

PDC ENERGY INC

Location: COLORADO Slot: SLOT#12 BOOTH STATE 12N (2520'FSL & 753'FEL,SEC.25)

Field: WELD COUNTY (NAD83/GRID) Well: BOOTH STATE 12N

Facility: SEC.25-T05N-R67W Wellbore: BOOTH STATE 12N PWB

Plot reference wellpath is BOOTH STATE 12N (REV-A.0) PWP

Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet

True vertical depths are referenced to (4979'GL+30'KB@5009'RKB) (RKB)

North Reference: Grid north

Reference wellpath measured depths are referenced to (4979'GL+30'KB@5009'RKB) (RKB)

Scale: True distance

(4979'GL+30'KB@5009'RKB) (RKB) to Mean Sea Level: 5009 feet

Coordinates are in feet referenced to Slot

Mean Sea Level to Ground level (At Slot: SLOT#12 BOOTH STATE 12N (2520'FSL & 753'FEL,SEC.25)): 0 feet

Depths are in feet

Offset wellpath MDs are referenced to each path's default MD datum

Created by: gueneran on 2024-05-26; Database: WA_Denver

Location Information

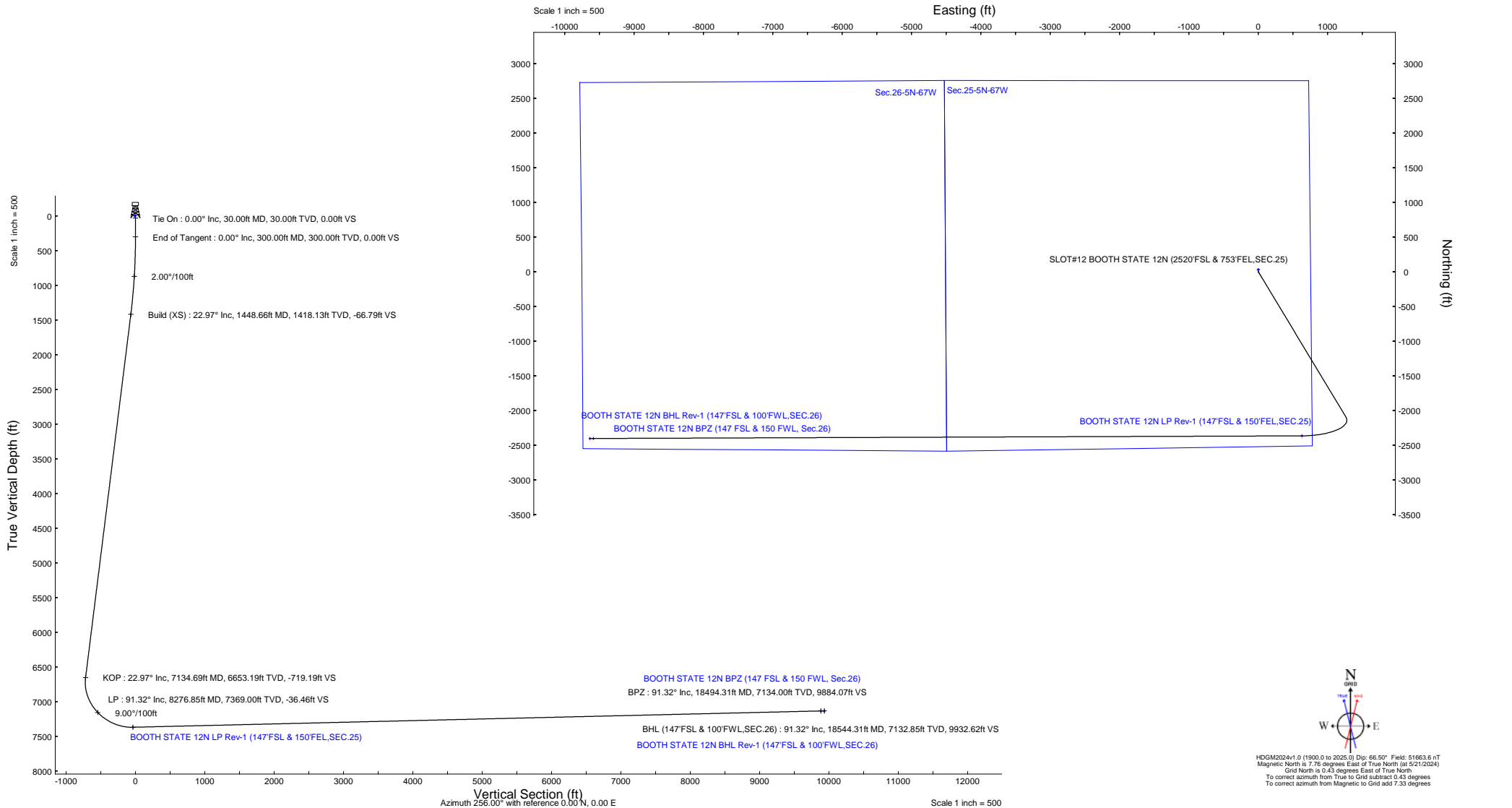
Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SEC.25-T05N-R67W		3185351.829	1376575.217	40°22'14.4552"N	104°50'5.1828"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#12 BOOTH STATE 12N (2520'FSL & 753'FEL,SEC.25)	-165.04	0.12	3185351.952	1378410.188	40°22'12.8244"N	104°50'5.1864"W
(4979'GL+30'KB@5009'RKB) (RKB) to Ground level (At Slot: SLOT#12 BOOTH STATE 12N (2520'FSL & 753'FEL,SEC.25))		5009ft				
Mean Sea Level to Ground level (At Slot: SLOT#12 BOOTH STATE 12N (2520'FSL & 753'FEL,SEC.25))		0ft				
(4979'GL+30'KB@5009'RKB) (RKB) to Mean Sea Level		5009ft				

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	-1.00	29.87	0.05	3185352.01	1378440.06	40°22'13.1196"N	104°50'5.1828"W
Sec.26-5N-67W	N/A	-1.00	29.87	0.05	3185352.01	1378440.06	40°22'13.1196"N	104°50'5.1828"W
BOOTH STATE 12N BHL Rev-1 (147'FSL & 100'FWL,SEC.26)	N/A	7134.00	-2402.43	-9637.64	3175714.73	1376007.86	40°21'49.7808"N	104°52'9.9192"W
BOOTH STATE 12N BPZ (147'FSL & 150'FWL,Sec.26)	18494.31	7134.00	-2402.07	-9587.76	3175764.61	1376008.22	40°21'49.7808"N	104°52'9.2748"W
BOOTH STATE 12N LP Rev-1 (147'FSL & 150'FWL,SEC.25)	8276.85	7369.00	-2364.46	626.93	3185978.86	1376045.83	40°21'49.4136"N	104°49'57.3168"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	0.000	148.908	30.00	0.00	0.00	0.00	0.00
End of Tangent	300.00	0.000	148.908	300.00	0.00	0.00	0.00	0.00
Build (XS)	1448.66	22.973	148.908	1418.13	-194.57	117.34	2.00	-66.79
KOP	7134.69	22.973	148.908	6653.19	-2095.02	1263.39	0.00	-719.19
LP	8276.85	91.318	269.789	7369.00	-2364.46	626.93	9.00	-36.46
BPZ	18494.31	91.318	269.789	7134.00	-2402.07	-9587.76	0.00	9884.07
BHL (147'FSL & 100'FWL,SEC.26)	18544.31	91.318	269.789	7132.85	-2402.26	-9637.74	0.00	9932.62





Planned Wellpath Report

BOOTH STATE 12N (REV-A.0) PWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	BOOTH STATE 12N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 12N PWB
Slot	SLOT#12 BOOTH STATE 12N (2520'FSL & 753'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 10:24:24 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	-165.04	0.12	3185351.95	1378410.19	40.3702290°	-104.8347740°
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	(4979'GL+30'KB@5009'RKB) (RKB) to Facility Vertical Datum	5009.00ft
Horizontal Reference Pt	Slot	(4979'GL+30'KB@5009'RKB) (RKB) to Mean Sea Level	5009.00ft
Vertical Reference Pt	(4979'GL+30'KB@5009'RKB) (RKB)	(4979'GL+30'KB@5009'RKB) (RKB) to Ground Level at Slot (SLOT#12 BOOTH STATE 12N (2520'FSL & 753'FEL,SEC.25))	5009.00ft
MD Reference Pt	(4979'GL+30'KB@5009'RKB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	256.00°



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Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 12N PWB
Slot	SLOT#12 BOOTH STATE 12N (2520'FSL & 753'FEL,SEC.25)		

WELLPATH DATA (206 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	148.908	0.00	0.00	0.00	0.00	40.3702290	-104.8347740	0.00	
30.00	0.000	148.908	30.00	0.00	0.00	0.00	40.3702290	-104.8347740	0.00	Tie On
130.00†	0.000	148.908	130.00	0.00	0.00	0.00	40.3702290	-104.8347740	0.00	
230.00†	0.000	148.908	230.00	0.00	0.00	0.00	40.3702290	-104.8347740	0.00	
300.00	0.000	148.908	300.00	0.00	0.00	0.00	40.3702290	-104.8347740	0.00	End of Tangent
330.00†	0.600	148.908	330.00	-0.05	-0.13	0.08	40.3702286	-104.8347737	2.00	
430.00†	2.600	148.908	429.96	-0.87	-2.53	1.52	40.3702220	-104.8347686	2.00	
530.00†	4.600	148.908	529.75	-2.71	-7.90	4.77	40.3702072	-104.8347571	2.00	
630.00†	6.600	148.908	629.27	-5.58	-16.26	9.80	40.3701842	-104.8347393	2.00	
730.00†	8.600	148.908	728.39	-9.47	-27.58	16.63	40.3701529	-104.8347150	2.00	
830.00†	10.600	148.908	826.98	-14.37	-41.86	25.25	40.3701136	-104.8346845	2.00	
904.48†	12.090	148.908	900.00	-18.68	-54.41	32.81	40.3700790	-104.8346577	2.00	PIERRE
930.00†	12.600	148.908	924.93	-20.28	-59.08	35.63	40.3700661	-104.8346477	2.00	
1027.80†	14.556	148.908	1020.00	-27.03	-78.74	47.49	40.3700119	-104.8346057	2.00	U PAWNEE
1030.00†	14.600	148.908	1022.13	-27.19	-79.22	47.77	40.3700106	-104.8346047	2.00	
1130.00†	16.600	148.908	1118.44	-35.10	-102.24	61.66	40.3699471	-104.8345555	2.00	
1230.00†	18.600	148.908	1213.75	-43.99	-128.14	77.27	40.3698757	-104.8345001	2.00	
1330.00†	20.600	148.908	1307.95	-53.85	-156.86	94.59	40.3697965	-104.8344388	2.00	
1430.00†	22.600	148.908	1400.93	-64.67	-188.38	113.60	40.3697096	-104.8343714	2.00	
1448.66	22.973	148.908	1418.13	-66.79	-194.57	117.34	40.3696925	-104.8343582	2.00	Build (XS)
1530.00†	22.973	148.908	1493.02	-76.13	-221.76	133.73	40.3696176	-104.8343001	0.00	
1543.01†	22.973	148.908	1505.00	-77.62	-226.11	136.35	40.3696056	-104.8342908	0.00	U PAWNEE BASE
1630.00†	22.973	148.908	1585.09	-87.60	-255.18	153.89	40.3695254	-104.8342286	0.00	
1730.00†	22.973	148.908	1677.15	-99.07	-288.60	174.04	40.3694332	-104.8341572	0.00	
1830.00†	22.973	148.908	1769.22	-110.55	-322.03	194.20	40.3693411	-104.8340858	0.00	
1930.00†	22.973	148.908	1861.29	-122.02	-355.45	214.35	40.3692489	-104.8340143	0.00	
2030.00†	22.973	148.908	1953.36	-133.50	-388.87	234.51	40.3691568	-104.8339429	0.00	
2130.00†	22.973	148.908	2045.43	-144.97	-422.30	254.66	40.3690646	-104.8338715	0.00	
2230.00†	22.973	148.908	2137.50	-156.44	-455.72	274.82	40.3689725	-104.8338000	0.00	
2330.00†	22.973	148.908	2229.57	-167.92	-489.14	294.98	40.3688803	-104.8337286	0.00	
2430.00†	22.973	148.908	2321.64	-179.39	-522.57	315.13	40.3687881	-104.8336572	0.00	
2530.00†	22.973	148.908	2413.70	-190.86	-555.99	335.29	40.3686960	-104.8335858	0.00	
2630.00†	22.973	148.908	2505.77	-202.34	-589.41	355.44	40.3686038	-104.8335143	0.00	
2730.00†	22.973	148.908	2597.84	-213.81	-622.83	375.60	40.3685117	-104.8334429	0.00	
2830.00†	22.973	148.908	2689.91	-225.28	-656.26	395.75	40.3684195	-104.8333715	0.00	
2930.00†	22.973	148.908	2781.98	-236.76	-689.68	415.91	40.3683274	-104.8333000	0.00	
3030.00†	22.973	148.908	2874.05	-248.23	-723.10	436.06	40.3682352	-104.8332286	0.00	
3130.00†	22.973	148.908	2966.12	-259.71	-756.53	456.22	40.3681431	-104.8331572	0.00	
3230.00†	22.973	148.908	3058.19	-271.18	-789.95	476.38	40.3680509	-104.8330858	0.00	
3330.00†	22.973	148.908	3150.25	-282.65	-823.37	496.53	40.3679587	-104.8330143	0.00	
3430.00†	22.973	148.908	3242.32	-294.13	-856.80	516.69	40.3678666	-104.8329429	0.00	
3530.00†	22.973	148.908	3334.39	-305.60	-890.22	536.84	40.3677744	-104.8328715	0.00	
3630.00†	22.973	148.908	3426.46	-317.07	-923.64	557.00	40.3676823	-104.8328000	0.00	
3730.00†	22.973	148.908	3518.53	-328.55	-957.06	577.15	40.3675901	-104.8327286	0.00	
3830.00†	22.973	148.908	3610.60	-340.02	-990.49	597.31	40.3674980	-104.8326572	0.00	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 12N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 12N PWB
Slot	SLOT#12 BOOTH STATE 12N (2520'FSL & 753'FEL,SEC.25)		

WELLPATH DATA (206 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3930.00†	22.973	148.908	3702.67	-351.50	-1023.91	617.46	40.3674058	-104.8325858	0.00	
4030.00†	22.973	148.908	3794.74	-362.97	-1057.33	637.62	40.3673136	-104.8325143	0.00	
4068.30†	22.973	148.908	3830.00	-367.36	-1070.13	645.34	40.3672783	-104.8324870	0.00	Parkman Sandstone
4130.00†	22.973	148.908	3886.80	-374.44	-1090.76	657.78	40.3672215	-104.8324429	0.00	
4230.00†	22.973	148.908	3978.87	-385.92	-1124.18	677.93	40.3671293	-104.8323715	0.00	
4330.00†	22.973	148.908	4070.94	-397.39	-1157.60	698.09	40.3670372	-104.8323001	0.00	
4430.00†	22.973	148.908	4163.01	-408.86	-1191.03	718.24	40.3669450	-104.8322286	0.00	
4530.00†	22.973	148.908	4255.08	-420.34	-1224.45	738.40	40.3668529	-104.8321572	0.00	
4629.84†	22.973	148.908	4347.00	-431.79	-1257.82	758.52	40.3667608	-104.8320859	0.00	Sussex Sandstone
4630.00†	22.973	148.908	4347.15	-431.81	-1257.87	758.55	40.3667607	-104.8320858	0.00	
4730.00†	22.973	148.908	4439.22	-443.28	-1291.29	778.71	40.3666685	-104.8320144	0.00	
4830.00†	22.973	148.908	4531.29	-454.76	-1324.72	798.86	40.3665764	-104.8319429	0.00	
4930.00†	22.973	148.908	4623.35	-466.23	-1358.14	819.02	40.3664842	-104.8318715	0.00	
5030.00†	22.973	148.908	4715.42	-477.71	-1391.56	839.18	40.3663921	-104.8318001	0.00	
5130.00†	22.973	148.908	4807.49	-489.18	-1424.99	859.33	40.3662999	-104.8317287	0.00	
5230.00†	22.973	148.908	4899.56	-500.65	-1458.41	879.49	40.3662078	-104.8316572	0.00	
5250.03†	22.973	148.908	4918.00	-502.95	-1465.10	883.52	40.3661893	-104.8316429	0.00	Shannon Sandstone
5330.00†	22.973	148.908	4991.63	-512.13	-1491.83	899.64	40.3661156	-104.8315858	0.00	
5430.00†	22.973	148.908	5083.70	-523.60	-1525.26	919.80	40.3660234	-104.8315144	0.00	
5530.00†	22.973	148.908	5175.77	-535.07	-1558.68	939.95	40.3659313	-104.8314430	0.00	
5630.00†	22.973	148.908	5267.84	-546.55	-1592.10	960.11	40.3658391	-104.8313715	0.00	
5730.00†	22.973	148.908	5359.90	-558.02	-1625.52	980.27	40.3657470	-104.8313001	0.00	
5830.00†	22.973	148.908	5451.97	-569.50	-1658.95	1000.42	40.3656548	-104.8312287	0.00	
5930.00†	22.973	148.908	5544.04	-580.97	-1692.37	1020.58	40.3655626	-104.8311573	0.00	
6030.00†	22.973	148.908	5636.11	-592.44	-1725.79	1040.73	40.3654705	-104.8310858	0.00	
6130.00†	22.973	148.908	5728.18	-603.92	-1759.22	1060.89	40.3653783	-104.8310144	0.00	
6230.00†	22.973	148.908	5820.25	-615.39	-1792.64	1081.04	40.3652862	-104.8309430	0.00	
6330.00†	22.973	148.908	5912.32	-626.86	-1826.06	1101.20	40.3651940	-104.8308716	0.00	
6430.00†	22.973	148.908	6004.39	-638.34	-1859.49	1121.35	40.3651019	-104.8308002	0.00	
6530.00†	22.973	148.908	6096.45	-649.81	-1892.91	1141.51	40.3650097	-104.8307287	0.00	
6630.00†	22.973	148.908	6188.52	-661.28	-1926.33	1161.67	40.3649175	-104.8306573	0.00	
6730.00†	22.973	148.908	6280.59	-672.76	-1959.75	1181.82	40.3648254	-104.8305859	0.00	
6830.00†	22.973	148.908	6372.66	-684.23	-1993.18	1201.98	40.3647332	-104.8305145	0.00	
6930.00†	22.973	148.908	6464.73	-695.71	-2026.60	1222.13	40.3646411	-104.8304431	0.00	
7030.00†	22.973	148.908	6556.80	-707.18	-2060.02	1242.29	40.3645489	-104.8303716	0.00	
7130.00†	22.973	148.908	6648.87	-718.65	-2093.45	1262.44	40.3644567	-104.8303002	0.00	
7134.69	22.973	148.908	6653.19	-719.19	-2095.02	1263.39	40.3644524	-104.8302969	0.00	KOP
7230.00†	20.273	171.164	6741.93	-723.18	-2127.32	1275.55	40.3643635	-104.8302541	9.00	
7330.00†	20.978	196.826	6835.71	-712.43	-2161.64	1273.03	40.3642693	-104.8302641	9.00	
7430.00†	24.989	217.632	6927.91	-686.64	-2195.57	1254.91	40.3641766	-104.8303300	9.00	
7530.00†	31.048	231.906	7016.24	-646.46	-2228.28	1221.65	40.3640875	-104.8304502	9.00	
7630.00†	38.187	241.606	7098.55	-592.87	-2258.95	1174.07	40.3640043	-104.8306218	9.00	
7645.97†	39.389	242.864	7111.00	-583.15	-2263.61	1165.21	40.3639917	-104.8306537	9.00	Sharon Springs
7691.11†	42.852	246.095	7145.00	-554.08	-2276.37	1138.42	40.3639572	-104.8307502	9.00	Niobrara A
7730.00†	45.901	248.555	7172.80	-527.19	-2286.84	1113.33	40.3639290	-104.8308405	9.00	



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Slot	SLOT#12 BOOTH STATE 12N (2520'FSL & 753'FEL,SEC.25)		

WELLPATH DATA (206 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS ["/100ft]	Comments
7830.00†	53.938	253.865	7237.16	-451.04	-2311.25	1040.93	40.3638635	-104.8311010	9.00	
7883.56†	58.325	256.269	7267.00	-406.59	-2322.68	997.97	40.3638330	-104.8312554	9.00	Niobrara B
7930.00†	62.164	258.175	7290.05	-366.29	-2331.58	958.66	40.3638094	-104.8313968	9.00	
8030.00†	70.506	261.870	7330.16	-275.04	-2347.34	868.54	40.3637680	-104.8317206	9.00	
8032.52†	70.717	261.957	7331.00	-272.67	-2347.67	866.18	40.3637671	-104.8317290	9.00	Niobrara C
8130.00†	78.915	265.199	7356.52	-179.52	-2358.13	772.78	40.3637404	-104.8320645	9.00	
8230.00†	87.358	268.340	7368.46	-82.08	-2363.70	673.76	40.3637271	-104.8324199	9.00	
8276.85	91.318	269.789	7369.00†	-36.46	-2364.46	626.93	40.3637260	-104.8325880	9.00	LP
8330.00†	91.318	269.789	7367.78	15.15	-2364.66	573.79	40.3637266	-104.8327787	0.00	
8430.00†	91.318	269.789	7365.48	112.24	-2365.03	473.82	40.3637276	-104.8331374	0.00	
8530.00†	91.318	269.789	7363.18	209.33	-2365.40	373.85	40.3637287	-104.8334962	0.00	
8630.00†	91.318	269.789	7360.88	306.43	-2365.76	273.88	40.3637297	-104.8338549	0.00	
8730.00†	91.318	269.789	7358.58	403.52	-2366.13	173.90	40.3637308	-104.8342137	0.00	
8830.00†	91.318	269.789	7356.28	500.62	-2366.50	73.93	40.3637318	-104.8345724	0.00	
8930.00†	91.318	269.789	7353.98	597.71	-2366.87	-26.04	40.3637329	-104.8349312	0.00	
9030.00†	91.318	269.789	7351.68	694.80	-2367.24	-126.02	40.3637339	-104.8352899	0.00	
9130.00†	91.318	269.789	7349.38	791.90	-2367.60	-225.99	40.3637350	-104.8356487	0.00	
9230.00†	91.318	269.789	7347.08	888.99	-2367.97	-325.96	40.3637360	-104.8360074	0.00	
9330.00†	91.318	269.789	7344.78	986.08	-2368.34	-425.93	40.3637370	-104.8363662	0.00	
9430.00†	91.318	269.789	7342.48	1083.18	-2368.71	-525.91	40.3637381	-104.8367249	0.00	
9530.00†	91.318	269.789	7340.18	1180.27	-2369.08	-625.88	40.3637391	-104.8370837	0.00	
9630.00†	91.318	269.789	7337.88	1277.37	-2369.44	-725.85	40.3637402	-104.8374424	0.00	
9730.00†	91.318	269.789	7335.58	1374.46	-2369.81	-825.83	40.3637412	-104.8378012	0.00	
9830.00†	91.318	269.789	7333.28	1471.55	-2370.18	-925.80	40.3637423	-104.8381599	0.00	
9929.03†	91.318	269.789	7331.00	1567.71	-2370.55	-1024.81	40.3637433	-104.8385152	0.00	Niobrara C
9930.00†	91.318	269.789	7330.98	1568.65	-2370.55	-1025.77	40.3637433	-104.8385186	0.00	
10030.00†	91.318	269.789	7328.68	1665.74	-2370.92	-1125.74	40.3637443	-104.8388774	0.00	
10130.00†	91.318	269.789	7326.38	1762.84	-2371.29	-1225.72	40.3637454	-104.8392361	0.00	
10230.00†	91.318	269.789	7324.08	1859.93	-2371.65	-1325.69	40.3637464	-104.8395949	0.00	
10330.00†	91.318	269.789	7321.78	1957.02	-2372.02	-1425.66	40.3637474	-104.8399536	0.00	
10430.00†	91.318	269.789	7319.48	2054.12	-2372.39	-1525.64	40.3637485	-104.8403124	0.00	
10530.00†	91.318	269.789	7317.18	2151.21	-2372.76	-1625.61	40.3637495	-104.8406711	0.00	
10630.00†	91.318	269.789	7314.88	2248.31	-2373.13	-1725.58	40.3637505	-104.8410299	0.00	
10730.00†	91.318	269.789	7312.58	2345.40	-2373.49	-1825.55	40.3637515	-104.8413886	0.00	
10830.00†	91.318	269.789	7310.28	2442.49	-2373.86	-1925.53	40.3637526	-104.8417474	0.00	
10930.00†	91.318	269.789	7307.98	2539.59	-2374.23	-2025.50	40.3637536	-104.8421061	0.00	
11030.00†	91.318	269.789	7305.68	2636.68	-2374.60	-2125.47	40.3637546	-104.8424649	0.00	
11130.00†	91.318	269.789	7303.38	2733.78	-2374.97	-2225.45	40.3637556	-104.8428236	0.00	
11230.00†	91.318	269.789	7301.08	2830.87	-2375.33	-2325.42	40.3637567	-104.8431824	0.00	
11330.00†	91.318	269.789	7298.78	2927.96	-2375.70	-2425.39	40.3637577	-104.8435411	0.00	
11430.00†	91.318	269.789	7296.48	3025.06	-2376.07	-2525.36	40.3637587	-104.8438999	0.00	
11530.00†	91.318	269.789	7294.18	3122.15	-2376.44	-2625.34	40.3637597	-104.8442586	0.00	
11630.00†	91.318	269.789	7291.88	3219.25	-2376.81	-2725.31	40.3637608	-104.8446174	0.00	
11730.00†	91.318	269.789	7289.58	3316.34	-2377.17	-2825.28	40.3637618	-104.8449761	0.00	
11830.00†	91.318	269.789	7287.28	3413.43	-2377.54	-2925.26	40.3637628	-104.8453349	0.00	



Planned Wellpath Report

BOOTH STATE 12N (REV-A.0) PWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	BOOTH STATE 12N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 12N PWB
Slot	SLOT#12 BOOTH STATE 12N (2520'FSL & 753'FEL,SEC.25)		

WELLPATH DATA (206 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11930.00†	91.318	269.789	7284.98	3510.53	-2377.91	-3025.23	40.3637638	-104.8456936	0.00	
12030.00†	91.318	269.789	7282.68	3607.62	-2378.28	-3125.20	40.3637648	-104.8460524	0.00	
12130.00†	91.318	269.789	7280.38	3704.71	-2378.65	-3225.17	40.3637658	-104.8464111	0.00	
12230.00†	91.318	269.789	7278.08	3801.81	-2379.02	-3325.15	40.3637668	-104.8467699	0.00	
12330.00†	91.318	269.789	7275.78	3898.90	-2379.38	-3425.12	40.3637678	-104.8471286	0.00	
12430.00†	91.318	269.789	7273.48	3996.00	-2379.75	-3525.09	40.3637689	-104.8474874	0.00	
12530.00†	91.318	269.789	7271.18	4093.09	-2380.12	-3625.07	40.3637699	-104.8478461	0.00	
12630.00†	91.318	269.789	7268.88	4190.18	-2380.49	-3725.04	40.3637709	-104.8482049	0.00	
12711.66†	91.318	269.789	7267.00	4269.47	-2380.79	-3806.68	40.3637717	-104.8484978	0.00	Niobrara B
12730.00†	91.318	269.789	7266.58	4287.28	-2380.86	-3825.01	40.3637719	-104.8485636	0.00	
12830.00†	91.318	269.789	7264.28	4384.37	-2381.22	-3924.98	40.3637729	-104.8489224	0.00	
12930.00†	91.318	269.789	7261.98	4481.47	-2381.59	-4024.96	40.3637739	-104.8492811	0.00	
13030.00†	91.318	269.789	7259.68	4578.56	-2381.96	-4124.93	40.3637749	-104.8496398	0.00	
13130.00†	91.318	269.789	7257.38	4675.65	-2382.33	-4224.90	40.3637759	-104.8499986	0.00	
13230.00†	91.318	269.789	7255.08	4772.75	-2382.70	-4324.88	40.3637769	-104.8503573	0.00	
13330.00†	91.318	269.789	7252.78	4869.84	-2383.06	-4424.85	40.3637779	-104.8507161	0.00	
13430.00†	91.318	269.789	7250.48	4966.94	-2383.43	-4524.82	40.3637789	-104.8510748	0.00	
13530.00†	91.318	269.789	7248.18	5064.03	-2383.80	-4624.79	40.3637799	-104.8514336	0.00	
13630.00†	91.318	269.789	7245.88	5161.12	-2384.17	-4724.77	40.3637809	-104.8517923	0.00	
13730.00†	91.318	269.789	7243.58	5258.22	-2384.54	-4824.74	40.3637819	-104.8521511	0.00	
13830.00†	91.318	269.789	7241.28	5355.31	-2384.90	-4924.71	40.3637829	-104.8525098	0.00	
13930.00†	91.318	269.789	7238.98	5452.41	-2385.27	-5024.69	40.3637839	-104.8528686	0.00	
14030.00†	91.318	269.789	7236.68	5549.50	-2385.64	-5124.66	40.3637849	-104.8532273	0.00	
14130.00†	91.318	269.789	7234.38	5646.59	-2386.01	-5224.63	40.3637858	-104.8535861	0.00	
14230.00†	91.318	269.789	7232.08	5743.69	-2386.38	-5324.60	40.3637868	-104.8539448	0.00	
14330.00†	91.318	269.789	7229.78	5840.78	-2386.75	-5424.58	40.3637878	-104.8543036	0.00	
14430.00†	91.318	269.789	7227.48	5937.88	-2387.11	-5524.55	40.3637888	-104.8546623	0.00	
14530.00†	91.318	269.789	7225.18	6034.97	-2387.48	-5624.52	40.3637898	-104.8550211	0.00	
14630.00†	91.318	269.789	7222.88	6132.06	-2387.85	-5724.50	40.3637908	-104.8553798	0.00	
14730.00†	91.318	269.789	7220.58	6229.16	-2388.22	-5824.47	40.3637918	-104.8557386	0.00	
14830.00†	91.318	269.789	7218.28	6326.25	-2388.59	-5924.44	40.3637928	-104.8560973	0.00	
14930.00†	91.318	269.789	7215.98	6423.35	-2388.95	-6024.41	40.3637937	-104.8564561	0.00	
15030.00†	91.318	269.789	7213.68	6520.44	-2389.32	-6124.39	40.3637947	-104.8568148	0.00	
15130.00†	91.318	269.789	7211.38	6617.53	-2389.69	-6224.36	40.3637957	-104.8571736	0.00	
15230.00†	91.318	269.789	7209.08	6714.63	-2390.06	-6324.33	40.3637967	-104.8575323	0.00	
15330.00†	91.318	269.789	7206.78	6811.72	-2390.43	-6424.31	40.3637976	-104.8578911	0.00	
15430.00†	91.318	269.789	7204.48	6908.81	-2390.79	-6524.28	40.3637986	-104.8582498	0.00	
15530.00†	91.318	269.789	7202.18	7005.91	-2391.16	-6624.25	40.3637996	-104.8586086	0.00	
15630.00†	91.318	269.789	7199.88	7103.00	-2391.53	-6724.22	40.3638006	-104.8589673	0.00	
15730.00†	91.318	269.789	7197.58	7200.10	-2391.90	-6824.20	40.3638015	-104.8593261	0.00	
15830.00†	91.318	269.789	7195.28	7297.19	-2392.27	-6924.17	40.3638025	-104.8596848	0.00	
15930.00†	91.318	269.789	7192.98	7394.28	-2392.63	-7024.14	40.3638035	-104.8600436	0.00	
16030.00†	91.318	269.789	7190.68	7491.38	-2393.00	-7124.12	40.3638045	-104.8604023	0.00	
16130.00†	91.318	269.789	7188.38	7588.47	-2393.37	-7224.09	40.3638054	-104.8607611	0.00	
16230.00†	91.318	269.789	7186.08	7685.57	-2393.74	-7324.06	40.3638064	-104.8611198	0.00	



Planned Wellpath Report

BOOTH STATE 12N (REV-A.0) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 12N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 12N PWB
Slot	SLOT#12 BOOTH STATE 12N (2520'FSL & 753'FEL,SEC.25)		

WELLPATH DATA (206 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16330.00†	91.318	269.789	7183.78	7782.66	-2394.11	-7424.03	40.3638074	-104.8614786	0.00	
16430.00†	91.318	269.789	7181.48	7879.75	-2394.48	-7524.01	40.3638083	-104.8618373	0.00	
16530.00†	91.318	269.789	7179.18	7976.85	-2394.84	-7623.98	40.3638093	-104.8621961	0.00	
16630.00†	91.318	269.789	7176.88	8073.94	-2395.21	-7723.95	40.3638103	-104.8625548	0.00	
16730.00†	91.318	269.789	7174.58	8171.04	-2395.58	-7823.93	40.3638112	-104.8629136	0.00	
16830.00†	91.318	269.789	7172.28	8268.13	-2395.95	-7923.90	40.3638122	-104.8632723	0.00	
16930.00†	91.318	269.789	7169.98	8365.22	-2396.32	-8023.87	40.3638131	-104.8636311	0.00	
17030.00†	91.318	269.789	7167.68	8462.32	-2396.68	-8123.84	40.3638141	-104.8639898	0.00	
17130.00†	91.318	269.789	7165.38	8559.41	-2397.05	-8223.82	40.3638151	-104.8643485	0.00	
17230.00†	91.318	269.789	7163.08	8656.51	-2397.42	-8323.79	40.3638160	-104.8647073	0.00	
17330.00†	91.318	269.789	7160.78	8753.60	-2397.79	-8423.76	40.3638170	-104.8650660	0.00	
17430.00†	91.318	269.789	7158.48	8850.69	-2398.16	-8523.74	40.3638179	-104.8654248	0.00	
17530.00†	91.318	269.789	7156.18	8947.79	-2398.52	-8623.71	40.3638189	-104.8657835	0.00	
17630.00†	91.318	269.789	7153.88	9044.88	-2398.89	-8723.68	40.3638198	-104.8661423	0.00	
17730.00†	91.318	269.789	7151.58	9141.98	-2399.26	-8823.65	40.3638208	-104.8665010	0.00	
17830.00†	91.318	269.789	7149.28	9239.07	-2399.63	-8923.63	40.3638217	-104.8668598	0.00	
17930.00†	91.318	269.789	7146.98	9336.16	-2400.00	-9023.60	40.3638227	-104.8672185	0.00	
18016.05†	91.318	269.789	7145.00	9419.71	-2400.31	-9109.62	40.3638235	-104.8675272	0.00	Niobrara A
18030.00†	91.318	269.789	7144.68	9433.26	-2400.37	-9123.57	40.3638236	-104.8675773	0.00	
18130.00†	91.318	269.789	7142.38	9530.35	-2400.73	-9223.55	40.3638246	-104.8679360	0.00	
18230.00†	91.318	269.789	7140.08	9627.44	-2401.10	-9323.52	40.3638255	-104.8682948	0.00	
18330.00†	91.318	269.789	7137.78	9724.54	-2401.47	-9423.49	40.3638265	-104.8686535	0.00	
18430.00†	91.318	269.789	7135.48	9821.63	-2401.84	-9523.47	40.3638274	-104.8690123	0.00	
18494.31	91.318	269.789	7134.00 ²	9884.07	-2402.07	-9587.76	40.3638280	-104.8692430	0.00	BPZ
18530.00†	91.318	269.789	7133.18	9918.73	-2402.21	-9623.44	40.3638283	-104.8693710	0.00	
18544.31	91.318	269.789	7132.85	9932.62	-2402.26	-9637.74	40.3638285	-104.8694224	0.00	BHL (147'FSL & 100'FWL,SEC.26)



Planned Wellpath Report

BOOTH STATE 12N (REV-A.0) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 12N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 12N PWB
Slot	SLOT#12 BOOTH STATE 12N (2520'FSL & 753'FEL,SEC.25)		

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	-1.00	29.87	0.05	3185352.01	1378440.06	40.3703110	-104.8347730	polygon
	2D Polygon: dimensions not calculated								
Sec.26-5N-67W	N/A	-1.00	29.87	0.05	3185352.01	1378440.06	40.3703110	-104.8347730	polygon
	2D Polygon: dimensions not calculated								
BOOTH STATE 12N BHL Rev-1 (147'FSL & 100'FWL,SEC.26)	N/A	7134.00	-2402.43	-9637.64	3175714.73	1376007.86	40.3638280	-104.8694220	point
2) BOOTH STATE 12N BPZ (147 FSL & 150 FWL, Sec.26)	18494.31	7134.00	-2402.07	-9587.76	3175764.61	1376008.22	40.3638280	-104.8692430	point
1) BOOTH STATE 12N LP Rev-1 (147'FSL & 150'FEL,SEC.25)	8276.85	7369.00	-2364.46	626.93	3185978.86	1376045.83	40.3637260	-104.8325880	point

SURVEY PROGRAM - Ref Wellbore: BOOTH STATE 12N PWB Ref Wellpath: BOOTH STATE 12N (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 12N PWB
2000.00	18552.36	OWSG MWD rev2 (MS+IFR1)		BOOTH STATE 12N PWB



Planned Wellpath Report

BOOTH STATE 12N (REV-A.0) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 12N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 12N PWB
Slot	SLOT#12 BOOTH STATE 12N (2520'FSL & 753'FEL,SEC.25)		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
904.48	12.090	148.908	900.00	PIERRE
1027.80	14.556	148.908	1020.00	U PAWNEE
1543.01	22.973	148.908	1505.00	U PAWNEE BASE
4068.30	22.973	148.908	3830.00	Parkman Sandstone
4629.84	22.973	148.908	4347.00	Sussex Sandstone
5250.03	22.973	148.908	4918.00	Shannon Sandstone
7645.97	39.389	242.864	7111.00	Sharon Springs
7691.11	42.852	246.095	7145.00	Niobrara A
7883.56	58.325	256.269	7267.00	Niobrara B
8032.52	70.717	261.957	7331.00	Niobrara C
9929.03	91.318	269.789	7331.00	Niobrara C
12711.66	91.318	269.789	7267.00	Niobrara B
18016.05	91.318	269.789	7145.00	Niobrara A

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
30.00	0.000	148.908	30.00	Tie On
300.00	0.000	148.908	300.00	End of Tangent
1448.66	22.973	148.908	1418.13	Build (XS)
7134.69	22.973	148.908	6653.19	KOP
8276.85	91.318	269.789	7369.00	LP
18494.31	91.318	269.789	7134.00	BPZ
18544.31	91.318	269.789	7132.85	BHL (147'FSL & 100'FWL,SEC.26)



Closest Approach Clearance Summary Report

BOOTH STATE 12N (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 12N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 12N PWB
Slot	SLOT#12 BOOTH STATE 12N (2520'FSL & 753'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 10:49:29 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	-165.04	0.12	3185351.95	1378410.19	40.3702290°	-104.8347740°
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	(4979'GL+30'KB@5009'RKB) (RKB) to Facility Vertical Datum	5009.00ft
Horizontal Reference Pt	Slot	(4979'GL+30'KB@5009'RKB) (RKB) to Mean Sea Level	5009.00ft
Vertical Reference Pt	(4979'GL+30'KB@5009'RKB) (RKB)	(4979'GL+30'KB@5009'RKB) (RKB) to Ground Level at Slot (SLOT#12 BOOTH STATE 12N (2520'FSL & 753'FEL,SEC.25))	5009.00ft
MD Reference Pt	(4979'GL+30'KB@5009'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	7.76° East of TN	Dip Angle	66.50°	Mag Field Strength	51664 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 12N (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 12N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 12N PWB
Slot	SLOT#12 BOOTH STATE 12N (2520'FSL & 753'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 12N PWB Ref Wellpath: BOOTH STATE 12N (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 12N PWB
2000.00	18552.36	OWSG MWD rev2 (MS+IFR1)		BOOTH STATE 12N PWB



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BOOTH STATE 12N (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 12N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 12N PWB
Slot	SLOT#12 BOOTH STATE 12N (2520'FSL & 753'FEL,SEC.25)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 18544.31ft 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#16 BOOTH #34-26 (05-123-18230) PA	BOOTH #34-26	BOOTH #34-26 AWB	BOOTH #34-26 AWP	Abandoned	15381.96	271.72	15381.96	15381.72	0.03	15381.72	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	2107.45	99.58	8730.00	2136.59	0.04	8730.00	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	8905.62	489.05	8905.62	8904.87	0.05	8904.87	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	10095.97	670.70	10095.97	10094.55	0.08	10094.55	FAIL
SEC.26-T05N-R67W	SLOT#17 BLEHM #1 (05-123-10692) TA	BLEHM #1	BLEHM #1 AWB	BLEHM #1 AWP	Abandoned	17440.05	1109.69	17440.05	17436.11	0.13	17436.11	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	12137.51	1212.83	12137.51	12132.85	0.14	12132.85	FAIL
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	12167.06	1214.18	12167.06	12162.39	0.14	12162.39	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	2673.60	899.86	9300.32	9300.32	0.15	9300.32	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	15194.07	1597.39	15194.07	15185.99	0.18	15185.99	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	12904.84	1664.68	12904.84	12896.07	0.19	12896.07	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	30.00	1402.72	10132.14	10132.14	0.19	10132.14	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	17799.93	1928.15	17799.93	17788.10	0.22	17788.10	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	11469.75	1985.82	11469.75	11457.32	0.22	11457.32	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	30.00	621.72	9030.00	9009.57	0.33	9009.57	FAIL
SEC.26-T05N-R67W	SLOT#12 BLEHM #2 (05-123-11006) PA	BLEHM #2	BLEHM #2 AWB	BLEHM #2 AWP	Drilling	16696.43	3112.36	16696.43	16666.00	0.35	16666.00	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	30.00	2788.52	11530.00	11504.75	0.36	11504.75	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	14192.95	3240.02	14192.95	14159.95	0.37	14159.95	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	12917.84	3313.51	12917.84	12883.37	0.37	12883.37	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	15533.61	3336.51	15533.61	15498.65	0.38	15498.65	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	17826.53	3331.39	17826.53	17791.57	0.38	17791.57	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	13302.16	2672.26	13302.16	13131.20	0.41	13131.20	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	30.00	1609.21	9630.00	9568.01	0.42	9568.01	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	14772.37	3933.78	14772.37	14723.87	0.44	14723.87	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	30.00	3748.61	12330.00	12232.36	0.44	12232.36	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	17305.98	3995.88	17305.98	17255.79	0.45	17255.79	FAIL



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BOOTH STATE 12N (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 12N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 12N PWB
Slot	SLOT#12 BOOTH STATE 12N (2520'FSL & 753'FEL,SEC.25)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 18544.31ft 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#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	30.00	2364.44	10230.00	10202.47	0.48	10202.47	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	15200.46	4482.00	15200.46	15137.43	0.51	15137.43	FAIL
SEC.26-T05N-R67W	SLOT#08 BLEHM #3 (05-123-11103) TA	BLEHM #3	BLEHM #3 AWB	BLEHM #3 AWP	Drilling	18000.77	4473.63	18000.77	17937.73	0.51	17937.73	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	30.00	3493.02	11530.00	11476.72	0.52	11476.72	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	30.00	4654.35	12930.00	12881.50	0.52	12881.50	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	16871.32	4664.08	16871.32	16802.84	0.53	16802.84	FAIL
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	317.49	14.93	18544.31	18544.31	1.35	18544.31	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	16976.79	334.58	16976.79	16975.61	1.58	16975.61	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	29.87	300.00	18544.31	2.69	18544.31	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	11369.34	382.63	11369.34	11387.15	3.75	11387.15	PASS
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	322.36	1420.40	9930.00	9874.75	3.77	9874.75	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	44.81	8330.00	18544.31	4.06	18544.31	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	60.11	300.00	18544.31	5.41	18544.31	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	75.05	300.00	18544.31	6.82	18544.31	PASS
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	13301.23	1061.75	13301.23	13362.68	7.63	13362.68	PASS
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	30.00	89.99	230.00	18544.31	8.13	18544.31	PASS
SEC.25-T05N-R67W	SLOT#05 BOOTH STATE 05N (2625'FSL & 752'FEL,SEC.25)	BOOTH STATE 05N	BOOTH STATE 05N PWB	BOOTH STATE 05N (REV-A.0) PWP	Planned	30.00	104.92	300.00	18544.31	9.49	18544.31	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	119.86	300.00	18544.31	10.83	18544.31	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	135.16	300.00	18544.31	12.21	18544.31	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	10865.76	1209.63	10865.76	11018.85	13.14	11018.85	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	30.00	150.10	300.00	18544.31	13.51	18544.31	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	165.04	230.00	18544.31	14.87	18544.31	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	11963.03	2425.21	11963.03	12694.19	20.76	12694.19	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	13541.19	3786.27	13541.19	14462.75	25.95	14462.75	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	2833.34	2143.19	10630.00	11534.87	27.38	11534.87	PASS



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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 12N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 12N PWB
Slot	SLOT#12 BOOTH STATE 12N (2520'FSL & 753'FEL,SEC.25)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 18544.31ft 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#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	13987.48	4568.97	13987.48	15194.89	27.94	15194.89	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	3617.21	1611.75	9630.00	9805.63	28.79	9805.63	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	1121.39	3458.71	10930.00	12324.68	35.65	12324.68	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	30.00	2015.18	8930.00	11250.55	55.76	11250.55	PASS