815003	-104.43058069
16,000.03	90.16	179.05	6,316.65	-9,400.92	-754.10	14,639,356.67	1,799,166.69	40.30787547	-104.43057475
16,100.03	90.16	179.05	6,316.36	-9,500.90	-752.44	14,639,256.70	1,799,168.99	40.30760091	-104.43056881
16,200.03	90.16	179.05	6,316.08	-9,600.89	-750.79	14,639,156.73	1,799,171.29	40.30732635	-104.43056287
16,300.03	90.16	179.05	6,315.80	-9,700.87	-749.14	14,639,056.76	1,799,173.58	40.30705180	-104.43055692
16,400.03	90.16	179.05	6,315.52	-9,800.86	-747.48	14,638,956.78	1,799,175.88	40.30677724	-104.43055098
16,500.03	90.16	179.05	6,315.24	-9,900.85	-745.83	14,638,856.81	1,799,178.18	40.30650268	-104.43054504
16,584.78	90.16	179.05	6,315.00	-9,985.58	-744.43	14,638,772.09	1,799,180.13	40.30627000	-104.43054000
PBHL/TD 16584.78 MD 6315.00 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 70 Ranch 10-7-1L 4 - plan hits target center - Point	0.00	0.00	6,315.00	-9,985.58	-744.43	14,638,772.09	1,799,180.13	40.30627000	-104.43054000
LP 70 Ranch 10-7-1L 47 - plan hits target center - Point	0.00	0.00	6,342.00	-396.93	-902.98	14,648,359.49	1,798,959.61	40.33260000	-104.43111000

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	
5,406.73	5,373.42	46.89	-130.22	Begin 40.67° tangent section	
5,960.03	5,793.06	169.05	-469.51	Begin 10°/100' build/turn	
6,994.78	6,342.00	-396.93	-902.98	LP Begin 90.16° lateral section	
16,584.78	6,315.00	-9,985.58	-744.43	PBHL/TD 16584.78 MD 6315.00 TVD	