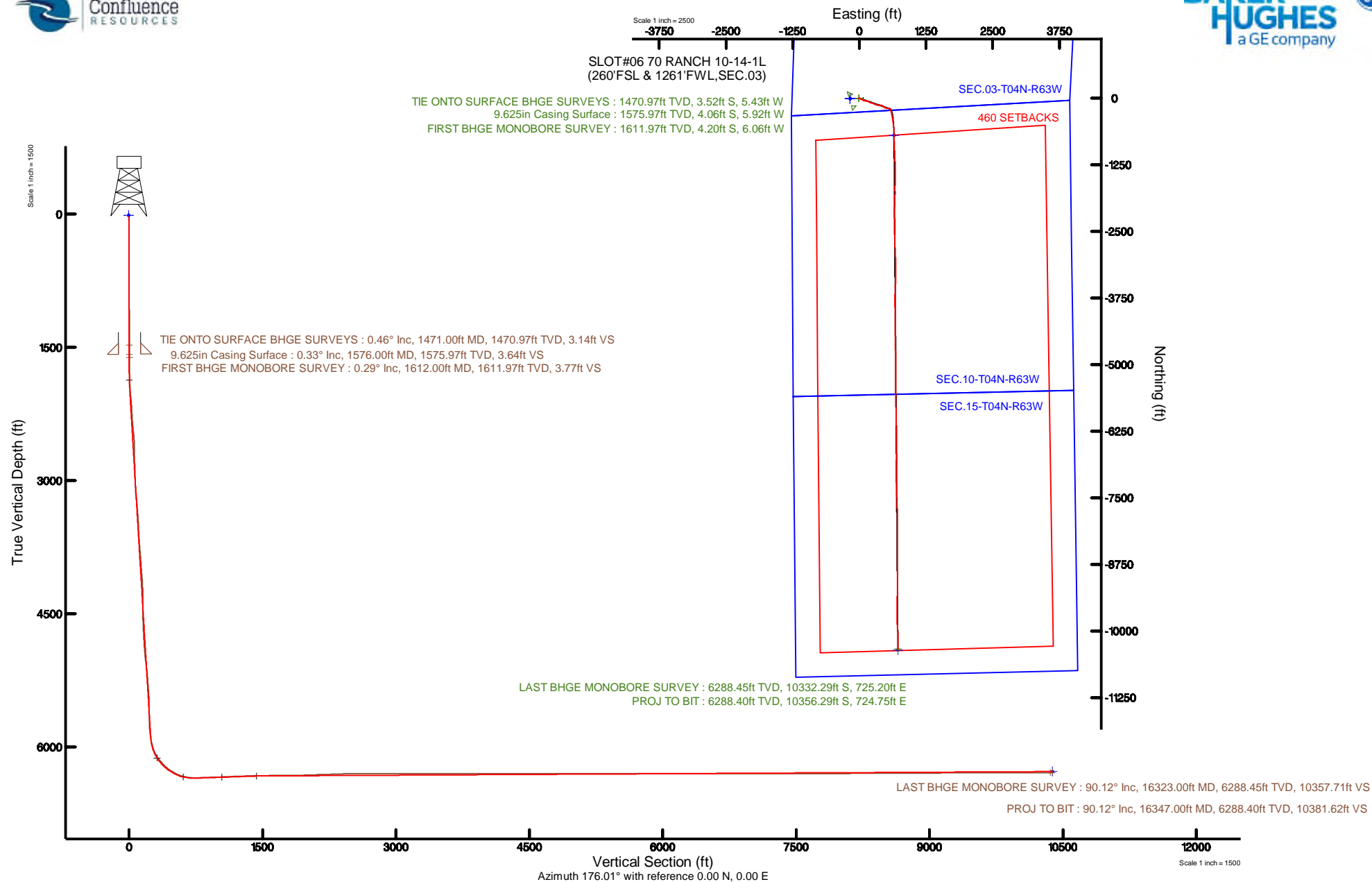


# CONFLUENCE RESOURCES

Location: COLORADO Slot: SLOT#06 70 RANCH 10-14-1L (260'FSL & 1261'FWL, SEC.03)  
 Field: WELD COUNTY (NAD83, TRUE NORTH) Well: 70 RANCH 10-14-1L  
 Facility: SEC.03-T04N-R63W Wellbore: 70 RANCH 10-14-1L PWB

Plot reference wellpath is 70 RANCH 10-14-1L PWB (REV-B.0)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to ENSIGN 140 (23) (RKB)	North Reference: True north
Measured depths are referenced to ENSIGN 140 (23) (RKB)	Scale: True distance
ENSIGN 140 (23) (RKB) to Mean Sea Level: 4620 feet	Depths are in feet
Mean Sea Level to Mud line (At Slot: SLOT#06 70 RANCH 10-14-1L (260'FSL & 1261'FWL, SEC.03)): 0 feet	Created by: robiale01 on 2019-07-02
Coordinates are in feet referenced to Slot	Database: WA DENVER



# Actual Wellpath Report

70 RANCH 10-14-1L AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	CONFLUENCE RESOURCES	Slot	SLOT#06 70 RANCH 10-14-1L (260'FSL & 1261'FWL,SEC.03)
Area	COLORADO	Well	70 RANCH 10-14-1L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	70 RANCH 10-14-1L AWB
Facility	SEC.03-T04N-R63W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.1
North Reference	True	User	Robiale01
Scale	0.999958	Report Generated	7/2/2019 at 2:32:28 PM
Convergence at slot	0.69° East	Database/Source file	WA DENVER/70_RANCH_10-14-1L_AWP.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	7.29	172.85	3298475.18	1366595.78	40°20'05.136"N	104°25'45.552"W
Facility Reference Pt			3298302.44	1366586.41	40°20'05.064"N	104°25'47.784"W
Field Reference Pt			3230456.90	1245096.09	40°00'11.664"N	104°40'38.424"W

## WELLPATH DATUM

Calculation method	Minimum curvature	ENSIGN 140 (23') (RKB) to Facility Vertical Datum	4620.00ft
Horizontal Reference Pt	Slot	ENSIGN 140 (23') (RKB) to Mean Sea Level	4620.00ft
Vertical Reference Pt	ENSIGN 140 (23') (RKB)	ENSIGN 140 (23') (RKB) to Mud Line at Slot (SLOT#06 70 RANCH 10-14-1L (260'FSL & 1261'FWL,SEC.03))	4620.00ft
MD Reference Pt	ENSIGN 140 (23') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	176.01°

# Actual Wellpath Report

70 RANCH 10-14-1L AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	CONFLUENCE RESOURCES	Slot	SLOT#06 70 RANCH 10-14-1L (260'FSL & 1261'FWL,SEC.03)
Area	COLORADO	Well	70 RANCH 10-14-1L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	70 RANCH 10-14-1L AWB
Facility	SEC.03-T04N-R63W		

## WELLPATH DATA (183 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	68.010	0.00	0.00	0.00	0.00	40°20'05.136"N	104°25'45.552"W	0.00	
23.00	0.000	68.010	23.00	0.00	0.00	0.00	40°20'05.136"N	104°25'45.552"W	0.00	
127.00	0.150	68.010	127.00	-0.04	0.05	0.13	40°20'05.137"N	104°25'45.550"W	0.14	
218.00	0.150	140.170	218.00	0.02	0.00	0.31	40°20'05.136"N	104°25'45.548"W	0.19	
310.00	0.180	127.130	310.00	0.21	-0.18	0.51	40°20'05.134"N	104°25'45.545"W	0.05	
399.00	0.140	105.500	399.00	0.34	-0.29	0.72	40°20'05.133"N	104°25'45.543"W	0.08	
489.00	0.370	224.540	489.00	0.57	-0.53	0.62	40°20'05.131"N	104°25'45.544"W	0.51	
667.00	0.190	261.750	667.00	0.97	-0.98	-0.07	40°20'05.126"N	104°25'45.553"W	0.14	
846.00	0.510	277.980	845.99	0.83	-0.91	-1.15	40°20'05.127"N	104°25'45.567"W	0.19	
935.00	0.690	235.550	934.99	1.02	-1.16	-1.99	40°20'05.125"N	104°25'45.578"W	0.52	
1025.00	0.680	252.990	1024.98	1.41	-1.62	-2.95	40°20'05.120"N	104°25'45.590"W	0.23	
1114.00	0.330	224.000	1113.98	1.70	-1.96	-3.63	40°20'05.117"N	104°25'45.599"W	0.48	
1204.00	0.510	230.270	1203.98	2.11	-2.40	-4.12	40°20'05.112"N	104°25'45.605"W	0.21	
1293.00	0.310	265.660	1292.97	2.34	-2.67	-4.66	40°20'05.110"N	104°25'45.612"W	0.35	
1382.00	0.410	207.410	1381.97	2.62	-2.97	-5.05	40°20'05.107"N	104°25'45.617"W	0.41	
1471.00	0.460	221.620	1470.97	3.14	-3.52	-5.43	40°20'05.101"N	104°25'45.622"W	0.13	TIE ONTO SURFACE BHGE SURVEYS
1612.00	0.290	224.630	1611.97	3.77	-4.20	-6.06	40°20'05.094"N	104°25'45.630"W	0.12	FIRST BHGE MONOBORE SURVEY
1702.00	0.900	11.870	1701.96	3.24	-3.67	-6.07	40°20'05.100"N	104°25'45.630"W	1.28	
1791.00	2.850	90.980	1790.92	2.76	-3.02	-3.72	40°20'05.106"N	104°25'45.600"W	3.17	
1881.00	5.410	110.390	1880.68	4.70	-4.54	2.50	40°20'05.091"N	104°25'45.520"W	3.20	
1970.00	8.000	120.530	1969.07	9.95	-9.15	11.77	40°20'05.046"N	104°25'45.400"W	3.19	
2059.00	9.740	119.860	2057.00	17.65	-16.05	23.63	40°20'04.977"N	104°25'45.247"W	1.96	
2149.00	10.130	115.240	2145.65	25.76	-23.21	37.39	40°20'04.907"N	104°25'45.069"W	0.99	
2238.00	8.990	98.700	2233.43	31.11	-27.60	51.35	40°20'04.863"N	104°25'44.889"W	3.33	
2327.00	8.380	113.140	2321.42	35.59	-31.20	64.19	40°20'04.828"N	104°25'44.723"W	2.54	
2417.00	8.810	128.690	2410.42	43.26	-38.09	75.60	40°20'04.760"N	104°25'44.576"W	2.62	
2506.00	10.040	122.560	2498.22	52.50	-46.52	87.46	40°20'04.676"N	104°25'44.423"W	1.78	
2595.00	9.780	99.620	2585.93	58.90	-51.97	101.46	40°20'04.622"N	104°25'44.242"W	4.42	
2684.00	8.070	82.660	2673.86	60.31	-52.43	115.11	40°20'04.618"N	104°25'44.066"W	3.51	
2774.00	7.880	92.860	2763.00	60.68	-51.93	127.54	40°20'04.623"N	104°25'43.905"W	1.58	
2863.00	8.050	105.410	2851.15	63.48	-53.89	139.64	40°20'04.603"N	104°25'43.749"W	1.96	
2953.00	5.430	94.080	2940.52	66.17	-55.87	149.96	40°20'04.584"N	104°25'43.616"W	3.25	
3042.00	7.540	102.100	3028.95	68.38	-57.39	159.87	40°20'04.569"N	104°25'43.488"W	2.57	
3131.00	8.550	119.590	3117.08	73.66	-61.88	171.34	40°20'04.524"N	104°25'43.340"W	2.96	
3221.00	8.200	126.020	3206.13	81.48	-68.96	182.35	40°20'04.455"N	104°25'43.197"W	1.11	
3310.00	8.910	124.230	3294.14	89.83	-76.57	193.18	40°20'04.379"N	104°25'43.057"W	0.85	

WELLPATH DATA (183 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3400.00	9.370	113.680	3383.00	97.54	-83.44	205.65	40°20'04.311"N	104°25'42.896"W	1.93	
3490.00	9.120	95.340	3471.85	102.10	-87.04	219.47	40°20'04.276"N	104°25'42.718"W	3.27	
3579.00	10.180	104.250	3559.59	105.71	-89.64	234.11	40°20'04.250"N	104°25'42.529"W	2.05	
3668.00	9.850	105.730	3647.24	110.74	-93.64	249.06	40°20'04.211"N	104°25'42.336"W	0.47	
3758.00	9.350	116.490	3735.98	117.04	-98.98	263.02	40°20'04.158"N	104°25'42.156"W	2.07	
3847.00	9.300	116.570	3823.81	124.37	-105.43	275.92	40°20'04.094"N	104°25'41.989"W	0.06	
3936.00	9.040	110.350	3911.67	130.91	-111.07	288.91	40°20'04.038"N	104°25'41.821"W	1.15	
4026.00	9.130	112.940	4000.54	137.05	-116.32	302.11	40°20'03.987"N	104°25'41.651"W	0.47	
4115.00	9.910	117.250	4088.32	144.22	-122.57	315.43	40°20'03.925"N	104°25'41.479"W	1.19	

# Actual Wellpath Report

70 RANCH 10-14-1L AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	CONFLUENCE RESOURCES	Slot	SLOT#06 70 RANCH 10-14-1L (260'FSL & 1261'FWL,SEC.03)
Area	COLORADO	Well	70 RANCH 10-14-1L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	70 RANCH 10-14-1L AWB
Facility	SEC.03-T04N-R63W		

## WELLPATH DATA (183 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4204.00	9.100	102.510	4176.11	150.20	-127.61	329.11	40°20'03.875"N	104°25'41.302"W	2.87	
4294.00	9.160	91.100	4264.98	152.85	-129.29	343.22	40°20'03.858"N	104°25'41.120"W	2.01	
4383.00	8.150	83.840	4352.96	153.24	-128.75	356.58	40°20'03.864"N	104°25'40.948"W	1.67	
4472.00	8.900	93.640	4440.98	153.92	-128.51	369.72	40°20'03.866"N	104°25'40.778"W	1.83	
4562.00	8.140	88.950	4529.99	155.17	-128.83	383.04	40°20'03.863"N	104°25'40.606"W	1.14	
4651.00	8.840	104.790	4618.03	157.69	-130.46	395.95	40°20'03.847"N	104°25'40.439"W	2.73	
4740.00	8.710	105.620	4705.99	162.16	-134.02	409.05	40°20'03.812"N	104°25'40.270"W	0.20	
4830.00	8.190	105.410	4795.01	166.57	-137.56	421.80	40°20'03.777"N	104°25'40.105"W	0.58	
4919.00	8.530	111.820	4883.07	171.55	-141.70	434.04	40°20'03.736"N	104°25'39.947"W	1.11	
5009.00	7.890	135.280	4972.17	179.14	-148.57	444.58	40°20'03.668"N	104°25'39.811"W	3.76	
5098.00	9.240	145.410	5060.18	189.92	-158.79	452.94	40°20'03.567"N	104°25'39.703"W	2.27	
5188.00	9.440	122.930	5149.01	200.58	-168.76	463.24	40°20'03.468"N	104°25'39.570"W	4.03	
5277.00	8.620	108.110	5236.92	207.47	-174.80	475.71	40°20'03.409"N	104°25'39.409"W	2.76	
5366.00	9.550	116.960	5324.81	213.78	-180.22	488.63	40°20'03.355"N	104°25'39.242"W	1.88	
5455.00	9.550	106.850	5412.58	220.20	-185.71	502.27	40°20'03.301"N	104°25'39.066"W	1.88	
5544.00	10.020	97.370	5500.29	224.36	-188.84	517.02	40°20'03.270"N	104°25'38.876"W	1.88	
5634.00	9.340	86.320	5589.02	225.94	-189.38	532.07	40°20'03.265"N	104°25'38.681"W	2.19	
5723.00	9.260	89.570	5676.85	226.42	-188.86	546.44	40°20'03.270"N	104°25'38.496"W	0.60	
5813.00	8.530	105.480	5765.78	229.10	-190.59	560.12	40°20'03.253"N	104°25'38.319"W	2.84	
5902.00	9.220	129.480	5853.74	236.20	-196.88	571.99	40°20'03.190"N	104°25'38.166"W	4.20	
5991.00	12.070	154.610	5941.25	249.78	-209.83	581.49	40°20'03.062"N	104°25'38.043"W	6.05	
6080.00	21.320	160.930	6026.41	274.12	-233.58	590.78	40°20'02.828"N	104°25'37.923"W	10.58	
6170.00	32.090	166.090	6106.70	313.59	-272.37	601.91	40°20'02.444"N	104°25'37.780"W	12.23	
6259.00	42.160	169.790	6177.58	366.71	-324.86	612.92	40°20'01.926"N	104°25'37.638"W	11.59	
6349.00	50.700	171.970	6239.56	431.60	-389.19	623.15	40°20'01.290"N	104°25'37.505"W	9.65	
6438.00	61.660	171.580	6289.02	505.23	-462.25	633.73	40°20'00.568"N	104°25'37.369"W	12.32	
6527.00	71.780	173.450	6324.15	586.72	-543.21	644.32	40°19'59.768"N	104°25'37.232"W	11.53	
6617.00	82.750	178.290	6343.98	674.34	-630.61	650.55	40°19'58.904"N	104°25'37.152"W	13.27	
6706.00	91.510	180.080	6348.43	763.01	-719.40	651.81	40°19'58.027"N	104°25'37.136"W	10.05	
6795.00	92.550	178.310	6345.27	851.81	-808.33	653.05	40°19'57.148"N	104°25'37.119"W	2.31	
6885.00	92.310	176.950	6341.46	941.69	-898.17	656.77	40°19'56.260"N	104°25'37.071"W	1.53	
6974.00	92.150	176.900	6338.00	1030.61	-986.97	661.54	40°19'55.383"N	104°25'37.010"W	0.19	
7063.00	92.090	177.620	6334.70	1119.53	-1075.81	665.80	40°19'54.505"N	104°25'36.955"W	0.81	
7152.00	92.220	178.060	6331.36	1208.42	-1164.68	669.15	40°19'53.627"N	104°25'36.912"W	0.52	
7242.00	92.220	179.240	6327.87	1298.25	-1254.59	671.27	40°19'52.738"N	104°25'36.884"W	1.31	
7331.00	91.600	179.880	6324.90	1387.03	-1343.54	671.95	40°19'51.859"N	104°25'36.876"W	1.00	

WELLPATH DATA (183 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7421.00	90.520	180.480	6323.24	1476.78	-1433.52	671.67	40°19'50.970"N	104°25'36.879"W	1.37	
7510.00	90.150	180.080	6322.72	1565.53	-1522.52	671.23	40°19'50.091"N	104°25'36.885"W	0.61	
7599.00	90.620	181.320	6322.12	1654.23	-1611.51	670.14	40°19'49.211"N	104°25'36.899"W	1.49	
7689.00	90.460	179.630	6321.27	1743.95	-1701.50	669.40	40°19'48.322"N	104°25'36.909"W	1.89	
7778.00	90.550	180.000	6320.49	1832.75	-1790.49	669.69	40°19'47.443"N	104°25'36.905"W	0.43	
7867.00	91.540	181.630	6318.86	1921.41	-1879.46	668.42	40°19'46.564"N	104°25'36.921"W	2.14	
7957.00	91.880	182.260	6316.18	2010.89	-1969.37	665.37	40°19'45.675"N	104°25'36.961"W	0.80	
8046.00	91.910	183.300	6313.24	2099.22	-2058.22	661.05	40°19'44.797"N	104°25'37.017"W	1.17	
8135.00	91.910	182.110	6310.27	2187.56	-2147.07	656.86	40°19'43.919"N	104°25'37.071"W	1.34	

# Actual Wellpath Report

70 RANCH 10-14-1L AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	CONFLUENCE RESOURCES	Slot	SLOT#06 70 RANCH 10-14-1L (260'FSL & 1261'FWL,SEC.03)
Area	COLORADO	Well	70 RANCH 10-14-1L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	70 RANCH 10-14-1L AWB
Facility	SEC.03-T04N-R63W		

WELLPATH DATA (183 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8224.00	92.000	180.530	6307.23	2276.13	-2235.99	654.81	40°19'43.040"N	104°25'37.097"W	1.78	
8314.00	92.030	179.190	6304.07	2365.87	-2325.93	655.03	40°19'42.152"N	104°25'37.095"W	1.49	
8403.00	91.600	178.680	6301.25	2454.71	-2414.87	656.68	40°19'41.273"N	104°25'37.073"W	0.75	
8492.00	90.460	178.220	6299.65	2543.61	-2503.82	659.09	40°19'40.394"N	104°25'37.042"W	1.38	
8581.00	89.970	177.800	6299.32	2632.55	-2592.77	662.18	40°19'39.515"N	104°25'37.002"W	0.73	
8670.00	90.000	177.840	6299.34	2721.51	-2681.70	665.56	40°19'38.636"N	104°25'36.959"W	0.06	
8760.00	90.000	178.040	6299.34	2811.46	-2771.64	668.80	40°19'37.747"N	104°25'36.917"W	0.22	
8849.00	90.000	177.620	6299.34	2900.41	-2860.58	672.17	40°19'36.868"N	104°25'36.873"W	0.47	
8938.00	90.180	177.020	6299.20	2989.39	-2949.48	676.33	40°19'35.990"N	104°25'36.820"W	0.70	
9028.00	89.970	177.410	6299.08	3079.37	-3039.37	680.70	40°19'35.102"N	104°25'36.763"W	0.49	
9117.00	89.880	178.150	6299.20	3168.33	-3128.31	684.15	40°19'34.223"N	104°25'36.719"W	0.84	
9206.00	89.910	180.180	6299.36	3257.19	-3217.29	685.45	40°19'33.343"N	104°25'36.702"W	2.28	
9296.00	89.970	181.470	6299.46	3346.87	-3307.28	684.15	40°19'32.454"N	104°25'36.719"W	1.43	
9385.00	89.880	181.930	6299.57	3435.43	-3396.24	681.51	40°19'31.575"N	104°25'36.753"W	0.53	
9474.00	89.850	182.530	6299.78	3523.90	-3485.17	678.05	40°19'30.696"N	104°25'36.798"W	0.67	
9564.00	89.880	182.930	6299.99	3613.29	-3575.07	673.76	40°19'29.808"N	104°25'36.853"W	0.45	
9653.00	90.090	181.900	6300.02	3701.73	-3663.99	670.01	40°19'28.929"N	104°25'36.901"W	1.18	
9743.00	90.120	180.550	6299.85	3791.35	-3753.97	668.09	40°19'28.040"N	104°25'36.926"W	1.50	
9832.00	90.060	179.130	6299.71	3880.15	-3842.97	668.33	40°19'27.161"N	104°25'36.923"W	1.60	
9921.00	89.940	178.860	6299.71	3969.03	-3931.95	669.90	40°19'26.281"N	104°25'36.903"W	0.33	
10010.00	89.880	179.120	6299.85	4057.91	-4020.94	671.46	40°19'25.402"N	104°25'36.883"W	0.30	
10100.00	89.850	179.180	6300.06	4147.78	-4110.93	672.80	40°19'24.513"N	104°25'36.866"W	0.07	
10188.00	89.880	179.460	6300.27	4235.63	-4198.92	673.84	40°19'23.643"N	104°25'36.852"W	0.32	
10277.00	89.850	179.640	6300.48	4324.46	-4287.92	674.54	40°19'22.764"N	104°25'36.843"W	0.21	
10367.00	89.880	179.700	6300.69	4414.28	-4377.92	675.06	40°19'21.874"N	104°25'36.837"W	0.07	
10456.00	90.030	180.610	6300.76	4503.04	-4466.92	674.82	40°19'20.995"N	104°25'36.840"W	1.04	
10546.00	90.090	179.910	6300.67	4592.79	-4556.91	674.41	40°19'20.106"N	104°25'36.845"W	0.78	
10635.00	90.090	178.690	6300.53	4681.65	-4645.91	675.50	40°19'19.226"N	104°25'36.831"W	1.37	
10724.00	90.090	178.660	6300.39	4770.55	-4734.88	677.56	40°19'18.347"N	104°25'36.804"W	0.03	
10814.00	90.090	178.940	6300.25	4860.44	-4824.86	679.44	40°19'17.458"N	104°25'36.780"W	0.31	
10903.00	90.000	179.260	6300.18	4949.31	-4913.85	680.84	40°19'16.578"N	104°25'36.762"W	0.37	
10993.00	90.120	179.350	6300.08	5039.16	-5003.84	681.93	40°19'15.689"N	104°25'36.748"W	0.17	
11082.00	90.030	179.570	6299.97	5128.00	-5092.84	682.77	40°19'14.810"N	104°25'36.737"W	0.27	
11171.00	90.090	179.690	6299.87	5216.82	-5181.84	683.35	40°19'13.930"N	104°25'36.730"W	0.15	
11260.00	90.180	179.990	6299.66	5305.63	-5270.84	683.59	40°19'13.051"N	104°25'36.727"W	0.35	
11350.00	90.000	180.050	6299.52	5395.41	-5360.84	683.56	40°19'12.161"N	104°25'36.727"W	0.21	

WELLPATH DATA (183 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11439.00	90.220	179.800	6299.35	5484.20	-5449.84	683.68	40°19'11.282"N	104°25'36.726"W	0.37	
11528.00	89.970	180.750	6299.20	5572.95	-5538.83	683.25	40°19'10.402"N	104°25'36.731"W	1.10	
11618.00	89.910	179.670	6299.30	5662.71	-5628.83	682.92	40°19'09.513"N	104°25'36.735"W	1.20	
11707.00	89.940	178.530	6299.41	5751.58	-5717.82	684.32	40°19'08.634"N	104°25'36.717"W	1.28	
11796.00	89.820	178.630	6299.60	5840.49	-5806.79	686.53	40°19'07.755"N	104°25'36.689"W	0.18	
11886.00	89.940	178.960	6299.79	5930.38	-5896.77	688.42	40°19'06.865"N	104°25'36.665"W	0.39	
11975.00	89.880	178.580	6299.93	6019.28	-5985.75	690.33	40°19'05.986"N	104°25'36.640"W	0.43	
12064.00	89.880	178.430	6300.12	6108.19	-6074.72	692.65	40°19'05.107"N	104°25'36.610"W	0.17	
12154.00	89.850	177.960	6300.33	6198.13	-6164.68	695.49	40°19'04.218"N	104°25'36.573"W	0.52	



# Actual Wellpath Report

70 RANCH 10-14-1L AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	CONFLUENCE RESOURCES	Slot	SLOT#06 70 RANCH 10-14-1L (260'FSL & 1261'FWL,SEC.03)
Area	COLORADO	Well	70 RANCH 10-14-1L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	70 RANCH 10-14-1L AWB
Facility	SEC.03-T04N-R63W		

## WELLPATH DATA (183 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12243.00	89.910	178.160	6300.51	6287.07	-6253.62	698.50	40°19'03.339"N	104°25'36.535"W	0.23	
12333.00	89.970	178.870	6300.61	6376.98	-6343.59	700.83	40°19'02.450"N	104°25'36.505"W	0.79	
12422.00	90.030	180.120	6300.61	6465.82	-6432.59	701.61	40°19'01.571"N	104°25'36.494"W	1.41	
12511.00	90.030	180.450	6300.56	6554.57	-6521.59	701.17	40°19'00.691"N	104°25'36.500"W	0.37	
12601.00	90.000	181.590	6300.54	6644.22	-6611.57	699.57	40°18'59.802"N	104°25'36.521"W	1.27	
12690.00	90.000	181.750	6300.54	6732.79	-6700.53	696.98	40°18'58.923"N	104°25'36.554"W	0.18	
12779.00	89.940	181.510	6300.59	6821.36	-6789.50	694.44	40°18'58.044"N	104°25'36.587"W	0.28	
12869.00	90.060	180.980	6300.59	6910.98	-6879.48	692.49	40°18'57.155"N	104°25'36.612"W	0.60	
12959.00	90.060	180.250	6300.49	7000.69	-6969.47	691.52	40°18'56.265"N	104°25'36.625"W	0.81	
13049.00	89.970	179.560	6300.47	7090.49	-7059.47	691.67	40°18'55.376"N	104°25'36.623"W	0.77	
13139.00	89.940	178.730	6300.54	7180.35	-7149.46	693.02	40°18'54.487"N	104°25'36.606"W	0.92	
13229.00	90.120	178.540	6300.49	7270.26	-7239.43	695.16	40°18'53.598"N	104°25'36.578"W	0.29	
13319.00	90.000	178.110	6300.40	7360.18	-7329.39	697.79	40°18'52.709"N	104°25'36.544"W	0.50	
13409.00	90.310	177.940	6300.15	7450.13	-7419.34	700.89	40°18'51.820"N	104°25'36.504"W	0.39	
13498.00	90.220	177.910	6299.74	7539.07	-7508.28	704.11	40°18'50.941"N	104°25'36.463"W	0.11	
13588.00	90.220	177.850	6299.40	7629.03	-7598.22	707.44	40°18'50.052"N	104°25'36.420"W	0.07	
13678.00	90.250	177.930	6299.03	7718.98	-7688.16	710.76	40°18'49.163"N	104°25'36.377"W	0.09	
13767.00	90.340	178.610	6298.57	7807.91	-7777.11	713.44	40°18'48.284"N	104°25'36.342"W	0.77	
13856.00	90.250	178.070	6298.11	7896.83	-7866.08	716.02	40°18'47.405"N	104°25'36.309"W	0.62	
13946.00	90.030	179.590	6297.89	7986.72	-7956.05	717.86	40°18'46.516"N	104°25'36.285"W	1.71	
14036.00	90.090	179.640	6297.80	8076.54	-8046.05	718.46	40°18'45.627"N	104°25'36.278"W	0.09	
14126.00	90.340	180.240	6297.46	8166.33	-8136.05	718.56	40°18'44.737"N	104°25'36.276"W	0.72	
14216.00	90.280	180.750	6296.97	8256.05	-8226.05	717.78	40°18'43.848"N	104°25'36.286"W	0.57	
14305.00	90.340	179.850	6296.49	8344.80	-8315.04	717.32	40°18'42.969"N	104°25'36.292"W	1.01	
14395.00	90.250	179.180	6296.03	8434.63	-8405.04	718.08	40°18'42.079"N	104°25'36.283"W	0.75	
14484.00	90.340	179.950	6295.57	8523.46	-8494.03	718.75	40°18'41.200"N	104°25'36.274"W	0.87	
14574.00	90.180	180.240	6295.16	8613.23	-8584.03	718.60	40°18'40.310"N	104°25'36.276"W	0.37	
14664.00	90.220	179.950	6294.85	8703.00	-8674.03	718.45	40°18'39.421"N	104°25'36.278"W	0.33	
14753.00	90.280	180.390	6294.46	8791.76	-8763.03	718.19	40°18'38.542"N	104°25'36.281"W	0.50	
14843.00	90.370	180.020	6293.95	8881.52	-8853.03	717.87	40°18'37.652"N	104°25'36.286"W	0.42	
14932.00	90.220	180.180	6293.49	8970.29	-8942.03	717.71	40°18'36.773"N	104°25'36.288"W	0.25	
15022.00	90.310	180.050	6293.07	9060.06	-9032.02	717.53	40°18'35.883"N	104°25'36.290"W	0.18	
15111.00	90.280	180.530	6292.61	9148.81	-9121.02	717.08	40°18'35.004"N	104°25'36.296"W	0.54	
15200.00	90.340	181.160	6292.13	9237.49	-9210.01	715.77	40°18'34.125"N	104°25'36.313"W	0.71	
15290.00	90.340	182.250	6291.60	9327.04	-9299.97	713.09	40°18'33.236"N	104°25'36.347"W	1.21	
15379.00	90.220	182.390	6291.16	9415.50	-9388.89	709.49	40°18'32.357"N	104°25'36.394"W	0.21	

WELLPATH DATA (183 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
15468.00	90.150	182.400	6290.88	9503.95	-9477.82	705.77	40°18'31.478"N	104°25'36.442"W	0.08	
15557.00	90.180	180.420	6290.62	9592.55	-9566.78	703.58	40°18'30.599"N	104°25'36.470"W	2.22	
15647.00	90.090	178.960	6290.41	9682.36	-9656.78	704.07	40°18'29.710"N	104°25'36.464"W	1.63	
15736.00	90.120	178.470	6290.24	9771.26	-9745.76	706.06	40°18'28.831"N	104°25'36.438"W	0.55	
15825.00	90.180	177.600	6290.01	9860.21	-9834.70	709.11	40°18'27.952"N	104°25'36.399"W	0.98	
15914.00	90.180	176.160	6289.73	9949.19	-9923.57	713.96	40°18'27.073"N	104°25'36.336"W	1.62	
16004.00	90.250	177.240	6289.39	10039.19	-10013.42	719.14	40°18'26.186"N	104°25'36.270"W	1.20	
16093.00	90.180	178.050	6289.06	10128.15	-10102.34	722.80	40°18'25.307"N	104°25'36.222"W	0.91	
16182.00	90.150	178.770	6288.80	10217.07	-10191.31	725.27	40°18'24.428"N	104°25'36.191"W	0.81	

# Actual Wellpath Report

70 RANCH 10-14-1L AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	CONFLUENCE RESOURCES	Slot	SLOT#06 70 RANCH 10-14-1L (260'FSL & 1261'FWL,SEC.03)
Area	COLORADO	Well	70 RANCH 10-14-1L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	70 RANCH 10-14-1L AWB
Facility	SEC.03-T04N-R63W		

## WELLPATH DATA (183 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16272.00	90.150	180.440	6288.57	10306.89	-10281.30	725.89	40°18'23.538"N	104°25'36.183"W	1.86	
16323.00	90.120	181.090	6288.45	10357.71	-10332.29	725.20	40°18'23.034"N	104°25'36.191"W	1.28	LAST BHGE MONOBORE SURVEY
16347.00	90.120	181.090	6288.40	10381.62	-10356.29	724.75	40°18'22.797"N	104°25'36.197"W	0.00	PROJ TO BIT

## HOLE & CASING SECTIONS - Ref Wellbore: 70 RANCH 10-14-1L AWB Ref Wellpath: 70 RANCH 10-14-1L AWP

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
13.5in Open Hole	23.00	1587.00	1564.00	23.00	1586.97	0.00	0.00	-4.11	-5.97
9.625in Casing Surface	23.00	1576.00	1553.00	23.00	1575.97	0.00	0.00	-4.06	-5.92

## TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.03-T04N-R63W	11.00	-7.29	-172.85	3298302.44	1366586.40	40°20'05.064"N	104°25'47.784"W	polygon
SEC.10-T04N-R63W	11.00	-7.29	-172.85	3298302.44	1366586.40	40°20'05.064"N	104°25'47.784"W	polygon
SEC.15-T04N-R63W	11.00	-7.29	-172.85	3298302.44	1366586.40	40°20'05.064"N	104°25'47.784"W	polygon
70 RANCH 10-14-1L BHL (470'FNL & 1920'FWL,SEC.15)	6276.50	-10357.24	722.37	3299322.51	1356248.47	40°18'22.788"N	104°25'36.228"W	point
70 RANCH 10-14-1L LP (470'FNL & 1920'FWL,SEC.10)	6330.50	-695.82	649.60	3299133.10	1365907.88	40°19'58.260"N	104°25'37.164"W	point
460 SETBACKS	6383.00	-7.29	-172.85	3298302.44	1366586.40	40°20'05.064"N	104°25'47.784"W	polygon

## WELLPATH COMPOSITION - Ref Wellbore: 70 RANCH 10-14-1L AWB Ref Wellpath: 70 RANCH 10-14-1L AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
23.00	1471.00	BHI NaviTrak (Rotating+Axial Corr)	13 1/2" Surface Navitrak (Rotating+Axial Corr) <127-1471>	70 RANCH 10-14-1L AWB
1471.00	16323.00	BHI AutoTrak Curve (Short)	8.5" Monobore AutoTrak Curve (Short) <1612-16323>	70 RANCH 10-14-1L AWB

WELLPATH COMPOSITION - Ref Wellbore: 70 RANCH 10-14-1L AWB      Ref Wellpath: 70 RANCH 10-14-1L AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16323.00	16347.00	Blind Drilling (std)	Projection to bit	70 RANCH 10-14-1L AWB

# Actual Wellpath Report

70 RANCH 10-14-1L AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	CONFLUENCE RESOURCES	Slot	SLOT#06 70 RANCH 10-14-1L (260'FSL & 1261'FWL,SEC.03)
Area	COLORADO	Well	70 RANCH 10-14-1L
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	70 RANCH 10-14-1L AWB
Facility	SEC.03-T04N-R63W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1471.00	0.460	221.620	1470.97	TIE ONTO SURFACE BHGE SURVEYS
1612.00	0.290	224.630	1611.97	FIRST BHGE MONOBORE SURVEY
16323.00	90.120	181.090	6288.45	LAST BHGE MONOBORE SURVEY
16347.00	90.120	181.090	6288.40	PROJ TO BIT