

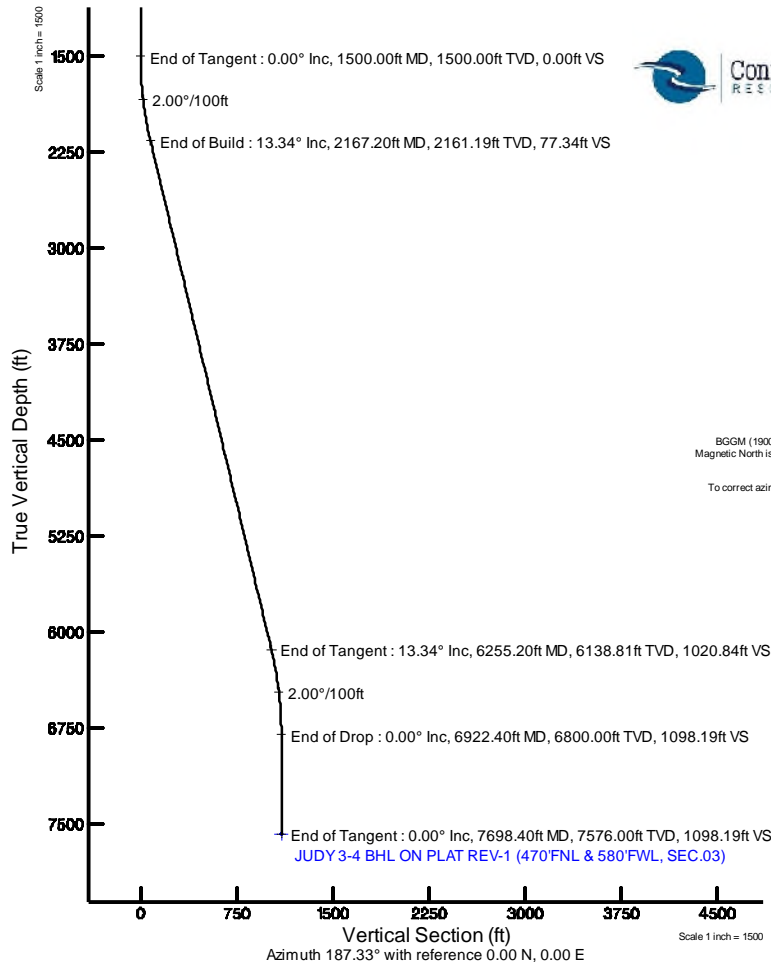
# CONFLUENCE RESOURCES

Location: COLORADO Slot: SLOT#01 JUDY 3-4 (620'FSL & 743'FWL, SEC.34)  
Field: WELD COUNTY (NAD83, TRUE NORTH) Well: JUDY 3-4  
Facility: SEC.34-T01N-R65W Wellbore: JUDY 3-4 PWB

Plot reference wellpath is JUDY 3-4 (REV-A.0) PWP	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (17KB) (RKB)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to RIG (17KB) (RKB)	North Reference: True north
RIG (17KB) (RKB) to Mean Sea Level: 5156 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#01 JUDY 3-4 (620'FSL & 743'FWL, SEC.34)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: adamkat on 2019-02-21
	Database: Denver

## Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.34-T01N-R65W			3236186.141	1244789.256	40°00'08.100"N	104°39'24.840"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#01 JUDY 3-4 (620'FSL & 743'FWL, SEC.34)	0.00	0.00	3236186.141	1244789.256	40°00'08.100"N	104°39'24.840"W
RIG (17KB) (RKB) to Mud line (At Slot: SLOT#01 JUDY 3-4 (620'FSL & 743'FWL, SEC.34))						5156ft
Mean Sea Level to Mud line (At Slot: SLOT#01 JUDY 3-4 (620'FSL & 743'FWL, SEC.34))						0ft
RIG (17KB) (RKB) to Mean Sea Level						5156ft



## Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.03-T01N-R65W		0.00	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W
SEC.34-T01N-R65W		0.00	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W
JUDY 3-4 BHL ON PLAT REV-1 (470'FNL & 580'FWL, SEC.03)	7698.40	7576.00	-1089.22	-140.08	3236056.42	1243698.80	39°59'57.336"N	104°39'26.640"W

## Survey Program

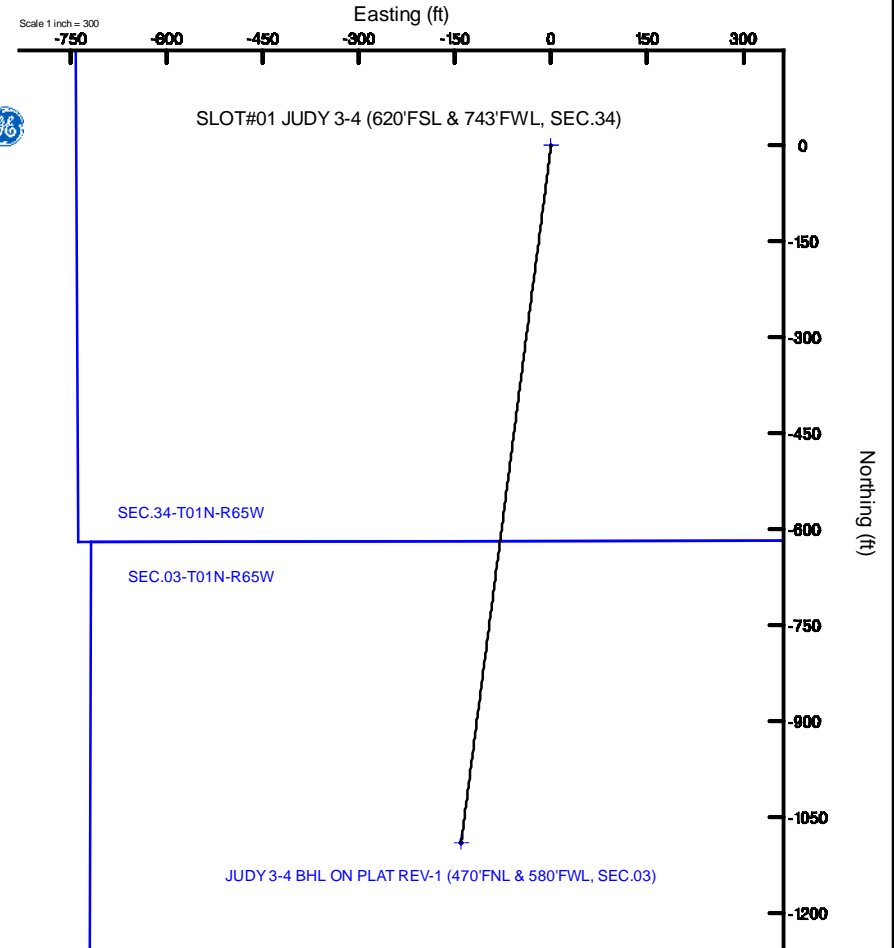
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	1500.00	BHI NavITrak	BHI NavITrak (Rotating+Axial Corr)		JUDY 3-4 PWB
1500.00	7698.40	BHI AutoTrak Curve	BHI AutoTrak Curve (Axial Corr, Short spacing)		JUDY 3-4 PWB

## Bottom Hole Location

MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
7698.40	0.000	187.329	7576.00	-1089.22	-140.08	3236056.42	1243698.80	39°59'57.336"N	104°39'26.640"W

## Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	17.00	0.000	187.329	17.00	0.00	0.00	0.00	0.00
End of Tangent	1500.00	0.000	187.329	1500.00	0.00	0.00	0.00	0.00
End of Build	2167.20	13.344	187.329	2161.19	-76.71	-9.87	2.00	77.34
End of Tangent	6255.20	13.344	187.329	6138.81	-1012.51	-130.22	0.00	1020.84
End of Drop	6922.40	0.000	187.329	6800.00	-1089.22	-140.08	2.00	1098.19
End of Tangent	7698.40	0.000	187.329	7576.00	-1089.22	-140.08	0.00	1098.19



# Planned Wellpath Report

JUDY 3-4 (REV-A.0) PWP

Page 1 of 5

REFERENCE WELLPATH IDENTIFICATION			
Operator	CONFLUENCE RESOURCES	Slot	SLOT#01 JUDY 3-4 (620'FSL & 743'FWL, SEC.34)
Area	COLORADO	Well	JUDY 3-4
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	JUDY 3-4 PWB
Facility	SEC.34-T01N-R65W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Adamkat
Scale	0.999966	Report Generated	2/21/2019 at 2:45:10 PM
Convergence at slot	0.55° East	Database/Source file	Denver/JUDY_3-4_REV-A.0_PWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W
Facility Reference Pt			3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W
Field Reference Pt			3230456.90	1245096.09	40°00'11.664"N	104°40'38.424"W

WELLPATH DATUM			
Calculation method	Minimum curvature	RIG (17'KB) (RKB) to Facility Vertical Datum	5156.00ft
Horizontal Reference Pt	Slot	RIG (17'KB) (RKB) to Mean Sea Level	5156.00ft
Vertical Reference Pt	RIG (17'KB) (RKB)	RIG (17'KB) (RKB) to Mud Line at Slot (SLOT#01 JUDY 3-4 (620'FSL & 743'FWL, SEC.34))	5156.00ft
MD Reference Pt	RIG (17'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	187.33°

# Planned Wellpath Report

JUDY 3-4 (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	CONFLUENCE RESOURCES	Slot	SLOT#01 JUDY 3-4 (620'FSL & 743'FWL, SEC.34)
Area	COLORADO	Well	JUDY 3-4
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	JUDY 3-4 PWB
Facility	SEC.34-T01N-R65W		

WELLPATH DATA (83 stations) † = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	187.329	0.00	0.00	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W	0.00	
17.00	0.000	187.329	17.00	0.00	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W	0.00	Tie On
117.00†	0.000	187.329	117.00	0.00	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W	0.00	
217.00†	0.000	187.329	217.00	0.00	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W	0.00	
317.00†	0.000	187.329	317.00	0.00	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W	0.00	
417.00†	0.000	187.329	417.00	0.00	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W	0.00	
517.00†	0.000	187.329	517.00	0.00	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W	0.00	
617.00†	0.000	187.329	617.00	0.00	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W	0.00	
717.00†	0.000	187.329	717.00	0.00	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W	0.00	
817.00†	0.000	187.329	817.00	0.00	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W	0.00	
917.00†	0.000	187.329	917.00	0.00	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W	0.00	
1017.00†	0.000	187.329	1017.00	0.00	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W	0.00	
1117.00†	0.000	187.329	1117.00	0.00	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W	0.00	
1217.00†	0.000	187.329	1217.00	0.00	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W	0.00	
1317.00†	0.000	187.329	1317.00	0.00	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W	0.00	
1417.00†	0.000	187.329	1417.00	0.00	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W	0.00	
1500.00	0.000	187.329	1500.00	0.00	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W	0.00	End of Tangent
1517.00†	0.340	187.329	1517.00	0.05	-0.05	-0.01	3236186.13	1244789.21	40°00'08.100"N	104°39'24.840"W	2.00	
1617.00†	2.340	187.329	1616.97	2.39	-2.37	-0.30	3236185.86	1244786.88	40°00'08.077"N	104°39'24.844"W	2.00	
1717.00†	4.340	187.329	1716.79	8.21	-8.15	-1.05	3236185.17	1244781.10	40°00'08.019"N	104°39'24.853"W	2.00	
1817.00†	6.340	187.329	1816.35	17.52	-17.38	-2.23	3236184.07	1244771.86	40°00'07.928"N	104°39'24.869"W	2.00	
1917.00†	8.340	187.329	1915.53	30.30	-30.05	-3.86	3236182.56	1244759.17	40°00'07.803"N	104°39'24.890"W	2.00	
2017.00†	10.340	187.329	2014.20	46.52	-46.14	-5.93	3236180.65	1244743.06	40°00'07.644"N	104°39'24.916"W	2.00	
2117.00†	12.340	187.329	2112.24	66.19	-65.65	-8.44	3236178.32	1244723.54	40°00'07.451"N	104°39'24.948"W	2.00	
2167.20	13.344	187.329	2161.19	77.34	-76.71	-9.87	3236177.01	1244712.46	40°00'07.342"N	104°39'24.967"W	2.00	End of Build
2217.00†	13.344	187.329	2209.64	88.84	-88.11	-11.33	3236175.65	1244701.04	40°00'07.229"N	104°39'24.986"W	0.00	
2317.00†	13.344	187.329	2306.94	111.92	-111.00	-14.28	3236172.92	1244678.13	40°00'07.003"N	104°39'25.023"W	0.00	
2417.00†	13.344	187.329	2404.24	135.00	-133.89	-17.22	3236170.20	1244655.21	40°00'06.777"N	104°39'25.061"W	0.00	
2517.00†	13.344	187.329	2501.54	158.08	-156.79	-20.16	3236167.47	1244632.29	40°00'06.551"N	104°39'25.099"W	0.00	
2617.00†	13.344	187.329	2598.84	181.16	-179.68	-23.11	3236164.74	1244609.37	40°00'06.324"N	104°39'25.137"W	0.00	
2717.00†	13.344	187.329	2696.14	204.24	-202.57	-26.05	3236162.02	1244586.46	40°00'06.098"N	104°39'25.175"W	0.00	
2817.00†	13.344	187.329	2793.44	227.32	-225.46	-29.00	3236159.29	1244563.54	40°00'05.872"N	104°39'25.213"W	0.00	
2917.00†	13.344	187.329	2890.74	250.40	-248.35	-31.94	3236156.56	1244540.62	40°00'05.646"N	104°39'25.250"W	0.00	
3017.00†	13.344	187.329	2988.04	273.48	-271.24	-34.88	3236153.84	1244517.70	40°00'05.420"N	104°39'25.288"W	0.00	
3117.00†	13.344	187.329	3085.34	296.56	-294.13	-37.83	3236151.11	1244494.79	40°00'05.193"N	104°39'25.326"W	0.00	
3217.00†	13.344	187.329	3182.64	319.64	-317.02	-40.77	3236148.39	1244471.87	40°00'04.967"N	104°39'25.364"W	0.00	
3317.00†	13.344	187.329	3279.94	342.72	-339.92	-43.72	3236145.66	1244448.95	40°00'04.741"N	104°39'25.402"W	0.00	
3417.00†	13.344	187.329	3377.24	365.79	-362.81	-46.66	3236142.93	1244426.04	40°00'04.515"N	104°39'25.440"W	0.00	
3517.00†	13.344	187.329	3474.54	388.87	-385.70	-49.60	3236140.21	1244403.12	40°00'04.288"N	104°39'25.477"W	0.00	
3617.00†	13.344	187.329	3571.84	411.95	-408.59	-52.55	3236137.48	1244380.20	40°00'04.062"N	104°39'25.515"W	0.00	
3717.00†	13.344	187.329	3669.14	435.03	-431.48	-55.49	3236134.76	1244357.28	40°00'03.836"N	104°39'25.553"W	0.00	
3817.00†	13.344	187.329	3766.44	458.11	-454.37	-58.44	3236132.03	1244334.37	40°00'03.610"N	104°39'25.591"W	0.00	
3917.00†	13.344	187.329	3863.74	481.19	-477.26	-61.38	3236129.30	1244311.45	40°00'03.384"N	104°39'25.629"W	0.00	
4017.00†	13.344	187.329	3961.04	504.27	-500.15	-64.32	3236126.58	1244288.53	40°00'03.157"N	104°39'25.667"W	0.00	
4117.00†	13.344	187.329	4058.34	527.35	-523.05	-67.27	3236123.85	1244265.61	40°00'02.931"N	104°39'25.704"W	0.00	

# Planned Wellpath Report

JUDY 3-4 (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	CONFLUENCE RESOURCES	Slot	SLOT#01 JUDY 3-4 (620'FSL & 743'FWL, SEC.34)
Area	COLORADO	Well	JUDY 3-4
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	JUDY 3-4 PWB
Facility	SEC.34-T01N-R65W		

WELLPATH DATA (83 stations) † = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4217.00†	13.344	187.329	4155.64	550.43	-545.94	-70.21	3236121.12	1244242.70	40°00'02.705"N	104°39'25.742"W	0.00	
4317.00†	13.344	187.329	4252.94	573.51	-568.83	-73.16	3236118.40	1244219.78	40°00'02.479"N	104°39'25.780"W	0.00	
4417.00†	13.344	187.329	4350.24	596.59	-591.72	-76.10	3236115.67	1244196.86	40°00'02.252"N	104°39'25.818"W	0.00	
4517.00†	13.344	187.329	4447.54	619.67	-614.61	-79.04	3236112.95	1244173.94	40°00'02.026"N	104°39'25.856"W	0.00	
4617.00†	13.344	187.329	4544.84	642.75	-637.50	-81.99	3236110.22	1244151.03	40°00'01.800"N	104°39'25.894"W	0.00	
4717.00†	13.344	187.329	4642.14	665.83	-660.39	-84.93	3236107.49	1244128.11	40°00'01.574"N	104°39'25.931"W	0.00	
4817.00†	13.344	187.329	4739.44	688.91	-683.28	-87.88	3236104.77	1244105.19	40°00'01.348"N	104°39'25.969"W	0.00	
4917.00†	13.344	187.329	4836.74	711.99	-706.18	-90.82	3236102.04	1244082.27	40°00'01.121"N	104°39'26.007"W	0.00	
5017.00†	13.344	187.329	4934.05	735.07	-729.07	-93.76	3236099.32	1244059.36	40°00'00.895"N	104°39'26.045"W	0.00	
5117.00†	13.344	187.329	5031.35	758.15	-751.96	-96.71	3236096.59	1244036.44	40°00'00.669"N	104°39'26.083"W	0.00	
5217.00†	13.344	187.329	5128.65	781.23	-774.85	-99.65	3236093.86	1244013.52	40°00'00.443"N	104°39'26.121"W	0.00	
5317.00†	13.344	187.329	5225.95	804.31	-797.74	-102.60	3236091.14	1243990.61	40°00'00.216"N	104°39'26.158"W	0.00	
5417.00†	13.344	187.329	5323.25	827.39	-820.63	-105.54	3236088.41	1243967.69	39°59'59.990"N	104°39'26.196"W	0.00	
5517.00†	13.344	187.329	5420.55	850.47	-843.52	-108.48	3236085.68	1243944.77	39°59'59.764"N	104°39'26.234"W	0.00	
5617.00†	13.344	187.329	5517.85	873.55	-866.41	-111.43	3236082.96	1243921.85	39°59'59.538"N	104°39'26.272"W	0.00	
5717.00†	13.344	187.329	5615.15	896.63	-889.31	-114.37	3236080.23	1243898.94	39°59'59.312"N	104°39'26.310"W	0.00	
5817.00†	13.344	187.329	5712.45	919.71	-912.20	-117.32	3236077.51	1243876.02	39°59'59.085"N	104°39'26.347"W	0.00	
5917.00†	13.344	187.329	5809.75	942.79	-935.09	-120.26	3236074.78	1243853.10	39°59'58.859"N	104°39'26.385"W	0.00	
6017.00†	13.344	187.329	5907.05	965.87	-957.98	-123.20	3236072.05	1243830.18	39°59'58.633"N	104°39'26.423"W	0.00	
6117.00†	13.344	187.329	6004.35	988.95	-980.87	-126.15	3236069.33	1243807.27	39°59'58.407"N	104°39'26.461"W	0.00	
6217.00†	13.344	187.329	6101.65	1012.03	-1003.76	-129.09	3236066.60	1243784.35	39°59'58.181"N	104°39'26.499"W	0.00	
6255.20	13.344	187.329	6138.81	1020.84	-1012.51	-130.22	3236065.56	1243775.60	39°59'58.094"N	104°39'26.513"W	0.00	End of Tangent
6317.00†	12.108	187.329	6199.10	1034.46	-1026.01	-131.95	3236063.95	1243762.08	39°59'57.961"N	104°39'26.536"W	2.00	
6417.00†	10.108	187.329	6297.22	1053.72	-1045.12	-134.41	3236061.68	1243742.95	39°59'57.772"N	104°39'26.567"W	2.00	
6517.00†	8.108	187.329	6395.95	1069.55	-1060.82	-136.43	3236059.81	1243727.23	39°59'57.617"N	104°39'26.593"W	2.00	
6617.00†	6.108	187.329	6495.18	1081.93	-1073.09	-138.01	3236058.35	1243714.94	39°59'57.495"N	104°39'26.613"W	2.00	
6717.00†	4.108	187.329	6594.78	1090.83	-1081.92	-139.14	3236057.29	1243706.10	39°59'57.408"N	104°39'26.628"W	2.00	
6817.00†	2.108	187.329	6694.62	1096.25	-1087.29	-139.84	3236056.65	1243700.72	39°59'57.355"N	104°39'26.637"W	2.00	
6917.00†	0.108	187.329	6794.60	1098.18	-1089.21	-140.08	3236056.43	1243698.80	39°59'57.336"N	104°39'26.640"W	2.00	
6922.40	0.000	187.329	6800.00	1098.19	-1089.22	-140.08	3236056.42	1243698.80	39°59'57.336"N	104°39'26.640"W	2.00	End of Drop
7017.00†	0.000	187.329	6894.60	1098.19	-1089.22	-140.08	3236056.42	1243698.80	39°59'57.336"N	104°39'26.640"W	0.00	
7117.00†	0.000	187.329	6994.60	1098.19	-1089.22	-140.08	3236056.42	1243698.80	39°59'57.336"N	104°39'26.640"W	0.00	
7217.00†	0.000	187.329	7094.60	1098.19	-1089.22	-140.08	3236056.42	1243698.80	39°59'57.336"N	104°39'26.640"W	0.00	
7317.00†	0.000	187.329	7194.60	1098.19	-1089.22	-140.08	3236056.42	1243698.80	39°59'57.336"N	104°39'26.640"W	0.00	
7417.00†	0.000	187.329	7294.60	1098.19	-1089.22	-140.08	3236056.42	1243698.80	39°59'57.336"N	104°39'26.640"W	0.00	
7517.00†	0.000	187.329	7394.60	1098.19	-1089.22	-140.08	3236056.42	1243698.80	39°59'57.336"N	104°39'26.640"W	0.00	
7617.00†	0.000	187.329	7494.60	1098.19	-1089.22	-140.08	3236056.42	1243698.80	39°59'57.336"N	104°39'26.640"W	0.00	
7698.40	0.000	187.329	7576.00†	1098.19	-1089.22	-140.08	3236056.42	1243698.80	39°59'57.336"N	104°39'26.640"W	0.00	End of Tangent

# Planned Wellpath Report

JUDY 3-4 (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	CONFLUENCE RESOURCES	Slot	SLOT#01 JUDY 3-4 (620'FSL & 743'FWL, SEC.34)
Area	COLORADO	Well	JUDY 3-4
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	JUDY 3-4 PWB
Facility	SEC.34-T01N-R65W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.03-T01N-R65W		0.00	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W	polygon
SEC.34-T01N-R65W		0.00	0.00	0.00	3236186.14	1244789.26	40°00'08.100"N	104°39'24.840"W	polygon
1) JUDY 3-4 BHL ON PLAT REV-1 (470'FNL & 580'FWL, SEC.03)	7698.40	7576.00	-1089.22	-140.08	3236056.42	1243698.80	39°59'57.336"N	104°39'26.640"W	point

SURVEY PROGRAM - Ref Wellbore: JUDY 3-4 PWB    Ref Wellpath: JUDY 3-4 (REV-A.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1500.00	BHI NaviTrak (Rotating+Axial Corr)		JUDY 3-4 PWB
1500.00	7698.40	BHI AutoTrak Curve (Axial Corr, Short spacing)		JUDY 3-4 PWB

# Planned Wellpath Report

JUDY 3-4 (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	CONFLUENCE RESOURCES	Slot	SLOT#01 JUDY 3-4 (620'FSL & 743'FWL, SEC.34)
Area	COLORADO	Well	JUDY 3-4
Field	WELD COUNTY (NAD83, TRUE NORTH)	Wellbore	JUDY 3-4 PWB
Facility	SEC.34-T01N-R65W		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	187.329	17.00	Tie On
1500.00	0.000	187.329	1500.00	End of Tangent
2167.20	13.344	187.329	2161.19	End of Build
6255.20	13.344	187.329	6138.81	End of Tangent
6922.40	0.000	187.329	6800.00	End of Drop
7698.40	0.000	187.329	7576.00	End of Tangent