

PDC ENERGY INC

Location: COLORADO Slot: SLOT#02 BOOTH STATE 02N (2670'FSL & 752'FEL,SEC.25)

Field: WELD COUNTY (NAD83/GRID) Well: BOOTH STATE 02N

Facility: SEC.25-T05N-R67W Wellbore: BOOTH STATE 02N PWB

Plot reference wellpath is BOOTH STATE 02N (REV-A.0) PWP

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

True vertical depths are referenced to (4984'GL+30'KB@5014'RKB) (RKB)

North Reference: Grid north

Reference wellpath measured depths are referenced to (4984'GL+30'KB@5014'RKB) (RKB)

Scale: True distance

(4984'GL+30'KB@5014'RKB) (RKB) to Mean Sea Level: 5014 feet

Coordinates are in feet referenced to Slot

Mean Sea Level to Ground level (At Slot: SLOT#02 BOOTH STATE 02N (2670'FSL & 752'FEL,SEC.25)): 0 feet

Depths are in feet

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

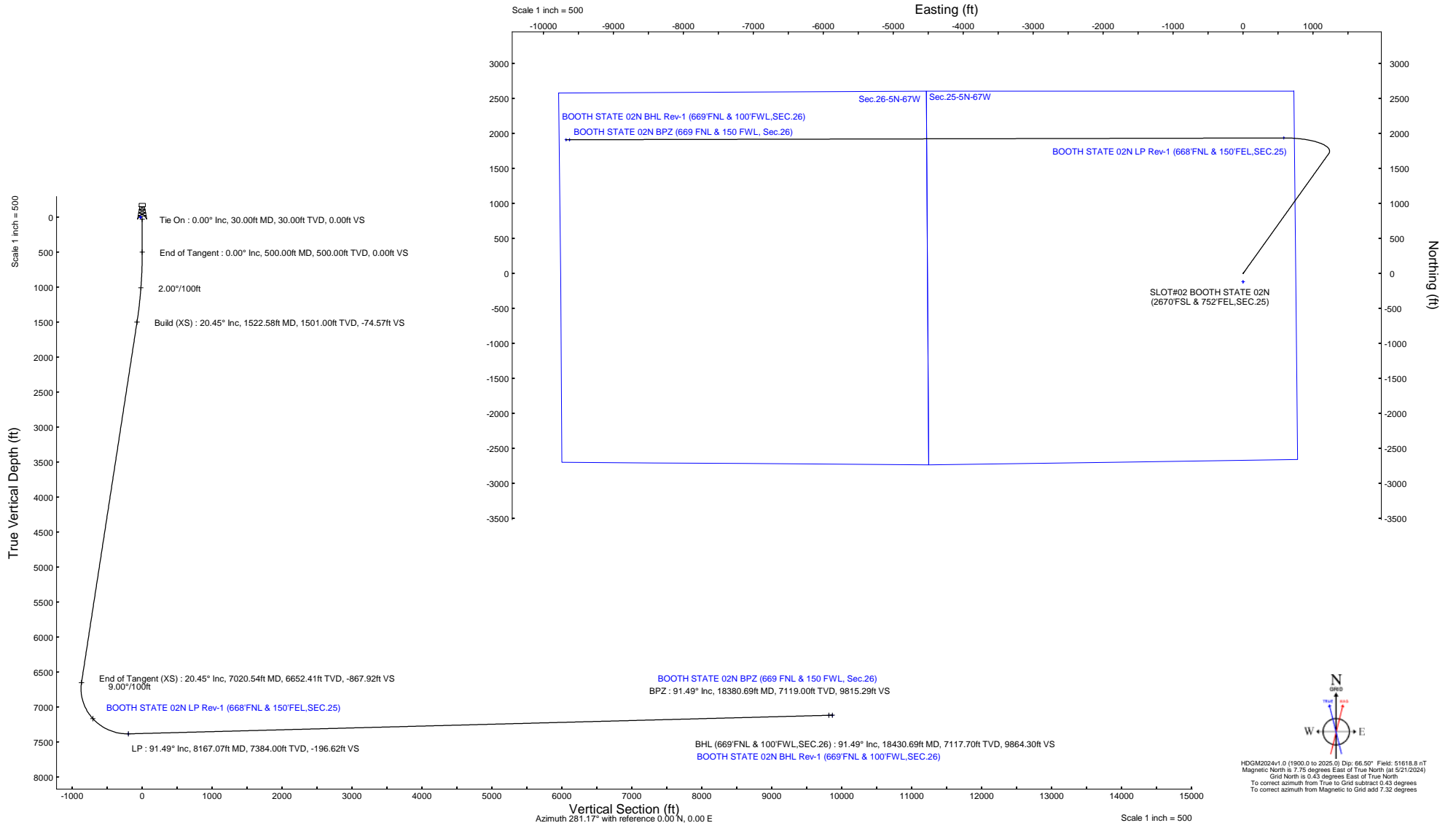
Created by: gueneral on 2024-05-26; Database: WA_Denver

Location Information

Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SEC.25-T05N-R67W		3185351.829	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#02 BOOTH STATE 02N (2670'FSL & 752'FEL,SEC.25)	-14.94	0.11	3185351.941	1378560.281	40°22'14.3076"N	104°50'5.1720"W
(4984'GL+30'KB@5014'RKB) (RKB) to Ground level (At Slot: SLOT#02 BOOTH STATE 02N (2670'FSL & 752'FEL,SEC.25))				5014ft		
Mean Sea Level to Ground level (At Slot: SLOT#02 BOOTH STATE 02N (2670'FSL & 752'FEL,SEC.25))				0ft		
(4984'GL+30'KB@5014'RKB) (RKB) to Mean Sea Level				5014ft		

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	4.00	-120.23	0.07	3185352.01	1378440.06	40°22'13.1196"N	104°50'5.1828"W	
Sec.26-5N-67W	N/A	4.00	-120.23	0.07	3185352.01	1378440.06	40°22'13.1196"N	104°50'5.1828"W	
BOOTH STATE 02N BHL Rev-1 (669'FNL & 100'FWL,SEC.26)	N/A	7119.00	1910.10	-9677.72	3175674.64	1380470.30	40°22'33.8808"N	104°52'10.0272"W	
BOOTH STATE 02N BPZ (669' FNL & 150' FWL, Sec.26)	18380.69	7119.00	1910.46	-9627.57	3175724.78	1380470.65	40°22'33.8808"N	104°52'9.3792"W	
BOOTH STATE 02N LP Rev-1 (668'FNL & 150'FEL,SEC.25)	8167.07	7384.00	1936.01	582.58	3185934.49	1380496.20	40°22'33.3948"N	104°49'57.4572"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	35.558	30.00	0.00	0.00	0.00	0.00
End of Tangent	500.00	0.000	35.558	500.00	0.00	0.00	0.00	0.00
Build (XS)	1522.58	20.452	35.558	1501.00	146.90	105.01	2.00	-74.57
End of Tangent (XS)	7020.54	20.452	35.558	6652.41	1709.74	1222.17	0.00	-867.92
LP	8167.07	91.487	269.857	7384.00	1936.01	582.58	9.00	-196.62
BPZ	18380.69	91.487	269.857	7119.00	1910.46	-9627.57	0.00	9815.29
BHL (669'FNL & 100'FWL,SEC.26)	18430.69	91.487	269.857	7117.70	1910.33	-9677.55	0.00	9864.30





Planned Wellpath Report

BOOTH STATE 02N (REV-A.0) PWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	BOOTH STATE 02N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 02N PWB
Slot	SLOT#02 BOOTH STATE 02N (2670'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 9:21:14 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	-14.94	0.11	3185351.94	1378560.28	40.3706410°	-104.8347700°
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	(4984'GL+30'KB@5014'RKB) (RKB) to Facility Vertical Datum	5014.00ft
Horizontal Reference Pt	Slot	(4984'GL+30'KB@5014'RKB) (RKB) to Mean Sea Level	5014.00ft
Vertical Reference Pt	(4984'GL+30'KB@5014'RKB) (RKB)	(4984'GL+30'KB@5014'RKB) (RKB) to Ground Level at Slot (SLOT#02 BOOTH STATE 02N (2670'FSL & 752'FEL,SEC.25))	5014.00ft
MD Reference Pt	(4984'GL+30'KB@5014'RKB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	281.17°



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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 02N PWB
Slot	SLOT#02 BOOTH STATE 02N (2670'FSL & 752'FEL,SEC.25)		

WELLPATH DATA (207 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	35.558	0.00	0.00	0.00	0.00	40.3706410	-104.8347700	0.00	
30.00	0.000	35.558	30.00	0.00	0.00	0.00	40.3706410	-104.8347700	0.00	Tie On
130.00†	0.000	35.558	130.00	0.00	0.00	0.00	40.3706410	-104.8347700	0.00	
230.00†	0.000	35.558	230.00	0.00	0.00	0.00	40.3706410	-104.8347700	0.00	
330.00†	0.000	35.558	330.00	0.00	0.00	0.00	40.3706410	-104.8347700	0.00	
430.00†	0.000	35.558	430.00	0.00	0.00	0.00	40.3706410	-104.8347700	0.00	
500.00	0.000	35.558	500.00	0.00	0.00	0.00	40.3706410	-104.8347700	0.00	End of Tangent
530.00†	0.600	35.558	530.00	-0.06	0.13	0.09	40.3706413	-104.8347697	2.00	
630.00†	2.600	35.558	629.96	-1.22	2.40	1.71	40.3706476	-104.8347638	2.00	
730.00†	4.600	35.558	729.75	-3.81	7.51	5.37	40.3706615	-104.8347505	2.00	
830.00†	6.600	35.558	829.27	-7.84	15.45	11.04	40.3706832	-104.8347300	2.00	
901.31†	8.026	35.558	900.00	-11.59	22.83	16.32	40.3707033	-104.8347108	2.00	PIERRE
930.00†	8.600	35.558	928.39	-13.30	26.20	18.73	40.3707125	-104.8347021	2.00	
1022.90†	10.458	35.558	1020.00	-19.65	38.71	27.67	40.3707467	-104.8346696	2.00	U PAWNEE
1030.00†	10.600	35.558	1026.98	-20.19	39.77	28.43	40.3707496	-104.8346669	2.00	
1130.00†	12.600	35.558	1124.93	-28.49	56.13	40.12	40.3707942	-104.8346245	2.00	
1230.00†	14.600	35.558	1222.13	-38.20	75.26	53.80	40.3708465	-104.8345749	2.00	
1330.00†	16.600	35.558	1318.44	-49.31	97.13	69.43	40.3709062	-104.8345182	2.00	
1430.00†	18.600	35.558	1413.75	-61.79	121.73	87.02	40.3709733	-104.8344544	2.00	
1522.58	20.452	35.558	1501.00	-74.57	146.90	105.01	40.3710421	-104.8343892	2.00	Build (XS)
1526.85†	20.452	35.558	1505.00	-75.19	148.11	105.88	40.3710454	-104.8343860	0.00	U PAWNEE BASE
1530.00†	20.452	35.558	1507.96	-75.64	149.01	106.52	40.3710478	-104.8343837	0.00	
1630.00†	20.452	35.558	1601.65	-90.07	177.44	126.84	40.3711254	-104.8343100	0.00	
1730.00†	20.452	35.558	1695.35	-104.50	205.86	147.16	40.3712030	-104.8342364	0.00	
1830.00†	20.452	35.558	1789.05	-118.93	234.29	167.48	40.3712806	-104.8341627	0.00	
1930.00†	20.452	35.558	1882.74	-133.36	262.71	187.80	40.3713582	-104.8340890	0.00	
2030.00†	20.452	35.558	1976.44	-147.79	291.14	208.12	40.3714358	-104.8340153	0.00	
2130.00†	20.452	35.558	2070.14	-162.22	319.57	228.43	40.3715134	-104.8339416	0.00	
2230.00†	20.452	35.558	2163.83	-176.65	347.99	248.75	40.3715911	-104.8338679	0.00	
2330.00†	20.452	35.558	2257.53	-191.08	376.42	269.07	40.3716687	-104.8337942	0.00	
2430.00†	20.452	35.558	2351.23	-205.51	404.84	289.39	40.3717463	-104.8337205	0.00	
2530.00†	20.452	35.558	2444.92	-219.94	433.27	309.71	40.3718239	-104.8336468	0.00	
2630.00†	20.452	35.558	2538.62	-234.37	461.70	330.03	40.3719015	-104.8335732	0.00	
2730.00†	20.452	35.558	2632.32	-248.80	490.12	350.35	40.3719791	-104.8334995	0.00	
2830.00†	20.452	35.558	2726.01	-263.23	518.55	370.67	40.3720567	-104.8334258	0.00	
2930.00†	20.452	35.558	2819.71	-277.66	546.97	390.99	40.3721343	-104.8333521	0.00	
3030.00†	20.452	35.558	2913.41	-292.09	575.40	411.31	40.3722119	-104.8332784	0.00	
3130.00†	20.452	35.558	3007.10	-306.52	603.82	431.63	40.3722895	-104.8332047	0.00	
3230.00†	20.452	35.558	3100.80	-320.95	632.25	451.95	40.3723671	-104.8331310	0.00	
3330.00†	20.452	35.558	3194.50	-335.38	660.68	472.27	40.3724447	-104.8330573	0.00	
3430.00†	20.452	35.558	3288.19	-349.81	689.10	492.59	40.3725223	-104.8329836	0.00	
3530.00†	20.452	35.558	3381.89	-364.24	717.53	512.91	40.3725999	-104.8329099	0.00	
3630.00†	20.452	35.558	3475.59	-378.67	745.95	533.23	40.3726775	-104.8328362	0.00	
3730.00†	20.452	35.558	3569.28	-393.10	774.38	553.55	40.3727551	-104.8327626	0.00	
3830.00†	20.452	35.558	3662.98	-407.53	802.81	573.87	40.3728327	-104.8326889	0.00	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 02N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 02N PWB
Slot	SLOT#02 BOOTH STATE 02N (2670'FSL & 752'FEL,SEC.25)		

WELLPATH DATA (207 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3930.00†	20.452	35.558	3756.68	-421.96	831.23	594.19	40.3729103	-104.8326152	0.00	
4008.25†	20.452	35.558	3830.00	-433.25	853.48	610.09	40.3729711	-104.8325575	0.00	Parkman Sandstone
4030.00†	20.452	35.558	3850.37	-436.39	859.66	614.51	40.3729879	-104.8325415	0.00	
4130.00†	20.452	35.558	3944.07	-450.82	888.08	634.83	40.3730655	-104.8324678	0.00	
4230.00†	20.452	35.558	4037.77	-465.25	916.51	655.15	40.3731432	-104.8323941	0.00	
4330.00†	20.452	35.558	4131.46	-479.68	944.93	675.47	40.3732208	-104.8323204	0.00	
4430.00†	20.452	35.558	4225.16	-494.11	973.36	695.79	40.3732984	-104.8322467	0.00	
4530.00†	20.452	35.558	4318.86	-508.54	1001.79	716.11	40.3733760	-104.8321730	0.00	
4560.03†	20.452	35.558	4347.00	-512.88	1010.32	722.21	40.3733993	-104.8321509	0.00	Sussex Sandstone
4630.00†	20.452	35.558	4412.56	-522.97	1030.21	736.43	40.3734536	-104.8320993	0.00	
4730.00†	20.452	35.558	4506.25	-537.40	1058.64	756.74	40.3735312	-104.8320256	0.00	
4830.00†	20.452	35.558	4599.95	-551.83	1087.06	777.06	40.3736088	-104.8319519	0.00	
4930.00†	20.452	35.558	4693.65	-566.26	1115.49	797.38	40.3736864	-104.8318782	0.00	
5030.00†	20.452	35.558	4787.34	-580.69	1143.92	817.70	40.3737640	-104.8318046	0.00	
5130.00†	20.452	35.558	4881.04	-595.12	1172.34	838.02	40.3738416	-104.8317309	0.00	
5169.45†	20.452	35.558	4918.00	-600.81	1183.56	846.04	40.3738722	-104.8317018	0.00	Shannon Sandstone
5230.00†	20.452	35.558	4974.74	-609.55	1200.77	858.34	40.3739192	-104.8316572	0.00	
5330.00†	20.452	35.558	5068.43	-623.98	1229.19	878.66	40.3739968	-104.8315835	0.00	
5430.00†	20.452	35.558	5162.13	-638.41	1257.62	898.98	40.3740744	-104.8315098	0.00	
5530.00†	20.452	35.558	5255.83	-652.84	1286.05	919.30	40.3741520	-104.8314361	0.00	
5630.00†	20.452	35.558	5349.52	-667.27	1314.47	939.62	40.3742296	-104.8313624	0.00	
5730.00†	20.452	35.558	5443.22	-681.70	1342.90	959.94	40.3743072	-104.8312887	0.00	
5830.00†	20.452	35.558	5536.92	-696.13	1371.32	980.26	40.3743848	-104.8312150	0.00	
5930.00†	20.452	35.558	5630.61	-710.56	1399.75	1000.58	40.3744624	-104.8311413	0.00	
6030.00†	20.452	35.558	5724.31	-724.99	1428.17	1020.90	40.3745400	-104.8310676	0.00	
6130.00†	20.452	35.558	5818.01	-739.42	1456.60	1041.22	40.3746176	-104.8309939	0.00	
6230.00†	20.452	35.558	5911.70	-753.85	1485.03	1061.54	40.3746952	-104.8309202	0.00	
6330.00†	20.452	35.558	6005.40	-768.28	1513.45	1081.86	40.3747728	-104.8308465	0.00	
6430.00†	20.452	35.558	6099.10	-782.71	1541.88	1102.18	40.3748504	-104.8307728	0.00	
6530.00†	20.452	35.558	6192.79	-797.14	1570.30	1122.50	40.3749280	-104.8306991	0.00	
6630.00†	20.452	35.558	6286.49	-811.57	1598.73	1142.82	40.3750056	-104.8306254	0.00	
6730.00†	20.452	35.558	6380.19	-826.00	1627.16	1163.14	40.3750832	-104.8305517	0.00	
6830.00†	20.452	35.558	6473.88	-840.43	1655.58	1183.46	40.3751608	-104.8304780	0.00	
6930.00†	20.452	35.558	6567.58	-854.86	1684.01	1203.78	40.3752385	-104.8304043	0.00	
7020.54	20.452	35.558	6652.41	-869.29	1709.74	1222.17	40.3753087	-104.8303376	0.00	End of Tangent (XS)
7030.00†	19.993	33.481	6661.29	-869.22	1712.44	1224.03	40.3753161	-104.8303309	9.00	
7130.00†	17.029	6.406	6756.28	-874.51	1741.31	1235.11	40.3753951	-104.8302903	9.00	
7230.00†	18.370	336.815	6851.74	-864.38	1770.40	1230.53	40.3754750	-104.8303060	9.00	
7330.00†	23.284	315.356	6945.31	-839.09	1799.01	1210.40	40.3755540	-104.8303775	9.00	
7430.00†	30.066	302.051	7034.69	-799.25	1826.42	1175.21	40.3756299	-104.8305030	9.00	
7521.58†	37.053	294.099	7111.00	-750.84	1849.90	1130.50	40.3756953	-104.8306628	9.00	Sharon Springs
7530.00†	37.718	293.500	7117.69	-745.86	1851.97	1125.82	40.3757011	-104.8306796	9.00	
7565.21†	40.528	291.178	7145.00	-724.06	1860.39	1105.28	40.3757246	-104.8307531	9.00	Niobrara A
7630.00†	45.802	287.536	7192.25	-680.21	1875.01	1063.46	40.3757656	-104.8309028	9.00	
7730.00†	54.120	283.036	7256.54	-603.94	1894.99	989.66	40.3758220	-104.8311671	9.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 02N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 02N PWB
Slot	SLOT#02 BOOTH STATE 02N (2670'FSL & 752'FEL,SEC.25)		

WELLPATH DATA (207 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7748.18†	55.649	282.323	7267.00	-589.08	1898.25	975.15	40.3758313	-104.8312191	9.00	Niobrara B
7830.00†	62.575	279.402	7308.99	-518.91	1911.41	906.24	40.3758688	-104.8314661	9.00	
7881.67†	66.977	277.746	7331.00	-472.24	1918.37	860.03	40.3758888	-104.8316317	9.00	Niobrara C
7930.00†	71.109	276.291	7348.28	-427.23	1923.87	815.24	40.3759049	-104.8317923	9.00	
8030.00†	79.691	273.485	7373.47	-331.15	1932.06	718.92	40.3759294	-104.8321378	9.00	
8051.65†	81.552	272.902	7377.00	-309.99	1933.25	697.60	40.3759331	-104.8322143	9.00	Fort Hays
8130.00†	88.295	270.829	7383.93	-233.03	1935.78	619.64	40.3759416	-104.8324940	9.00	
8167.07	91.487	269.857	7384.00†	-196.62	1936.01	582.58	40.3759430	-104.8326270	9.00	LP
8230.00†	91.487	269.857	7382.37	-134.93	1935.85	519.67	40.3759439	-104.8328528	0.00	
8330.00†	91.487	269.857	7379.77	-36.91	1935.60	419.70	40.3759452	-104.8332116	0.00	
8430.00†	91.487	269.857	7377.18	61.12	1935.35	319.74	40.3759466	-104.8335704	0.00	
8436.86†	91.487	269.857	7377.00	67.85	1935.33	312.88	40.3759467	-104.8335950	0.00	Fort Hays
8530.00†	91.487	269.857	7374.58	159.14	1935.10	219.77	40.3759480	-104.8339291	0.00	
8630.00†	91.487	269.857	7371.99	257.17	1934.85	119.81	40.3759494	-104.8342879	0.00	
8730.00†	91.487	269.857	7369.39	355.19	1934.60	19.84	40.3759507	-104.8346467	0.00	
8830.00†	91.487	269.857	7366.80	453.22	1934.35	-80.13	40.3759521	-104.8350055	0.00	
8930.00†	91.487	269.857	7364.21	551.24	1934.10	-180.09	40.3759535	-104.8353643	0.00	
9030.00†	91.487	269.857	7361.61	649.27	1933.85	-280.06	40.3759549	-104.8357231	0.00	
9130.00†	91.487	269.857	7359.02	747.29	1933.60	-380.02	40.3759562	-104.8360818	0.00	
9230.00†	91.487	269.857	7356.42	845.32	1933.35	-479.99	40.3759576	-104.8364406	0.00	
9330.00†	91.487	269.857	7353.83	943.34	1933.10	-579.96	40.3759590	-104.8367994	0.00	
9430.00†	91.487	269.857	7351.23	1041.37	1932.85	-679.92	40.3759603	-104.8371582	0.00	
9530.00†	91.487	269.857	7348.64	1139.39	1932.60	-779.89	40.3759617	-104.8375170	0.00	
9630.00†	91.487	269.857	7346.04	1237.42	1932.35	-879.85	40.3759630	-104.8378758	0.00	
9730.00†	91.487	269.857	7343.45	1335.44	1932.10	-979.82	40.3759644	-104.8382346	0.00	
9830.00†	91.487	269.857	7340.85	1433.47	1931.85	-1079.79	40.3759658	-104.8385933	0.00	
9930.00†	91.487	269.857	7338.26	1531.49	1931.60	-1179.75	40.3759671	-104.8389521	0.00	
10030.00†	91.487	269.857	7335.66	1629.52	1931.35	-1279.72	40.3759685	-104.8393109	0.00	
10130.00†	91.487	269.857	7333.07	1727.54	1931.10	-1379.68	40.3759698	-104.8396697	0.00	
10209.79†	91.487	269.857	7331.00	1805.76	1930.90	-1459.45	40.3759709	-104.8399560	0.00	Niobrara C
10230.00†	91.487	269.857	7330.48	1825.57	1930.85	-1479.65	40.3759712	-104.8400285	0.00	
10330.00†	91.487	269.857	7327.88	1923.59	1930.60	-1579.62	40.3759726	-104.8403873	0.00	
10430.00†	91.487	269.857	7325.29	2021.62	1930.35	-1679.58	40.3759739	-104.8407461	0.00	
10530.00†	91.487	269.857	7322.69	2119.64	1930.09	-1779.55	40.3759753	-104.8411048	0.00	
10630.00†	91.487	269.857	7320.10	2217.67	1929.84	-1879.51	40.3759766	-104.8414636	0.00	
10730.00†	91.487	269.857	7317.50	2315.69	1929.59	-1979.48	40.3759780	-104.8418224	0.00	
10830.00†	91.487	269.857	7314.91	2413.72	1929.34	-2079.45	40.3759793	-104.8421812	0.00	
10930.00†	91.487	269.857	7312.31	2511.74	1929.09	-2179.41	40.3759807	-104.8425400	0.00	
11030.00†	91.487	269.857	7309.72	2609.77	1928.84	-2279.38	40.3759820	-104.8428988	0.00	
11130.00†	91.487	269.857	7307.12	2707.79	1928.59	-2379.34	40.3759834	-104.8432576	0.00	
11230.00†	91.487	269.857	7304.53	2805.82	1928.34	-2479.31	40.3759847	-104.8436163	0.00	
11330.00†	91.487	269.857	7301.94	2903.84	1928.09	-2579.28	40.3759860	-104.8439751	0.00	
11430.00†	91.487	269.857	7299.34	3001.87	1927.84	-2679.24	40.3759874	-104.8443339	0.00	
11530.00†	91.487	269.857	7296.75	3099.89	1927.59	-2779.21	40.3759887	-104.8446927	0.00	
11630.00†	91.487	269.857	7294.15	3197.92	1927.34	-2879.17	40.3759901	-104.8450515	0.00	



Planned Wellpath Report

BOOTH STATE 02N (REV-A.0) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 02N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 02N PWB
Slot	SLOT#02 BOOTH STATE 02N (2670'FSL & 752'FEL,SEC.25)		

WELLPATH DATA (207 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11730.00†	91.487	269.857	7291.56	3295.94	1927.09	-2979.14	40.3759914	-104.8454103	0.00	
11830.00†	91.487	269.857	7288.96	3393.97	1926.84	-3079.11	40.3759927	-104.8457690	0.00	
11930.00†	91.487	269.857	7286.37	3491.99	1926.59	-3179.07	40.3759941	-104.8461278	0.00	
12030.00†	91.487	269.857	7283.77	3590.02	1926.34	-3279.04	40.3759954	-104.8464866	0.00	
12130.00†	91.487	269.857	7281.18	3688.04	1926.09	-3379.00	40.3759968	-104.8468454	0.00	
12230.00†	91.487	269.857	7278.58	3786.07	1925.84	-3478.97	40.3759981	-104.8472042	0.00	
12330.00†	91.487	269.857	7275.99	3884.09	1925.59	-3578.94	40.3759994	-104.8475630	0.00	
12430.00†	91.487	269.857	7273.40	3982.12	1925.34	-3678.90	40.3760008	-104.8479218	0.00	
12530.00†	91.487	269.857	7270.80	4080.14	1925.09	-3778.87	40.3760021	-104.8482805	0.00	
12630.00†	91.487	269.857	7268.21	4178.17	1924.84	-3878.83	40.3760034	-104.8486393	0.00	
12676.48†	91.487	269.857	7267.00	4223.73	1924.73	-3925.30	40.3760040	-104.8488061	0.00	Niobrara B
12730.00†	91.487	269.857	7265.61	4276.19	1924.59	-3978.80	40.3760047	-104.8489981	0.00	
12830.00†	91.487	269.857	7263.02	4374.22	1924.34	-4078.77	40.3760061	-104.8493569	0.00	
12930.00†	91.487	269.857	7260.42	4472.24	1924.09	-4178.73	40.3760074	-104.8497157	0.00	
13030.00†	91.487	269.857	7257.83	4570.27	1923.84	-4278.70	40.3760087	-104.8500745	0.00	
13130.00†	91.487	269.857	7255.23	4668.29	1923.59	-4378.67	40.3760100	-104.8504333	0.00	
13230.00†	91.487	269.857	7252.64	4766.32	1923.34	-4478.63	40.3760114	-104.8507920	0.00	
13330.00†	91.487	269.857	7250.04	4864.35	1923.09	-4578.60	40.3760127	-104.8511508	0.00	
13430.00†	91.487	269.857	7247.45	4962.37	1922.84	-4678.56	40.3760140	-104.8515096	0.00	
13530.00†	91.487	269.857	7244.85	5060.40	1922.59	-4778.53	40.3760153	-104.8518684	0.00	
13630.00†	91.487	269.857	7242.26	5158.42	1922.34	-4878.50	40.3760166	-104.8522272	0.00	
13730.00†	91.487	269.857	7239.67	5256.45	1922.09	-4978.46	40.3760180	-104.8525860	0.00	
13830.00†	91.487	269.857	7237.07	5354.47	1921.84	-5078.43	40.3760193	-104.8529448	0.00	
13930.00†	91.487	269.857	7234.48	5452.50	1921.59	-5178.39	40.3760206	-104.8533035	0.00	
14030.00†	91.487	269.857	7231.88	5550.52	1921.34	-5278.36	40.3760219	-104.8536623	0.00	
14130.00†	91.487	269.857	7229.29	5648.55	1921.09	-5378.33	40.3760232	-104.8540211	0.00	
14230.00†	91.487	269.857	7226.69	5746.57	1920.84	-5478.29	40.3760245	-104.8543799	0.00	
14330.00†	91.487	269.857	7224.10	5844.60	1920.59	-5578.26	40.3760258	-104.8547387	0.00	
14430.00†	91.487	269.857	7221.50	5942.62	1920.34	-5678.22	40.3760272	-104.8550975	0.00	
14530.00†	91.487	269.857	7218.91	6040.65	1920.09	-5778.19	40.3760285	-104.8554563	0.00	
14630.00†	91.487	269.857	7216.31	6138.67	1919.84	-5878.16	40.3760298	-104.8558150	0.00	
14730.00†	91.487	269.857	7213.72	6236.70	1919.59	-5978.12	40.3760311	-104.8561738	0.00	
14830.00†	91.487	269.857	7211.13	6334.72	1919.34	-6078.09	40.3760324	-104.8565326	0.00	
14930.00†	91.487	269.857	7208.53	6432.75	1919.09	-6178.05	40.3760337	-104.8568914	0.00	
15030.00†	91.487	269.857	7205.94	6530.77	1918.84	-6278.02	40.3760350	-104.8572502	0.00	
15130.00†	91.487	269.857	7203.34	6628.80	1918.59	-6377.99	40.3760363	-104.8576090	0.00	
15230.00†	91.487	269.857	7200.75	6726.82	1918.34	-6477.95	40.3760376	-104.8579678	0.00	
15330.00†	91.487	269.857	7198.15	6824.85	1918.09	-6577.92	40.3760389	-104.8583265	0.00	
15430.00†	91.487	269.857	7195.56	6922.87	1917.84	-6677.88	40.3760402	-104.8586853	0.00	
15530.00†	91.487	269.857	7192.96	7020.90	1917.59	-6777.85	40.3760415	-104.8590441	0.00	
15630.00†	91.487	269.857	7190.37	7118.92	1917.34	-6877.82	40.3760428	-104.8594029	0.00	
15730.00†	91.487	269.857	7187.77	7216.95	1917.09	-6977.78	40.3760441	-104.8597617	0.00	
15830.00†	91.487	269.857	7185.18	7314.97	1916.84	-7077.75	40.3760454	-104.8601205	0.00	
15930.00†	91.487	269.857	7182.58	7413.00	1916.59	-7177.71	40.3760467	-104.8604793	0.00	
16030.00†	91.487	269.857	7179.99	7511.02	1916.34	-7277.68	40.3760480	-104.8608380	0.00	



Planned Wellpath Report

BOOTH STATE 02N (REV-A.0) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 02N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 02N PWB
Slot	SLOT#02 BOOTH STATE 02N (2670'FSL & 752'FEL,SEC.25)		

WELLPATH DATA (207 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16130.00†	91.487	269.857	7177.40	7609.05	1916.09	-7377.65	40.3760492	-104.8611968	0.00	
16230.00†	91.487	269.857	7174.80	7707.07	1915.84	-7477.61	40.3760505	-104.8615556	0.00	
16330.00†	91.487	269.857	7172.21	7805.10	1915.59	-7577.58	40.3760518	-104.8619144	0.00	
16430.00†	91.487	269.857	7169.61	7903.12	1915.34	-7677.54	40.3760531	-104.8622732	0.00	
16530.00†	91.487	269.857	7167.02	8001.15	1915.09	-7777.51	40.3760544	-104.8626320	0.00	
16630.00†	91.487	269.857	7164.42	8099.17	1914.83	-7877.48	40.3760557	-104.8629908	0.00	
16730.00†	91.487	269.857	7161.83	8197.20	1914.58	-7977.44	40.3760570	-104.8633496	0.00	
16830.00†	91.487	269.857	7159.23	8295.22	1914.33	-8077.41	40.3760582	-104.8637083	0.00	
16930.00†	91.487	269.857	7156.64	8393.25	1914.08	-8177.37	40.3760595	-104.8640671	0.00	
17030.00†	91.487	269.857	7154.04	8491.27	1913.83	-8277.34	40.3760608	-104.8644259	0.00	
17130.00†	91.487	269.857	7151.45	8589.30	1913.58	-8377.31	40.3760621	-104.8647847	0.00	
17230.00†	91.487	269.857	7148.86	8687.32	1913.33	-8477.27	40.3760634	-104.8651435	0.00	
17330.00†	91.487	269.857	7146.26	8785.35	1913.08	-8577.24	40.3760646	-104.8655023	0.00	
17378.60†	91.487	269.857	7145.00	8832.99	1912.96	-8625.82	40.3760653	-104.8656766	0.00	Niobrara A
17430.00†	91.487	269.857	7143.67	8883.37	1912.83	-8677.20	40.3760659	-104.8658611	0.00	
17530.00†	91.487	269.857	7141.07	8981.40	1912.58	-8777.17	40.3760672	-104.8662198	0.00	
17630.00†	91.487	269.857	7138.48	9079.42	1912.33	-8877.14	40.3760685	-104.8665786	0.00	
17730.00†	91.487	269.857	7135.88	9177.45	1912.08	-8977.10	40.3760697	-104.8669374	0.00	
17830.00†	91.487	269.857	7133.29	9275.47	1911.83	-9077.07	40.3760710	-104.8672962	0.00	
17930.00†	91.487	269.857	7130.69	9373.50	1911.58	-9177.03	40.3760723	-104.8676550	0.00	
18030.00†	91.487	269.857	7128.10	9471.52	1911.33	-9277.00	40.3760736	-104.8680138	0.00	
18130.00†	91.487	269.857	7125.50	9569.55	1911.08	-9376.97	40.3760748	-104.8683726	0.00	
18230.00†	91.487	269.857	7122.91	9667.57	1910.83	-9476.93	40.3760761	-104.8687313	0.00	
18330.00†	91.487	269.857	7120.32	9765.60	1910.58	-9576.90	40.3760774	-104.8690901	0.00	
18380.69	91.487	269.857	7119.00 ²	9815.29	1910.46	-9627.57	40.3760780	-104.8692720	0.00	BPZ
18430.00†	91.487	269.857	7117.72	9863.62	1910.33	-9676.86	40.3760786	-104.8694489	0.00	
18430.69	91.487	269.857	7117.70	9864.30	1910.33	-9677.55	40.3760786	-104.8694514	0.00	BHL (669'FNL & 100'FWL,SEC.26)



Planned Wellpath Report

BOOTH STATE 02N (REV-A.0) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 02N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 02N PWB
Slot	SLOT#02 BOOTH STATE 02N (2670'FSL & 752'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	4.00	-120.23	0.07	3185352.01	1378440.06	40.3703110	-104.8347730	polygon
	2D Polygon: dimensions not calculated								
Sec.26-5N-67W	N/A	4.00	-120.23	0.07	3185352.01	1378440.06	40.3703110	-104.8347730	polygon
	2D Polygon: dimensions not calculated								
BOOTH STATE 02N BHL Rev-1 (669'FNL & 100'FWL,SEC.26)	N/A	7119.00	1910.10	-9677.72	3175674.64	1380470.30	40.3760780	-104.8694520	point
2) BOOTH STATE 02N BPZ (669 FNL & 150 FWL, Sec.26)	18380.69	7119.00	1910.46	-9627.57	3175724.78	1380470.65	40.3760780	-104.8692720	point
1) BOOTH STATE 02N LP Rev-1 (668'FNL & 150'FEL,SEC.25)	8167.07	7384.00	1936.01	582.58	3185934.49	1380496.20	40.3759430	-104.8326270	point

SURVEY PROGRAM - Ref Wellbore: BOOTH STATE 02N PWB Ref Wellpath: BOOTH STATE 02N (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 02N PWB
2000.00	18430.73	OWSG MWD rev2 (MS+IFR1)		BOOTH STATE 02N PWB



Planned Wellpath Report

BOOTH STATE 02N (REV-A.0) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 02N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 02N PWB
Slot	SLOT#02 BOOTH STATE 02N (2670'FSL & 752'FEL,SEC.25)		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
901.31	8.026	35.558	900.00	PIERRE
1022.90	10.458	35.558	1020.00	U PAWNEE
1526.85	20.452	35.558	1505.00	U PAWNEE BASE
4008.25	20.452	35.558	3830.00	Parkman Sandstone
4560.03	20.452	35.558	4347.00	Sussex Sandstone
5169.45	20.452	35.558	4918.00	Shannon Sandstone
7521.58	37.053	294.099	7111.00	Sharon Springs
7565.21	40.528	291.178	7145.00	Niobrara A
7748.18	55.649	282.323	7267.00	Niobrara B
7881.67	66.977	277.746	7331.00	Niobrara C
8051.65	81.552	272.902	7377.00	Fort Hays
8436.86	91.487	269.857	7377.00	Fort Hays
10209.79	91.487	269.857	7331.00	Niobrara C
12676.48	91.487	269.857	7267.00	Niobrara B
17378.60	91.487	269.857	7145.00	Niobrara A

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
30.00	0.000	35.558	30.00	Tie On
500.00	0.000	35.558	500.00	End of Tangent
1522.58	20.452	35.558	1501.00	Build (XS)
7020.54	20.452	35.558	6652.41	End of Tangent (XS)
8167.07	91.487	269.857	7384.00	LP
18380.69	91.487	269.857	7119.00	BPZ
18430.69	91.487	269.857	7117.70	BHL (669'FNL & 100'FWL,SEC.26)



Closest Approach Clearance Summary Report

BOOTH STATE 02N (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 02N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 02N PWB
Slot	SLOT#02 BOOTH STATE 02N (2670'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 9:42:46 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	-14.94	0.11	3185351.94	1378560.28	40°22'14.3076"N	104°50'5.1720"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	(4984'GL+30'KB@5014'RKB) (RKB) to Facility Vertical Datum	5014.00ft
Horizontal Reference Pt	Slot	(4984'GL+30'KB@5014'RKB) (RKB) to Mean Sea Level	5014.00ft
Vertical Reference Pt	(4984'GL+30'KB@5014'RKB) (RKB)	(4984'GL+30'KB@5014'RKB) (RKB) to Ground Level at Slot (SLOT#02 BOOTH STATE 02N (2670'FSL & 752'FEL,SEC.25))	5014.00ft
MD Reference Pt	(4984'GL+30'KB@5014'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 02N (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 02N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 02N PWB
Slot	SLOT#02 BOOTH STATE 02N (2670'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 02N PWB Ref Wellpath: BOOTH STATE 02N (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 02N PWB
2000.00	18430.73	OWSG MWD rev2 (MS+IFR1)		BOOTH STATE 02N PWB



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BOOTH STATE 02N (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 02N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 02N PWB
Slot	SLOT#02 BOOTH STATE 02N (2670'FSL & 752'FEL,SEC.25)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 18430.69ft 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#08 BLEHM #3 (05-123-11103) TA	BLEHM #3	BLEHM #3 AWB	BLEHM #3 AWP	Drilling	17863.72	11.50	17863.72	17863.72	0.00	17863.72	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	15063.22	23.16	15063.22	15063.22	0.00	15063.22	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	10122.07	155.10	10122.07	10121.99	0.02	10121.99	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	11406.71	190.15	11406.71	11406.59	0.02	11406.59	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	12812.04	198.98	12812.04	12811.90	0.02	12811.90	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	16734.42	203.28	16734.42	16734.28	0.02	16734.28	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	17168.33	465.44	17168.33	17167.55	0.05	17167.55	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	12143.72	479.42	12143.72	12142.91	0.05	12142.91	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	14634.46	524.55	14634.46	14633.48	0.06	14633.48	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	9474.68	645.18	9474.68	9473.22	0.07	9473.22	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	15395.05	1122.72	15395.05	15390.57	0.13	15390.57	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	12779.07	1142.63	12779.07	12774.44	0.13	12774.44	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	17688.13	1130.55	17688.13	17683.55	0.13	17683.55	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	11399.09	1196.04	11399.09	11394.03	0.13	11394.03	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	14054.18	1217.62	14054.18	14048.91	0.14	14048.91	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	1824.54	381.66	8930.00	2450.28	0.15	8930.00	FAIL
SEC.26-T05N-R67W	SLOT#12 BLEHM #2 (05-123-11006) PA	BLEHM #2	BLEHM #2 AWB	BLEHM #2 AWP	Drilling	16557.69	1348.24	16557.69	16551.22	0.15	16551.22	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	13158.62	1781.45	13158.62	13238.22	0.27	13238.22	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	11329.30	2468.61	11329.30	11307.61	0.28	11307.61	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	637.95	8568.30	8568.30	0.28	8568.30	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	17659.87	2533.75	17659.87	17636.75	0.29	17636.75	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	1478.16	9974.15	9974.15	0.31	9974.15	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	12764.12	2791.45	12764.12	12736.24	0.32	12736.24	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	15053.44	2861.43	15053.44	15024.12	0.33	15024.12	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	1284.74	9130.00	9128.93	0.35	9128.93	FAIL



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BOOTH STATE 02N (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 02N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 02N PWB
Slot	SLOT#02 BOOTH STATE 02N (2670'FSL & 752'FEL,SEC.25)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 18430.69ft 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	12025.75	3241.08	12025.75	11988.16	0.37	11988.16	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	11996.20	3242.39	11996.20	11958.57	0.37	11958.57	FAIL
SEC.26-T05N-R67W	SLOT#17 BLEHM #1 (05-123-10692) TA	BLEHM #1	BLEHM #1 AWB	BLEHM #1 AWP	Abandoned	17298.99	3351.78	17298.99	17258.48	0.39	17258.48	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	2202.41	9930.00	9902.76	0.43	9902.76	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	2027.84	8730.00	8707.39	0.44	8707.39	FAIL
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	15239.77	4187.33	15239.77	15176.74	0.48	15176.74	FAIL
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	13854.08	116.45	13854.08	13857.26	0.74	13857.26	FAIL
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	8825.61	59.75	8825.61	8826.62	0.84	8826.62	FAIL
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	687.13	11.28	687.13	722.93	0.88	18430.69	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	9811.52	1117.04	9811.52	9801.54	1.26	9801.54	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	14.94	230.00	18430.69	1.35	18430.69	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	662.66	27.48	662.66	18421.67	2.71	18421.67	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	577.20	43.95	577.20	18430.69	4.06	18430.69	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	13403.61	670.42	13403.61	13424.04	4.84	13424.04	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	508.97	59.42	508.97	18430.69	5.41	18430.69	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	330.00	18430.69	6.81	18430.69	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	10792.92	686.00	10792.92	10781.56	7.27	10781.56	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	89.99	330.00	18430.69	8.11	18430.69	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	105.29	330.00	18430.69	9.47	18430.69	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	120.23	330.00	18430.69	10.81	18430.69	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	135.16	230.00	18430.69	12.16	18430.69	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	150.10	230.00	18430.69	13.49	18430.69	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	11916.01	1825.92	11916.01	11917.28	14.56	11917.28	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	16826.96	4125.61	16826.96	17619.25	19.11	17619.25	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	10524.62	1822.73	10524.62	10884.03	20.03	10884.03	PASS



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REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	BOOTH STATE 02N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.25-T05N-R67W	Wellbore	BOOTH STATE 02N PWB
Slot	SLOT#02 BOOTH STATE 02N (2670'FSL & 752'FEL,SEC.25)		

CALCULATION RANGE & CUTOFF		
From: 30.00ft MD	To: 18430.69ft 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	13157.87	3394.54	13157.87	13892.32	23.56	13892.32	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	4347.19	2108.85	9430.00	10179.52	24.54	10179.52	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	423.22	2593.67	10730.00	11683.20	33.63	11683.20	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	84.00	3465.77	11230.00	12598.97	37.18	12598.97	PASS