



Well: Colorado State 207-3601H
Site: Section 36-T12N-R64W
Project: Weld County, Colorado
Design: plan2

DESIGN TARGET DETAILS

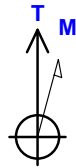
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LP Colorado State 207-3601H 600 FNL 1003 FWL p2	7682.00	955.00	-274.51	1598168.45	3275946.45	40.97106399	-104.50076700
PBHL Colorado State 207-3601H 300 FNL 1056 FWL p2	7682.00	-8868.49	-304.73	1588345.26	3276027.03	40.94410299	-104.50087600

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	KOP Begin 2°/100' build
3	3564.95	21.30	351.27	3540.59	193.41	-29.69	2.00	351.27	-192.40	Begin 21.30° tangent
4	7175.66	21.30	351.27	6904.68	1489.76	-228.66	0.00	0.00	-1482.02	Begin 10°/100' build/turn
5	8286.07	90.00	179.99	7682.00	955.00	-274.51	10.00	-170.65	-946.10	Begin 90° lateral section
6	18110.55	90.00	179.99	7682.00	-8869.47	-272.95	0.00	0.00	8873.67	PBHL/TD 18110.55 MD/7682.00 TVD

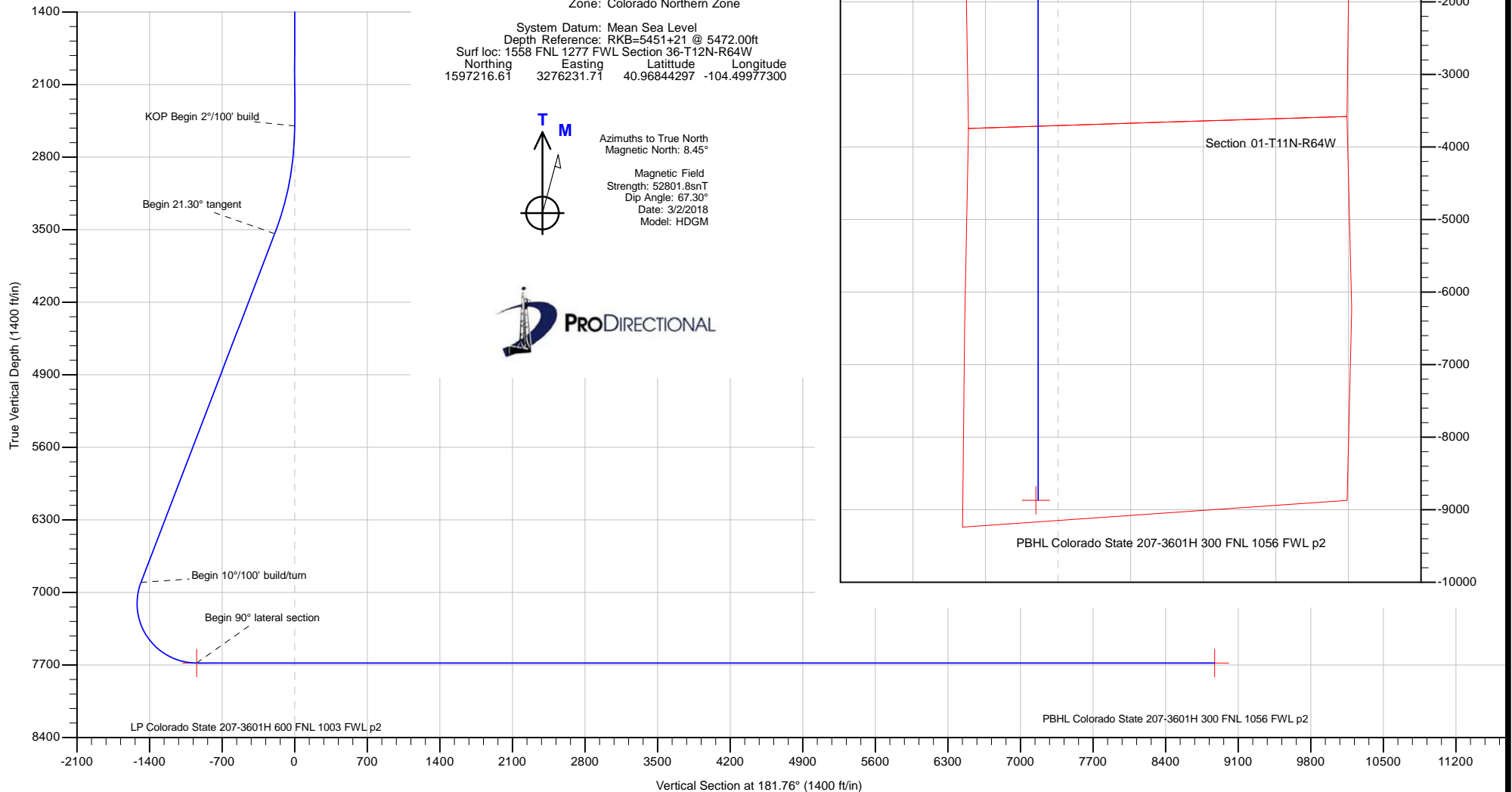
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone

System Datum: Mean Sea Level
Depth Reference: RKB=5451+21 @ 5472.00ft
Surf loc: 1558 FNL 1277 FWL Section 36-T12N-R64W
Northing Easting Latitude Longitude
1597216.61 3276231.71 40.96844297 -104.49977300



Azimuths to True North
Magnetic North: 8.45°

Magnetic Field
Strength: 52801.8snT
Dip Angle: 67.30°
Date: 3/2/2018
Model: HDGM



Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Colorado State 207-3601H
Company:	Clear Creek Resources Partners	TVD Reference:	RKB=5451+21 @ 5472.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5451+21 @ 5472.00ft
Site:	Section 36-T12N-R64W	North Reference:	True
Well:	Colorado State 207-3601H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

Project	Weld County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		Section 36-T12N-R64W			
Site Position:		Northing:	1,596,167.27 usft	Latitude:	40.96551935
From:	Map	Easting:	3,277,644.08 usft	Longitude:	-104.49470236
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.65 °

Well	Colorado State 207-3601H, Surf loc: 1558 FNL 1277 FWL Section 36-T12N-R64W					
Well Position	+N/-S	1,065.29 ft	Northing:	1,597,216.61 usft	Latitude:	40.96844297
	+E/-W	-1,400.39 ft	Easting:	3,276,231.71 usft	Longitude:	-104.49977300
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,451.00 ft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	3/2/2018	8.45	67.30	52,801.80000000

Design	plan2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	181.76

Plan Survey Tool Program	Date	3/7/2018		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,109.59 plan2 (Original Hole)	MWD	
			OWSG MWD - Standard	

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	
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,564.95	21.30	351.27	3,540.59	193.41	-29.69	2.00	2.00	0.00	351.27	
7,175.66	21.30	351.27	6,904.68	1,489.76	-228.66	0.00	0.00	0.00	0.00	
8,286.07	90.00	179.99	7,682.00	955.00	-274.51	10.00	6.19	-15.43	-170.65	LP Colorado State 20
18,110.55	90.00	179.99	7,682.00	-8,869.47	-272.95	0.00	0.00	0.00	0.00	PBHL Colorado State

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Colorado State 207-3601H
Company:	Clear Creek Resources Partners	TVD Reference:	RKB=5451+21 @ 5472.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5451+21 @ 5472.00ft
Site:	Section 36-T12N-R64W	North Reference:	True
Well:	Colorado State 207-3601H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP Begin 2°/100' build									
2,600.01	2.00	351.27	2,599.98	1.73	-0.26	-1.72	2.00	2.00	0.00
2,700.01	4.00	351.27	2,699.84	6.90	-1.06	-6.86	2.00	2.00	0.00
2,800.01	6.00	351.27	2,799.46	15.51	-2.38	-15.43	2.00	2.00	0.00
2,900.01	8.00	351.27	2,898.71	27.56	-4.23	-27.41	2.00	2.00	0.00
3,000.01	10.00	351.27	2,997.47	43.02	-6.60	-42.80	2.00	2.00	0.00
3,100.01	12.00	351.27	3,095.63	61.88	-9.50	-61.56	2.00	2.00	0.00
3,200.01	14.00	351.27	3,193.06	84.11	-12.91	-83.68	2.00	2.00	0.00
3,300.01	16.00	351.27	3,289.65	109.69	-16.84	-109.12	2.00	2.00	0.00
3,400.01	18.00	351.27	3,385.28	138.59	-21.27	-137.87	2.00	2.00	0.00
3,500.01	20.00	351.27	3,479.82	170.77	-26.21	-169.88	2.00	2.00	0.00
3,564.95	21.30	351.27	3,540.59	193.41	-29.69	-192.40	2.00	2.00	0.00
Begin 21.30° tangent									
3,600.01	21.30	351.27	3,573.25	205.99	-31.62	-204.92	0.00	0.00	0.00
3,700.01	21.30	351.27	3,666.42	241.90	-37.13	-240.64	0.00	0.00	0.00
3,800.01	21.30	351.27	3,759.59	277.80	-42.64	-276.36	0.00	0.00	0.00
3,900.01	21.30	351.27	3,852.76	313.70	-48.15	-312.07	0.00	0.00	0.00
4,000.01	21.30	351.27	3,945.93	349.61	-53.66	-347.79	0.00	0.00	0.00
4,100.01	21.30	351.27	4,039.10	385.51	-59.17	-383.51	0.00	0.00	0.00
4,200.01	21.30	351.27	4,132.27	421.41	-64.68	-419.22	0.00	0.00	0.00
4,300.01	21.30	351.27	4,225.44	457.32	-70.19	-454.94	0.00	0.00	0.00
4,400.01	21.30	351.27	4,318.61	493.22	-75.70	-490.66	0.00	0.00	0.00
4,500.01	21.30	351.27	4,411.78	529.12	-81.21	-526.37	0.00	0.00	0.00
4,600.01	21.30	351.27	4,504.95	565.02	-86.73	-562.09	0.00	0.00	0.00
4,700.01	21.30	351.27	4,598.12	600.93	-92.24	-597.81	0.00	0.00	0.00
4,800.01	21.30	351.27	4,691.29	636.83	-97.75	-633.52	0.00	0.00	0.00
4,900.01	21.30	351.27	4,784.46	672.73	-103.26	-669.24	0.00	0.00	0.00

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Project:	Weld County, Colorado	MD Reference:	RKB=5451+21 @ 5472.00ft
Site:	Section 36-T12N-R64W	North Reference:	True
Well:	Colorado State 207-3601H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,000.01	21.30	351.27	4,877.63	708.64	-108.77	-704.96	0.00	0.00	0.00
5,100.01	21.30	351.27	4,970.80	744.54	-114.28	-740.67	0.00	0.00	0.00
5,200.01	21.30	351.27	5,063.97	780.44	-119.79	-776.39	0.00	0.00	0.00
5,300.01	21.30	351.27	5,157.14	816.35	-125.30	-812.11	0.00	0.00	0.00
5,400.01	21.30	351.27	5,250.31	852.25	-130.81	-847.82	0.00	0.00	0.00
5,500.01	21.30	351.27	5,343.48	888.15	-136.32	-883.54	0.00	0.00	0.00
5,600.01	21.30	351.27	5,436.65	924.06	-141.83	-919.26	0.00	0.00	0.00
5,700.01	21.30	351.27	5,529.82	959.96	-147.34	-954.97	0.00	0.00	0.00
5,800.01	21.30	351.27	5,622.99	995.86	-152.85	-990.69	0.00	0.00	0.00
5,900.01	21.30	351.27	5,716.16	1,031.76	-158.37	-1,026.41	0.00	0.00	0.00
6,000.01	21.30	351.27	5,809.33	1,067.67	-163.88	-1,062.12	0.00	0.00	0.00
6,100.01	21.30	351.27	5,902.50	1,103.57	-169.39	-1,097.84	0.00	0.00	0.00
6,200.01	21.30	351.27	5,995.67	1,139.47	-174.90	-1,133.55	0.00	0.00	0.00
6,300.01	21.30	351.27	6,088.84	1,175.38	-180.41	-1,169.27	0.00	0.00	0.00
6,400.01	21.30	351.27	6,182.01	1,211.28	-185.92	-1,204.99	0.00	0.00	0.00
6,500.01	21.30	351.27	6,275.18	1,247.18	-191.43	-1,240.70	0.00	0.00	0.00
6,600.01	21.30	351.27	6,368.35	1,283.09	-196.94	-1,276.42	0.00	0.00	0.00
6,700.01	21.30	351.27	6,461.52	1,318.99	-202.45	-1,312.14	0.00	0.00	0.00
6,800.01	21.30	351.27	6,554.69	1,354.89	-207.96	-1,347.85	0.00	0.00	0.00
6,900.01	21.30	351.27	6,647.86	1,390.80	-213.47	-1,383.57	0.00	0.00	0.00
7,000.01	21.30	351.27	6,741.03	1,426.70	-218.98	-1,419.29	0.00	0.00	0.00
7,100.01	21.30	351.27	6,834.20	1,462.60	-224.49	-1,455.00	0.00	0.00	0.00
7,175.66	21.30	351.27	6,904.68	1,489.76	-228.66	-1,482.02	0.00	0.00	0.00
Begin 10°/100' build/turn									
7,200.01	18.90	350.05	6,927.55	1,498.02	-230.02	-1,490.24	9.99	-9.85	-5.01
7,300.01	9.24	338.70	7,024.45	1,521.51	-235.75	-1,513.54	10.00	-9.66	-11.35
7,400.01	3.66	247.59	7,123.95	1,527.79	-241.63	-1,519.64	10.00	-5.59	-91.11
7,500.02	11.88	196.31	7,223.03	1,516.67	-247.48	-1,508.34	10.00	8.22	-51.29
7,600.02	21.65	188.55	7,318.68	1,488.48	-253.12	-1,479.99	10.00	9.77	-7.75
7,700.02	31.56	185.51	7,407.99	1,444.08	-258.39	-1,435.45	10.00	9.91	-3.04
7,800.02	41.51	183.82	7,488.24	1,384.82	-263.13	-1,376.07	10.00	9.95	-1.69
7,900.02	51.47	182.69	7,557.00	1,312.50	-267.18	-1,303.66	10.00	9.97	-1.13
8,000.02	61.45	181.83	7,612.18	1,229.32	-270.43	-1,220.42	10.00	9.97	-0.85
8,100.02	71.43	181.13	7,652.11	1,137.81	-272.77	-1,128.88	10.00	9.98	-0.70
8,200.02	81.41	180.50	7,675.56	1,040.73	-274.14	-1,031.81	10.00	9.98	-0.63
8,286.07	90.00	179.99	7,682.00	955.00	-274.51	-946.10	10.00	9.98	-0.59
Begin 90° lateral section									
8,300.02	90.00	179.99	7,682.00	941.06	-274.51	-932.17	0.00	0.00	0.00
8,400.02	90.00	179.99	7,682.00	841.06	-274.49	-832.22	0.00	0.00	0.00
8,500.02	90.00	179.99	7,682.00	741.06	-274.47	-732.26	0.00	0.00	0.00
8,600.02	90.00	179.99	7,682.00	641.06	-274.46	-632.31	0.00	0.00	0.00
8,700.02	90.00	179.99	7,682.00	541.06	-274.44	-532.36	0.00	0.00	0.00
8,800.02	90.00	179.99	7,682.00	441.06	-274.43	-432.41	0.00	0.00	0.00
8,900.02	90.00	179.99	7,682.00	341.06	-274.41	-332.45	0.00	0.00	0.00
9,000.02	90.00	179.99	7,682.00	241.06	-274.39	-232.50	0.00	0.00	0.00
9,100.02	90.00	179.99	7,682.00	141.06	-274.38	-132.55	0.00	0.00	0.00
9,200.02	90.00	179.99	7,682.00	41.06	-274.36	-32.60	0.00	0.00	0.00
9,300.02	90.00	179.99	7,682.00	-58.94	-274.35	67.36	0.00	0.00	0.00
9,400.02	90.00	179.99	7,682.00	-158.94	-274.33	167.31	0.00	0.00	0.00
9,500.02	90.00	179.99	7,682.00	-258.94	-274.32	267.26	0.00	0.00	0.00
9,600.02	90.00	179.99	7,682.00	-358.95	-274.30	367.21	0.00	0.00	0.00
9,700.02	90.00	179.99	7,682.00	-458.95	-274.28	467.17	0.00	0.00	0.00
9,800.02	90.00	179.99	7,682.00	-558.95	-274.27	567.12	0.00	0.00	0.00
9,900.02	90.00	179.99	7,682.00	-658.95	-274.25	667.07	0.00	0.00	0.00

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Site:	Section 36-T12N-R64W	North Reference:	True
Well:	Colorado State 207-3601H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,000.02	90.00	179.99	7,682.00	-758.95	-274.24	767.02	0.00	0.00	0.00
10,100.02	90.00	179.99	7,682.00	-858.95	-274.22	866.97	0.00	0.00	0.00
10,200.02	90.00	179.99	7,682.00	-958.95	-274.20	966.93	0.00	0.00	0.00
10,300.02	90.00	179.99	7,682.00	-1,058.95	-274.19	1,066.88	0.00	0.00	0.00
10,400.02	90.00	179.99	7,682.00	-1,158.95	-274.17	1,166.83	0.00	0.00	0.00
10,500.02	90.00	179.99	7,682.00	-1,258.95	-274.16	1,266.78	0.00	0.00	0.00
10,600.02	90.00	179.99	7,682.00	-1,358.95	-274.14	1,366.74	0.00	0.00	0.00
10,700.02	90.00	179.99	7,682.00	-1,458.95	-274.13	1,466.69	0.00	0.00	0.00
10,800.02	90.00	179.99	7,682.00	-1,558.95	-274.11	1,566.64	0.00	0.00	0.00
10,900.02	90.00	179.99	7,682.00	-1,658.95	-274.09	1,666.59	0.00	0.00	0.00
11,000.02	90.00	179.99	7,682.00	-1,758.95	-274.08	1,766.55	0.00	0.00	0.00
11,100.02	90.00	179.99	7,682.00	-1,858.95	-274.06	1,866.50	0.00	0.00	0.00
11,200.02	90.00	179.99	7,682.00	-1,958.95	-274.05	1,966.45	0.00	0.00	0.00
11,300.02	90.00	179.99	7,682.00	-2,058.95	-274.03	2,066.40	0.00	0.00	0.00
11,400.02	90.00	179.99	7,682.00	-2,158.95	-274.01	2,166.36	0.00	0.00	0.00
11,500.02	90.00	179.99	7,682.00	-2,258.95	-274.00	2,266.31	0.00	0.00	0.00
11,600.02	90.00	179.99	7,682.00	-2,358.95	-273.98	2,366.26	0.00	0.00	0.00
11,700.02	90.00	179.99	7,682.00	-2,458.95	-273.97	2,466.21	0.00	0.00	0.00
11,800.02	90.00	179.99	7,682.00	-2,558.95	-273.95	2,566.17	0.00	0.00	0.00
11,900.02	90.00	179.99	7,682.00	-2,658.95	-273.94	2,666.12	0.00	0.00	0.00
12,000.02	90.00	179.99	7,682.00	-2,758.95	-273.92	2,766.07	0.00	0.00	0.00
12,100.02	90.00	179.99	7,682.00	-2,858.95	-273.90	2,866.02	0.00	0.00	0.00
12,200.02	90.00	179.99	7,682.00	-2,958.95	-273.89	2,965.97	0.00	0.00	0.00
12,300.02	90.00	179.99	7,682.00	-3,058.95	-273.87	3,065.93	0.00	0.00	0.00
12,400.03	90.00	179.99	7,682.00	-3,158.95	-273.86	3,165.88	0.00	0.00	0.00
12,500.03	90.00	179.99	7,682.00	-3,258.95	-273.84	3,265.83	0.00	0.00	0.00
12,600.03	90.00	179.99	7,682.00	-3,358.95	-273.82	3,365.78	0.00	0.00	0.00
12,700.03	90.00	179.99	7,682.00	-3,458.95	-273.81	3,465.74	0.00	0.00	0.00
12,800.03	90.00	179.99	7,682.00	-3,558.95	-273.79	3,565.69	0.00	0.00	0.00
12,900.03	90.00	179.99	7,682.00	-3,658.95	-273.78	3,665.64	0.00	0.00	0.00
13,000.03	90.00	179.99	7,682.00	-3,758.95	-273.76	3,765.59	0.00	0.00	0.00
13,100.03	90.00	179.99	7,682.00	-3,858.95	-273.75	3,865.55	0.00	0.00	0.00
13,200.03	90.00	179.99	7,682.00	-3,958.95	-273.73	3,965.50	0.00	0.00	0.00
13,300.03	90.00	179.99	7,682.00	-4,058.95	-273.71	4,065.45	0.00	0.00	0.00
13,400.03	90.00	179.99	7,682.00	-4,158.95	-273.70	4,165.40	0.00	0.00	0.00
13,500.03	90.00	179.99	7,682.00	-4,258.95	-273.68	4,265.36	0.00	0.00	0.00
13,600.03	90.00	179.99	7,682.00	-4,358.95	-273.67	4,365.31	0.00	0.00	0.00
13,700.03	90.00	179.99	7,682.00	-4,458.95	-273.65	4,465.26	0.00	0.00	0.00
13,800.03	90.00	179.99	7,682.00	-4,558.95	-273.64	4,565.21	0.00	0.00	0.00
13,900.03	90.00	179.99	7,682.00	-4,658.95	-273.62	4,665.17	0.00	0.00	0.00
14,000.03	90.00	179.99	7,682.00	-4,758.95	-273.60	4,765.12	0.00	0.00	0.00
14,100.03	90.00	179.99	7,682.00	-4,858.95	-273.59	4,865.07	0.00	0.00	0.00
14,200.03	90.00	179.99	7,682.00	-4,958.95	-273.57	4,965.02	0.00	0.00	0.00
14,300.03	90.00	179.99	7,682.00	-5,058.95	-273.56	5,064.98	0.00	0.00	0.00
14,400.03	90.00	179.99	7,682.00	-5,158.95	-273.54	5,164.93	0.00	0.00	0.00
14,500.03	90.00	179.99	7,682.00	-5,258.95	-273.52	5,264.88	0.00	0.00	0.00
14,600.03	90.00	179.99	7,682.00	-5,358.96	-273.51	5,364.83	0.00	0.00	0.00
14,700.03	90.00	179.99	7,682.00	-5,458.96	-273.49	5,464.78	0.00	0.00	0.00
14,800.03	90.00	179.99	7,682.00	-5,558.96	-273.48	5,564.74	0.00	0.00	0.00
14,900.03	90.00	179.99	7,682.00	-5,658.96	-273.46	5,664.69	0.00	0.00	0.00
15,000.03	90.00	179.99	7,682.00	-5,758.96	-273.45	5,764.64	0.00	0.00	0.00
15,100.03	90.00	179.99	7,682.00	-5,858.96	-273.43	5,864.59	0.00	0.00	0.00
15,200.03	90.00	179.99	7,682.00	-5,958.96	-273.41	5,964.55	0.00	0.00	0.00
15,300.03	90.00	179.99	7,682.00	-6,058.96	-273.40	6,064.50	0.00	0.00	0.00

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Colorado State 207-3601H
Company:	Clear Creek Resources Partners	TVD Reference:	RKB=5451+21 @ 5472.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5451+21 @ 5472.00ft
Site:	Section 36-T12N-R64W	North Reference:	True
Well:	Colorado State 207-3601H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
15,400.03	90.00	179.99	7,682.00	-6,158.96	-273.38	6,164.45	0.00	0.00	0.00
15,500.03	90.00	179.99	7,682.00	-6,258.96	-273.37	6,264.40	0.00	0.00	0.00
15,600.03	90.00	179.99	7,682.00	-6,358.96	-273.35	6,364.36	0.00	0.00	0.00
15,700.03	90.00	179.99	7,682.00	-6,458.96	-273.33	6,464.31	0.00	0.00	0.00
15,800.03	90.00	179.99	7,682.00	-6,558.96	-273.32	6,564.26	0.00	0.00	0.00
15,900.03	90.00	179.99	7,682.00	-6,658.96	-273.30	6,664.21	0.00	0.00	0.00
16,000.03	90.00	179.99	7,682.00	-6,758.96	-273.29	6,764.17	0.00	0.00	0.00
16,100.03	90.00	179.99	7,682.00	-6,858.96	-273.27	6,864.12	0.00	0.00	0.00
16,200.03	90.00	179.99	7,682.00	-6,958.96	-273.26	6,964.07	0.00	0.00	0.00
16,300.03	90.00	179.99	7,682.00	-7,058.96	-273.24	7,064.02	0.00	0.00	0.00
16,400.03	90.00	179.99	7,682.00	-7,158.96	-273.22	7,163.98	0.00	0.00	0.00
16,500.03	90.00	179.99	7,682.00	-7,258.96	-273.21	7,263.93	0.00	0.00	0.00
16,600.03	90.00	179.99	7,682.00	-7,358.96	-273.19	7,363.88	0.00	0.00	0.00
16,700.03	90.00	179.99	7,682.00	-7,458.96	-273.18	7,463.83	0.00	0.00	0.00
16,800.03	90.00	179.99	7,682.00	-7,558.96	-273.16	7,563.79	0.00	0.00	0.00
16,900.03	90.00	179.99	7,682.00	-7,658.96	-273.14	7,663.74	0.00	0.00	0.00
17,000.03	90.00	179.99	7,682.00	-7,758.96	-273.13	7,763.69	0.00	0.00	0.00
17,100.03	90.00	179.99	7,682.00	-7,858.96	-273.11	7,863.64	0.00	0.00	0.00
17,200.03	90.00	179.99	7,682.00	-7,958.96	-273.10	7,963.59	0.00	0.00	0.00
17,300.03	90.00	179.99	7,682.00	-8,058.96	-273.08	8,063.55	0.00	0.00	0.00
17,400.04	90.00	179.99	7,682.00	-8,158.96	-273.07	8,163.50	0.00	0.00	0.00
17,500.04	90.00	179.99	7,682.00	-8,258.96	-273.05	8,263.45	0.00	0.00	0.00
17,600.04	90.00	179.99	7,682.00	-8,358.96	-273.03	8,363.40	0.00	0.00	0.00
17,700.04	90.00	179.99	7,682.00	-8,458.96	-273.02	8,463.36	0.00	0.00	0.00
17,800.04	90.00	179.99	7,682.00	-8,558.96	-273.00	8,563.31	0.00	0.00	0.00
17,900.04	90.00	179.99	7,682.00	-8,658.96	-272.99	8,663.26	0.00	0.00	0.00
18,000.04	90.00	179.99	7,682.00	-8,758.96	-272.97	8,763.21	0.00	0.00	0.00
18,100.04	90.00	179.99	7,682.00	-8,858.96	-272.95	8,863.17	0.00	0.00	0.00
18,110.55	90.00	179.99	7,682.00	-8,869.47	-272.95	8,873.67	0.00	0.00	0.00
PBHL/TD 18110.55 MD/7682.00 TVD									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL Colorado State 2C	0.00	0.00	7,682.00	-8,868.49	-304.73	1,588,345.26	3,276,027.03	40.94410299	-104.50087600
- hit/miss target									
- Shape									
- plan misses target center by 31.78ft at 18109.56ft MD (7682.00 TVD, -8868.49 N, -272.95 E)									
- Point									
LP Colorado State 207-3	0.00	0.00	7,682.00	955.00	-274.51	1,598,168.45	3,275,946.45	40.97106399	-104.50076700
- plan hits target center									
- Point									

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Colorado State 207-3601H
Company:	Clear Creek Resources Partners	TVD Reference:	RKB=5451+21 @ 5472.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5451+21 @ 5472.00ft
Site:	Section 36-T12N-R64W	North Reference:	True
Well:	Colorado State 207-3601H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
2,500.00	2,500.00	0.00	0.00	KOP Begin 2°/100' build	
3,564.95	3,540.59	193.41	-29.69	Begin 21.30° tangent	
7,175.66	6,904.68	1,489.76	-228.66	Begin 10°/100' build/turn	
8,286.07	7,682.00	955.00	-274.51	Begin 90° lateral section	
18,110.55	7,682.00	-8,869.47	-272.95	PBHL/TD 18110.55 MD/7682.00 TVD	

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Colorado State 207-3601H
Company:	Clear Creek Resources Partners	TVD Reference:	RKB=5451+21 @ 5472.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5451+21 @ 5472.00ft
Site:	Section 36-T12N-R64W	North Reference:	True
Well:	Colorado State 207-3601H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

Project	Weld County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		Section 36-T12N-R64W			
Site Position:		Northing:	1,596,167.27 usft	Latitude:	40.96551935
From:	Map	Easting:	3,277,644.08 usft	Longitude:	-104.49470236
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.65 °

Well	Colorado State 207-3601H, Surf loc: 1558 FNL 1277 FWL Section 36-T12N-R64W					
Well Position	+N/-S	0.00 ft	Northing:	1,597,216.61 usft	Latitude:	40.96844297
	+E/-W	0.00 ft	Easting:	3,276,231.71 usft	Longitude:	-104.49977300
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,451.00 ft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	3/2/2018	8.45	67.30	52,801.80000000

Design	plan2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	181.76

Plan Survey Tool Program	Date	3/7/2018		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,109.59 plan2 (Original Hole)	MWD	
			OWSG MWD - Standard	

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	
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,564.95	21.30	351.27	3,540.59	193.41	-29.69	2.00	2.00	0.00	351.27	
7,175.66	21.30	351.27	6,904.68	1,489.76	-228.66	0.00	0.00	0.00	0.00	
8,286.07	90.00	179.99	7,682.00	955.00	-274.51	10.00	6.19	-15.43	-170.65	LP Colorado State 20
18,110.55	90.00	179.99	7,682.00	-8,869.47	-272.95	0.00	0.00	0.00	0.00	PBHL Colorado State

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Colorado State 207-3601H
Company:	Clear Creek Resources Partners	TVD Reference:	RKB=5451+21 @ 5472.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5451+21 @ 5472.00ft
Site:	Section 36-T12N-R64W	North Reference:	True
Well:	Colorado State 207-3601H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
100.00	0.00	0.00	100.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
200.00	0.00	0.00	200.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
300.00	0.00	0.00	300.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
400.00	0.00	0.00	400.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
500.00	0.00	0.00	500.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
600.00	0.00	0.00	600.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
700.00	0.00	0.00	700.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
800.00	0.00	0.00	800.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
900.00	0.00	0.00	900.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
1,000.00	0.00	0.00	1,000.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
1,100.00	0.00	0.00	1,100.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
1,200.00	0.00	0.00	1,200.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
1,300.00	0.00	0.00	1,300.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
1,400.00	0.00	0.00	1,400.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
1,500.00	0.00	0.00	1,500.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
1,600.00	0.00	0.00	1,600.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
1,700.00	0.00	0.00	1,700.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
1,800.00	0.00	0.00	1,800.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
1,900.00	0.00	0.00	1,900.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
2,000.00	0.00	0.00	2,000.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
2,100.00	0.00	0.00	2,100.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
2,200.00	0.00	0.00	2,200.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
2,300.00	0.00	0.00	2,300.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
2,400.00	0.00	0.00	2,400.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
2,500.00	0.00	0.00	2,500.00	0.00	0.00	1,597,216.61	3,276,231.71	40.96844297	-104.49977300
KOP Begin 2°/100' build									
2,600.01	2.00	351.27	2,599.98	1.73	-0.26	1,597,218.33	3,276,231.43	40.96844770	-104.49977395
2,700.01	4.00	351.27	2,699.84	6.90	-1.06	1,597,223.50	3,276,230.58	40.96846190	-104.49977683
2,800.01	6.00	351.27	2,799.46	15.51	-2.38	1,597,232.09	3,276,229.16	40.96848554	-104.49978162
2,900.01	8.00	351.27	2,898.71	27.56	-4.23	1,597,244.12	3,276,227.17	40.96851860	-104.49978831
3,000.01	10.00	351.27	2,997.47	43.02	-6.60	1,597,259.55	3,276,224.63	40.96856104	-104.49979690
3,100.01	12.00	351.27	3,095.63	61.88	-9.50	1,597,278.38	3,276,221.52	40.96861280	-104.49980739
3,200.01	14.00	351.27	3,193.06	84.11	-12.91	1,597,300.57	3,276,217.86	40.96867382	-104.49981974
3,300.01	16.00	351.27	3,289.65	109.69	-16.84	1,597,326.11	3,276,213.64	40.96874403	-104.49983396
3,400.01	18.00	351.27	3,385.28	138.59	-21.27	1,597,354.95	3,276,208.88	40.96882334	-104.49985002
3,500.01	20.00	351.27	3,479.82	170.77	-26.21	1,597,387.07	3,276,203.58	40.96891165	-104.49986790
3,564.95	21.30	351.27	3,540.59	193.41	-29.69	1,597,409.67	3,276,199.85	40.96897378	-104.49988049
Begin 21.30° tangent									
3,600.01	21.30	351.27	3,573.25	205.99	-31.62	1,597,422.23	3,276,197.77	40.96900832	-104.49988748
3,700.01	21.30	351.27	3,666.42	241.90	-37.13	1,597,458.07	3,276,191.86	40.96910686	-104.49990744
3,800.01	21.30	351.27	3,759.59	277.80	-42.64	1,597,493.91	3,276,185.94	40.96920540	-104.49992739
3,900.01	21.30	351.27	3,852.76	313.70	-48.15	1,597,529.75	3,276,180.03	40.96930393	-104.49994734
4,000.01	21.30	351.27	3,945.93	349.61	-53.66	1,597,565.59	3,276,174.11	40.96940247	-104.49996730
4,100.01	21.30	351.27	4,039.10	385.51	-59.17	1,597,601.43	3,276,168.20	40.96950101	-104.49998725
4,200.01	21.30	351.27	4,132.27	421.41	-64.68	1,597,637.26	3,276,162.28	40.96959955	-104.50000721
4,300.01	21.30	351.27	4,225.44	457.32	-70.19	1,597,673.10	3,276,156.37	40.96969808	-104.50002716
4,400.01	21.30	351.27	4,318.61	493.22	-75.70	1,597,708.94	3,276,150.45	40.96979662	-104.50004712
4,500.01	21.30	351.27	4,411.78	529.12	-81.21	1,597,744.78	3,276,144.54	40.96989516	-104.50006707
4,600.01	21.30	351.27	4,504.95	565.02	-86.73	1,597,780.62	3,276,138.62	40.96999369	-104.50008703
4,700.01	21.30	351.27	4,598.12	600.93	-92.24	1,597,816.46	3,276,132.71	40.97009223	-104.50010698
4,800.01	21.30	351.27	4,691.29	636.83	-97.75	1,597,852.30	3,276,126.79	40.97019077	-104.50012694
4,900.01	21.30	351.27	4,784.46	672.73	-103.26	1,597,888.13	3,276,120.87	40.97028930	-104.50014689
5,000.01	21.30	351.27	4,877.63	708.64	-108.77	1,597,923.97	3,276,114.96	40.97038784	-104.50016685

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Colorado State 207-3601H
Company:	Clear Creek Resources Partners	TVD Reference:	RKB=5451+21 @ 5472.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5451+21 @ 5472.00ft
Site:	Section 36-T12N-R64W	North Reference:	True
Well:	Colorado State 207-3601H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,100.01	21.30	351.27	4,970.80	744.54	-114.28	1,597,959.81	3,276,109.04	40.97048638	-104.50018680
5,200.01	21.30	351.27	5,063.97	780.44	-119.79	1,597,995.65	3,276,103.13	40.97058492	-104.50020676
5,300.01	21.30	351.27	5,157.14	816.35	-125.30	1,598,031.49	3,276,097.21	40.97068345	-104.50022671
5,400.01	21.30	351.27	5,250.31	852.25	-130.81	1,598,067.33	3,276,091.30	40.97078199	-104.50024667
5,500.01	21.30	351.27	5,343.48	888.15	-136.32	1,598,103.17	3,276,085.38	40.97088053	-104.50026662
5,600.01	21.30	351.27	5,436.65	924.06	-141.83	1,598,139.00	3,276,079.47	40.97097906	-104.50028658
5,700.01	21.30	351.27	5,529.82	959.96	-147.34	1,598,174.84	3,276,073.55	40.97107760	-104.50030653
5,800.01	21.30	351.27	5,622.99	995.86	-152.85	1,598,210.68	3,276,067.64	40.97117614	-104.50032649
5,900.01	21.30	351.27	5,716.16	1,031.76	-158.37	1,598,246.52	3,276,061.72	40.97127467	-104.50034644
6,000.01	21.30	351.27	5,809.33	1,067.67	-163.88	1,598,282.36	3,276,055.81	40.97137321	-104.50036640
6,100.01	21.30	351.27	5,902.50	1,103.57	-169.39	1,598,318.20	3,276,049.89	40.97147175	-104.50038635
6,200.01	21.30	351.27	5,995.67	1,139.47	-174.90	1,598,354.04	3,276,043.97	40.97157028	-104.50040631
6,300.01	21.30	351.27	6,088.84	1,175.38	-180.41	1,598,389.87	3,276,038.06	40.97166882	-104.50042627
6,400.01	21.30	351.27	6,182.01	1,211.28	-185.92	1,598,425.71	3,276,032.14	40.97176736	-104.50044622
6,500.01	21.30	351.27	6,275.18	1,247.18	-191.43	1,598,461.55	3,276,026.23	40.97186590	-104.50046618
6,600.01	21.30	351.27	6,368.35	1,283.09	-196.94	1,598,497.39	3,276,020.31	40.97196443	-104.50048613
6,700.01	21.30	351.27	6,461.52	1,318.99	-202.45	1,598,533.23	3,276,014.40	40.97206297	-104.50050609
6,800.01	21.30	351.27	6,554.69	1,354.89	-207.96	1,598,569.07	3,276,008.48	40.97216151	-104.50052605
6,900.01	21.30	351.27	6,647.86	1,390.80	-213.47	1,598,604.91	3,276,002.57	40.97226004	-104.50054600
7,000.01	21.30	351.27	6,741.03	1,426.70	-218.98	1,598,640.74	3,275,996.65	40.97235858	-104.50056596
7,100.01	21.30	351.27	6,834.20	1,462.60	-224.49	1,598,676.58	3,275,990.74	40.97245712	-104.50058591
7,175.66	21.30	351.27	6,904.68	1,489.76	-228.66	1,598,703.69	3,275,986.26	40.97253166	-104.50060101
Begin 10°/100' build/turn									
7,200.01	18.90	350.05	6,927.55	1,498.02	-230.02	1,598,711.94	3,275,984.82	40.97255432	-104.50060591
7,300.01	9.24	338.70	7,024.45	1,521.51	-235.75	1,598,735.36	3,275,978.82	40.97261880	-104.50062665
7,400.01	3.66	247.59	7,123.95	1,527.79	-241.63	1,598,741.58	3,275,972.87	40.97263604	-104.50064795
7,500.02	11.88	196.31	7,223.03	1,516.67	-247.48	1,598,730.39	3,275,967.15	40.97260551	-104.50066914
7,600.02	21.65	188.55	7,318.68	1,488.48	-253.12	1,598,702.14	3,275,961.82	40.97252814	-104.50068959
7,700.02	31.56	185.51	7,407.99	1,444.08	-258.39	1,598,657.68	3,275,957.05	40.97240629	-104.50070867
7,800.02	41.51	183.82	7,488.24	1,384.82	-263.13	1,598,598.37	3,275,952.98	40.97224365	-104.50072580
7,900.02	51.47	182.69	7,557.00	1,312.50	-267.18	1,598,526.01	3,275,949.75	40.97204517	-104.50074047
8,000.02	61.45	181.83	7,612.18	1,229.32	-270.43	1,598,442.80	3,275,947.44	40.97181687	-104.50075223
8,100.02	71.43	181.13	7,652.11	1,137.81	-272.77	1,598,351.26	3,275,946.13	40.97156570	-104.50076071
8,200.02	81.41	180.50	7,675.56	1,040.73	-274.14	1,598,254.18	3,275,945.85	40.97129929	-104.50076567
8,286.07	90.00	179.99	7,682.00	955.00	-274.51	1,598,168.45	3,275,946.45	40.97106399	-104.50076700
Begin 90° lateral section									
8,300.02	90.00	179.99	7,682.00	941.06	-274.51	1,598,154.51	3,275,946.61	40.97102572	-104.50076699
8,400.02	90.00	179.99	7,682.00	841.06	-274.49	1,598,054.52	3,275,947.76	40.97075127	-104.50076693
8,500.02	90.00	179.99	7,682.00	741.06	-274.47	1,597,954.52	3,275,948.90	40.97047682	-104.50076686
8,600.02	90.00	179.99	7,682.00	641.06	-274.46	1,597,854.53	3,275,950.04	40.97020236	-104.50076680
8,700.02	90.00	179.99	7,682.00	541.06	-274.44	1,597,754.54	3,275,951.19	40.96992791	-104.50076674
8,800.02	90.00	179.99	7,682.00	441.06	-274.43	1,597,654.54	3,275,952.33	40.96965346	-104.50076668
8,900.02	90.00	179.99	7,682.00	341.06	-274.41	1,597,554.55	3,275,953.47	40.96937900	-104.50076662
9,000.02	90.00	179.99	7,682.00	241.06	-274.39	1,597,454.55	3,275,954.62	40.96910455	-104.50076656
9,100.02	90.00	179.99	7,682.00	141.06	-274.38	1,597,354.56	3,275,955.76	40.96883010	-104.50076650
9,200.02	90.00	179.99	7,682.00	41.06	-274.36	1,597,254.57	3,275,956.91	40.96855564	-104.50076643
9,300.02	90.00	179.99	7,682.00	-58.94	-274.35	1,597,154.57	3,275,958.05	40.96828119	-104.50076637
9,400.02	90.00	179.99	7,682.00	-158.94	-274.33	1,597,054.58	3,275,959.19	40.96800673	-104.50076631
9,500.02	90.00	179.99	7,682.00	-258.94	-274.32	1,596,954.59	3,275,960.34	40.96773228	-104.50076625
9,600.02	90.00	179.99	7,682.00	-358.95	-274.30	1,596,854.59	3,275,961.48	40.96745783	-104.50076619
9,700.02	90.00	179.99	7,682.00	-458.95	-274.28	1,596,754.60	3,275,962.62	40.96718337	-104.50076613
9,800.02	90.00	179.99	7,682.00	-558.95	-274.27	1,596,654.61	3,275,963.77	40.96690892	-104.50076607
9,900.02	90.00	179.99	7,682.00	-658.95	-274.25	1,596,554.61	3,275,964.91	40.96663447	-104.50076600
10,000.02	90.00	179.99	7,682.00	-758.95	-274.24	1,596,454.62	3,275,966.06	40.96636001	-104.50076594

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Colorado State 207-3601H
Company:	Clear Creek Resources Partners	TVD Reference:	RKB=5451+21 @ 5472.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5451+21 @ 5472.00ft
Site:	Section 36-T12N-R64W	North Reference:	True
Well:	Colorado State 207-3601H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
10,100.02	90.00	179.99	7,682.00	-858.95	-274.22	1,596,354.63	3,275,967.20	40.96608556	-104.50076588	
10,200.02	90.00	179.99	7,682.00	-958.95	-274.20	1,596,254.63	3,275,968.34	40.96581110	-104.50076582	
10,300.02	90.00	179.99	7,682.00	-1,058.95	-274.19	1,596,154.64	3,275,969.49	40.96553665	-104.50076576	
10,400.02	90.00	179.99	7,682.00	-1,158.95	-274.17	1,596,054.65	3,275,970.63	40.96526220	-104.50076570	
10,500.02	90.00	179.99	7,682.00	-1,258.95	-274.16	1,595,954.65	3,275,971.77	40.96498774	-104.50076564	
10,600.02	90.00	179.99	7,682.00	-1,358.95	-274.14	1,595,854.66	3,275,972.92	40.96471329	-104.50076558	
10,700.02	90.00	179.99	7,682.00	-1,458.95	-274.13	1,595,754.67	3,275,974.06	40.96443883	-104.50076551	
10,800.02	90.00	179.99	7,682.00	-1,558.95	-274.11	1,595,654.67	3,275,975.21	40.96416438	-104.50076545	
10,900.02	90.00	179.99	7,682.00	-1,658.95	-274.09	1,595,554.68	3,275,976.35	40.96388992	-104.50076539	
11,000.02	90.00	179.99	7,682.00	-1,758.95	-274.08	1,595,454.69	3,275,977.49	40.96361547	-104.50076533	
11,100.02	90.00	179.99	7,682.00	-1,858.95	-274.06	1,595,354.69	3,275,978.64	40.96334102	-104.50076527	
11,200.02	90.00	179.99	7,682.00	-1,958.95	-274.05	1,595,254.70	3,275,979.78	40.96306656	-104.50076521	
11,300.02	90.00	179.99	7,682.00	-2,058.95	-274.03	1,595,154.71	3,275,980.93	40.96279211	-104.50076515	
11,400.02	90.00	179.99	7,682.00	-2,158.95	-274.01	1,595,054.71	3,275,982.07	40.96251765	-104.50076508	
11,500.02	90.00	179.99	7,682.00	-2,258.95	-274.00	1,594,954.72	3,275,983.21	40.96224320	-104.50076502	
11,600.02	90.00	179.99	7,682.00	-2,358.95	-273.98	1,594,854.72	3,275,984.36	40.96196875	-104.50076496	
11,700.02	90.00	179.99	7,682.00	-2,458.95	-273.97	1,594,754.73	3,275,985.50	40.96169429	-104.50076490	
11,800.02	90.00	179.99	7,682.00	-2,558.95	-273.95	1,594,654.74	3,275,986.64	40.96141984	-104.50076484	
11,900.02	90.00	179.99	7,682.00	-2,658.95	-273.94	1,594,554.74	3,275,987.79	40.96114538	-104.50076478	
12,000.02	90.00	179.99	7,682.00	-2,758.95	-273.92	1,594,454.75	3,275,988.93	40.96087093	-104.50076472	
12,100.02	90.00	179.99	7,682.00	-2,858.95	-273.90	1,594,354.76	3,275,990.08	40.96059647	-104.50076466	
12,200.02	90.00	179.99	7,682.00	-2,958.95	-273.89	1,594,254.76	3,275,991.22	40.96032202	-104.50076459	
12,300.02	90.00	179.99	7,682.00	-3,058.95	-273.87	1,594,154.77	3,275,992.36	40.96004756	-104.50076453	
12,400.03	90.00	179.99	7,682.00	-3,158.95	-273.86	1,594,054.78	3,275,993.51	40.95977311	-104.50076447	
12,500.03	90.00	179.99	7,682.00	-3,258.95	-273.84	1,593,954.78	3,275,994.65	40.95949865	-104.50076441	
12,600.03	90.00	179.99	7,682.00	-3,358.95	-273.82	1,593,854.79	3,275,995.79	40.95922420	-104.50076435	
12,700.03	90.00	179.99	7,682.00	-3,458.95	-273.81	1,593,754.80	3,275,996.94	40.95894975	-104.50076429	
12,800.03	90.00	179.99	7,682.00	-3,558.95	-273.79	1,593,654.80	3,275,998.08	40.95867529	-104.50076423	
12,900.03	90.00	179.99	7,682.00	-3,658.95	-273.78	1,593,554.81	3,275,999.23	40.95840084	-104.50076416	
13,000.03	90.00	179.99	7,682.00	-3,758.95	-273.76	1,593,454.82	3,276,000.37	40.95812638	-104.50076410	
13,100.03	90.00	179.99	7,682.00	-3,858.95	-273.75	1,593,354.82	3,276,001.51	40.95785193	-104.50076404	
13,200.03	90.00	179.99	7,682.00	-3,958.95	-273.73	1,593,254.83	3,276,002.66	40.95757747	-104.50076398	
13,300.03	90.00	179.99	7,682.00	-4,058.95	-273.71	1,593,154.84	3,276,003.80	40.95730302	-104.50076392	
13,400.03	90.00	179.99	7,682.00	-4,158.95	-273.70	1,593,054.84	3,276,004.94	40.95702856	-104.50076386	
13,500.03	90.00	179.99	7,682.00	-4,258.95	-273.68	1,592,954.85	3,276,006.09	40.95675411	-104.50076380	
13,600.03	90.00	179.99	7,682.00	-4,358.95	-273.67	1,592,854.86	3,276,007.23	40.95647965	-104.50076373	
13,700.03	90.00	179.99	7,682.00	-4,458.95	-273.65	1,592,754.86	3,276,008.38	40.95620520	-104.50076367	
13,800.03	90.00	179.99	7,682.00	-4,558.95	-273.64	1,592,654.87	3,276,009.52	40.95593074	-104.50076361	
13,900.03	90.00	179.99	7,682.00	-4,658.95	-273.62	1,592,554.88	3,276,010.66	40.95565629	-104.50076355	
14,000.03	90.00	179.99	7,682.00	-4,758.95	-273.60	1,592,454.88	3,276,011.81	40.95538183	-104.50076349	
14,100.03	90.00	179.99	7,682.00	-4,858.95	-273.59	1,592,354.89	3,276,012.95	40.95510738	-104.50076343	
14,200.03	90.00	179.99	7,682.00	-4,958.95	-273.57	1,592,254.89	3,276,014.09	40.95483292	-104.50076337	
14,300.03	90.00	179.99	7,682.00	-5,058.95	-273.56	1,592,154.90	3,276,015.24	40.95455847	-104.50076331	
14,400.03	90.00	179.99	7,682.00	-5,158.95	-273.54	1,592,054.91	3,276,016.38	40.95428401	-104.50076324	
14,500.03	90.00	179.99	7,682.00	-5,258.95	-273.52	1,591,954.91	3,276,017.53	40.95400956	-104.50076318	
14,600.03	90.00	179.99	7,682.00	-5,358.96	-273.51	1,591,854.92	3,276,018.67	40.95373510	-104.50076312	
14,700.03	90.00	179.99	7,682.00	-5,458.96	-273.49	1,591,754.93	3,276,019.81	40.95346065	-104.50076306	
14,800.03	90.00	179.99	7,682.00	-5,558.96	-273.48	1,591,654.93	3,276,020.96	40.95318619	-104.50076300	
14,900.03	90.00	179.99	7,682.00	-5,658.96	-273.46	1,591,554.94	3,276,022.10	40.95291173	-104.50076294	
15,000.03	90.00	179.99	7,682.00	-5,758.96	-273.45	1,591,454.95	3,276,023.24	40.95263728	-104.50076288	
15,100.03	90.00	179.99	7,682.00	-5,858.96	-273.43	1,591,354.95	3,276,024.39	40.95236282	-104.50076281	
15,200.03	90.00	179.99	7,682.00	-5,958.96	-273.41	1,591,254.96	3,276,025.53	40.95208837	-104.50076275	
15,300.03	90.00	179.99	7,682.00	-6,058.96	-273.40	1,591,154.97	3,276,026.68	40.95181391	-104.50076269	
15,400.03	90.00	179.99	7,682.00	-6,158.96	-273.38	1,591,054.97	3,276,027.82	40.95153946	-104.50076263	
15,500.03	90.00	179.99	7,682.00	-6,258.96	-273.37	1,590,954.98	3,276,028.96	40.95126500	-104.50076257	

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Colorado State 207-3601H
Company:	Clear Creek Resources Partners	TVD Reference:	RKB=5451+21 @ 5472.00ft
Project:	Weld County, Colorado	MD Reference:	RKB=5451+21 @ 5472.00ft
Site:	Section 36-T12N-R64W	North Reference:	True
Well:	Colorado State 207-3601H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	plan2		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
15,600.03	90.00	179.99	7,682.00	-6,358.96	-273.35	1,590,854.99	3,276,030.11	40.95099055	-104.50076251	
15,700.03	90.00	179.99	7,682.00	-6,458.96	-273.33	1,590,754.99	3,276,031.25	40.95071609	-104.50076245	
15,800.03	90.00	179.99	7,682.00	-6,558.96	-273.32	1,590,655.00	3,276,032.39	40.95044164	-104.50076239	
15,900.03	90.00	179.99	7,682.00	-6,658.96	-273.30	1,590,555.01	3,276,033.54	40.95016718	-104.50076232	
16,000.03	90.00	179.99	7,682.00	-6,758.96	-273.29	1,590,455.01	3,276,034.68	40.94989272	-104.50076226	
16,100.03	90.00	179.99	7,682.00	-6,858.96	-273.27	1,590,355.02	3,276,035.83	40.94961827	-104.50076220	
16,200.03	90.00	179.99	7,682.00	-6,958.96	-273.26	1,590,255.03	3,276,036.97	40.94934381	-104.50076214	
16,300.03	90.00	179.99	7,682.00	-7,058.96	-273.24	1,590,155.03	3,276,038.11	40.94906936	-104.50076208	
16,400.03	90.00	179.99	7,682.00	-7,158.96	-273.22	1,590,055.04	3,276,039.26	40.94879490	-104.50076202	
16,500.03	90.00	179.99	7,682.00	-7,258.96	-273.21	1,589,955.05	3,276,040.40	40.94852045	-104.50076196	
16,600.03	90.00	179.99	7,682.00	-7,358.96	-273.19	1,589,855.05	3,276,041.54	40.94824599	-104.50076189	
16,700.03	90.00	179.99	7,682.00	-7,458.96	-273.18	1,589,755.06	3,276,042.69	40.94797153	-104.50076183	
16,800.03	90.00	179.99	7,682.00	-7,558.96	-273.16	1,589,655.06	3,276,043.83	40.94769708	-104.50076177	
16,900.03	90.00	179.99	7,682.00	-7,658.96	-273.14	1,589,555.07	3,276,044.98	40.94742262	-104.50076171	
17,000.03	90.00	179.99	7,682.00	-7,758.96	-273.13	1,589,455.08	3,276,046.12	40.94714817	-104.50076165	
17,100.03	90.00	179.99	7,682.00	-7,858.96	-273.11	1,589,355.08	3,276,047.26	40.94687371	-104.50076159	
17,200.03	90.00	179.99	7,682.00	-7,958.96	-273.10	1,589,255.09	3,276,048.41	40.94659925	-104.50076153	
17,300.03	90.00	179.99	7,682.00	-8,058.96	-273.08	1,589,155.10	3,276,049.55	40.94632480	-104.50076147	
17,400.04	90.00	179.99	7,682.00	-8,158.96	-273.07	1,589,055.10	3,276,050.70	40.94605034	-104.50076140	
17,500.04	90.00	179.99	7,682.00	-8,258.96	-273.05	1,588,955.11	3,276,051.84	40.94577589	-104.50076134	
17,600.04	90.00	179.99	7,682.00	-8,358.96	-273.03	1,588,855.12	3,276,052.98	40.94550143	-104.50076128	
17,700.04	90.00	179.99	7,682.00	-8,458.96	-273.02	1,588,755.12	3,276,054.13	40.94522697	-104.50076122	
17,800.04	90.00	179.99	7,682.00	-8,558.96	-273.00	1,588,655.13	3,276,055.27	40.94495252	-104.50076116	
17,900.04	90.00	179.99	7,682.00	-8,658.96	-272.99	1,588,555.14	3,276,056.41	40.94467806	-104.50076110	
18,000.04	90.00	179.99	7,682.00	-8,758.96	-272.97	1,588,455.14	3,276,057.56	40.94440361	-104.50076104	
18,100.04	90.00	179.99	7,682.00	-8,858.96	-272.95	1,588,355.15	3,276,058.70	40.94412915	-104.50076098	
18,110.55	90.00	179.99	7,682.00	-8,869.47	-272.95	1,588,344.64	3,276,058.82	40.94410031	-104.50076097	
PBHL/TD 18110.55 MD/7682.00 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										
PBHL Colorado State 2C	0.00	0.00	7,682.00	-8,868.49	-304.73	1,588,345.26	3,276,027.03	40.94410299	-104.50087600	
- plan misses target center by 31.78ft at 18109.56ft MD (7682.00 TVD, -8868.49 N, -272.95 E)										
- Point										
LP Colorado State 207-3	0.00	0.00	7,682.00	955.00	-274.51	1,598,168.45	3,275,946.45	40.97106399	-104.50076700	
- plan hits target center										
- Point										

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
2,500.00	2,500.00	0.00	0.00	KOP Begin 2°/100' build	
3,564.95	3,540.59	193.41	-29.69	Begin 21.30° tangent	
7,175.66	6,904.68	1,489.76	-228.66	Begin 10°/100' build/turn	
8,286.07	7,682.00	955.00	-274.51	Begin 90° lateral section	
18,110.55	7,682.00	-8,869.47	-272.95	PBHL/TD 18110.55 MD/7682.00 TVD	