

<h1 style="margin: 0;">BISON OIL & GAS</h1>							
Location: COLORADO		Slot: SLOT#06 BOOMSLANG FED 8-60 14B-13-18-3 (1313FSL & 476FEL, SEC.14)					
Field: WELD COUNTY (NAD83/TN)		Well: BOOMSLANG FED 8-60 14B-13-18-3					
Facility: SEC.14-T08N-R60W		Wellbore: BOOMSLANG FED 8-60 14B-13-18-3 PWB					
Plot reference wellpath is BOOMSLANG FED 8-60 14B-13-18-3 (REV-A.0) PWP							
True vertical depths are referenced to RIG (4890/GL+25KB@4915) (RKB) Measured depths are referenced to RIG (4890/GL+25KB@4915) (RKB) RIG (4890/GL+25KB@4915) (RKB) to Mean Sea Level: 4915 feet Mean Sea Level to Mud line (At Slot: SLOTH06 BOOMSLANG FED 8-60 14B-13-18-3 (1313FSL & 476FEL, SEC.14)): 0 feet			Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet				
			North Reference: True north				
			Scale: True distance				
			Depths are in feet				
			Created by: hanisab on 2019-10-10				
Coordinates are in feet referenced to Slot			Database: WA DENVER				
<h2 style="margin: 0;">Location Information</h2>							
Facility Name			Grid East (US R)		Grid North (US R)	Latitude	Longitude
SEC.14-T08N-R60W			3401713.155		1488770.996	40°39'57.840"N	104°03'06.800"W
Slot	Local N (ft)	Local E (ft)	Grid East (US R)		Grid North (US R)	Latitude	Longitude
SLOT#06 BOOMSLANG FED 8-60 14B-13-18-3 (1313FSL & 476FEL, SEC.14)	-2622.35	451.09	3402206.999		1488156.410	40°39'31.928"N	104°03'00.947"W
RIG (4890/GL+25KB@4915) (RKB) to Mud line (At Slot: SLOTH06 BOOMSLANG FED 8-60 14B-13-18-3 (1313FSL & 476FEL, SEC.14))						4915ft	
Mean Sea Level to Mud line (At Slot: SLOTH06 BOOMSLANG FED 8-60 14B-13-18-3 (1313FSL & 476FEL, SEC.14))						0ft	
RIG (4890/GL+25KB@4915) (RKB) to Mean Sea Level						4915ft	



Planned Wellpath Report

BOOMSLANG FED 8-60 14B-13-18-3 (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BISON OIL & GAS	Slot	SLOT#06 BOOMSLANG FED 8-60 14B-13-18-3 (1313'FSL & 476'FEL,SEC.14)
Area	COLORADO	Well	BOOMSLANG FED 8-60 14B-13-18-3
Field	WELD COUNTY (NAD83/TN)	Wellbore	BOOMSLANG FED 8-60 14B-13-18-3 PWB
Facility	SEC.14-T08N-R60W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.1
North Reference	True	User	Hanisab
Scale	0.999982	Report Generated	10/10/2019 at 7:51:04 AM
Convergence at slot	0.94° East	Database/Source file	WA DENVER/BOOMSLANG_FED_8-60_14B-13-18-3_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	-2622.35	451.09	3402207.00	1486156.41	40°39'31.928"N	104°03'00.947"W
Facility Reference Pt			3401713.16	1488771.00	40°39'57.840"N	104°03'06.800"W
Field Reference Pt			3376841.67	1496090.80	40°41'14.050"N	104°08'28.060"W

WELLPATH DATUM

Calculation method	Minimum curvature	RIG (4890'GL+25'KB@4915') (RKB) to Facility Vertical Datum	4915.00ft
Horizontal Reference Pt	Slot	RIG (4890'GL+25'KB@4915') (RKB) to Mean Sea Level	4915.00ft
Vertical Reference Pt	RIG (4890'GL+25'KB@4915') (RKB)	RIG (4890'GL+25'KB@4915') (RKB) to Mud Line at Slot (SLOT#06 BOOMSLANG FED 8-60 14B-13-18-3 (1313'FSL & 476'FEL,SEC.14))	4915.00ft
MD Reference Pt	RIG (4890'GL+25'KB@4915') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	87.57°



Planned Wellpath Report

BOOMSLANG FED 8-60 14B-13-18-3 (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BISON OIL & GAS	Slot	SLOT#06 BOOMSLANG FED 8-60 14B-13-18-3 (1313'FSL & 476'FEL,SEC.14)
Area	COLORADO	Well	BOOMSLANG FED 8-60 14B-13-18-3
Field	WELD COUNTY (NAD83/TN)	Wellbore	BOOMSLANG FED 8-60 14B-13-18-3 PWB
Facility	SEC.14-T08N-R60W		

WELLPATH DATA (159 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	26.949	0.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
25.00	0.000	26.949	25.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	Tie On
125.00†	0.000	26.949	125.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
225.00†	0.000	26.949	225.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
325.00†	0.000	26.949	325.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
425.00†	0.000	26.949	425.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
525.00†	0.000	26.949	525.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
625.00†	0.000	26.949	625.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
725.00†	0.000	26.949	725.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
825.00†	0.000	26.949	825.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
925.00†	0.000	26.949	925.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
1025.00†	0.000	26.949	1025.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
1125.00†	0.000	26.949	1125.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
1225.00†	0.000	26.949	1225.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
1325.00†	0.000	26.949	1325.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
1425.00†	0.000	26.949	1425.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
1525.00†	0.000	26.949	1525.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
1625.00†	0.000	26.949	1625.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
1725.00†	0.000	26.949	1725.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
1825.00†	0.000	26.949	1825.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
1925.00†	0.000	26.949	1925.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
2025.00†	0.000	26.949	2025.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
2125.00†	0.000	26.949	2125.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
2225.00†	0.000	26.949	2225.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
2325.00†	0.000	26.949	2325.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
2425.00†	0.000	26.949	2425.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
2525.00†	0.000	26.949	2525.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
2625.00†	0.000	26.949	2625.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
2725.00†	0.000	26.949	2725.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
2825.00†	0.000	26.949	2825.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
2925.00†	0.000	26.949	2925.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	
3000.00	0.000	26.949	3000.00	0.00	0.00	0.00	40°39'31.928"N	104°03'00.947"W	0.00	End of Tangent
3025.00†	0.500	26.949	3025.00	0.05	0.10	0.05	40°39'31.929"N	104°03'00.946"W	2.00	
3125.00†	2.500	26.949	3124.96	1.34	2.43	1.24	40°39'31.952"N	104°03'00.931"W	2.00	
3225.00†	4.500	26.949	3224.77	4.33	7.87	4.00	40°39'32.006"N	104°03'00.895"W	2.00	

WELLPATH DATA (159 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3290.50†	5.810	26.949	3290.00	7.22	13.12	6.67	40°39'32.058"N	104°03'00.860"W	2.00	Parkman
3325.00†	6.500	26.949	3324.30	9.04	16.42	8.35	40°39'32.090"N	104°03'00.839"W	2.00	
3385.63	7.713	26.949	3384.47	12.72	23.10	11.75	40°39'32.156"N	104°03'00.795"W	2.00	End of Build
3425.00†	7.713	26.949	3423.48	15.31	27.81	14.14	40°39'32.203"N	104°03'00.764"W	0.00	
3525.00†	7.713	26.949	3522.58	21.89	39.77	20.22	40°39'32.321"N	104°03'00.685"W	0.00	
3625.00†	7.713	26.949	3621.67	28.48	51.74	26.30	40°39'32.439"N	104°03'00.606"W	0.00	
3725.00†	7.713	26.949	3720.77	35.06	63.70	32.39	40°39'32.557"N	104°03'00.527"W	0.00	
3825.00†	7.713	26.949	3819.86	41.64	75.66	38.47	40°39'32.676"N	104°03'00.448"W	0.00	
3925.00†	7.713	26.949	3918.96	48.23	87.63	44.55	40°39'32.794"N	104°03'00.369"W	0.00	
4025.00†	7.713	26.949	4018.05	54.81	99.59	50.63	40°39'32.912"N	104°03'00.290"W	0.00	
4117.79†	7.713	26.949	4110.00	60.92	110.69	56.28	40°39'33.022"N	104°03'00.217"W	0.00	Sussex
4125.00†	7.713	26.949	4117.15	61.40	111.55	56.71	40°39'33.030"N	104°03'00.211"W	0.00	
4225.00†	7.713	26.949	4216.24	67.98	123.52	62.80	40°39'33.148"N	104°03'00.132"W	0.00	
4325.00†	7.713	26.949	4315.34	74.57	135.48	68.88	40°39'33.267"N	104°03'00.053"W	0.00	
4425.00†	7.713	26.949	4414.43	81.15	147.44	74.96	40°39'33.385"N	104°02'59.974"W	0.00	
4525.00†	7.713	26.949	4513.53	87.74	159.41	81.04	40°39'33.503"N	104°02'59.895"W	0.00	
4625.00†	7.713	26.949	4612.62	94.32	171.37	87.12	40°39'33.621"N	104°02'59.817"W	0.00	
4725.00†	7.713	26.949	4711.72	100.90	183.33	93.21	40°39'33.740"N	104°02'59.738"W	0.00	
4825.00†	7.713	26.949	4810.82	107.49	195.30	99.29	40°39'33.858"N	104°02'59.659"W	0.00	
4925.00†	7.713	26.949	4909.91	114.07	207.26	105.37	40°39'33.976"N	104°02'59.580"W	0.00	
4965.46†	7.713	26.949	4950.00	116.74	212.10	107.83	40°39'34.024"N	104°02'59.548"W	0.00	Shannon
5025.00†	7.713	26.949	5009.01	120.66	219.22	111.45	40°39'34.094"N	104°02'59.501"W	0.00	
5125.00†	7.713	26.949	5108.10	127.24	231.19	117.54	40°39'34.212"N	104°02'59.422"W	0.00	
5225.00†	7.713	26.949	5207.20	133.83	243.15	123.62	40°39'34.331"N	104°02'59.343"W	0.00	
5325.00†	7.713	26.949	5306.29	140.41	255.11	129.70	40°39'34.449"N	104°02'59.264"W	0.00	
5425.00†	7.713	26.949	5405.39	147.00	267.07	135.78	40°39'34.567"N	104°02'59.185"W	0.00	
5525.00†	7.713	26.949	5504.48	153.58	279.04	141.86	40°39'34.685"N	104°02'59.106"W	0.00	
5607.65	7.713	26.949	5586.39	159.02	288.93	146.89	40°39'34.783"N	104°02'59.041"W	0.00	End of Tangent
5625.00†	8.529	36.394	5603.56	160.40	291.00	148.18	40°39'34.803"N	104°02'59.024"W	9.00	
5725.00†	15.612	64.417	5701.37	177.46	302.80	164.75	40°39'34.920"N	104°02'58.809"W	9.00	
5825.00†	23.999	74.282	5795.39	209.69	314.15	196.53	40°39'35.032"N	104°02'58.397"W	9.00	
5925.00†	32.700	79.178	5883.33	256.30	324.75	242.73	40°39'35.137"N	104°02'57.797"W	9.00	
6001.33†	39.425	81.573	5945.00	300.86	332.18	287.01	40°39'35.210"N	104°02'57.223"W	9.00	Sharon Springs
6025.00†	41.518	82.180	5963.00	316.14	334.35	302.22	40°39'35.232"N	104°02'57.026"W	9.00	
6125.00†	50.391	84.284	6032.46	387.74	342.71	373.53	40°39'35.314"N	104°02'56.100"W	9.00	
6161.63†	53.650	84.921	6055.00	416.57	345.42	402.27	40°39'35.341"N	104°02'55.727"W	9.00	Niobrara A
6225.00†	59.293	85.906	6089.99	469.34	349.63	454.91	40°39'35.383"N	104°02'55.044"W	9.00	
6325.00†	68.212	87.252	6134.17	558.92	354.94	544.35	40°39'35.435"N	104°02'53.884"W	9.00	
6341.23†	69.661	87.453	6140.00	574.06	355.64	559.47	40°39'35.442"N	104°02'53.688"W	9.00	Niobrara B
6425.00†	77.141	88.439	6163.92	654.29	358.50	639.65	40°39'35.470"N	104°02'52.647"W	9.00	
6525.00†	86.075	89.544	6178.50	753.08	360.23	738.46	40°39'35.487"N	104°02'51.365"W	9.00	
6569.83	90.080	90.028	6180.00†	797.84	360.39	783.25	40°39'35.489"N	104°02'50.784"W	9.00	End of 3D Arc
6625.00†	90.080	90.028	6179.92	852.96	360.37	838.42	40°39'35.489"N	104°02'50.068"W	0.00	
6725.00†	90.080	90.028	6179.78	952.87	360.32	938.42	40°39'35.488"N	104°02'48.771"W	0.00	
6825.00†	90.080	90.028	6179.64	1052.78	360.27	1038.42	40°39'35.488"N	104°02'47.473"W	0.00	
6925.00†	90.080	90.028	6179.50	1152.69	360.22	1138.42	40°39'35.487"N	104°02'46.176"W	0.00	
7025.00†	90.080	90.028	6179.36	1252.60	360.17	1238.42	40°39'35.487"N	104°02'44.878"W	0.00	
7125.00†	90.080	90.028	6179.22	1352.50	360.12	1338.42	40°39'35.486"N	104°02'43.580"W	0.00	
7225.00†	90.080	90.028	6179.09	1452.41	360.07	1438.42	40°39'35.486"N	104°02'42.283"W	0.00	
7325.00†	90.080	90.028	6178.95	1552.32	360.02	1538.42	40°39'35.485"N	104°02'40.985"W	0.00	

WELLPATH DATA (159 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7425.00†	90.080	90.028	6178.81	1652.23	359.97	1638.42	40°39'35.484"N	104°02'39.688"W	0.00	
7525.00†	90.080	90.028	6178.67	1752.13	359.92	1738.42	40°39'35.484"N	104°02'38.390"W	0.00	
7625.00†	90.080	90.028	6178.53	1852.04	359.87	1838.42	40°39'35.483"N	104°02'37.093"W	0.00	
7725.00†	90.080	90.028	6178.39	1951.95	359.82	1938.42	40°39'35.483"N	104°02'35.795"W	0.00	
7825.00†	90.080	90.028	6178.25	2051.86	359.77	2038.42	40°39'35.482"N	104°02'34.498"W	0.00	
7925.00†	90.080	90.028	6178.11	2151.76	359.73	2138.42	40°39'35.482"N	104°02'33.200"W	0.00	
8025.00†	90.080	90.028	6177.97	2251.67	359.68	2238.42	40°39'35.481"N	104°02'31.903"W	0.00	
8125.00†	90.080	90.028	6177.83	2351.58	359.63	2338.42	40°39'35.480"N	104°02'30.605"W	0.00	
8225.00†	90.080	90.028	6177.69	2451.49	359.58	2438.42	40°39'35.480"N	104°02'29.308"W	0.00	
8325.00†	90.080	90.028	6177.55	2551.39	359.53	2538.42	40°39'35.479"N	104°02'28.010"W	0.00	
8425.00†	90.080	90.028	6177.41	2651.30	359.48	2638.42	40°39'35.479"N	104°02'26.712"W	0.00	
8525.00†	90.080	90.028	6177.27	2751.21	359.43	2738.42	40°39'35.478"N	104°02'25.415"W	0.00	
8625.00†	90.080	90.028	6177.13	2851.12	359.38	2838.42	40°39'35.477"N	104°02'24.117"W	0.00	
8725.00†	90.080	90.028	6176.99	2951.03	359.33	2938.42	40°39'35.477"N	104°02'22.820"W	0.00	
8825.00†	90.080	90.028	6176.85	3050.93	359.28	3038.42	40°39'35.476"N	104°02'21.522"W	0.00	
8925.00†	90.080	90.028	6176.71	3150.84	359.23	3138.42	40°39'35.476"N	104°02'20.225"W	0.00	
9025.00†	90.080	90.028	6176.57	3250.75	359.18	3238.42	40°39'35.475"N	104°02'18.927"W	0.00	
9125.00†	90.080	90.028	6176.43	3350.66	359.13	3338.42	40°39'35.474"N	104°02'17.630"W	0.00	
9225.00†	90.080	90.028	6176.29	3450.56	359.08	3438.42	40°39'35.474"N	104°02'16.332"W	0.00	
9325.00†	90.080	90.028	6176.15	3550.47	359.03	3538.42	40°39'35.473"N	104°02'15.035"W	0.00	
9425.00†	90.080	90.028	6176.01	3650.38	358.99	3638.42	40°39'35.473"N	104°02'13.737"W	0.00	
9525.00†	90.080	90.028	6175.87	3750.29	358.94	3738.42	40°39'35.472"N	104°02'12.440"W	0.00	
9625.00†	90.080	90.028	6175.73	3850.19	358.89	3838.42	40°39'35.471"N	104°02'11.142"W	0.00	
9725.00†	90.080	90.028	6175.59	3950.10	358.84	3938.42	40°39'35.471"N	104°02'09.844"W	0.00	
9825.00†	90.080	90.028	6175.45	4050.01	358.79	4038.42	40°39'35.470"N	104°02'08.547"W	0.00	
9925.00†	90.080	90.028	6175.32	4149.92	358.74	4138.42	40°39'35.469"N	104°02'07.249"W	0.00	
10000.00	90.080	90.028	6175.21	4224.85	358.70	4213.42	40°39'35.469"N	104°02'06.276"W	0.00	End of Tangent
10025.00†	90.330	90.028	6175.12	4249.82	358.69	4238.42	40°39'35.469"N	104°02'05.952"W	1.00	
10048.26	90.563	90.028	6174.94	4273.07	358.68	4261.68	40°39'35.469"N	104°02'05.650"W	1.00	End of Build
10125.00†	90.563	90.028	6174.19	4349.73	358.64	4338.41	40°39'35.468"N	104°02'04.654"W	0.00	
10225.00†	90.563	90.028	6173.20	4449.63	358.59	4438.41	40°39'35.467"N	104°02'03.357"W	0.00	
10325.00†	90.563	90.028	6172.22	4549.53	358.54	4538.41	40°39'35.467"N	104°02'02.059"W	0.00	
10425.00†	90.563	90.028	6171.24	4649.44	358.49	4638.40	40°39'35.466"N	104°02'00.762"W	0.00	
10525.00†	90.563	90.028	6170.26	4749.34	358.44	4738.40	40°39'35.465"N	104°01'59.464"W	0.00	
10625.00†	90.563	90.028	6169.28	4849.24	358.39	4838.39	40°39'35.465"N	104°01'58.167"W	0.00	
10725.00†	90.563	90.028	6168.29	4949.15	358.34	4938.39	40°39'35.464"N	104°01'56.870"W	0.00	
10825.00†	90.563	90.028	6167.31	5049.05	358.29	5038.38	40°39'35.463"N	104°01'55.572"W	0.00	
10925.00†	90.563	90.028	6166.33	5148.95	358.24	5138.38	40°39'35.463"N	104°01'54.275"W	0.00	
11025.00†	90.563	90.028	6165.35	5248.85	358.20	5238.37	40°39'35.462"N	104°01'52.977"W	0.00	
11125.00†	90.563	90.028	6164.37	5348.76	358.15	5338.37	40°39'35.461"N	104°01'51.680"W	0.00	
11225.00†	90.563	90.028	6163.38	5448.66	358.10	5438.36	40°39'35.460"N	104°01'50.382"W	0.00	
11325.00†	90.563	90.028	6162.40	5548.56	358.05	5538.36	40°39'35.460"N	104°01'49.085"W	0.00	
11425.00†	90.563	90.028	6161.42	5648.47	358.00	5638.35	40°39'35.459"N	104°01'47.787"W	0.00	
11525.00†	90.563	90.028	6160.44	5748.37	357.95	5738.35	40°39'35.458"N	104°01'46.490"W	0.00	
11625.00†	90.563	90.028	6159.46	5848.27	357.90	5838.34	40°39'35.458"N	104°01'45.192"W	0.00	
11725.00†	90.563	90.028	6158.47	5948.18	357.85	5938.34	40°39'35.457"N	104°01'43.895"W	0.00	
11825.00†	90.563	90.028	6157.49	6048.08	357.80	6038.33	40°39'35.456"N	104°01'42.597"W	0.00	
11925.00†	90.563	90.028	6156.51	6147.98	357.75	6138.33	40°39'35.455"N	104°01'41.300"W	0.00	
12025.00†	90.563	90.028	6155.53	6247.88	357.70	6238.32	40°39'35.455"N	104°01'40.002"W	0.00	
12125.00†	90.563	90.028	6154.55	6347.79	357.65	6338.32	40°39'35.454"N	104°01'38.705"W	0.00	

WELLPATH DATA (159 stations)

† = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12225.00†	90.563	90.028	6153.56	6447.69	357.60	6438.31	40°39'35.453"N	104°01'37.407"W	0.00	
12325.00†	90.563	90.028	6152.58	6547.59	357.55	6538.31	40°39'35.452"N	104°01'36.110"W	0.00	
12425.00†	90.563	90.028	6151.60	6647.50	357.50	6638.30	40°39'35.452"N	104°01'34.812"W	0.00	
12525.00†	90.563	90.028	6150.62	6747.40	357.46	6738.30	40°39'35.451"N	104°01'33.515"W	0.00	
12625.00†	90.563	90.028	6149.64	6847.30	357.41	6838.29	40°39'35.450"N	104°01'32.217"W	0.00	
12725.00†	90.563	90.028	6148.65	6947.20	357.36	6938.29	40°39'35.449"N	104°01'30.920"W	0.00	
12825.00†	90.563	90.028	6147.67	7047.11	357.31	7038.28	40°39'35.449"N	104°01'29.623"W	0.00	
12925.00†	90.563	90.028	6146.69	7147.01	357.26	7138.28	40°39'35.448"N	104°01'28.325"W	0.00	
13025.00†	90.563	90.028	6145.71	7246.91	357.21	7238.27	40°39'35.447"N	104°01'27.028"W	0.00	
13125.00†	90.563	90.028	6144.73	7346.82	357.16	7338.27	40°39'35.446"N	104°01'25.730"W	0.00	
13225.00†	90.563	90.028	6143.74	7446.72	357.11	7438.26	40°39'35.446"N	104°01'24.433"W	0.00	
13325.00†	90.563	90.028	6142.76	7546.62	357.06	7538.26	40°39'35.445"N	104°01'23.135"W	0.00	
13425.00†	90.563	90.028	6141.78	7646.53	357.01	7638.26	40°39'35.444"N	104°01'21.838"W	0.00	
13525.00†	90.563	90.028	6140.80	7746.43	356.96	7738.25	40°39'35.443"N	104°01'20.540"W	0.00	
13606.34†	90.563	90.028	6140.00	7827.69	356.92	7819.59	40°39'35.443"N	104°01'19.485"W	0.00	Niobrara B
13625.00†	90.563	90.028	6139.82	7846.33	356.91	7838.25	40°39'35.442"N	104°01'19.243"W	0.00	
13725.00†	90.563	90.028	6138.83	7946.23	356.86	7938.24	40°39'35.442"N	104°01'17.945"W	0.00	
13825.00†	90.563	90.028	6137.85	8046.14	356.81	8038.24	40°39'35.441"N	104°01'16.648"W	0.00	
13925.00†	90.563	90.028	6136.87	8146.04	356.76	8138.23	40°39'35.440"N	104°01'15.350"W	0.00	
14025.00†	90.563	90.028	6135.89	8245.94	356.72	8238.23	40°39'35.439"N	104°01'14.053"W	0.00	
14115.51	90.563	90.028	6135.00 ²	8336.37	356.67	8328.74	40°39'35.438"N	104°01'12.878"W	0.00	End of Tangent
14125.00†	90.379	90.130	6134.92	8345.85	356.66	8338.22	40°39'35.438"N	104°01'12.755"W	2.22	
14172.48	89.457	90.642	6134.99	8393.27	356.34	8385.70	40°39'35.435"N	104°01'12.139"W	2.22	End of 3D Arc (J)
14173.50	89.457	90.642	6135.00 ³	8394.29	356.33	8386.72	40°39'35.435"N	104°01'12.126"W	0.00	End of Tangent (J)

HOLE & CASING SECTIONS

- Ref Wellbore: BOOMSLANG FED 8-60 14B-13-18-3 PWB

Ref Wellpath: BOOMSLANG FED 8-60 14B-13-18-3 (REV-A.0) PWP

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	25.00	2000.00	1975.00	25.00	2000.00	0.00	0.00	0.00	0.00
9.625in Casing Surface	25.00	2000.00	1975.00	25.00	2000.00	0.00	0.00	0.00	0.00
8.5in Open Hole	2000.00	14173.50	12173.50	2000.00	6135.00	0.00	0.00	356.33	8386.72

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.13-T08N-R60W		15.00	2622.85	-451.07	3401713.12	1488771.48	40°39'57.845"N	104°03'06.800"W	polygon
SEC.14-T08N-R60W		15.00	2622.85	-451.07	3401713.12	1488771.48	40°39'57.845"N	104°03'06.800"W	polygon
SEC.18-T08N-R59W		15.00	2622.85	-451.07	3401713.12	1488771.48	40°39'57.845"N	104°03'06.800"W	polygon
3) BOOMSLANG FED 8-60 14B-13-18-3 BHL PLAT (1690'FSL & 2615'FWL,SEC.18)	14173.50	6135.00	356.33	8386.72	3410586.61	1486649.79	40°39'35.435"N	104°01'12.126"W	point
2) BOOMSLANG FED 8-60 14B-13-18-3 EPI PLAT (1689'FSL & 2557'FWL,SEC.18)	14115.51	6135.00	356.67	8328.74	3410528.63	1486649.18	40°39'35.438"N	104°01'12.878"W	point

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) BOOMSLANG FED 8-60 14B-13-18-3 BPI PLAT (1669'FSL & 300'FWL,SEC.13)	6569.83	6180.00	360.39	783.25	3402984.24	1486529.55	40°39'35.489"N	104°02'50.784"W	point
HARDLINES 300' SETBACK		6315.00	2622.85	-451.07	3401713.12	1488771.48	40°39'57.845"N	104°03'06.800"W	polygon

SURVEY PROGRAM - Ref Wellbore: BOOMSLANG FED 8-60 14B-13-18-3 PWB					Ref Wellpath: BOOMSLANG FED 8-60 14B-13-18-3 (REV-A.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model				Log Name/Comment		Wellbore	
25.00	2000.00	OWSG MWD rev2 + IFR1 + Multi-Station Correction						BOOMSLANG FED 8-60 14B-13-18-3 PWB	
2000.00	14173.50	OWSG MWD rev2 + IFR1 + Sag + Multi-Station Correction						BOOMSLANG FED 8-60 14B-13-18-3 PWB	



Planned Wellpath Report

BOOMSLANG FED 8-60 14B-13-18-3 (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BISON OIL & GAS	Slot	SLOT#06 BOOMSLANG FED 8-60 14B-13-18-3 (1313'FSL & 476'FEL,SEC.14)
Area	COLORADO	Well	BOOMSLANG FED 8-60 14B-13-18-3
Field	WELD COUNTY (NAD83/TN)	Wellbore	BOOMSLANG FED 8-60 14B-13-18-3 PWB
Facility	SEC.14-T08N-R60W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
3290.50	5.810	26.949	3290.00	Parkman
4117.79	7.713	26.949	4110.00	Sussex
4965.46	7.713	26.949	4950.00	Shannon
6001.33	39.425	81.573	5945.00	Sharon Springs
6161.63	53.650	84.921	6055.00	Niobrara A
6341.23	69.661	87.453	6140.00	Niobrara B
13606.34	90.563	90.028	6140.00	Niobrara B

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
25.00	0.000	26.949	25.00	Tie On
3000.00	0.000	26.949	3000.00	End of Tangent
3385.63	7.713	26.949	3384.47	End of Build
5607.65	7.713	26.949	5586.39	End of Tangent
6569.83	90.080	90.028	6180.00	End of 3D Arc
10000.00	90.080	90.028	6175.21	End of Tangent
10048.26	90.563	90.028	6174.94	End of Build
14115.51	90.563	90.028	6135.00	End of Tangent
14172.48	89.457	90.642	6134.99	End of 3D Arc (J)
14173.50	89.457	90.642	6135.00	End of Tangent (J)