

# PDC ENERGY INC

Location: COLORADO Slot: SLOT#05 BOOTH STATE 05N (2625'FSL & 752'FEL,SEC.25)

Field: WELD COUNTY (NAD83/GRID) Well: BOOTH STATE 05N

Facility: SEC.25-T05N-R67W Wellbore: BOOTH STATE 05N PWB

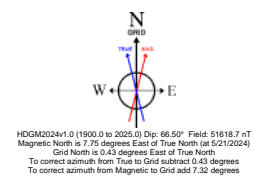
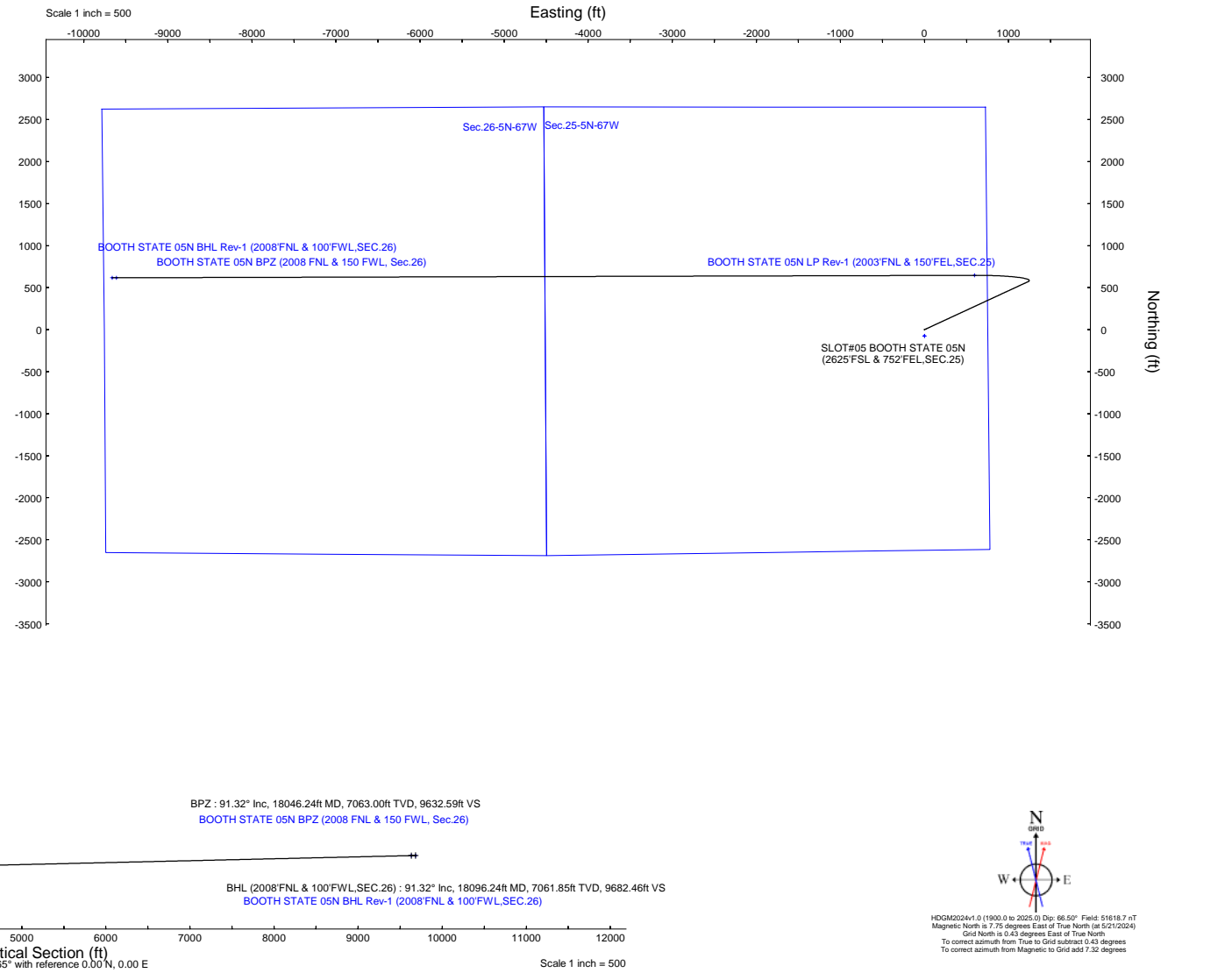
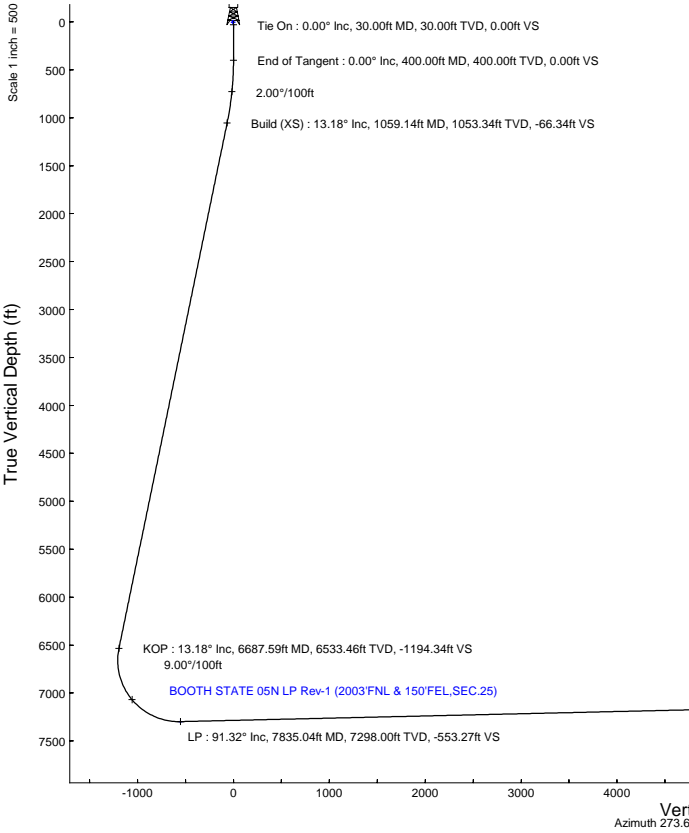
**Plot reference wellpath is BOOTH STATE 05N (REV-A.0) PWP**

Grid System: NAD83 / Lambert Colorado SP, Northern Zone (S01), US feet  
 North Reference: Grid north  
 Scale: True distance  
 Coordinates are in feet referenced to Slot  
 Depths are in feet  
 Created by: guenater on 2024-05-26; Database: WA\_Deriver

Location Information						
Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SEC.25-T05N-R67W		3185351.829	1378575.217	40°22'14.4552"N	104°50'5.1720"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#05 BOOTH STATE 05N (2625'FSL & 752'FEL,SEC.25)	60.11	0.17	3185352.001	1378515.108	40°22'13.8612"N	104°50'5.1756"W
[4983'GL+30'KB@5013'RKB] (RKB) to Ground level (At Slot: SLOT#05 BOOTH STATE 05N (2625'FSL & 752'FEL,SEC.25))					5013ft	
Mean Sea Level to Ground level (At Slot: SLOT#05 BOOTH STATE 05N (2625'FSL & 752'FEL,SEC.25))					0ft	
[4983'GL+30'KB@5013'RKB] (RKB) to Mean Sea Level					5013ft	

Targets								
Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Sec.25-5N-67W	N/A	3.00	-75.05	0.01	3185352.01	1378440.06	40°22'13.1196"N	104°50'5.1828"W
Sec.26-5N-67W	N/A	3.00	-75.05	0.01	3185352.01	1378440.06	40°22'13.1196"N	104°50'5.1828"W
BOOTH STATE 05N BHL Rev-1 (2008'FNL & 100'FWL,SEC.26)	N/A	7063.00	616.51	-9662.69	3175689.73	1379131.59	40°22'20.6508"N	104°52'9.9552"W
BOOTH STATE 05N BPZ (2008'FNL & 150'FWL, Sec.26)	18046.24	7063.00	616.86	-9612.81	3175739.60	1379131.94	40°22'20.6508"N	104°52'9.3108"W
BOOTH STATE 05N LP Rev-1 (2003'FNL & 150'FEL,SEC.25)	7835.04	7298.00	646.04	595.63	3185947.61	1379161.12	40°22'20.2008"N	104°49'57.4176"W

Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	30.00	0.00	65.146	30.00	0.00	0.00	0.00	0.00
End of Tangent	400.00	0.00	65.146	400.00	0.00	0.00	0.00	0.00
Build (XS)	1059.14	13.183	65.146	1053.34	31.73	68.50	2.00	-66.34
KOP	6687.59	13.183	65.146	6533.46	571.25	1233.23	0.00	-1194.34
LP	7835.04	91.319	269.836	7298.00	646.04	595.63	9.00	-553.27
BPZ	18046.24	91.319	269.836	7063.00	616.86	-9612.81	0.00	9632.59
BHL (2008'FNL & 100'FWL,SEC.26)	18096.24	91.319	269.836	7061.85	616.72	-9662.80	0.00	9682.46





# Planned Wellpath Report

BOOTH STATE 05N (REV-A.0) PWP  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	BOOTH STATE 05N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 05N PWB
Slot	SLOT#05 BOOTH STATE 05N (2625'FSL & 752'FEL,SEC.25)		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Guenaler
Scale	0.999959	Report Generated	5/25/2024 at 9:21:37 PM
Convergence at slot	0.43° East	Database	WA_Denver

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-60.11	0.17	3185352.00	1378515.11	40.3705170°	-104.8347710°
Facility Reference Pt			3185351.83	1378575.22	40.3706820°	-104.8347700°
Field Reference Pt			3296400.32	1413291.61	40.4630000°	-104.4347500°

## WELLPATH DATUM

Calculation method	Minimum curvature	(4983'GL+30'KB@5013'RKB) (RKB) to Facility Vertical Datum	5013.00ft
Horizontal Reference Pt	Slot	(4983'GL+30'KB@5013'RKB) (RKB) to Mean Sea Level	5013.00ft
Vertical Reference Pt	(4983'GL+30'KB@5013'RKB) (RKB)	(4983'GL+30'KB@5013'RKB) (RKB) to Ground Level at Slot (SLOT#05 BOOTH STATE 05N (2625'FSL & 752'FEL,SEC.25))	5013.00ft
MD Reference Pt	(4983'GL+30'KB@5013'RKB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	273.65°



# Planned Wellpath Report

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Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 05N PWB
Slot	SLOT#05 BOOTH STATE 05N (2625'FSL & 752'FEL, SEC.25)		

**WELLPATH DATA (200 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	65.146	0.00	0.00	0.00	0.00	40.3705170	-104.8347710	0.00	
30.00	0.000	65.146	30.00	0.00	0.00	0.00	40.3705170	-104.8347710	0.00	Tie On
130.00†	0.000	65.146	130.00	0.00	0.00	0.00	40.3705170	-104.8347710	0.00	
230.00†	0.000	65.146	230.00	0.00	0.00	0.00	40.3705170	-104.8347710	0.00	
330.00†	0.000	65.146	330.00	0.00	0.00	0.00	40.3705170	-104.8347710	0.00	
400.00	0.000	65.146	400.00	0.00	0.00	0.00	40.3705170	-104.8347710	0.00	End of Tangent
430.00†	0.600	65.146	430.00	-0.14	0.07	0.14	40.3705172	-104.8347705	2.00	
530.00†	2.600	65.146	529.96	-2.59	1.24	2.68	40.3705203	-104.8347614	2.00	
630.00†	4.600	65.146	629.75	-8.11	3.88	8.37	40.3705275	-104.8347408	2.00	
730.00†	6.600	65.146	729.27	-16.68	7.98	17.23	40.3705385	-104.8347090	2.00	
830.00†	8.600	65.146	828.39	-28.31	13.54	29.23	40.3705536	-104.8346657	2.00	
902.57†	10.051	65.146	900.00	-38.64	18.48	39.90	40.3705669	-104.8346273	2.00	PIERRE
930.00†	10.600	65.146	926.98	-42.96	20.55	44.36	40.3705725	-104.8346113	2.00	
1024.94†	12.499	65.146	1020.00	-59.66	28.54	61.61	40.3705941	-104.8345491	2.00	U PAWNEE
1024.00†	12.600	65.146	1024.93	-60.63	29.00	62.60	40.3705953	-104.8345456	2.00	
1059.14	13.183	65.146	1053.34	-66.34	31.73	68.50	40.3706027	-104.8345243	2.00	Build (XS)
1130.00†	13.183	65.146	1122.33	-80.54	38.52	83.17	40.3706210	-104.8344715	0.00	
1230.00†	13.183	65.146	1219.70	-100.58	48.11	103.86	40.3706469	-104.8343970	0.00	
1330.00†	13.183	65.146	1317.06	-120.63	57.69	124.55	40.3706728	-104.8343225	0.00	
1430.00†	13.183	65.146	1414.43	-140.67	67.28	145.25	40.3706987	-104.8342479	0.00	
1523.02†	13.183	65.146	1505.00	-159.31	76.20	164.50	40.3707228	-104.8341786	0.00	U PAWNEE BASE
1530.00†	13.183	65.146	1511.79	-160.71	76.87	165.94	40.3707246	-104.8341734	0.00	
1630.00†	13.183	65.146	1609.16	-180.75	86.45	186.63	40.3707505	-104.8340989	0.00	
1730.00†	13.183	65.146	1706.52	-200.79	96.04	207.33	40.3707763	-104.8340244	0.00	
1830.00†	13.183	65.146	1803.89	-220.83	105.62	228.02	40.3708022	-104.8339499	0.00	
1930.00†	13.183	65.146	1901.25	-240.87	115.21	248.71	40.3708281	-104.8338753	0.00	
2030.00†	13.183	65.146	1998.62	-260.91	124.79	269.41	40.3708540	-104.8338008	0.00	
2130.00†	13.183	65.146	2095.98	-280.95	134.38	290.10	40.3708799	-104.8337263	0.00	
2230.00†	13.183	65.146	2193.34	-300.99	143.97	310.80	40.3709058	-104.8336518	0.00	
2330.00†	13.183	65.146	2290.71	-321.04	153.55	331.49	40.3709316	-104.8335772	0.00	
2430.00†	13.183	65.146	2388.07	-341.08	163.14	352.18	40.3709575	-104.8335027	0.00	
2530.00†	13.183	65.146	2485.44	-361.12	172.72	372.88	40.3709834	-104.8334282	0.00	
2630.00†	13.183	65.146	2582.80	-381.16	182.31	393.57	40.3710093	-104.8333537	0.00	
2730.00†	13.183	65.146	2680.17	-401.20	191.89	414.26	40.3710352	-104.8332791	0.00	
2830.00†	13.183	65.146	2777.53	-421.24	201.48	434.96	40.3710611	-104.8332046	0.00	
2930.00†	13.183	65.146	2874.90	-441.28	211.06	455.65	40.3710869	-104.8331301	0.00	
3030.00†	13.183	65.146	2972.26	-461.32	220.65	476.34	40.3711128	-104.8330556	0.00	
3130.00†	13.183	65.146	3069.63	-481.36	230.24	497.04	40.3711387	-104.8329811	0.00	
3230.00†	13.183	65.146	3166.99	-501.40	239.82	517.73	40.3711646	-104.8329065	0.00	
3330.00†	13.183	65.146	3264.36	-521.45	249.41	538.42	40.3711905	-104.8328320	0.00	
3430.00†	13.183	65.146	3361.72	-541.49	258.99	559.12	40.3712164	-104.8327575	0.00	
3530.00†	13.183	65.146	3459.09	-561.53	268.58	579.81	40.3712422	-104.8326830	0.00	
3630.00†	13.183	65.146	3556.45	-581.57	278.16	600.51	40.3712681	-104.8326084	0.00	
3730.00†	13.183	65.146	3653.82	-601.61	287.75	621.20	40.3712940	-104.8325339	0.00	
3830.00†	13.183	65.146	3751.18	-621.65	297.33	641.89	40.3713199	-104.8324594	0.00	



# Planned Wellpath Report

BOOTH STATE 05N (REV-A.0) PWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 05N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 05N PWB
Slot	SLOT#05 BOOTH STATE 05N (2625'FSL & 752'FEL,SEC.25)		

WELLPATH DATA (200 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3910.95†	13.183	65.146	3830.00	-637.87	305.09	658.64	40.3713408	-104.8323991	0.00	Parkman Sandstone
3930.00†	13.183	65.146	3848.54	-641.69	306.92	662.59	40.3713458	-104.8323849	0.00	
4030.00†	13.183	65.146	3945.91	-661.73	316.51	683.28	40.3713717	-104.8323104	0.00	
4130.00†	13.183	65.146	4043.27	-681.77	326.09	703.97	40.3713975	-104.8322358	0.00	
4230.00†	13.183	65.146	4140.64	-701.81	335.68	724.67	40.3714234	-104.8321613	0.00	
4330.00†	13.183	65.146	4238.00	-721.86	345.26	745.36	40.3714493	-104.8320868	0.00	
4430.00†	13.183	65.146	4335.37	-741.90	354.85	766.05	40.3714752	-104.8320123	0.00	
4441.95†	13.183	65.146	4347.00	-744.29	355.99	768.53	40.3714783	-104.8320034	0.00	Sussex Sandstone
4530.00†	13.183	65.146	4432.73	-761.94	364.43	786.75	40.3715011	-104.8319377	0.00	
4630.00†	13.183	65.146	4530.10	-781.98	374.02	807.44	40.3715270	-104.8318632	0.00	
4730.00†	13.183	65.146	4627.46	-802.02	383.61	828.14	40.3715528	-104.8317887	0.00	
4830.00†	13.183	65.146	4724.83	-822.06	393.19	848.83	40.3715787	-104.8317142	0.00	
4930.00†	13.183	65.146	4822.19	-842.10	402.78	869.52	40.3716046	-104.8316396	0.00	
5028.40†	13.183	65.146	4918.00	-861.82	412.21	889.88	40.3716301	-104.8315663	0.00	Shannon Sandstone
5030.00†	13.183	65.146	4919.56	-862.14	412.36	890.22	40.3716305	-104.8315651	0.00	
5130.00†	13.183	65.146	5016.92	-882.18	421.95	910.91	40.3716564	-104.8314906	0.00	
5230.00†	13.183	65.146	5114.29	-902.23	431.53	931.60	40.3716823	-104.8314161	0.00	
5330.00†	13.183	65.146	5211.65	-922.27	441.12	952.30	40.3717081	-104.8313415	0.00	
5430.00†	13.183	65.146	5309.02	-942.31	450.70	972.99	40.3717340	-104.8312670	0.00	
5530.00†	13.183	65.146	5406.38	-962.35	460.29	993.68	40.3717599	-104.8311925	0.00	
5630.00†	13.183	65.146	5503.75	-982.39	469.88	1014.38	40.3717858	-104.8311180	0.00	
5730.00†	13.183	65.146	5601.11	-1002.43	479.46	1035.07	40.3718117	-104.8310434	0.00	
5830.00†	13.183	65.146	5698.47	-1022.47	489.05	1055.76	40.3718376	-104.8309689	0.00	
5930.00†	13.183	65.146	5795.84	-1042.51	498.63	1076.46	40.3718634	-104.8308944	0.00	
6030.00†	13.183	65.146	5893.20	-1062.55	508.22	1097.15	40.3718893	-104.8308199	0.00	
6130.00†	13.183	65.146	5990.57	-1082.59	517.80	1117.85	40.3719152	-104.8307453	0.00	
6230.00†	13.183	65.146	6087.93	-1102.64	527.39	1138.54	40.3719411	-104.8306708	0.00	
6330.00†	13.183	65.146	6185.30	-1122.68	536.97	1159.23	40.3719670	-104.8305963	0.00	
6430.00†	13.183	65.146	6282.66	-1142.72	546.56	1179.93	40.3719928	-104.8305218	0.00	
6530.00†	13.183	65.146	6380.03	-1162.76	556.15	1200.62	40.3720187	-104.8304472	0.00	
6630.00†	13.183	65.146	6477.39	-1182.80	565.73	1221.31	40.3720446	-104.8303727	0.00	
6687.59	13.183	65.146	6533.46	-1194.34	571.25	1233.23	40.3720595	-104.8303298	0.00	KOP
6730.00†	9.869	55.552	6575.02	-1201.45	575.34	1240.62	40.3720706	-104.8303032	9.00	
6830.00†	5.682	351.134	6674.24	-1207.14	585.10	1246.94	40.3720972	-104.8302802	9.00	
6930.00†	11.343	299.317	6773.22	-1197.18	594.83	1237.58	40.3721241	-104.8303136	9.00	
7030.00†	19.660	285.941	6869.52	-1171.83	604.28	1212.78	40.3721506	-104.8304023	9.00	
7130.00†	28.387	280.449	6960.79	-1131.70	613.23	1173.15	40.3721760	-104.8305443	9.00	
7230.00†	37.236	277.399	7044.75	-1077.80	621.46	1119.66	40.3721997	-104.8307360	9.00	
7318.05†	45.072	275.594	7111.00	-1019.97	627.94	1062.13	40.3722186	-104.8309423	9.00	Sharon Springs
7330.00†	46.137	275.388	7119.36	-1011.44	628.75	1053.63	40.3722211	-104.8309728	9.00	
7368.20†	49.545	274.775	7145.00	-983.13	631.26	1025.42	40.3722285	-104.8310740	9.00	Niobrara A
7430.00†	55.064	273.904	7182.77	-934.26	634.94	976.68	40.3722396	-104.8312488	9.00	
7530.00†	64.006	272.714	7233.42	-848.15	639.87	890.72	40.3722550	-104.8315572	9.00	
7619.80†	72.043	271.792	7267.00	-764.97	643.12	807.58	40.3722656	-104.8318554	9.00	Niobrara B
7630.00†	72.956	271.693	7270.07	-755.25	643.42	797.85	40.3722666	-104.8318903	9.00	



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REFERENCE WELLPATH IDENTIFICATION			
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Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 05N PWB
Slot	SLOT#05 BOOTH STATE 05N (2625'FSL & 752'FEL,SEC.25)		

WELLPATH DATA (200 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7730.00†	81.910	270.767	7291.80	-657.84	645.50	700.37	40.3722743	-104.8322401	9.00	
7830.00†	90.867	269.881	7298.10	-558.31	646.06	600.68	40.3722779	-104.8325979	9.00	
7835.04	91.319	269.836	7298.00†	-553.27	646.04	595.63	40.3722780	-104.8326160	9.00	LP
7930.00†	91.319	269.836	7295.81	-458.55	645.77	500.70	40.3722792	-104.8329567	0.00	
8030.00†	91.319	269.836	7293.51	-358.80	645.49	400.73	40.3722805	-104.8333155	0.00	
8130.00†	91.319	269.836	7291.21	-259.05	645.20	300.76	40.3722818	-104.8336743	0.00	
8230.00†	91.319	269.836	7288.91	-159.30	644.92	200.78	40.3722831	-104.8340331	0.00	
8330.00†	91.319	269.836	7286.61	-59.55	644.63	100.81	40.3722843	-104.8343919	0.00	
8430.00†	91.319	269.836	7284.31	40.21	644.34	0.84	40.3722856	-104.8347507	0.00	
8530.00†	91.319	269.836	7282.01	139.96	644.06	-99.14	40.3722869	-104.8351094	0.00	
8630.00†	91.319	269.836	7279.70	239.71	643.77	-199.11	40.3722881	-104.8354682	0.00	
8730.00†	91.319	269.836	7277.40	339.46	643.49	-299.08	40.3722894	-104.8358270	0.00	
8830.00†	91.319	269.836	7275.10	439.21	643.20	-399.06	40.3722907	-104.8361858	0.00	
8930.00†	91.319	269.836	7272.80	538.97	642.91	-499.03	40.3722920	-104.8365446	0.00	
9030.00†	91.319	269.836	7270.50	638.72	642.63	-599.00	40.3722932	-104.8369034	0.00	
9130.00†	91.319	269.836	7268.20	738.47	642.34	-698.98	40.3722945	-104.8372622	0.00	
9182.05†	91.319	269.836	7267.00	790.39	642.19	-751.01	40.3722952	-104.8374490	0.00	Niobrara B
9230.00†	91.319	269.836	7265.90	838.22	642.06	-798.95	40.3722958	-104.8376210	0.00	
9330.00†	91.319	269.836	7263.60	937.97	641.77	-898.92	40.3722970	-104.8379798	0.00	
9430.00†	91.319	269.836	7261.29	1037.73	641.49	-998.90	40.3722983	-104.8383386	0.00	
9530.00†	91.319	269.836	7258.99	1137.48	641.20	-1098.87	40.3722996	-104.8386974	0.00	
9630.00†	91.319	269.836	7256.69	1237.23	640.91	-1198.84	40.3723008	-104.8390562	0.00	
9730.00†	91.319	269.836	7254.39	1336.98	640.63	-1298.81	40.3723021	-104.8394149	0.00	
9830.00†	91.319	269.836	7252.09	1436.73	640.34	-1398.79	40.3723033	-104.8397737	0.00	
9930.00†	91.319	269.836	7249.79	1536.49	640.06	-1498.76	40.3723046	-104.8401325	0.00	
10030.00†	91.319	269.836	7247.49	1636.24	639.77	-1598.73	40.3723058	-104.8404913	0.00	
10130.00†	91.319	269.836	7245.18	1735.99	639.49	-1698.71	40.3723071	-104.8408501	0.00	
10230.00†	91.319	269.836	7242.88	1835.74	639.20	-1798.68	40.3723084	-104.8412089	0.00	
10330.00†	91.319	269.836	7240.58	1935.49	638.91	-1898.65	40.3723096	-104.8415677	0.00	
10430.00†	91.319	269.836	7238.28	2035.24	638.63	-1998.63	40.3723109	-104.8419265	0.00	
10530.00†	91.319	269.836	7235.98	2135.00	638.34	-2098.60	40.3723121	-104.8422853	0.00	
10630.00†	91.319	269.836	7233.68	2234.75	638.06	-2198.57	40.3723134	-104.8426441	0.00	
10730.00†	91.319	269.836	7231.38	2334.50	637.77	-2298.55	40.3723146	-104.8430029	0.00	
10830.00†	91.319	269.836	7229.07	2434.25	637.48	-2398.52	40.3723159	-104.8433617	0.00	
10930.00†	91.319	269.836	7226.77	2534.00	637.20	-2498.49	40.3723171	-104.8437205	0.00	
11030.00†	91.319	269.836	7224.47	2633.76	636.91	-2598.46	40.3723184	-104.8440792	0.00	
11130.00†	91.319	269.836	7222.17	2733.51	636.63	-2698.44	40.3723196	-104.8444380	0.00	
11230.00†	91.319	269.836	7219.87	2833.26	636.34	-2798.41	40.3723208	-104.8447968	0.00	
11330.00†	91.319	269.836	7217.57	2933.01	636.06	-2898.38	40.3723221	-104.8451556	0.00	
11430.00†	91.319	269.836	7215.27	3032.76	635.77	-2998.36	40.3723233	-104.8455144	0.00	
11530.00†	91.319	269.836	7212.96	3132.52	635.48	-3098.33	40.3723246	-104.8458732	0.00	
11630.00†	91.319	269.836	7210.66	3232.27	635.20	-3198.30	40.3723258	-104.8462320	0.00	
11730.00†	91.319	269.836	7208.36	3332.02	634.91	-3298.28	40.3723270	-104.8465908	0.00	
11830.00†	91.319	269.836	7206.06	3431.77	634.63	-3398.25	40.3723283	-104.8469496	0.00	
11930.00†	91.319	269.836	7203.76	3531.52	634.34	-3498.22	40.3723295	-104.8473084	0.00	



# Planned Wellpath Report

BOOTH STATE 05N (REV-A.0) PWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 05N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 05N PWB
Slot	SLOT#05 BOOTH STATE 05N (2625'FSL & 752'FEL,SEC.25)		

WELLPATH DATA (200 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12030.00†	91.319	269.836	7201.46	3631.28	634.06	-3598.20	40.3723308	-104.8476672	0.00	
12130.00†	91.319	269.836	7199.16	3731.03	633.77	-3698.17	40.3723320	-104.8480260	0.00	
12230.00†	91.319	269.836	7196.85	3830.78	633.48	-3798.14	40.3723332	-104.8483848	0.00	
12330.00†	91.319	269.836	7194.55	3930.53	633.20	-3898.12	40.3723345	-104.8487436	0.00	
12430.00†	91.319	269.836	7192.25	4030.28	632.91	-3998.09	40.3723357	-104.8491023	0.00	
12530.00†	91.319	269.836	7189.95	4130.03	632.63	-4098.06	40.3723369	-104.8494611	0.00	
12630.00†	91.319	269.836	7187.65	4229.79	632.34	-4198.03	40.3723381	-104.8498199	0.00	
12730.00†	91.319	269.836	7185.35	4329.54	632.05	-4298.01	40.3723394	-104.8501787	0.00	
12830.00†	91.319	269.836	7183.05	4429.29	631.77	-4397.98	40.3723406	-104.8505375	0.00	
12930.00†	91.319	269.836	7180.74	4529.04	631.48	-4497.95	40.3723418	-104.8508963	0.00	
13030.00†	91.319	269.836	7178.44	4628.79	631.20	-4597.93	40.3723430	-104.8512551	0.00	
13130.00†	91.319	269.836	7176.14	4728.55	630.91	-4697.90	40.3723443	-104.8516139	0.00	
13230.00†	91.319	269.836	7173.84	4828.30	630.63	-4797.87	40.3723455	-104.8519727	0.00	
13330.00†	91.319	269.836	7171.54	4928.05	630.34	-4897.85	40.3723467	-104.8523315	0.00	
13430.00†	91.319	269.836	7169.24	5027.80	630.05	-4997.82	40.3723479	-104.8526903	0.00	
13530.00†	91.319	269.836	7166.94	5127.55	629.77	-5097.79	40.3723491	-104.8530491	0.00	
13630.00†	91.319	269.836	7164.64	5227.31	629.48	-5197.77	40.3723504	-104.8534079	0.00	
13730.00†	91.319	269.836	7162.33	5327.06	629.20	-5297.74	40.3723516	-104.8537666	0.00	
13830.00†	91.319	269.836	7160.03	5426.81	628.91	-5397.71	40.3723528	-104.8541254	0.00	
13930.00†	91.319	269.836	7157.73	5526.56	628.63	-5497.68	40.3723540	-104.8544842	0.00	
14030.00†	91.319	269.836	7155.43	5626.31	628.34	-5597.66	40.3723552	-104.8548430	0.00	
14130.00†	91.319	269.836	7153.13	5726.07	628.05	-5697.63	40.3723564	-104.8552018	0.00	
14230.00†	91.319	269.836	7150.83	5825.82	627.77	-5797.60	40.3723576	-104.8555606	0.00	
14330.00†	91.319	269.836	7148.53	5925.57	627.48	-5897.58	40.3723588	-104.8559194	0.00	
14430.00†	91.319	269.836	7146.22	6025.32	627.20	-5997.55	40.3723601	-104.8562782	0.00	
14483.18†	91.319	269.836	7145.00	6078.37	627.04	-6050.72	40.3723607	-104.8564690	0.00	Niobrara A
14530.00†	91.319	269.836	7143.92	6125.07	626.91	-6097.52	40.3723613	-104.8566370	0.00	
14630.00†	91.319	269.836	7141.62	6224.82	626.62	-6197.50	40.3723625	-104.8569958	0.00	
14730.00†	91.319	269.836	7139.32	6324.58	626.34	-6297.47	40.3723637	-104.8573546	0.00	
14830.00†	91.319	269.836	7137.02	6424.33	626.05	-6397.44	40.3723649	-104.8577134	0.00	
14930.00†	91.319	269.836	7134.72	6524.08	625.77	-6497.42	40.3723661	-104.8580722	0.00	
15030.00†	91.319	269.836	7132.42	6623.83	625.48	-6597.39	40.3723673	-104.8584310	0.00	
15130.00†	91.319	269.836	7130.11	6723.58	625.20	-6697.36	40.3723685	-104.8587897	0.00	
15230.00†	91.319	269.836	7127.81	6823.34	624.91	-6797.34	40.3723697	-104.8591485	0.00	
15330.00†	91.319	269.836	7125.51	6923.09	624.62	-6897.31	40.3723709	-104.8595073	0.00	
15430.00†	91.319	269.836	7123.21	7022.84	624.34	-6997.28	40.3723721	-104.8598661	0.00	
15530.00†	91.319	269.836	7120.91	7122.59	624.05	-7097.25	40.3723733	-104.8602249	0.00	
15630.00†	91.319	269.836	7118.61	7222.34	623.77	-7197.23	40.3723745	-104.8605837	0.00	
15730.00†	91.319	269.836	7116.31	7322.10	623.48	-7297.20	40.3723757	-104.8609425	0.00	
15830.00†	91.319	269.836	7114.00	7421.85	623.19	-7397.17	40.3723769	-104.8613013	0.00	
15930.00†	91.319	269.836	7111.70	7521.60	622.91	-7497.15	40.3723780	-104.8616601	0.00	
15960.55†	91.319	269.836	7111.00	7552.07	622.82	-7527.68	40.3723784	-104.8617697	0.00	Sharon Springs
16030.00†	91.319	269.836	7109.40	7621.35	622.62	-7597.12	40.3723792	-104.8620189	0.00	
16130.00†	91.319	269.836	7107.10	7721.10	622.34	-7697.09	40.3723804	-104.8623777	0.00	
16230.00†	91.319	269.836	7104.80	7820.86	622.05	-7797.07	40.3723816	-104.8627365	0.00	



# Planned Wellpath Report

BOOTH STATE 05N (REV-A.0) PWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 05N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 05N PWB
Slot	SLOT#05 BOOTH STATE 05N (2625'FSL & 752'FEL,SEC.25)		

WELLPATH DATA (200 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16330.00†	91.319	269.836	7102.50	7920.61	621.77	-7897.04	40.3723828	-104.8630953	0.00	
16430.00†	91.319	269.836	7100.20	8020.36	621.48	-7997.01	40.3723840	-104.8634541	0.00	
16530.00†	91.319	269.836	7097.89	8120.11	621.19	-8096.99	40.3723852	-104.8638128	0.00	
16630.00†	91.319	269.836	7095.59	8219.86	620.91	-8196.96	40.3723864	-104.8641716	0.00	
16730.00†	91.319	269.836	7093.29	8319.61	620.62	-8296.93	40.3723875	-104.8645304	0.00	
16830.00†	91.319	269.836	7090.99	8419.37	620.34	-8396.90	40.3723887	-104.8648892	0.00	
16930.00†	91.319	269.836	7088.69	8519.12	620.05	-8496.88	40.3723899	-104.8652480	0.00	
17030.00†	91.319	269.836	7086.39	8618.87	619.77	-8596.85	40.3723911	-104.8656068	0.00	
17130.00†	91.319	269.836	7084.09	8718.62	619.48	-8696.82	40.3723923	-104.8659656	0.00	
17230.00†	91.319	269.836	7081.78	8818.37	619.19	-8796.80	40.3723934	-104.8663244	0.00	
17330.00†	91.319	269.836	7079.48	8918.13	618.91	-8896.77	40.3723946	-104.8666832	0.00	
17430.00†	91.319	269.836	7077.18	9017.88	618.62	-8996.74	40.3723958	-104.8670420	0.00	
17530.00†	91.319	269.836	7074.88	9117.63	618.34	-9096.72	40.3723970	-104.8674008	0.00	
17630.00†	91.319	269.836	7072.58	9217.38	618.05	-9196.69	40.3723981	-104.8677596	0.00	
17730.00†	91.319	269.836	7070.28	9317.13	617.76	-9296.66	40.3723993	-104.8681184	0.00	
17830.00†	91.319	269.836	7067.98	9416.89	617.48	-9396.64	40.3724005	-104.8684772	0.00	
17930.00†	91.319	269.836	7065.68	9516.64	617.19	-9496.61	40.3724016	-104.8688360	0.00	
18030.00†	91.319	269.836	7063.37	9616.39	616.91	-9596.58	40.3724028	-104.8691947	0.00	
18046.24	91.319	269.836	7063.00 <sup>2</sup>	9632.59	616.86	-9612.81	40.3724030	-104.8692530	0.00	BPZ
18096.24	91.319	269.836	7061.85	9682.46	616.72	-9662.80	40.3724036	-104.8694324	0.00	BHL (2008'FNL & 100'FWL,SEC.26)

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Sec.25-5N-67W	N/A	3.00	-75.05	0.01	3185352.01	1378440.06	40.3703110	-104.8347730	polygon
	2D Polygon: dimensions not calculated								
Sec.26-5N-67W	N/A	3.00	-75.05	0.01	3185352.01	1378440.06	40.3703110	-104.8347730	polygon
	2D Polygon: dimensions not calculated								
BOOTH STATE 05N BHL Rev-1 (2008'FNL & 100'FWL,SEC.26)	N/A	7063.00	616.51	-9662.69	3175689.73	1379131.59	40.3724030	-104.8694320	point
2) BOOTH STATE 05N BPZ (2008 FNL & 150 FWL, Sec.26)	18046.24	7063.00	616.86	-9612.81	3175739.60	1379131.94	40.3724030	-104.8692530	point
1) BOOTH STATE 05N LP Rev-1 (2003'FNL & 150'FEL,SEC.25)	7835.04	7298.00	646.04	595.63	3185947.61	1379161.12	40.3722780	-104.8326160	point



# Planned Wellpath Report

BOOTH STATE 05N (REV-A.0) PWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 05N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 05N PWB
Slot	SLOT#05 BOOTH STATE 05N (2625'FSL & 752'FEL,SEC.25)		

SURVEY PROGRAM - Ref Wellbore: BOOTH STATE 05N PWB    Ref Wellpath: BOOTH STATE 05N (REV-A.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	2000.00	OWSG MWD rev2 - Standard		BOOTH STATE 05N PWB
2000.00	18096.24	OWSG MWD rev2 (MS+IFR1)		BOOTH STATE 05N PWB



# Planned Wellpath Report

BOOTH STATE 05N (REV-A.0) PWP  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 05N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 05N PWB
Slot	SLOT#05 BOOTH STATE 05N (2625'FSL & 752'FEL,SEC.25)		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
902.57	10.051	65.146	900.00	PIERRE
1024.94	12.499	65.146	1020.00	U PAWNEE
1523.02	13.183	65.146	1505.00	U PAWNEE BASE
3910.95	13.183	65.146	3830.00	Parkman Sandstone
4441.95	13.183	65.146	4347.00	Sussex Sandstone
5028.40	13.183	65.146	4918.00	Shannon Sandstone
7318.05	45.072	275.594	7111.00	Sharon Springs
7368.20	49.545	274.775	7145.00	Niobrara A
7619.80	72.043	271.792	7267.00	Niobrara B
9182.05	91.319	269.836	7267.00	Niobrara B
14483.18	91.319	269.836	7145.00	Niobrara A
15960.55	91.319	269.836	7111.00	Sharon Springs

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
30.00	0.000	65.146	30.00	Tie On
400.00	0.000	65.146	400.00	End of Tangent
1059.14	13.183	65.146	1053.34	Build (XS)
6687.59	13.183	65.146	6533.46	KOP
7835.04	91.319	269.836	7298.00	LP
18046.24	91.319	269.836	7063.00	BPZ
18096.24	91.319	269.836	7061.85	BHL (2008'FNL & 100'FWL,SEC.26)



# Closest Approach Clearance Summary Report

BOOTH STATE 05N (REV-A.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 05N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 05N PWB
Slot	SLOT#05 BOOTH STATE 05N (2625'FSL & 752'FEL,SEC.25)		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Guenaler
Scale	0.999959	Report Generated	5/25/2024 at 9:42:16 PM
Convergence at slot	0.43° East	Database	WA_Denver

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-60.11	0.17	3185352.00	1378515.11	40°22'13.8612"N	104°50'5.1756"W
Facility Reference Pt			3185351.83	1378575.22	40°22'14.4552"N	104°50'5.1720"W
Field Reference Pt			3296400.32	1413291.61	40°27'46.8000"N	104°26'5.1000"W

WELLPATH DATUM			
Calculation method	Minimum Curvature	(4983'GL+30'KB@5013'RKB) (RKB) to Facility Vertical Datum	5013.00ft
Horizontal Reference Pt	Slot	(4983'GL+30'KB@5013'RKB) (RKB) to Mean Sea Level	5013.00ft
Vertical Reference Pt	(4983'GL+30'KB@5013'RKB) (RKB)	(4983'GL+30'KB@5013'RKB) (RKB) to Ground Level at Slot (SLOT#05 BOOTH STATE 05N (2625'FSL & 752'FEL,SEC.25))	5013.00ft
MD Reference Pt	(4983'GL+30'KB@5013'RKB) (RKB)		
Field Vertical Reference	Mean Sea Level		

POSITIONAL UNCERTAINTY CALCULATION SETTINGS					
Ellipse Confidence Limit	3.50 Std Dev	Ellipse Start MD	30.00ft	Surface Position Uncertainty	included
Declination	7.75° East of TN	Dip Angle	66.50°	Mag Field Strength	51619 nT
Slot Surface Uncertainty @1SD		Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD		Horizontal	8.200ft	Vertical	3.000ft
Positional Uncertainty values in the WELLPATH DATA table are the projection of the ellipsoid of uncertainty onto the vertical and horizontal planes					



# Closest Approach Clearance Summary Report

BOOTH STATE 05N (REV-A.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 05N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 05N PWB
Slot	SLOT#05 BOOTH STATE 05N (2625'FSL & 752'FEL,SEC.25)		

PROXIMITY-SCAN RULE			
Rule Name	SPE WPTS Stop Drilling HSE Risk (2017)	Rule Based On	Ratio
Plane of Rule	Closest Approach	Threshold Value	1.00
Include Casing & Hole Size	yes	Apply Cone of Safety	no

SURVEY PROGRAM - Ref Wellbore: BOOTH STATE 05N PWB    Ref Wellpath: BOOTH STATE 05N (REV-A.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	2000.00	OWSG MWD rev2 - Standard		BOOTH STATE 05N PWB
2000.00	18096.24	OWSG MWD rev2 (MS+IFR1)		BOOTH STATE 05N PWB



# Closest Approach Clearance Summary Report

BOOTH STATE 05N (REV-A.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 05N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 05N PWB
Slot	SLOT#05 BOOTH STATE 05N (2625'FSL & 752'FEL,SEC.25)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 18096.24ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (54 Offset Wellpaths selected) Ratios are calculated in Closest Approach plane												
Offset Facility	Offset Slot	Offset Well	Offset Wellbore	Offset Wellpath	Wellbore Status	C-C Clearance Distance			Rule Separation Ratio			
						Ref MD [ft]	Min C-C Clear Dist [ft]	Diverging from MD [ft]	Ref MD of Min Ratio [ft]	Min Ratio	Min Ratio Dvrg from [ft]	Rule Status
SEC.26-T05N-R67W	SLOT#12 BLEHM #2 (05-123-11006) PA	BLEHM #2	BLEHM #2 AWB	BLEHM #2 AWP	Drilling	16234.84	10.08	16234.84	16234.84	0.00	16234.84	FAIL
SEC.26-T05N-R67W	SLOT#11 BLEHM N #26-8 (05-123-23344) SI	BLEHM N #26-8	BLEHM N #26-8 AWB	BLEHM N #26-8 AWP	Producing / injecting	13731.46	119.64	13731.46	13731.42	0.01	13731.42	FAIL
SEC.25-T05N-R67W	SLOT#29 BOOTH #N 25-6 (05-123-18083) SI	BOOTH #N 25-6 (05-123-18083) SI	BOOTH #N 25-6 AWB	BOOTH #N 25-6 AWP ( SI)	Producing / injecting	11076.55	140.28	11076.55	11076.50	0.02	11076.50	FAIL
SEC.25-T05N-R67W	SLOT#28 BOOTH #25-14 (05-123-17369) PA	BOOTH #25-14 (05-123-17369) PA	BOOTH #25-14 AWB	BOOTH #25-14 AWP ( PA)	Abandoned	8575.47	144.07	8575.47	8575.41	0.02	8575.41	FAIL
SEC.25-T05N-R67W	SLOT#33 BOOTH #N 25-5 (05-123-18082) SI	BOOTH #N 25-5 (05-123-18082) SI	BOOTH #N 25-5 AWB	BOOTH #N 25-5 AWP ( SI)	Producing / injecting	12456.42	194.18	12456.42	12456.30	0.02	12456.30	FAIL
SEC.26-T05N-R67W	SLOT#15 BLEHM N #26-5 (05-123-19492) PA	BLEHM N #26-5	BLEHM N #26-5 AWB	BLEHM N #26-5 AWP	Abandoned	17365.12	208.01	17365.12	17364.99	0.02	17364.99	FAIL
SEC.26-T05N-R67W	SLOT#14 VETTER #26-13 (05-123-19998) PA	VETTER #26-13	VETTER #26-13 AWB	VETTER #26-13 AWP	Abandoned	15072.20	215.02	15072.20	15072.06	0.02	15072.06	FAIL
SEC.26-T05N-R67W	SLOT#03 Booth N #25-32D (05-123-31660) PR	Booth N #25-32D	Booth N #25-32D AWB	Booth N #25-32D AWP (PR)	Producing / injecting	12837.41	447.91	12837.41	12860.28	0.07	12860.28	FAIL
SEC.25-T05N-R67W	SLOT#32 BOOTH #25-15 (05-123-28106) PR	BOOTH #25-15 (05-123-28106) PR	BOOTH #25-15 AWB	BOOTH #25-15 AWP ( PR)	Producing / injecting	9152.08	690.46	9152.08	9150.59	0.08	9150.59	FAIL
SEC.26-T05N-R67W	SLOT#06 BLEHM #26-17 (05-123-23036) TA	BLEHM #26-17	BLEHM #26-17 AWB	BLEHM #26-17 AWP	Abandoned	14311.45	812.92	14311.45	14309.37	0.09	14309.37	FAIL
SEC.25-T05N-R67W	SLOT#24 BOOTH N #25-19 (05-123-25620) SI	BOOTH N #25-19 (05-123-25620) SI	BOOTH N #25-19 AWB	BOOTH N #25-19 AWP ( SI)	Producing / injecting	11820.88	857.17	11820.88	11818.57	0.10	11818.57	FAIL
SEC.26-T05N-R67W	SLOT#02 BLEHM N #26-19 (05-123-23361) SI	BLEHM N #26-19	BLEHM N #26-19 AWB	BLEHM N #26-19 AWP	Producing / injecting	16845.12	872.93	16845.12	16842.72	0.10	16842.72	FAIL
SEC.25-T05N-R67W	SLOT#21 BOOTH N #25-11 (05-123-22680) PA	BOOTH N #25-11 (05-123-22680) PA	BOOTH N #25-11 AWB	BOOTH N #25-11 AWP ( PA)	Abandoned	11007.23	1132.31	11007.23	11003.15	0.13	11003.15	FAIL
SEC.25-T05N-R67W	SLOT#22 BOOTH #25-12 (05-123-17336) PA	BOOTH #25-12 (05-123-17336) PA	BOOTH #25-12 AWB	BOOTH #25-12 AWP ( PA)	Abandoned	9799.26	1180.76	9799.26	9794.89	0.13	9794.89	FAIL
SEC.25-T05N-R67W	SLOT#20 BOOTH N #25-9 (05-123-21924) PA	BOOTH N #25-9 (05-123-21924) PA	BOOTH N #25-9 AWB	BOOTH N #25-9 AWP ( PA)	Abandoned	30.00	594.41	8264.79	8264.79	0.14	8264.79	FAIL
SEC.26-T05N-R67W	SLOT#10 BOOTH #13-26 (05-123-17941) TA	BOOTH #13-26	BOOTH #13-26 AWB	BOOTH #13-26 AWP	Abandoned	17337.37	1195.20	17337.37	17332.79	0.14	17332.79	FAIL
SEC.26-T05N-R67W	SLOT#07 VETTER #26-12 (05-123-19413) PA	VETTER #26-12	VETTER #26-12 AWB	VETTER #26-12 AWP	Drilling	14739.99	1360.79	14739.99	14734.15	0.15	14734.15	FAIL
SEC.26-T05N-R67W	SLOT#08 BLEHM #3 (05-123-11103) TA	BLEHM #3	BLEHM #3 AWB	BLEHM #3 AWP	Drilling	17540.29	1350.12	17540.29	17534.53	0.15	17534.53	FAIL
SEC.25-T05N-R67W	SLOT#26 BOOTH N #25-10 (05-123-21925) PA	BOOTH N #25-10 (05-123-21925) PA	BOOTH N #25-10 AWB	BOOTH N #25-10 AWP ( PA)	Abandoned	9678.73	1394.75	9678.73	9672.55	0.16	9672.55	FAIL
SEC.25-T05N-R67W	SLOT#27 BOOTH N #25-12 (05-123-22681) PA	BOOTH N #25-12 (05-123-22681) PA	BOOTH N #25-12 AWB	BOOTH N #25-12 AWP ( PA)	Abandoned	12442.06	1454.64	12442.06	12435.29	0.17	12435.29	FAIL
SEC.25-T05N-R67W	SLOT#17 BOOTH #N 25-3 (05-123-15479) SI	BOOTH #N 25-3 (05-123-15479) SI	BOOTH #N 25-3 AWB	BOOTH #N 25-3 AWP ( SI)	Producing / injecting	11083.68	1526.47	11083.68	11076.36	0.17	11076.36	FAIL
SEC.25-T05N-R67W	SLOT#23 BOOTH N #25-4 (05-123-15478) SI	BOOTH N #25-4 (05-123-15478) SI	BOOTH N #25-4 AWB	BOOTH N #25-4 AWP ( SI)	Producing / injecting	12488.90	1535.80	12488.90	12481.48	0.17	12481.48	FAIL
SEC.26-T05N-R67W	SLOT#09 BOOTH #33-26 (05-123-18228) PA	BOOTH #33-26	BOOTH #33-26 AWB	BOOTH #33-26 AWP	Abandoned	14731.23	1523.81	14731.23	14723.82	0.17	14723.82	FAIL
SEC.26-T05N-R67W	SLOT#01 BLEHM N #26-03 (05-123-19438) SI	BLEHM N #26-03	BLEHM N #26-03 AWB	BLEHM N #26-03 AWP (SI)	Producing / injecting	16411.00	1541.50	16411.00	16403.48	0.18	16403.48	FAIL
SEC.25-T05N-R67W	SLOT#19 BOOTH N #25-23 (05-123-23167) PA	BOOTH N #25-23 (05-123-23167) PA	BOOTH N #25-23 AWB	BOOTH N #25-23 AWP ( PA)	Abandoned	130.00	1241.98	8832.05	8832.05	0.21	8832.05	FAIL



# Closest Approach Clearance Summary Report

BOOTH STATE 05N (REV-A.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 05N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 05N PWB
Slot	SLOT#05 BOOTH STATE 05N (2625'FSL & 752'FEL,SEC.25)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 18096.24ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (54 Offset Wellpaths selected) Ratios are calculated in Closest Approach plane												
Offset Facility	Offset Slot	Offset Well	Offset Wellbore	Offset Wellpath	Wellbore Status	C-C Clearance Distance			Rule Separation Ratio			
						Ref MD [ft]	Min C-C Clear Dist [ft]	Diverging from MD [ft]	Ref MD of Min Ratio [ft]	Min Ratio	Min Ratio Dvrg from [ft]	Rule Status
SEC.25-T05N-R67W	SLOT#13 BOOTH N #25-25 (05-123-22706) PA	BOOTH N #25-25 (05-123-22706) PA	BOOTH N #25-25 AWB	BOOTH N #25-25 AWP (PA)	Abandoned	11703.91	1904.53	11703.91	11692.30	0.22	11692.30	FAIL
SEC.25-T05N-R67W	SLOT#15 BOOTH N #25-13 (05-123-22708) TA	BOOTH N #25-13 (05-123-22708) TA	BOOTH N #25-13 AWB	BOOTH N #25-13 AWP (TA)	Abandoned	11674.35	1905.86	11674.35	11662.73	0.22	11662.73	FAIL
SEC.26-T05N-R67W	SLOT#17 BLEHM #1 (05-123-10692) TA	BLEHM #1	BLEHM #1 AWB	BLEHM #1 AWP	Abandoned	16976.80	2013.36	16976.80	16963.78	0.23	16963.78	FAIL
SEC.25-T05N-R67W	SLOT#31 BOOTH #25-32 (05-123-19894) PA	BOOTH #25-32 (05-123-19894) PA	BOOTH #25-32 AWB	BOOTH #25-32 AWP (PA)	Abandoned	9489.08	218.71	9489.08	9488.78	0.25	9488.78	FAIL
SEC.25-T05N-R67W	SLOT#34 BOOTH N #25-15 (05-123-21926) PA	BOOTH N #25-15 (05-123-21926) PA	BOOTH N #25-15 AWB	BOOTH N #25-15 AWP (PA)	Abandoned	130.00	2164.62	9630.00	9613.21	0.28	9613.21	FAIL
SEC.25-T05N-R67W	SLOT#30 BOOTH N #25-16 (05-123-21927) PA	BOOTH N #25-16 (05-123-21927) PA	BOOTH N #25-16 AWB	BOOTH N #25-16 AWP (PA)	Abandoned	130.00	1982.66	8430.00	8419.87	0.30	8419.87	FAIL
SEC.26-T05N-R67W	SLOT#16 BOOTH #34-26 (05-123-18230) PA	BOOTH #34-26	BOOTH #34-26 AWB	BOOTH #34-26 AWB	Abandoned	14918.03	2849.64	14918.03	14891.97	0.33	14891.97	FAIL
SEC.25-T05N-R67W	SLOT#06 BOOTH STATE 06N (2610'FSL & 752'FEL,SEC.25)	BOOTH STATE 06N	BOOTH STATE 06N PWB	BOOTH STATE 06N (REV-A.0) PWP	Planned	410.02	14.74	410.02	18090.91	1.39	18090.91	PASS
SEC.25-T05N-R67W	SLOT#04 BOOTH STATE 04C (2640'FSL & 752'FEL,SEC.25)	BOOTH STATE 04C	BOOTH STATE 04C PWB	BOOTH STATE 04C (REV-A.0) PWP	Planned	30.00	14.94	18096.24	18096.24	1.51	18096.24	PASS
SEC.25-T05N-R67W	SLOT#03 BOOTH STATE 03NA (2655'FSL & 752'FEL,SEC.25)	BOOTH STATE 03NA	BOOTH STATE 03NA PWB	BOOTH STATE 03NA (REV-A.0) PWP	Planned	30.00	30.24	330.00	18096.24	2.73	18096.24	PASS
SEC.25-T05N-R67W	SLOT#07 BOOTH STATE 07NA (2595'FSL & 752'FEL,SEC.25)	BOOTH STATE 07NA	BOOTH STATE 07NA PWB	BOOTH STATE 07NA (REV-A.0) PWP	Planned	30.00	29.87	400.00	18096.24	2.74	18096.24	PASS
SEC.25-T05N-R67W	SLOT#02 BOOTH STATE 02N (2670'FSL & 752'FEL,SEC.25)	BOOTH STATE 02N	BOOTH STATE 02N PWB	BOOTH STATE 02N (REV-A.0) PWP	Planned	577.19	43.95	577.19	18096.24	4.07	18096.24	PASS
SEC.25-T05N-R67W	SLOT#08 BOOTH STATE 08C (2580'FSL & 753'FEL,SEC.25)	BOOTH STATE 08C	BOOTH STATE 08C PWB	BOOTH STATE 08C (REV-A.0) PWP	Planned	30.00	44.81	7835.04	18096.24	4.11	18096.24	PASS
SEC.25-T05N-R67W	SLOT#35 Booth N #25-20D (05-123-31645) TA	Booth N #25-20D (05-123-31645) TA	Booth N #25-20D AWB	Booth N #25-20D AWP (TA)	Abandoned	11592.70	531.38	11592.70	11544.61	4.35	11544.61	PASS
SEC.25-T05N-R67W	SLOT#25 Booth N #25-31D (05-123-31514) SI	Booth N #25-31D (05-123-31514) SI	Booth N #25-31D AWB	Booth N #25-31D AWP (SI)	Producing / injecting	13080.05	667.15	13080.05	13115.49	4.87	13115.49	PASS
SEC.25-T05N-R67W	SLOT#01 BOOTH STATE 01N (2588'FNL & 752'FEL,SEC.25)	BOOTH STATE 01N	BOOTH STATE 01N PWB	BOOTH STATE 01N (REV-A.0) PWP	Planned	30.00	60.11	230.00	18096.24	5.40	18096.24	PASS
SEC.25-T05N-R67W	SLOT#09 BOOTH STATE 09N (2565'FSL & 753'FEL,SEC.25)	BOOTH STATE 09N	BOOTH STATE 09N PWB	BOOTH STATE 09N (REV-A.0) PWP	Planned	30.00	60.11	400.00	18096.24	5.42	18096.24	PASS
SEC.25-T05N-R67W	SLOT#38 Booth N #25-21D (05-123-31648) PA	Booth N #25-21D (05-123-31648) PA	Booth N #25-21D AWB	Booth N #25-21D AWP (PA)	Abandoned	10201.38	486.55	10201.38	10216.56	5.59	10216.56	PASS
SEC.25-T05N-R67W	SLOT#10 BOOTH STATE 10N (2550'FSL & 753'FEL,SEC.25)	BOOTH STATE 10N	BOOTH STATE 10N PWB	BOOTH STATE 10N (REV-A.0) PWP	Planned	30.00	75.05	400.00	18096.24	6.78	18096.24	PASS
SEC.25-T05N-R67W	SLOT#18 Booth N #25-18D (05-123-31511) PA	Booth N #25-18D (05-123-31511) PA	Booth N #25-18D AWB	Booth N #25-18D AWP (PA)	Abandoned	10469.73	649.95	10469.73	10558.10	6.98	10558.10	PASS
SEC.25-T05N-R67W	SLOT#11 BOOTH STATE 11N (2535'FSL & 753'FEL,SEC.25)	BOOTH STATE 11N	BOOTH STATE 11N PWB	BOOTH STATE 11N (REV-A.0) PWP	Planned	30.00	89.99	230.00	18096.24	8.13	18096.24	PASS
SEC.25-T05N-R67W	SLOT#12 BOOTH STATE 12N (2520'FSL & 753'FEL,SEC.25)	BOOTH STATE 12N	BOOTH STATE 12N PWB	BOOTH STATE 12N (REV-A.0) PWP	Planned	30.00	104.92	230.00	18096.24	9.48	18096.24	PASS
SEC.26-T05N-R67W	SLOT#05 BLEHM N #26-1 (05-123-22113) PA Gyro Need Survey	BLEHM N #26-1	BLEHM N #26-1 AWB	BLEHM N #26-1 AWP	Abandoned	13529.46	1455.38	13529.46	13677.81	9.56	13677.81	PASS
SEC.25-T05N-R67W	SLOT#36 Booth N #25-22D (05-123-31646) PA	Booth N #25-22D (05-123-31646) PA	Booth N #25-22D AWB	Booth N #25-22D AWP (PA)	Abandoned	9145.90	781.20	9145.90	9352.26	9.68	9352.26	PASS
SEC.26-T05N-R67W	SLOT#13 BOOTH #24-26 (05-123-17942) PA	BOOTH #24-26	BOOTH #24-26 AWB	BOOTH #24-26 AWP	Abandoned	16499.84	2786.61	16499.84	16888.17	13.20	16888.17	PASS



# Closest Approach Clearance Summary Report

BOOTH STATE 05N (REV-A.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 05N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 05N PWB
Slot	SLOT#05 BOOTH STATE 05N (2625'FSL & 752'FEL,SEC.25)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 18096.24ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (54 Offset Wellpaths selected) Ratios are calculated in Closest Approach plane												
Offset Facility	Offset Slot	Offset Well	Offset Wellbore	Offset Wellpath	Wellbore Status	C-C Clearance Distance			Rule Separation Ratio			
						Ref MD [ft]	Min C-C Clear Dist [ft]	Diverging from MD [ft]	Ref MD of Min Ratio [ft]	Min Ratio	Min Ratio Dvrg from [ft]	Rule Status
SEC.26-T05N-R67W	SLOT#04 BOOTH N #25-33D (05-123-31666) PR	BOOTH N #25-33D	BOOTH N #25-33D AWB	BOOTH N #25-33D AWP	Drilling	12837.37	2058.61	12837.37	13128.28	14.82	13128.28	PASS
SEC.25-T05N-R67W	SLOT#16 BOOTH #25-11 (05-123-16856) PA	BOOTH #25-11 (05-123-16856) PA	BOOTH #25-11 AWB	BOOTH #25-11 AWP ( PA)	Abandoned	8503.11	1275.10	8503.11	8675.32	19.53	8675.32	PASS
SEC.25-T05N-R67W	SLOT#37 Booth N #25-24D (05-123-31647) PA	Booth N #25-24D (05-123-31647) PA	Booth N #25-24D AWB	Booth N #25-24D AWP ( PA)	Abandoned	10402.60	1908.54	10402.60	10755.91	21.20	10755.91	PASS
SEC.25-T05N-R67W	SLOT#14 BOOTH N #25-14 (05-123-22709) PA	BOOTH N #25-14 (05-123-22709) PA	BOOTH N #25-14 AWB	BOOTH N #25-14 AWP ( PA)	Abandoned	10903.22	2735.17	10903.22	11559.32	26.73	11559.32	PASS