

PDC ENERGY INC

Location: COLORADO Slot: SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)
 Field: WELD COUNTY (NAD83/GRID) Well: CAPITOL 08N
 Facility: SEC.36-T05N-R66W Wellbore: CAPITOL 08N PWB

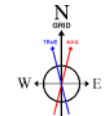
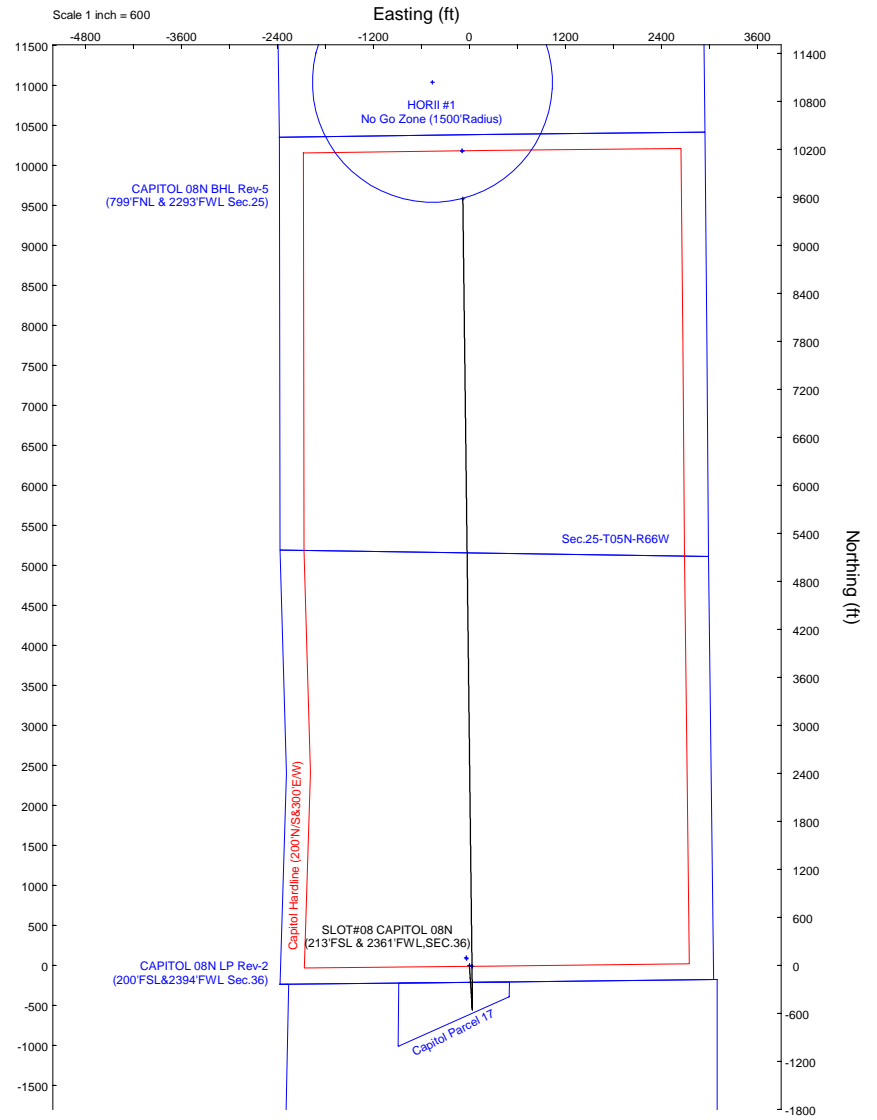
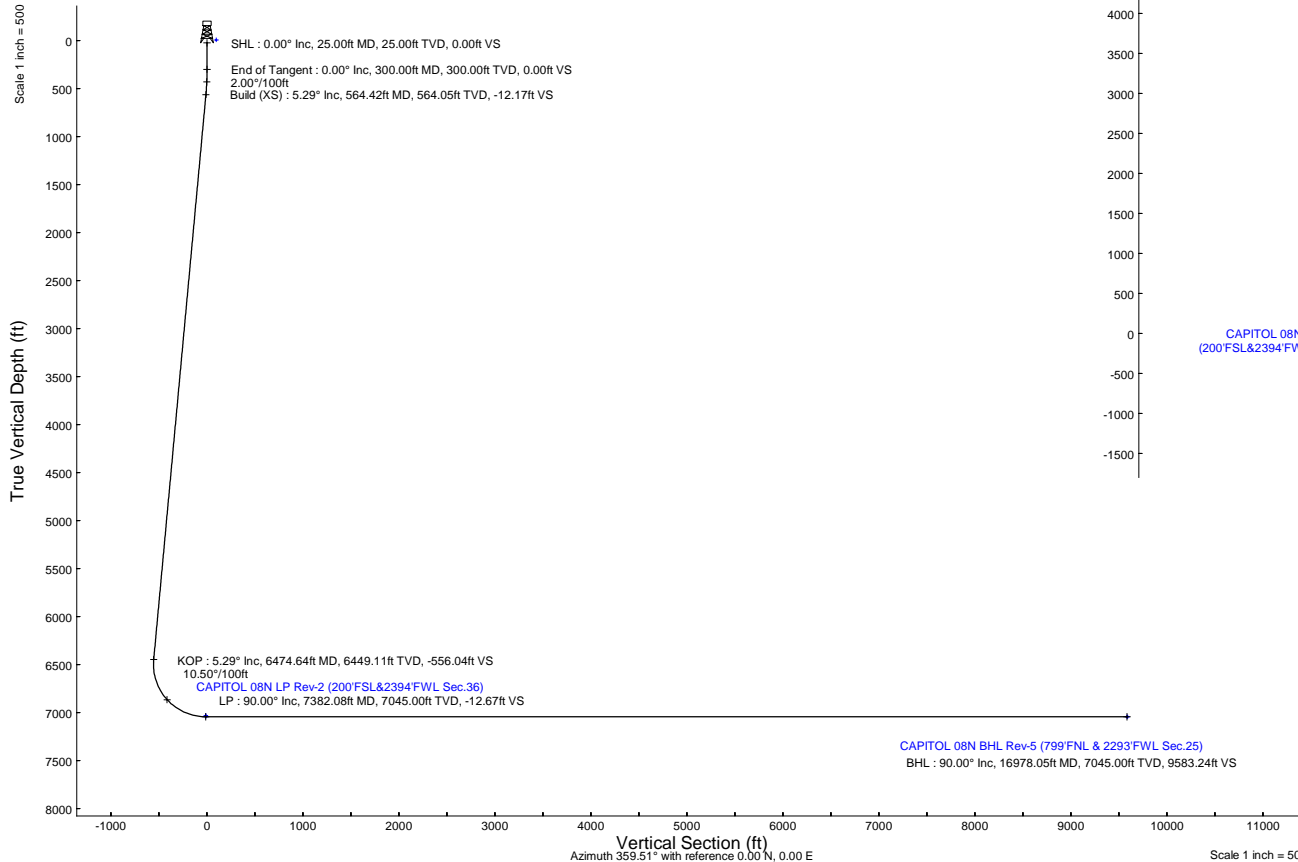
Plot reference wellpath is CAPITOL 08N (REV-E.0) PWP
 True vertical depths are referenced to Rig (4664'GL+25'KB = 4689'RKB) (RKB)
 Reference wellpath measured depths are referenced to Rig (4664'GL+25'KB = 4689'RKB) (RKB)
 Rig (4664'GL+25'KB = 4689'RKB) to Mean Sea Level: 4689 feet
 Mean Sea Level to Ground level (At Slot: SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)): 0 feet
 Offset wellpath MDs are referenced to each path's default MD datum
 Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
 North Reference: Grid north
 Scale: True distance
 Coordinates are in feet referenced to Slot
 Depths are in feet
 Created by: guenaler on 2025-06-20; Database: WA, Denver

Location Information

Facility Name				
SEC.36-T05N-R66W				
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)	-96.68	41.06	3215510.944	1371026.935
Rig (4664'GL+25'KB = 4689'RKB) (RKB) to Ground level (At Slot: SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36))				
4689ft				
Mean Sea Level to Ground level (At Slot: SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36))				
0ft				
Rig (4664'GL+25'KB = 4689'RKB) (RKB) to Mean Sea Level				
4689ft				

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
SHL	25.00	0.00	176.248	25.00	0.00	0.00	0.00	0.00
End of Tangent	300.00	0.00	176.248	300.00	0.00	0.00	0.00	0.00
Build (XS)	564.42	5.288	176.248	564.05	-12.17	0.80	2.00	-12.17
KOP	6474.64	5.288	176.248	6449.11	-555.75	36.45	0.00	-556.04
LP	7382.08	90.000	359.314	7045.00	-12.39	32.89	10.50	-12.67
BHL	16978.05	90.000	359.314	7045.00	9582.89	-82.02	0.00	9583.24



HDGM2024v1.0 (1900.0 to 2025.0) Dip: 66.52° Field: 51611.1 nT
 Magnetic North is 7.67 degrees East of True North (at 8/22/2024)
 Grid North is 0.50 degrees East of True North
 To correct azimuth from True to Grid subtract 0.50 degrees
 To correct azimuth from Magnetic to Grid add 7.17 degrees



Planned Wellpath Report

CAPITOL 08N (REV-E.0) PWP

Page 1 of 10



REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	CAPITOL 08N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 08N PWB
Slot	SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)		

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	0.999958	Report Generated	6/20/2025 at 2:57:40 PM
Convergence at slot	0.50° 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	-96.58	41.06	3215552.00	1370930.36	40.3490248°	-104.7266256°
Facility Reference Pt			3215510.94	1371026.94	40.3492909°	-104.7267699°
Field Reference Pt			3296400.32	1413291.61	40.4630000°	-104.4347500°

WELLPATH DATUM

Calculation method	Minimum curvature	Rig (4664'GL+25'KB = 4689'RKB) (RKB) to Facility Vertical Datum	4689.00ft
Horizontal Reference Pt	Slot	Rig (4664'GL+25'KB = 4689'RKB) (RKB) to Mean Sea Level	4689.00ft
Vertical Reference Pt	Rig (4664'GL+25'KB = 4689'RKB) (RKB)	Rig (4664'GL+25'KB = 4689'RKB) (RKB) to Ground Level at Slot (SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36))	4689.00ft
MD Reference Pt	Rig (4664'GL+25'KB = 4689'RKB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	359.51°



Planned Wellpath Report

CAPITOL 08N (REV-E.0) PWP

Page 2 of 10



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Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 08N PWB
Slot	SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)		

WELLPATH DATA (190 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	176.248	0.00	0.00	0.00	0.00	3215552.00	1370930.36	40.3490248	-104.7266256	0.00	
25.00	0.000	176.248	25.00	0.00	0.00	0.00	3215552.00	1370930.36	40.3490248	-104.7266256	0.00	SHL
125.00†	0.000	176.248	125.00	0.00	0.00	0.00	3215552.00	1370930.36	40.3490248	-104.7266256	0.00	
225.00†	0.000	176.248	225.00	0.00	0.00	0.00	3215552.00	1370930.36	40.3490248	-104.7266256	0.00	
300.00	0.000	176.248	300.00	0.00	0.00	0.00	3215552.00	1370930.36	40.3490248	-104.7266256	0.00	End of Tangent
325.00†	0.500	176.248	325.00	-0.11	-0.11	0.01	3215552.01	1370930.25	40.3490245	-104.7266256	2.00	
425.00†	2.500	176.248	424.96	-2.72	-2.72	0.18	3215552.18	1370927.64	40.3490173	-104.7266251	2.00	
525.00†	4.500	176.248	524.77	-8.82	-8.81	0.58	3215552.58	1370921.55	40.3490006	-104.7266238	2.00	
564.42	5.288	176.248	564.05	-12.17	-12.17	0.80	3215552.80	1370918.19	40.3489914	-104.7266231	2.00	Build (XS)
625.00†	5.288	176.248	624.37	-17.75	-17.74	1.16	3215553.16	1370912.62	40.3489761	-104.7266220	0.00	
725.00†	5.288	176.248	723.94	-26.95	-26.94	1.77	3215553.77	1370903.42	40.3489508	-104.7266201	0.00	
825.00†	5.288	176.248	823.52	-36.15	-36.13	2.37	3215554.37	1370894.22	40.3489256	-104.7266182	0.00	
925.00†	5.288	176.248	923.09	-45.36	-45.33	2.97	3215554.97	1370885.03	40.3489003	-104.7266164	0.00	
1025.00†	5.288	176.248	1022.66	-54.56	-54.53	3.58	3215555.58	1370875.83	40.3488750	-104.7266145	0.00	
1125.00†	5.288	176.248	1122.24	-63.76	-63.73	4.18	3215556.18	1370866.63	40.3488498	-104.7266126	0.00	
1225.00†	5.288	176.248	1221.81	-72.96	-72.92	4.78	3215556.78	1370857.44	40.3488245	-104.7266107	0.00	
1325.00†	5.288	176.248	1321.39	-82.16	-82.12	5.39	3215557.39	1370848.24	40.3487993	-104.7266089	0.00	
1332.65†	5.288	176.248	1329.00	-82.87	-82.82	5.43	3215557.43	1370847.54	40.3487973	-104.7266087	0.00	PIERRE_(UPPER)_AQUIFER_BASE
1425.00†	5.288	176.248	1420.96	-91.37	-91.32	5.99	3215557.99	1370839.04	40.3487740	-104.7266070	0.00	
1525.00†	5.288	176.248	1520.54	-100.57	-100.52	6.59	3215558.59	1370829.85	40.3487488	-104.7266051	0.00	
1625.00†	5.288	176.248	1620.11	-109.77	-109.71	7.20	3215559.20	1370820.65	40.3487235	-104.7266032	0.00	
1725.00†	5.288	176.248	1719.68	-118.97	-118.91	7.80	3215559.80	1370811.45	40.3486982	-104.7266014	0.00	
1825.00†	5.288	176.248	1819.26	-128.17	-128.11	8.40	3215560.40	1370802.26	40.3486730	-104.7265995	0.00	
1925.00†	5.288	176.248	1918.83	-137.38	-137.30	9.00	3215561.01	1370793.06	40.3486477	-104.7265976	0.00	
2025.00†	5.288	176.248	2018.41	-146.58	-146.50	9.61	3215561.61	1370783.86	40.3486225	-104.7265957	0.00	
2125.00†	5.288	176.248	2117.98	-155.78	-155.70	10.21	3215562.21	1370774.66	40.3485972	-104.7265938	0.00	
2225.00†	5.288	176.248	2217.56	-164.98	-164.90	10.81	3215562.82	1370765.47	40.3485719	-104.7265920	0.00	
2296.75†	5.288	176.248	2289.00	-171.59	-171.50	11.25	3215563.25	1370758.87	40.3485538	-104.7265906	0.00	PIERRE_MBR_A_SD_TOP
2325.00†	5.288	176.248	2317.13	-174.18	-174.09	11.42	3215563.42	1370756.27	40.3485467	-104.7265901	0.00	
2425.00†	5.288	176.248	2416.70	-183.39	-183.29	12.02	3215564.02	1370747.07	40.3485214	-104.7265882	0.00	



Planned Wellpath Report

CAPITOL 08N (REV-E.0) PWP

Page 3 of 10



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Operator	PDC ENERGY INC	Well	CAPITOL 08N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 08N PWB
Slot	SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)		

WELLPATH DATA (190 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2525.00†	5.288	176.248	2516.28	-192.59	-192.49	12.62	3215564.62	1370737.88	40.3484962	-104.7265863	0.00	
2625.00†	5.288	176.248	2615.85	-201.79	-201.69	13.23	3215565.23	1370728.68	40.3484709	-104.7265845	0.00	
2725.00†	5.288	176.248	2715.43	-210.99	-210.88	13.83	3215565.83	1370719.48	40.3484456	-104.7265826	0.00	
2825.00†	5.288	176.248	2815.00	-220.20	-220.08	14.43	3215566.43	1370710.29	40.3484204	-104.7265807	0.00	
2828.01†	5.288	176.248	2818.00	-220.47	-220.36	14.45	3215566.45	1370710.01	40.3484196	-104.7265807	0.00	PIERRE_MBR_A_SD_BASE
2925.00†	5.288	176.248	2914.58	-229.40	-229.28	15.04	3215567.04	1370701.09	40.3483951	-104.7265788	0.00	
3025.00†	5.288	176.248	3014.15	-238.60	-238.47	15.64	3215567.64	1370691.89	40.3483699	-104.7265770	0.00	
3125.00†	5.288	176.248	3113.72	-247.80	-247.67	16.24	3215568.24	1370682.70	40.3483446	-104.7265751	0.00	
3225.00†	5.288	176.248	3213.30	-257.00	-256.87	16.85	3215568.85	1370673.50	40.3483193	-104.7265732	0.00	
3325.00†	5.288	176.248	3312.87	-266.21	-266.07	17.45	3215569.45	1370664.30	40.3482941	-104.7265713	0.00	
3425.00†	5.288	176.248	3412.45	-275.41	-275.26	18.05	3215570.05	1370655.11	40.3482688	-104.7265695	0.00	
3525.00†	5.288	176.248	3512.02	-284.61	-284.46	18.66	3215570.66	1370645.91	40.3482436	-104.7265676	0.00	
3625.00†	5.288	176.248	3611.60	-293.81	-293.66	19.26	3215571.26	1370636.71	40.3482183	-104.7265657	0.00	
3641.47†	5.288	176.248	3628.00	-295.33	-295.17	19.36	3215571.36	1370635.20	40.3482141	-104.7265654	0.00	PARKMAN
3725.00†	5.288	176.248	3711.17	-303.01	-302.86	19.86	3215571.86	1370627.51	40.3481930	-104.7265638	0.00	
3825.00†	5.288	176.248	3810.75	-312.22	-312.05	20.47	3215572.47	1370618.32	40.3481678	-104.7265620	0.00	
3925.00†	5.288	176.248	3910.32	-321.42	-321.25	21.07	3215573.07	1370609.12	40.3481425	-104.7265601	0.00	
4025.00†	5.288	176.248	4009.89	-330.62	-330.45	21.67	3215573.67	1370599.92	40.3481173	-104.7265582	0.00	
4107.46†	5.288	176.248	4092.00	-338.21	-338.03	22.17	3215574.17	1370592.34	40.3480964	-104.7265567	0.00	SUSSEX
4125.00†	5.288	176.248	4109.47	-339.82	-339.64	22.27	3215574.28	1370590.73	40.3480920	-104.7265563	0.00	
4225.00†	5.288	176.248	4209.04	-349.02	-348.84	22.88	3215574.88	1370581.53	40.3480667	-104.7265545	0.00	
4325.00†	5.288	176.248	4308.62	-358.23	-358.04	23.48	3215575.48	1370572.33	40.3480415	-104.7265526	0.00	
4425.00†	5.288	176.248	4408.19	-367.43	-367.24	24.08	3215576.08	1370563.14	40.3480162	-104.7265507	0.00	
4525.00†	5.288	176.248	4507.77	-376.63	-376.43	24.69	3215576.69	1370553.94	40.3479910	-104.7265488	0.00	
4625.00†	5.288	176.248	4607.34	-385.83	-385.63	25.29	3215577.29	1370544.74	40.3479657	-104.7265469	0.00	
4725.00†	5.288	176.248	4706.91	-395.04	-394.83	25.89	3215577.89	1370535.55	40.3479405	-104.7265451	0.00	
4802.42†	5.288	176.248	4784.00	-402.16	-401.95	26.36	3215578.36	1370528.43	40.3479209	-104.7265436	0.00	SHANNON
4825.00†	5.288	176.248	4806.49	-404.24	-404.03	26.50	3215578.50	1370526.35	40.3479152	-104.7265432	0.00	
4925.00†	5.288	176.248	4906.06	-413.44	-413.22	27.10	3215579.10	1370517.15	40.3478899	-104.7265413	0.00	
5025.00†	5.288	176.248	5005.64	-422.64	-422.42	27.70	3215579.70	1370507.96	40.3478647	-104.7265394	0.00	



Planned Wellpath Report

CAPITOL 08N (REV-E.0) PWP

Page 4 of 10



REFERENCE WELLPATH IDENTIFICATION			
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Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 08N PWB
Slot	SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)		

WELLPATH DATA (190 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5125.00†	5.288	176.248	5105.21	-431.84	-431.62	28.31	3215580.31	1370498.76	40.3478394	-104.7265376	0.00	
5225.00†	5.288	176.248	5204.79	-441.05	-440.81	28.91	3215580.91	1370489.56	40.3478142	-104.7265357	0.00	
5325.00†	5.288	176.248	5304.36	-450.25	-450.01	29.51	3215581.51	1370480.36	40.3477889	-104.7265338	0.00	
5425.00†	5.288	176.248	5403.93	-459.45	-459.21	30.12	3215582.12	1370471.17	40.3477636	-104.7265319	0.00	
5525.00†	5.288	176.248	5503.51	-468.65	-468.41	30.72	3215582.72	1370461.97	40.3477384	-104.7265301	0.00	
5625.00†	5.288	176.248	5603.08	-477.85	-477.60	31.32	3215583.32	1370452.77	40.3477131	-104.7265282	0.00	
5725.00†	5.288	176.248	5702.66	-487.06	-486.80	31.93	3215583.93	1370443.58	40.3476879	-104.7265263	0.00	
5825.00†	5.288	176.248	5802.23	-496.26	-496.00	32.53	3215584.53	1370434.38	40.3476626	-104.7265244	0.00	
5925.00†	5.288	176.248	5901.81	-505.46	-505.20	33.13	3215585.13	1370425.18	40.3476373	-104.7265226	0.00	
6025.00†	5.288	176.248	6001.38	-514.66	-514.39	33.74	3215585.74	1370415.99	40.3476121	-104.7265207	0.00	
6057.76†	5.288	176.248	6034.00	-517.68	-517.41	33.93	3215585.93	1370412.97	40.3476038	-104.7265201	0.00	TEPEE BUTTES
6125.00†	5.288	176.248	6100.95	-523.86	-523.59	34.34	3215586.34	1370406.79	40.3475868	-104.7265188	0.00	
6225.00†	5.288	176.248	6200.53	-533.07	-532.79	34.94	3215586.94	1370397.59	40.3475616	-104.7265169	0.00	
6325.00†	5.288	176.248	6300.10	-542.27	-541.98	35.54	3215587.54	1370388.40	40.3475363	-104.7265151	0.00	
6425.00†	5.288	176.248	6399.68	-551.47	-551.18	36.15	3215588.15	1370379.20	40.3475110	-104.7265132	0.00	
6474.64	5.288	176.248	6449.11	-556.04	-555.75	36.45	3215588.45	1370374.63	40.3474985	-104.7265122	0.00	KOP
6525.00†	0.284	87.999	6499.39	-558.35	-558.06	36.72	3215588.72	1370372.32	40.3474921	-104.7265113	10.50	
6625.00†	10.510	0.843	6598.83	-549.20	-548.91	37.11	3215589.11	1370381.47	40.3475173	-104.7265097	10.50	
6725.00†	21.008	0.053	6694.94	-522.09	-521.79	37.26	3215589.26	1370408.59	40.3475917	-104.7265083	10.50	
6825.00†	31.508	359.777	6784.50	-477.91	-477.61	37.17	3215589.17	1370452.77	40.3477130	-104.7265072	10.50	
6842.18†	33.312	359.746	6799.00	-468.70	-468.40	37.13	3215589.13	1370461.98	40.3477382	-104.7265070	10.50	SHARON SPRINGS
6882.69†	37.565	359.683	6832.00	-445.21	-444.91	37.02	3215589.02	1370485.46	40.3478027	-104.7265067	10.50	NIO_A_CHALK
6911.03†	40.540	359.646	6854.00	-427.37	-427.07	36.91	3215588.91	1370503.31	40.3478517	-104.7265066	10.50	NIO_A_MARL
6925.00†	42.007	359.629	6864.50	-418.15	-417.85	36.85	3215588.85	1370512.53	40.3478770	-104.7265065	10.50	
7025.00†	52.507	359.532	6932.28	-344.81	-344.51	36.31	3215588.31	1370585.86	40.3480783	-104.7265061	10.50	
7062.39†	56.433	359.502	6954.00	-314.39	-314.09	36.05	3215588.05	1370616.28	40.3481618	-104.7265061	10.50	NIO_B_CHALK
7110.92†	61.528	359.468	6979.00	-272.82	-272.52	35.68	3215587.68	1370657.85	40.3482759	-104.7265061	10.50	NIO_B_MARL
7125.00†	63.007	359.458	6985.55	-260.35	-260.05	35.56	3215587.56	1370670.31	40.3483102	-104.7265062	10.50	
7225.00†	73.507	359.398	7022.55	-167.59	-167.30	34.64	3215586.63	1370763.06	40.3485648	-104.7265066	10.50	
7249.61†	76.091	359.384	7029.00	-143.84	-143.56	34.38	3215586.38	1370786.81	40.3486299	-104.7265068	10.50	NIO_C_CHALK



Planned Wellpath Report

CAPITOL 08N (REV-E.0) PWP

Page 5 of 10



REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	CAPITOL 08N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 08N PWB
Slot	SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)		

WELLPATH DATA (190 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7308.15†	82.238	359.353	7040.00	-86.38	-86.09	33.75	3215585.75	1370844.27	40.3487877	-104.7265072	10.50	NIO_C_MARL
7325.00†	84.007	359.344	7042.02	-69.65	-69.37	33.56	3215585.56	1370860.99	40.3488336	-104.7265074	10.50	
7382.08	90.000	359.314	7045.00†	-12.67	-12.39	32.89	3215584.89	1370917.96	40.3489900	-104.7265080	10.50	LP
7425.00†	90.000	359.314	7045.00	30.24	30.52	32.38	3215584.38	1370960.88	40.3491078	-104.7265085	0.00	
7525.00†	90.000	359.314	7045.00	130.24	130.52	31.18	3215583.18	1371060.87	40.3493823	-104.7265097	0.00	
7625.00†	90.000	359.314	7045.00	230.24	230.51	29.98	3215581.98	1371160.86	40.3496568	-104.7265108	0.00	
7725.00†	90.000	359.314	7045.00	330.24	330.50	28.79	3215580.79	1371260.84	40.3499313	-104.7265120	0.00	
7825.00†	90.000	359.314	7045.00	430.24	430.49	27.59	3215579.59	1371360.83	40.3502058	-104.7265132	0.00	
7925.00†	90.000	359.314	7045.00	530.24	530.49	26.39	3215578.39	1371460.82	40.3504803	-104.7265143	0.00	
8025.00†	90.000	359.314	7045.00	630.24	630.48	25.19	3215577.19	1371560.81	40.3507548	-104.7265155	0.00	
8125.00†	90.000	359.314	7045.00	730.24	730.47	24.00	3215576.00	1371660.80	40.3510292	-104.7265167	0.00	
8225.00†	90.000	359.314	7045.00	830.24	830.47	22.80	3215574.80	1371760.79	40.3513037	-104.7265178	0.00	
8325.00†	90.000	359.314	7045.00	930.24	930.46	21.60	3215573.60	1371860.77	40.3515782	-104.7265190	0.00	
8425.00†	90.000	359.314	7045.00	1030.24	1030.45	20.40	3215572.40	1371960.76	40.3518527	-104.7265202	0.00	
8525.00†	90.000	359.314	7045.00	1130.24	1130.44	19.21	3215571.21	1372060.75	40.3521272	-104.7265213	0.00	
8625.00†	90.000	359.314	7045.00	1230.24	1230.44	18.01	3215570.01	1372160.74	40.3524017	-104.7265225	0.00	
8725.00†	90.000	359.314	7045.00	1330.24	1330.43	16.81	3215568.81	1372260.73	40.3526762	-104.7265237	0.00	
8825.00†	90.000	359.314	7045.00	1430.24	1430.42	15.61	3215567.61	1372360.72	40.3529507	-104.7265248	0.00	
8925.00†	90.000	359.314	7045.00	1530.24	1530.41	14.42	3215566.42	1372460.71	40.3532252	-104.7265260	0.00	
9025.00†	90.000	359.314	7045.00	1630.23	1630.41	13.22	3215565.22	1372560.69	40.3534997	-104.7265272	0.00	
9125.00†	90.000	359.314	7045.00	1730.23	1730.40	12.02	3215564.02	1372660.68	40.3537742	-104.7265283	0.00	
9225.00†	90.000	359.314	7045.00	1830.23	1830.39	10.82	3215562.82	1372760.67	40.3540486	-104.7265295	0.00	
9325.00†	90.000	359.314	7045.00	1930.23	1930.39	9.63	3215561.63	1372860.66	40.3543231	-104.7265307	0.00	
9425.00†	90.000	359.314	7045.00	2030.23	2030.38	8.43	3215560.43	1372960.65	40.3545976	-104.7265318	0.00	
9525.00†	90.000	359.314	7045.00	2130.23	2130.37	7.23	3215559.23	1373060.64	40.3548721	-104.7265330	0.00	
9625.00†	90.000	359.314	7045.00	2230.23	2230.36	6.03	3215558.03	1373160.62	40.3551466	-104.7265342	0.00	
9725.00†	90.000	359.314	7045.00	2330.23	2330.36	4.84	3215556.84	1373260.61	40.3554211	-104.7265353	0.00	
9825.00†	90.000	359.314	7045.00	2430.23	2430.35	3.64	3215555.64	1373360.60	40.3556956	-104.7265365	0.00	
9925.00†	90.000	359.314	7045.00	2530.23	2530.34	2.44	3215554.44	1373460.59	40.3559701	-104.7265377	0.00	
10025.00†	90.000	359.314	7045.00	2630.23	2630.34	1.24	3215553.24	1373560.58	40.3562446	-104.7265388	0.00	



Planned Wellpath Report

CAPITOL 08N (REV-E.0) PWP

Page 6 of 10



REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	CAPITOL 08N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 08N PWB
Slot	SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)		

WELLPATH DATA (190 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10125.00†	90.000	359.314	7045.00	2730.23	2730.33	0.05	3215552.05	1373660.57	40.3565191	-104.7265400	0.00	
10225.00†	90.000	359.314	7045.00	2830.23	2830.32	-1.15	3215550.85	1373760.56	40.3567935	-104.7265412	0.00	
10325.00†	90.000	359.314	7045.00	2930.23	2930.31	-2.35	3215549.65	1373860.54	40.3570680	-104.7265423	0.00	
10425.00†	90.000	359.314	7045.00	3030.23	3030.31	-3.55	3215548.46	1373960.53	40.3573425	-104.7265435	0.00	
10525.00†	90.000	359.314	7045.00	3130.23	3130.30	-4.74	3215547.26	1374060.52	40.3576170	-104.7265447	0.00	
10625.00†	90.000	359.314	7045.00	3230.23	3230.29	-5.94	3215546.06	1374160.51	40.3578915	-104.7265458	0.00	
10725.00†	90.000	359.314	7045.00	3330.23	3330.29	-7.14	3215544.86	1374260.50	40.3581660	-104.7265470	0.00	
10825.00†	90.000	359.314	7045.00	3430.22	3430.28	-8.34	3215543.67	1374360.49	40.3584405	-104.7265482	0.00	
10925.00†	90.000	359.314	7045.00	3530.22	3530.27	-9.53	3215542.47	1374460.47	40.3587150	-104.7265493	0.00	
11025.00†	90.000	359.314	7045.00	3630.22	3630.26	-10.73	3215541.27	1374560.46	40.3589895	-104.7265505	0.00	
11125.00†	90.000	359.314	7045.00	3730.22	3730.26	-11.93	3215540.07	1374660.45	40.3592640	-104.7265517	0.00	
11225.00†	90.000	359.314	7045.00	3830.22	3830.25	-13.13	3215538.88	1374760.44	40.3595385	-104.7265528	0.00	
11325.00†	90.000	359.314	7045.00	3930.22	3930.24	-14.32	3215537.68	1374860.43	40.3598129	-104.7265540	0.00	
11425.00†	90.000	359.314	7045.00	4030.22	4030.24	-15.52	3215536.48	1374960.42	40.3600874	-104.7265552	0.00	
11525.00†	90.000	359.314	7045.00	4130.22	4130.23	-16.72	3215535.28	1375060.41	40.3603619	-104.7265563	0.00	
11625.00†	90.000	359.314	7045.00	4230.22	4230.22	-17.92	3215534.09	1375160.39	40.3606364	-104.7265575	0.00	
11725.00†	90.000	359.314	7045.00	4330.22	4330.21	-19.11	3215532.89	1375260.38	40.3609109	-104.7265587	0.00	
11825.00†	90.000	359.314	7045.00	4430.22	4430.21	-20.31	3215531.69	1375360.37	40.3611854	-104.7265598	0.00	
11925.00†	90.000	359.314	7045.00	4530.22	4530.20	-21.51	3215530.49	1375460.36	40.3614599	-104.7265610	0.00	
12025.00†	90.000	359.314	7045.00	4630.22	4630.19	-22.71	3215529.30	1375560.35	40.3617344	-104.7265622	0.00	
12125.00†	90.000	359.314	7045.00	4730.22	4730.19	-23.90	3215528.10	1375660.34	40.3620089	-104.7265633	0.00	
12225.00†	90.000	359.314	7045.00	4830.22	4830.18	-25.10	3215526.90	1375760.32	40.3622834	-104.7265645	0.00	
12325.00†	90.000	359.314	7045.00	4930.22	4930.17	-26.30	3215525.70	1375860.31	40.3625578	-104.7265657	0.00	
12425.00†	90.000	359.314	7045.00	5030.22	5030.16	-27.50	3215524.51	1375960.30	40.3628323	-104.7265668	0.00	
12525.00†	90.000	359.314	7045.00	5130.21	5130.16	-28.69	3215523.31	1376060.29	40.3631068	-104.7265680	0.00	
12625.00†	90.000	359.314	7045.00	5230.21	5230.15	-29.89	3215522.11	1376160.28	40.3633813	-104.7265692	0.00	
12725.00†	90.000	359.314	7045.00	5330.21	5330.14	-31.09	3215520.92	1376260.27	40.3636558	-104.7265703	0.00	
12825.00†	90.000	359.314	7045.00	5430.21	5430.14	-32.28	3215519.72	1376360.26	40.3639303	-104.7265715	0.00	
12925.00†	90.000	359.314	7045.00	5530.21	5530.13	-33.48	3215518.52	1376460.24	40.3642048	-104.7265727	0.00	
13025.00†	90.000	359.314	7045.00	5630.21	5630.12	-34.68	3215517.32	1376560.23	40.3644793	-104.7265739	0.00	



Planned Wellpath Report

CAPITOL 08N (REV-E.0) PWP

Page 7 of 10



REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	CAPITOL 08N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 08N PWB
Slot	SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)		

WELLPATH DATA (190 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13125.00†	90.000	359.314	7045.00	5730.21	5730.11	-35.88	3215516.13	1376660.22	40.3647538	-104.7265750	0.00	
13225.00†	90.000	359.314	7045.00	5830.21	5830.11	-37.07	3215514.93	1376760.21	40.3650283	-104.7265762	0.00	
13325.00†	90.000	359.314	7045.00	5930.21	5930.10	-38.27	3215513.73	1376860.20	40.3653027	-104.7265774	0.00	
13425.00†	90.000	359.314	7045.00	6030.21	6030.09	-39.47	3215512.53	1376960.19	40.3655772	-104.7265785	0.00	
13525.00†	90.000	359.314	7045.00	6130.21	6130.09	-40.67	3215511.34	1377060.17	40.3658517	-104.7265797	0.00	
13625.00†	90.000	359.314	7045.00	6230.21	6230.08	-41.86	3215510.14	1377160.16	40.3661262	-104.7265809	0.00	
13725.00†	90.000	359.314	7045.00	6330.21	6330.07	-43.06	3215508.94	1377260.15	40.3664007	-104.7265820	0.00	
13825.00†	90.000	359.314	7045.00	6430.21	6430.06	-44.26	3215507.74	1377360.14	40.3666752	-104.7265832	0.00	
13925.00†	90.000	359.314	7045.00	6530.21	6530.06	-45.46	3215506.55	1377460.13	40.3669497	-104.7265844	0.00	
14025.00†	90.000	359.314	7045.00	6630.21	6630.05	-46.65	3215505.35	1377560.12	40.3672242	-104.7265855	0.00	
14125.00†	90.000	359.314	7045.00	6730.21	6730.04	-47.85	3215504.15	1377660.11	40.3674987	-104.7265867	0.00	
14225.00†	90.000	359.314	7045.00	6830.20	6830.03	-49.05	3215502.95	1377760.09	40.3677732	-104.7265879	0.00	
14325.00†	90.000	359.314	7045.00	6930.20	6930.03	-50.25	3215501.76	1377860.08	40.3680476	-104.7265890	0.00	
14425.00†	90.000	359.314	7045.00	7030.20	7030.02	-51.44	3215500.56	1377960.07	40.3683221	-104.7265902	0.00	
14525.00†	90.000	359.314	7045.00	7130.20	7130.01	-52.64	3215499.36	1378060.06	40.3685966	-104.7265914	0.00	
14625.00†	90.000	359.314	7045.00	7230.20	7230.01	-53.84	3215498.16	1378160.05	40.3688711	-104.7265925	0.00	
14725.00†	90.000	359.314	7045.00	7330.20	7330.00	-55.04	3215496.97	1378260.04	40.3691456	-104.7265937	0.00	
14825.00†	90.000	359.314	7045.00	7430.20	7429.99	-56.23	3215495.77	1378360.02	40.3694201	-104.7265949	0.00	
14925.00†	90.000	359.314	7045.00	7530.20	7529.98	-57.43	3215494.57	1378460.01	40.3696946	-104.7265960	0.00	
15025.00†	90.000	359.314	7045.00	7630.20	7629.98	-58.63	3215493.38	1378560.00	40.3699691	-104.7265972	0.00	
15125.00†	90.000	359.314	7045.00	7730.20	7729.97	-59.83	3215492.18	1378659.99	40.3702436	-104.7265984	0.00	
15225.00†	90.000	359.314	7045.00	7830.20	7829.96	-61.02	3215490.98	1378759.98	40.3705181	-104.7265995	0.00	
15325.00†	90.000	359.314	7045.00	7930.20	7929.96	-62.22	3215489.78	1378859.97	40.3707925	-104.7266007	0.00	
15425.00†	90.000	359.314	7045.00	8030.20	8029.95	-63.42	3215488.59	1378959.96	40.3710670	-104.7266019	0.00	
15525.00†	90.000	359.314	7045.00	8130.20	8129.94	-64.62	3215487.39	1379059.94	40.3713415	-104.7266030	0.00	
15625.00†	90.000	359.314	7045.00	8230.20	8229.93	-65.81	3215486.19	1379159.93	40.3716160	-104.7266042	0.00	
15725.00†	90.000	359.314	7045.00	8330.20	8329.93	-67.01	3215484.99	1379259.92	40.3718905	-104.7266054	0.00	
15825.00†	90.000	359.314	7045.00	8430.20	8429.92	-68.21	3215483.80	1379359.91	40.3721650	-104.7266065	0.00	
15925.00†	90.000	359.314	7045.00	8530.19	8529.91	-69.41	3215482.60	1379459.90	40.3724395	-104.7266077	0.00	
16025.00†	90.000	359.314	7045.00	8630.19	8629.91	-70.60	3215481.40	1379559.89	40.3727140	-104.7266089	0.00	



Planned Wellpath Report

CAPITOL 08N (REV-E.0) PWP

Page 8 of 10



REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	CAPITOL 08N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 08N PWB
Slot	SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)		

WELLPATH DATA (190 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16125.00†	90.000	359.314	7045.00	8730.19	8729.90	-71.80	3215480.20	1379659.87	40.3729885	-104.7266100	0.00	
16225.00†	90.000	359.314	7045.00	8830.19	8829.89	-73.00	3215479.01	1379759.86	40.3732629	-104.7266112	0.00	
16325.00†	90.000	359.314	7045.00	8930.19	8929.88	-74.20	3215477.81	1379859.85	40.3735374	-104.7266124	0.00	
16425.00†	90.000	359.314	7045.00	9030.19	9029.88	-75.39	3215476.61	1379959.84	40.3738119	-104.7266135	0.00	
16525.00†	90.000	359.314	7045.00	9130.19	9129.87	-76.59	3215475.41	1380059.83	40.3740864	-104.7266147	0.00	
16625.00†	90.000	359.314	7045.00	9230.19	9229.86	-77.79	3215474.22	1380159.82	40.3743609	-104.7266159	0.00	
16725.00†	90.000	359.314	7045.00	9330.19	9329.86	-78.99	3215473.02	1380259.81	40.3746354	-104.7266170	0.00	
16825.00†	90.000	359.314	7045.00	9430.19	9429.85	-80.18	3215471.82	1380359.79	40.3749099	-104.7266182	0.00	
16925.00†	90.000	359.314	7045.00	9530.19	9529.84	-81.38	3215470.62	1380459.78	40.3751844	-104.7266194	0.00	
16978.05	90.000	359.314	7045.00 [‡]	9583.24	9582.89	-82.02	3215469.99	1380512.83	40.3753300	-104.7266200	0.00	BHL

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Sec.01-T04N-R66W	N/A	-38.00	-3736.07	2498.36	3218050.25	1367194.45	40.3387098	-104.7177809	polygon
	2D Polygon: dimensions not calculated								
Sec.06-T04N-R65W	N/A	-38.00	-3736.07	2498.36	3218050.25	1367194.45	40.3387098	-104.7177809	polygon
	2D Polygon: dimensions not calculated								
Sec.25-T05N-R66W	N/A	-38.00	-3736.07	2498.36	3218050.25	1367194.45	40.3387098	-104.7177809	polygon
	2D Polygon: dimensions not calculated								
Sec.30-T05N-R65W	N/A	-38.00	-3736.07	2498.36	3218050.25	1367194.45	40.3387098	-104.7177809	polygon
	2D Polygon: dimensions not calculated								
Sec.31-T05N-R65W	N/A	-38.00	-3736.07	2498.36	3218050.25	1367194.45	40.3387098	-104.7177809	polygon
	2D Polygon: dimensions not calculated								
Sec.36-T05N-R66W	N/A	-38.00	-3736.07	2498.36	3218050.25	1367194.45	40.3387098	-104.7177809	polygon
	2D Polygon: dimensions not calculated								
Sec.24-T05N-R66W	N/A	-6.00	96.58	-41.06	3215510.94	1371026.94	40.3492909	-104.7267699	polygon
	2D Polygon: dimensions not calculated								

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
CAPITOL 08N BHL (150'FNL & 2293'FWL,SEC.24)	N/A	7027.00	15510.57	-152.94	3215399.07	1386440.25	40.3916020	-104.7266890	point

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
CAPITOL 08N BPZ 200'FNL&2293'FWLSEC.24	N/A	7027.00	15460.41	-152.31	3215399.70	1386390.10	40.3914643	-104.7266883	point
CAPITOL 08N Rev-2 BHL (200'FNL & 2293'FWL,SEC.25)	N/A	7027.00	10180.31	-90.01	3215461.99	1381110.23	40.3769700	-104.7266300	point
CAPITOL 08N LP (200'FSL & 2394'FWL,SEC.36)	N/A	7031.00	-12.39	32.89	3215584.89	1370917.96	40.3489900	-104.7265080	point
2) CAPITOL 08N BHL Rev-5 (799'FNL & 2293'FWL Sec.25)	16978.05	7045.00	9582.89	-82.02	3215469.99	1380512.83	40.3753300	-104.7266200	point
1) CAPITOL 08N LP Rev-2 (200'FSL&2394'FWL Sec.36)	7382.08	7045.00	-12.39	32.89	3215584.89	1370917.96	40.3489900	-104.7265080	point
CAPITOL 08N Rev-3 BHL (200'FNL & 2293'FWL,SEC.25)	N/A	7045.00	10180.31	-90.01	3215461.99	1381110.23	40.3769700	-104.7266300	point
CAPITOL 08N Rev-4 BHL (794'FNL&2292'FWL Sec.25)	N/A	7045.00	9587.46	-82.86	3215469.14	1380517.40	40.3753426	-104.7266229	point
HORII #1 No Go Zone (1500'Radius)	N/A	7099.00	11038.70	-462.49	3215089.53	1381968.57	40.3793350	-104.7279400	circle
2D Circle radius 1500.									

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Capitol Hardline (200'N/S&300'E/W)	N/A	7199.00	82.83	-35.17	3215516.83	1371013.18	40.3492530	-104.7267492	polygon
2D Polygon: dimensions not calculated									
Capitol Parcel 17	N/A	7200.00	0.00	0.00	3215552.00	1370930.36	40.3490248	-104.7266256	polygon
2D Polygon: dimensions not calculated									



Planned Wellpath Report

CAPITOL 08N (REV-E.0) PWP

Page 9 of 10



REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	CAPITOL 08N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 08N PWB
Slot	SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)		

SURVEY PROGRAM - Ref Wellbore: CAPITOL 08N PWB Ref Wellpath: CAPITOL 08N (REV-E.0) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	1995.00	OWSG MWD rev2 - Standard		CAPITOL 08N PWB
1995.00	22953.93	OWSG MWD rev2 (MS+IFR1)		CAPITOL 08N PWB



Planned Wellpath Report

CAPITOL 08N (REV-E.0) PWP

Page 10 of 10



REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	CAPITOL 08N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 08N PWB
Slot	SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1332.65	5.288	176.248	1329.00	PIERRE_(UPPER)_AQUIFER_BASE
2296.75	5.288	176.248	2289.00	PIERRE_MBR_A_SD_TOP
2828.01	5.288	176.248	2818.00	PIERRE_MBR_A_SD_BASE
3641.47	5.288	176.248	3628.00	PARKMAN
4107.46	5.288	176.248	4092.00	SUSSEX
4802.42	5.288	176.248	4784.00	SHANNON
6057.76	5.288	176.248	6034.00	TEPEE_BUTTES
6842.18	33.312	359.746	6799.00	SHARON SPRINGS
6882.69	37.565	359.683	6832.00	NIO_A_CHALK
6911.03	40.540	359.646	6854.00	NIO_A_MARL
7062.39	56.433	359.502	6954.00	NIO_B_CHALK
7110.92	61.528	359.468	6979.00	NIO_B_MARL
7249.61	76.091	359.384	7029.00	NIO_C_CHALK
7308.15	82.238	359.353	7040.00	NIO_C_MARL

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
25.00	0.000	176.248	25.00	SHL
300.00	0.000	176.248	300.00	End of Tangent
564.42	5.288	176.248	564.05	Build (XS)
6474.64	5.288	176.248	6449.11	KOP
7382.08	90.000	359.314	7045.00	LP
16978.05	90.000	359.314	7045.00	BHL



Closest Approach Clearance Summary Report

CAPITOL 08N (REV-E.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 1 of 9



REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	CAPITOL 08N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 08N PWB
Slot	SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)		

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	0.999958	Report Generated	6/20/2025 at 3:05:23 PM
Convergence at slot	0.50° 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	-96.58	41.06	3215552.00	1370930.36	40°20'56.4893"N	104°43'35.8522"W
Facility Reference Pt			3215510.94	1371026.94	40°20'57.4472"N	104°43'36.3716"W
Field Reference Pt			3296400.32	1413291.61	40°27'46.8000"N	104°26'5.1000"W

WELLPATH DATUM

Calculation method	Minimum Curvature	Rig (4664'GL+25'KB = 4689'RKB) (RKB) to Facility Vertical Datum	4689.00ft
Horizontal Reference Pt	Slot	Rig (4664'GL+25'KB = 4689'RKB) (RKB) to Mean Sea Level	4689.00ft
Vertical Reference Pt	Rig (4664'GL+25'KB = 4689'RKB) (RKB)	Rig (4664'GL+25'KB = 4689'RKB) (RKB) to Ground Level at Slot (SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36))	4689.00ft
MD Reference Pt	Rig (4664'GL+25'KB = 4689'RKB) (RKB)		
Field Vertical Reference	Mean Sea Level		

POSITIONAL UNCERTAINTY CALCULATION SETTINGS

Ellipse Confidence Limit	3.50 Std Dev	Ellipse Start MD	25.00ft	Surface Position Uncertainty	included
Declination	7.67° East of TN	Dip Angle	66.52°	Mag Field Strength	51611 nT

POSITIONAL UNCERTAINTY CALCULATION SETTINGS

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

CAPITOL 08N (REV-E.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)
Page 2 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	CAPITOL 08N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 08N PWB
Slot	SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)		

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: CAPITOL 08N PWB Ref Wellpath: CAPITOL 08N (REV-E.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	1995.00	OWSG MWD rev2 - Standard		CAPITOL 08N PWB
1995.00	22953.93	OWSG MWD rev2 (MS+IFR1)		CAPITOL 08N PWB



Closest Approach Clearance Summary Report

CAPITOL 08N (REV-E.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 3 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	CAPITOL 08N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 08N PWB
Slot	SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)		

CALCULATION RANGE & CUTOFF		
From: 25.00ft MD	To: 16978.05ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (171 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	
Blackburn Offsets	(ANDERSON-COOMBS 1) (05-123-11649)	ANDERSON-COOMBS 1	ANDERSON-COOMBS 1	OWB\OWB	Abandoned	14541.94	350.67	14541.94	14541.94	0.04	14541.94	FAIL	
Blackburn Offsets	(STATE-ELK 1) (05-123-12916)	STATE-ELK 1	STATE-ELK 1	OWB\OWB	Abandoned	10669.73	483.16	10669.73	10669.74	0.06	10669.74	FAIL	
Blackburn Offsets	(HILL STATE 18-36) (05-123-22263)	HILL STATE 18-36	HILL STATE 18-36	OWB\OWB	Abandoned	11144.59	863.41	11144.59	11144.60	0.10	11144.60	FAIL	
Blackburn Offsets	(CURTIS UNIT 1) (05-123-11914)	CURTIS UNIT 1	CURTIS UNIT 1	OWB\OWB	Abandoned	13093.12	985.00	13093.12	13093.14	0.11	13093.14	FAIL	
Blackburn Offsets	(ISHIGURO 5) (05-123-12892)	ISHIGURO 5	ISHIGURO 5	OWB\OWB	Abandoned	10682.64	1155.62	10682.64	10682.66	0.13	10682.66	FAIL	
Blackburn Offsets	(REEVE, FREEDA 2-1) (05-123-14918)	REEVE, FREEDA 2-1	REEVE, FREEDA 2-1	OWB\OWB	Abandoned	6541.25	1247.37	6541.25	6842.57	0.15	6842.57	FAIL	
Blackburn Offsets	(ANDERSON COOMBS 6) (05-123-12852)	ANDERSON COOMBS 6	ANDERSON COOMBS 6	OWB\OWB	Abandoned	16978.05	1671.33	16978.05	16978.05	0.19	16978.05	FAIL	
Blackburn Offsets	(PEPLER 3-36) (05-123-13289)	PEPLER 3-36	PEPLER 3-36	OWB\OWB	Suspended	10164.16	1836.52	10164.16	10164.19	0.21	10164.19	FAIL	
Blackburn Offsets	(CUNNINGHAM UNIT 1) (05-123-11835)	CUNNINGHAM UNIT 1	CUNNINGHAM UNIT 1	OWB\OWB	Abandoned	14385.39	3616.86	14385.39	14385.65	0.42	14385.65	FAIL	
Blackburn Offsets	(VAUGHAN 12-30) (05-123-12596)	VAUGHAN 12-30	VAUGHAN 12-30	OWB\OWB	Abandoned	15578.20	3862.53	15578.20	15578.55	0.45	15578.55	FAIL	
Blackburn Offsets	(NOE 1-30) (05-123-13288)	NOE 1-30	NOE 1-30	OWB\OWB	Abandoned	12965.48	3913.13	12965.48	12965.73	0.45	12965.73	FAIL	
Blackburn Offsets	(GEMINI K 1-14) (05-123-13870)	GEMINI K 1-14	GEMINI K 1-14	OWB\OWB	Abandoned	6525.00	4341.02	6525.00	6839.82	0.53	6839.82	FAIL	
Blackburn Offsets	(STENZEL 1 - 31) (05-123-13295)	STENZEL 1 - 31	STENZEL 1 - 31	OWB\OWB	Abandoned	12017.86	4756.56	12017.86	12018.17	0.55	12018.17	FAIL	
				OWB\OWB	Suspended	6525.00	4655.54	6525.00	6914.11	0.57	6914.11	FAIL	

OFFSET WELL CLEARANCE SUMMARY (171 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	
Blackburn Offsets	(GEMINI G FEDERAL 6-33) (05-123-30688)	GEMINI G FEDERAL 6-33	GEMINI G FEDERAL 6-33										
Blackburn Offsets	(GEMINI K FEDERAL 1-16) (05-123-13872)	GEMINI K FEDERAL 1-16	GEMINI K FEDERAL 1-16	OWB\OWB	Abandoned	6525.00	4708.18	6525.00	6889.80	0.57	6889.80	FAIL	
Blackburn Offsets	(SYLVESTER 31-6H5) (05-123-18190)	SYLVESTER 31-6H5	SYLVESTER 31-6H5	OWB\OWB	Abandoned	10577.32	5011.89	10577.32	10577.56	0.58	10577.56	FAIL	
SEC.24-T5N-R66W	SLOT#12 HORII #1 (05-123-11135) PA	HORII #1	HORII #1 AWB	HORII #1 AWP	Abandoned	16978.05	1504.70	16978.05	16978.05	0.69	16978.05	FAIL	
SEC.24-T5N-R66W	SLOT#10 DUELL #1 (05-123-11750) PA	DUELL #1	DUELL #1 AWB	DUELL #1 AWP	Abandoned	16978.05	1775.51	16978.05	16978.05	0.82	16978.05	FAIL	
Blackburn Offsets	(REHMER 36-14H6) (05-123-18686)	REHMER 36-14H6	REHMER 36-14H6	OWB\OWB	Abandoned	7961.99	59.83	7961.99	7962.23	0.95	7962.23	FAIL	
Blackburn Offsets	(GOODNER 6-1) (05-123-13912)	GOODNER 6-1	GOODNER 6-1	OWB\OWB	Abandoned	6525.00	8176.70	6525.00	7211.04	0.97	7211.04	FAIL	
Blackburn Offsets	(SYLVESTER 36-16H6) (05-123-18113)	SYLVESTER 36-16H6	SYLVESTER 36-16H6	SYLVESTER 36-16H6 AWP	Producing / injecting	7943.55	2247.25	7943.55	7943.75	1.05	7943.75	WARN	
Blackburn Offsets	(SYLVESTER 36-9H6) (05-123-12507)	SYLVESTER 36-9H6	SYLVESTER 36-9H6	SYLVESTER 36-9H6 AWP	Producing / injecting	8955.95	2253.80	8955.95	8956.38	1.05	8956.38	WARN	
SEC.24-T5N-R66W	SLOT#13 HORII #2 (05-123-11748) PA	HORII #2	HORII #2 AWB	HORII #2 AWP	Abandoned	16978.05	2805.36	16978.05	16978.05	1.29	16978.05	PASS	
Blackburn Offsets	(ISHIGURO 17-36) (05-123-25592)	ISHIGURO 17-36	ISHIGURO 17-36	ISHIGURO 17-36 AWP	Producing / injecting	11399.01	1570.37	11399.01	11400.91	1.46	11400.91	PASS	
SEC.36-T05N-R66W	SLOT#07 CAPITOL 07N (227'FSL & 2355'FWL,SEC.36)	CAPITOL 07N	CAPITOL 07N PWB	CAPITOL 07N (REV-E.0) PWP	Planned	25.00	15.01	16925.00	16939.15	1.52	16939.15	PASS	



Closest Approach Clearance Summary Report

CAPITOL 08N (REV-E.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 4 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	CAPITOL 08N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 08N PWB
Slot	SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)		

CALCULATION RANGE & CUTOFF		
From: 25.00ft MD	To: 16978.05ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (171 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	
Blackburn Offsets	(SYLVESTER 31-12H5) (05-123-18191)	SYLVESTER 31-12H5	SYLVESTER 31-12H5	SYLVESTER 31-12H5 AWP	Producing / injecting	9301.19	3693.04	9301.19	9302.52	1.72	9302.52	PASS	
SEC.24-T5N-R66W	SLOT#15 RKW #1 (05-123-10763) PA	RKW #1	RKW #1 AWB	RKW #1 AWP	Abandoned	16978.05	4191.37	16978.05	16978.05	1.92	16978.05	PASS	
SEC.24-T5N-R66W	SLOT#14 MEYER #1 (05-123-12474) PA	MEYER #1	MEYER #1 AWB	MEYER #1 AWP	Abandoned	16978.05	4396.46	16978.05	16978.05	2.01	16978.05	PASS	
Blackburn Offsets	(LOEFFLER K 01-69-1HN) (05-123-37735)	LOEFFLER K 01-69-1HN	LOEFFLER K 01-69-1HN	OWB\OWB	Producing / injecting	6966.69	212.03	6966.69	7029.06	2.03	7029.06	PASS	
Blackburn Offsets	(CURTIS 23-25) (05-123-31134)	CURTIS 23-25	CURTIS 23-25	OWB\OWB	Producing / injecting	13896.92	286.61	13896.92	13898.22	2.35	13898.22	PASS	
Blackburn Offsets	(ANDERSON COOMBS 3) (05-123-12849)	ANDERSON COOMBS 3	ANDERSON COOMBS 3	OWB\OWB	Abandoned	16978.05	342.08	16978.05	16978.05	2.40	16978.05	PASS	
Blackburn Offsets	(MCCARTHY FEDERAL 6-33) (05-123-19040)	MCCARTHY FEDERAL 6-33	MCCARTHY FEDERAL 6-33	MCCARTHY FEDERAL 6-33 AWP	Producing / injecting	6525.00	5550.64	6525.00	6975.85	2.69	6975.85	PASS	
Blackburn Offsets	(ANDERSON-COOMBS 2) (05-123-12848)	ANDERSON-COOMBS 2	ANDERSON-COOMBS 2	OWB\OWB	Abandoned	15831.00	377.53	15831.00	15838.17	2.71	15838.17	PASS	
Blackburn Offsets	(MCCARTHY FEDERAL 6-35) (05-123-25323)	MCCARTHY FEDERAL 6-35	MCCARTHY FEDERAL 6-35	MCCARTHY FEDERAL 6-35 AWP	Producing / injecting	6525.00	5781.05	6525.00	7014.77	2.79	7014.77	PASS	
Blackburn Offsets	(AD FED LIBRARY 20W-25-18) (05-123-45037)	AD FED LIBRARY 20W-25-18	AD FED LIBRARY 20W-25-18	OWB\OWB	Producing / injecting	16978.05	1214.84	16978.05	16969.06	2.86	16969.06	PASS	
Blackburn Offsets	(ISHIGURO 2) (05-123-12900)	ISHIGURO 2	ISHIGURO 2	OWB\OWB	Abandoned	12089.35	277.23	12089.35	12094.69	2.93	12094.69	PASS	
Blackburn Offsets	(AD FED LIBRARY 20W-25-17) (05-123-45033)	AD FED LIBRARY 20W-25-17	AD FED LIBRARY 20W-25-17	OWB\OWB	Suspended	16978.05	1429.17	16978.05	16978.05	2.94	16978.05	PASS	
SEC.36-T05N-R66W	SLOT#06 CAPITOL 06N (241'FSL & 2348'FWL,SEC.36)	CAPITOL 06N	CAPITOL 06N PWB	CAPITOL 06N (REV-E.0) PWP	Planned	25.00	30.02	16925.00	16970.11	3.00	16970.11	PASS	
				OWB\OWB		16978.05	1622.74	16978.05	16978.05	3.18	16978.05	PASS	

OFFSET WELL CLEARANCE SUMMARY (171 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	
Blackburn Offsets	(AD FED DAIRY 20W-25-16) (05-123-45937)	AD FED DAIRY 20W-25-16	AD FED DAIRY 20W-25-16		Producing / injecting								
Blackburn Offsets	(AD FED DAIRY 20W-25-15) (05-123-41140)	AD FED DAIRY 20W-25-15	AD FED DAIRY 20W-25-15	OWB\OWB	Producing / injecting	16978.05	1736.87	16978.05	16978.05	3.33	16978.05	PASS	
Blackburn Offsets	(GREEN 1) (05-123-11874)	GREEN 1	GREEN 1	OWB\OWB	Abandoned	13229.92	371.66	13229.92	13240.59	3.49	13240.59	PASS	
Blackburn Offsets	(CURTIS 36-25) (05-123-31207)	CURTIS 36-25	CURTIS 36-25	OWB\OWB	Producing / injecting	12603.78	381.50	12603.78	12619.19	3.54	12619.19	PASS	
Blackburn Offsets	(AD FED DAIRY 20W-25-14) (05-123-41138)	AD FED DAIRY 20W-25-14	AD FED DAIRY 20W-25-14	OWB\OWB	Producing / injecting	16978.05	1978.04	16978.05	16978.05	3.57	16978.05	PASS	
Blackburn Offsets	(AD FED DAIRY 20W-25-13) (05-123-45034)	AD FED DAIRY 20W-25-13	AD FED DAIRY 20W-25-13	OWB\OWB	Producing / injecting	16978.05	2179.17	16978.05	16978.05	3.84	16978.05	PASS	
Blackburn Offsets	(AD FED DAIRY 20W-25-12) (05-123-40314)	AD FED DAIRY 20W-25-12	AD FED DAIRY 20W-25-12	OWB\OWB	Producing / injecting	16978.05	2351.61	16978.05	16978.05	4.07	16978.05	PASS	
Blackburn Offsets	(ISHIGURO 21-36) (05-123-28121)	ISHIGURO 21-36	ISHIGURO 21-36	OWB\OWB	Abandoned	11262.94	398.18	11262.94	11279.49	4.28	11279.49	PASS	
Blackburn Offsets	(AD FED DAIRY 20W-25-11) (05-123-41146)	AD FED DAIRY 20W-25-11	AD FED DAIRY 20W-25-11	OWB\OWB	Producing / injecting	16978.05	2653.66	16978.05	16978.05	4.50	16978.05	PASS	
SEC.36-T05N-R66W	SLOT#05 CAPITOL 05N (254'FSL & 2342'FWL, SEC.36)	CAPITOL 05N	CAPITOL 05N PWB	CAPITOL 05N (REV-E.0) PWP	Planned	302.39	44.97	16978.05	16978.05	4.51	16978.05	PASS	
Blackburn Offsets	(AD FED DAIRY 20W-25-10) (05-123-45032)	AD FED DAIRY 20W-25-10	AD FED DAIRY 20W-25-10 AWB	OWB\OWB	Producing / injecting	16978.05	2786.28	16978.05	16978.05	4.71	16978.05	PASS	
Blackburn Offsets	(ISHIGURO 25-36) (05-123-28120)	ISHIGURO 25-36	ISHIGURO 25-36	OWb\OWb	Producing / injecting	9971.98	465.17	9971.98	10033.06	4.95	10033.06	PASS	



Closest Approach Clearance Summary Report

CAPITOL 08N (REV-E.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 5 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	CAPITOL 08N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 08N PWB
Slot	SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)		

CALCULATION RANGE & CUTOFF		
From: 25.00ft MD	To: 16978.05ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (171 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
Blackburn Offsets	(AD FED DOUBLE CLUTCH 20W-25-9) (05-123-45039)	AD FED DOUBLE CLUTC 20W-25-9	AD FED DOUBLE CLUTC 20W-25-9	OWB\OWB	Producing / injecting	16978.05	3205.49	16978.05	16978.05	5.35	16978.05	PASS
Blackburn Offsets	(BROWN 1) (05-123-12689)	BROWN 1	BROWN 1	OWB\OWB	Abandoned	9111.89	353.19	9111.89	9127.77	5.39	9127.77	PASS
Blackburn Offsets	(AD FED DOUBLE CLUTCH 20W-25-8) (05-123-45035)	AD FED DOUBLE CLUTC 20W-25-8	AD FED DOUBLE CLUTC 20W-25-8	OWB\OWB	Producing / injecting	16978.05	3436.09	16978.05	16978.05	5.68	16978.05	PASS
SEC.36-T05N-R66W	SLOT#04 CAPITOL 04N (268'FSL & 2336'FWL,SEC.36)	CAPITOL 04N	CAPITOL 04N PWB	CAPITOL 04N (REV-E.0) PWP	Planned	25.00	59.97	16978.05	16978.05	6.02	16978.05	PASS
Blackburn Offsets	(FREEDA REEVE 4-1) (05-123-15319)	FREEDA REEVE 4-1	FREEDA REEVE 4-1	OWB\OWB	Abandoned	6523.85	373.87	6523.85	6541.56	6.70	6541.56	PASS
Blackburn Offsets	(WASS 4) (05-123-11757)	WASS 4	WASS 4	OWB\OWB	Abandoned	16978.05	1031.47	16978.05	16978.05	6.72	16978.05	PASS
Blackburn Offsets	(WASS 2) (05-123-11668)	WASS 2	WASS 2	OWB\OWB	Abandoned	15790.13	1022.42	15790.13	15846.02	7.38	15846.02	PASS
SEC.36-T05N-R66W	SLOT#03 CAPITOL 03N (282'FSL & 2329'FWL,SEC.36)	CAPITOL 03N	CAPITOL 03N PWB	CAPITOL 03N (REV-E.0) PWP	Planned	300.10	75.01	16978.05	16978.05	7.52	16978.05	PASS
Blackburn Offsets	(CURTIS 15-25) (05-123-31132)	CURTIS 15-25	CURTIS 15-25	OWB\OWB	Abandoned	13326.69	902.23	13326.69	13381.69	8.39	13381.69	PASS
SEC.36-T05N-R66W	SLOT#02 CAPITOL 02N (296'FSL & 2323'FWL,SEC.36)	CAPITOL 02N	CAPITOL 02N PWB	CAPITOL 02N (REV-E.0) PWP	Planned	300.03	89.99	16978.05	16978.05	9.06	16978.05	PASS
Blackburn Offsets	(WASS 3X) (05-123-13279)	WASS 3X	WASS 3X	OWB\OWB	Abandoned	14489.62	1144.92	14489.62	14567.90	9.39	14567.90	PASS
Blackburn Offsets	(LOEFFLER K 01-68-1HN) (05-123-35836)	LOEFFLER K 01-68-1HN	LOEFFLER K 01-68-1HN	OWB\OWB	Producing / injecting	6755.27	765.36	6755.27	6820.05	10.03	6820.05	PASS
SEC.36-T05N-R66W	SLOT#01 CAPITOL 01N (310'FSL & 2317'FWL,SEC.36)	CAPITOL 01N	CAPITOL 01N PWB	CAPITOL 01N (REV-D.0) PWP	Planned	25.00	104.95	16978.05	16978.05	10.52	16978.05	PASS
	(ISHIGURO 1) (05-123-11904)	ISHIGURO 1	ISHIGURO 1	OWB\OWB	Abandoned	11945.20	1001.40	11945.20	12017.09	10.73	12017.09	PASS

OFFSET WELL CLEARANCE SUMMARY (171 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
Blackburn Offsets												
Blackburn Offsets	(CAVANAGH 36-10H6) (05-123-18232)	CAVANAGH 36-10H6	CAVANAGH 36-10H6	OWB\OWB	Abandoned	9142.99	793.22	9142.99	9192.26	11.82	9192.26	PASS
Blackburn Offsets	(ANDERSON COOMBS 5) (05-123-12851)	ANDERSON COOMBS 5	ANDERSON COOMBS 5	OWB\OWB	Abandoned	15885.02	1728.55	15885.02	16034.32	12.30	16034.32	PASS
Blackburn Offsets	(LOEFFLER K 01-67-1HN) (05-123-35835)	LOEFFLER K 01-67-1HN	LOEFFLER K 01-67-1HN	OWB\OWB	Suspended	6680.08	1367.53	6680.08	6766.88	12.57	6766.88	PASS
Blackburn Offsets	(AD FED DOUBLE CLUTCH #20W-25-7) (05-123-45036)	AD FED DOUBLE CLUTCH #20W-25-7	AD FED DOUBLE CLUTCH #20W-25-7 AWB	AD FED DOUBLE CLUTCH #20W-25-7 AWP	Producing / injecting	16978.05	3606.04	16978.05	16978.05	12.81	16978.05	PASS
Blackburn Offsets	(WASS 5) (05-123-13781)	WASS 5	WASS 5	OWB\OWB	Abandoned	16913.12	2037.62	16913.12	16978.05	13.27	16978.05	PASS
Blackburn Offsets	(AD FED DOUBLE CLUTCH #20W-25-6) (05-123-45040)	AD FED DOUBLE CLUTCH #20W-25-6	AD FED DOUBLE CLUTCH #20W-25-6 AWB	AD FED DOUBLE CLUTCH #20W-25-6 AWP	Producing / injecting	16978.05	3863.25	16978.05	16978.05	13.69	16978.05	PASS
Blackburn Offsets	(ANDERSON COOMBS 4) (05-123-12850)	ANDERSON COOMBS 4	ANDERSON COOMBS 4	OWB\OWB	Abandoned	14476.59	1702.78	14476.59	14660.06	13.80	14660.06	PASS
Blackburn Offsets	(AD FED J EVANS #20W-25-5) (05-123-45038)	AD FED J EVANS #20W-25-5	AD FED J EVANS #20W-25-5 AWB	AD FED J EVANS #20W-25-5 AWP	Producing / injecting	16978.05	4059.20	16978.05	16978.05	14.42	16978.05	PASS
Blackburn Offsets	(AD FED J EVANS #20W-25-4) (05-123-41135)	AD FED J EVANS #20W-25-4	AD FED J EVANS #20W-25-4 AWB	AD FED J EVANS #20W-25-4 AWP	Producing / injecting	16978.05	4192.72	16978.05	16978.05	14.81	16978.05	PASS
Blackburn Offsets	(AD FED J EVANS #20W-25-3) (05-123-41133)	AD FED J EVANS #20W-25-3	AD FED J EVANS #20W-25-3 AWB	AD FED J EVANS #20W-25-3 AWP	Producing / injecting	16978.05	4459.72	16978.05	16978.05	15.72	16978.05	PASS
Blackburn Offsets	(CURTIS 37-25) (05-123-31136)	CURTIS 37-25	CURTIS 37-25	OWB\OWB	Abandoned	12581.23	1643.47	12581.23	12781.02	16.31	12781.02	PASS



Closest Approach Clearance Summary Report

CAPITOL 08N (REV-E.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 6 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	CAPITOL 08N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 08N PWB
Slot	SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)		

CALCULATION RANGE & CUTOFF		
From: 25.00ft MD	To: 16978.05ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (171 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
Blackburn Offsets	(AD FED J EVANS #20W-25-2) (05-123-45041)	AD FED J EVANS #20W-25-2	AD FED J EVANS #20W-25-2 AWB	AD FED J EVANS #20W-25-2 AWP	Producing / injecting	16978.05	4699.03	16978.05	16978.05	16.56	16978.05	PASS
Blackburn Offsets	(WASS 6) (05-123-13265)	WASS 6	WASS 6	OWB\OWB	Abandoned	15610.54	2324.96	15610.54	15898.70	16.88	15898.70	PASS
Blackburn Offsets	(AD FED J EVANS #20W-25-1) (05-123-41137)	AD FED J EVANS #20W-25-1	AD FED J EVANS #20W-25-1 AWB	AD FED J EVANS #20W-25-1 AWP	Producing / injecting	16978.05	4810.00	16978.05	16978.05	16.96	16978.05	PASS
Blackburn Offsets	(LOEFFLER K 01-66-1HN ST) (05-123-35834)	LOEFFLER K 01-66-1HN ST	LOEFFLER K 01-66-1HN ST	OWB\OWB	Producing / injecting	6625.00	2021.70	6625.00	6719.30	18.18	6719.30	PASS
Blackburn Offsets	STATE-HUME #90750 (05-123-12899)	STATE-HUME #90750	STATE-HUME #90750	OWB\OWB	Abandoned	11726.57	1697.73	11726.57	11940.89	18.63	11940.89	PASS
Blackburn Offsets	(ISHIGURO 24-36) (05-123-28119)	ISHIGURO 24-36	ISHIGURO 24-36	OWB\OWB	Abandoned	9929.06	1733.11	9929.06	10056.34	18.78	10056.34	PASS
Blackburn Offsets	(KFKA J 25-13) (05-123-19224)	KFKA J 25-13	KFKA J 25-13	OWB\OWB	Abandoned	13066.34	2027.19	13066.34	13334.82	18.96	13334.82	PASS
Blackburn Offsets	(WASS 1) (05-123-10976)	WASS 1	WASS 1	OWB\OWB	Abandoned	14414.50	2402.16	14414.50	14757.29	19.59	14757.29	PASS
Blackburn Offsets	(LOEFFLER K 01-65HN) (05-123-37739)	LOEFFLER K 01-65HN	LOEFFLER K 01-65HN	OWB\OWB	Producing / injecting	6625.00	2270.88	6625.00	6714.31	19.74	6714.31	PASS
Blackburn Offsets	(GP-DAIRY 1-20-19) (05-123-40328)	GP-DAIRY 1-20-19	GP-DAIRY 1-20-19 ST01	GP-DAIRY 1-20-19 ST01	Producing / injecting	16978.05	4544.84	16978.05	16978.05	21.25	16978.05	PASS
Blackburn Offsets	(GP J EVANS FED #20W-20-16) (05-123-41134)	GP J EVANS FED #20W-20-16	GP J EVANS FED #20W-20-16 AWB	GP J EVANS FED #20W-20-16 AWP	Producing / injecting	16978.05	5553.67	16978.05	16978.05	22.08	16978.05	PASS
Blackburn Offsets	(GP HILLSIDE FED #20W-20-15) (05-123-41145)	GP HILLSIDE FED #20W-20-15	GP HILLSIDE FED #20W-20-15 AWB	GP HILLSIDE FED #20W-20-15 AWP	Producing / injecting	16978.05	5731.24	16978.05	16978.05	22.63	16978.05	PASS
Blackburn Offsets	(GP HILLSIDE FED #20W-20-14) (05-123-44430)	GP HILLSIDE FED #20W-20-14	GP HILLSIDE FED #20W-20-14 AWB	GP HILLSIDE FED #20W-20-14 AWP	Producing / injecting	16978.05	5951.41	16978.05	16978.05	23.36	16978.05	PASS
						16978.05	6186.07	16978.05	16978.05	24.21	16978.05	PASS

OFFSET WELL CLEARANCE SUMMARY (171 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
Blackburn Offsets	(GP HILLSIDE FED #20W-20-13) (05-123-41143)	GP HILLSIDE FED #20W-20-13	GP HILLSIDE FED #20W-20-13 AWB	GP HILLSIDE FED #20W-20-13 AWP	Producing / injecting							
Blackburn Offsets	(ISHIGURO 3) (05-123-12891)	ISHIGURO 3	ISHIGURO 3	OWB\OWB	Abandoned	11812.00	2284.67	11812.00	12202.06	24.77	12202.06	PASS
Blackburn Offsets	(GEMINI K FEDERAL 01-99HZ) (05-123-30686)	GEMINI K FEDERAL 01-99HZ	GEMINI K FEDERAL 01-99HZ	OBW\OBW	Producing / injecting	6625.00	3687.65	6625.00	6629.80	25.95	6629.80	PASS
Blackburn Offsets	(ISHIGURO 30-31) (05-123-28189)	ISHIGURO 30-31	ISHIGURO 30-31	OWB\OWB	Producing / injecting	12379.97	3078.22	12379.97	13154.31	26.93	13154.31	PASS
Blackburn Offsets	(PEPPLER 2-36) (05-123-14438)	PEPPLER 2-36	PEPPLER 2-36	OWB\OWB	Abandoned	9133.92	1868.99	9133.92	9429.22	27.73	9429.22	PASS
Blackburn Offsets	(REHMER 1) (05-123-12607)	REHMER 1	REHMER 1	Wellbore #1OWB\OWB	Abandoned	25.00	1188.35	7925.00	1925.00	28.69	9625.00	PASS
Blackburn Offsets	(JOHNSON X1 1-1-06) (05-123-26716)	JOHNSON X1 1-1-06	JOHNSON X1 1-1-06	OWB\OWB	Producing / injecting	6847.70	3692.16	6847.70	7142.78	29.45	7142.78	PASS
Blackburn Offsets	(ISHIGURO 6) (05-123-12893)	ISHIGURO 6	ISHIGURO 6	OWB\OWB	Abandoned	10567.70	2348.46	10567.70	11038.01	29.76	11038.01	PASS
Blackburn Offsets	(FREEDA REEVE 3-1) (05-123-15083)	FREEDA REEVE 3-1	FREEDA REEVE 3-1	OWB\OWB	Abandoned	6525.42	1698.64	6525.42	6591.73	30.16	6591.73	PASS
Blackburn Offsets	(REEVE, FREDA 1-1) (05-123-11780)	REEVE, FREDA 1-1	REEVE, FREDA 1-1	OWB\OWB	Abandoned	6525.00	1770.85	6525.00	6606.13	31.61	6606.13	PASS
Blackburn Offsets	(LOEFFLER 1-18) (05-123-11673)	LOEFFLER 1-18	LOEFFLER 1-18	OWB\OWB	Producing / injecting	6512.41	1709.07	6512.41	6725.00	32.06	6725.00	PASS
Blackburn Offsets	(PEPPLER 1-36) (05-123-13270)	PEPPLER 1-36	PEPPLER 1-36	OWB\OWB	Abandoned	7842.30	1926.69	7842.30	8008.83	32.31	8008.83	PASS



Closest Approach Clearance Summary Report

CAPITOL 08N (REV-E.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 7 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	CAPITOL 08N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 08N PWB
Slot	SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)		

CALCULATION RANGE & CUTOFF		
From: 25.00ft MD	To: 16978.05ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (171 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	
Blackburn Offsets	(COMMONS Z2 2-2-06) (05-123-26712)	COMMONS Z2 2-2-06	COMMONS Z2 2-2-06	OWB\OWB	Producing / injecting	6577.30	4417.15	6577.30	6942.04	32.47	6942.04	PASS	
Blackburn Offsets	(HAMBLLEN 1-30) (05-123-13151) - Could not confirm gyro from ECMC	HAMBLLEN 1-30	HAMBLLEN 1-30	OWB\OWB	Abandoned	15551.19	4788.43	15551.19	16728.45	33.57	16728.45	PASS	
SEC.24-T5N-R66W	SLOT#11 DUELL #2 (05-123-12788) PA	DUELL #2	DUELL #2 AWB	DUELL #2 AWP	Abandoned	16978.05	3007.26	16978.05	16978.05	34.43	16978.05	PASS	
Blackburn Offsets	(SYLVESTER F 31-32D) (05-123-33215)	SYLVESTER F 31-32D	SYLVESTER F 31-32D	OWB\OWB	Producing / injecting	9752.79	2927.81	9752.79	10330.19	35.60	10330.19	PASS	
Blackburn Offsets	(SYLVESTER 1-116) (05-123-18157)	SYLVESTER 1-116	SYLVESTER 1-116	OWB\OWB	Abandoned	491.68	2362.63	7025.00	7300.90	38.01	7300.90	PASS	
Blackburn Offsets	(ISHIGURO 4) (05-123-12924)	ISHIGURO 4	ISHIGURO 4	OWB\OWB	Abandoned	11847.27	3683.43	11847.27	12858.71	38.59	12858.71	PASS	
SEC.24-T5N-R66W	Slot #4 SEGL #22-24 (05-123-23842) SI	SEGL 22-24	SEGL 22-24 AWB	SEGL 22-24 AWP	Drilling	16978.05	3481.08	16978.05	16978.05	39.79	16978.05	PASS	
Blackburn Offsets	(SYLVESTER 31-5H5) (05-123-18189) - Could not verify surveys	SYLVESTER 31-5H5	SYLVESTER 31-5H5	OWB\OWB	Abandoned	10462.26	3671.23	10462.26	11620.40	40.04	11620.40	PASS	
Blackburn Offsets	(SYLVESTER G 06-30D) (05-123-33120)	SYLVESTER G 06-30D	SYLVESTER G 06-30D	OWB\OWB	Producing / injecting	377.81	2354.52	7248.31	7248.31	40.72	7248.31	PASS	
Blackburn Offsets	(CITY OF GREELEY 1-30) (05-123-13152) - Could not confirm gyro from ECMC	CITY OF GREELEY 1-30	CITY OF GREELEY 1-30	OWB\OWB	Abandoned	14016.93	5170.80	14016.93	15573.31	41.30	15573.31	PASS	
Blackburn Offsets	(LOEFFLER K 01-66-1HN) (05-123-35834)	LOEFFLER K 01-66-1HN	LOEFFLER K 01-66-1HN	OWB\OWB	Abandoned	1074.95	2685.13	6525.00	6580.31	41.65	6580.31	PASS	
Blackburn Offsets	(CITY OF GREELEY 2-30) (05-123-13160) - Could not confirm gyro from ECMC	CITY OF GREELEY 2-30	CITY OF GREELEY 2-30	OWB\OWB	Abandoned	13178.66	4894.66	13178.66	14698.19	42.76	14698.19	PASS	
Blackburn Offsets	(SANDAU X4 3-1-06) (05-123-26717)	SANDAU X4 3-1-06	SANDAU X4 3-1-06	OWB\OWB	Abandoned	5819.37	4973.97	5819.37	6932.78	43.45	16125.00	PASS	
	(LOEFFLER #2-24) (05-123-11888)	LOEFFLER #2-24	LOEFFLER #2-24	OWB\OWB		6519.52	2367.06	6519.52	6625.00	44.80	6625.00	PASS	

OFFSET WELL CLEARANCE SUMMARY (171 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	
Blackburn Offsets					Producing / injecting								
SEC.24-T5N-R66W	SLOT#17 S.E.G.L. #2 (05-123-12475) PA	S.E.G.L. #2	S.E.G.L. #2 AWB	S.E.G.L. #2 AWP	Abandoned	16978.05	4200.75	16978.05	16978.05	45.30	16978.05	PASS	
SEC.24-T5N-R66W	Slot #6 SEGL #7-24 (05-123-23840) PA	SEGL 7-24	SEGL 7-24 AWB	SEGL 7-24 AWP	Drilling	16978.05	4308.17	16978.05	16978.05	45.69	16978.05	PASS	
Blackburn Offsets	(GEMINI K1-11) (05-123-15177)	GEMINI K1-11	GEMINI K1-11	OWB\OWB	Suspended	6525.00	2672.91	6525.00	6637.99	47.82	6637.99	PASS	
Blackburn Offsets	(EVANS INDUSTRIAL PARK 2) (05-123-16656)	EVANS INDUSTRIAL PARK 2	EVANS INDUSTRIAL PARK 2	OWB\OWB\	Abandoned	14405.08	6485.42	14405.08	16687.36	48.07	16687.36	PASS	
Blackburn Offsets	(SYLVESTER F 31-20D) (05-123-33217)	SYLVESTER F 31-20D	SYLVESTER F 31-20D	OWB\OWB	Abandoned	155.63	4254.42	9925.00	11359.85	49.07	11359.85	PASS	
Blackburn Offsets	(UNION PACIFIC 1-1) (05-123-14011)	UNION PACIFIC 1-1	UNION PACIFIC 1-1	OWB\OWB	Abandoned	6516.61	2863.97	6516.61	6731.81	49.50	6731.81	PASS	
Blackburn Offsets	(SYLVESTER F 31-33) (05-123-33216)	SYLVESTER F 31-33	SYLVESTER F 31-33	OWB\OWB	Producing / injecting	8556.59	3220.99	8556.59	9478.06	49.85	9478.06	PASS	
Blackburn Offsets	(DOVE HILL Z1 2-6-31) (05-123-26713)	DOVE HILL Z1 2-6-31	DOVE HILL Z1 2-6-31	OWB\OWB	Producing / injecting	8499.19	4350.23	8499.19	9698.29	49.87	9698.29	PASS	
SEC.24-T5N-R66W	Slot #9 SEGL #17-24 (05-123-23839) PA	SEGL 17-24	SEGL 17-24 AWB	SEGL 17-24 AWP	Drilling	16978.05	5083.69	16978.05	16978.05	51.71	16978.05	PASS	
Blackburn Offsets	(CONNELL X3 3-7-31) (05-123-26715)	CONNELL X3 3-7-31	CONNELL X3 3-7-31	CONNELL X3 3-7-31	Abandoned	7786.13	4873.35	7786.13	8081.20	52.31	8081.20	PASS	
Blackburn Offsets	(EVANS INDUSTRIAL PARK 1) (05-123-16337) - Could not confirm gyro from ECMC	EVANS INDUSTRIAL PARK 1	EVANS INDUSTRIAL PARK 1	OWB\OWB	Abandoned	13256.46	6342.71	13256.46	15689.76	52.36	15689.76	PASS	



Closest Approach Clearance Summary Report

CAPITOL 08N (REV-E.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 8 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	CAPITOL 08N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 08N PWB
Slot	SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)		

CALCULATION RANGE & CUTOFF		
From: 25.00ft MD	To: 16978.05ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (171 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
Blackburn Offsets	(GEMINI K1-12) (05-123-15197)	GEMINI K1-12	GEMINI K1-12	OWB\OWB	Suspended	6525.00	2982.03	6525.00	6638.30	53.13	6638.30	PASS
Blackburn Offsets	(BRANTNER 30-9) (05-123-13310)	BRANTNER 30-9	BRANTNER 30-9	OWB\OWB	Abandoned	14355.43	7541.76	14355.43	16978.05	54.09	16978.05	PASS
SEC.24-T5N-R66W	Slot #8 SEGL #21-24X (05-123-23843) PA	SEGL 21-24X	SEGL 21-24X ST AWB	SEGL 21-24X ST AWP	Drilling	16978.05	4872.47	16978.05	16978.05	54.51	16978.05	PASS
SEC.24-T5N-R66W	SLOT#16 S.E.G.L. #1 (05-123-11776) PA	S.E.G.L. #1	S.E.G.L. #1 AWB	S.E.G.L. #1 AWP	Abandoned	16978.05	4078.00	16978.05	16978.05	54.55	16978.05	PASS
Blackburn Offsets	(ELLIS Y1 5-1-06) (05-123-25901)	ELLIS Y1 5-1-06	ELLIS Y1 5-1-06	OWB\OWB	Abandoned	25.00	5583.97	25.00	6575.18	55.06	16325.00	PASS
Blackburn Offsets	(COLE X6 4-8-31) (05-123-31836)	COLE X6 4-8-31	COLE X6 4-8-31	OWB\OWB	Abandoned	201.48	5323.73	7325.00	7074.93	55.57	7074.93	PASS
SEC.24-T5N-R66W	Slot #8 SEGL #21-24X (05-123-23843) PA	SEGL 21-24X	SEGL 21-24X AWB	SEGL 21-24X AWP	Drilling	16978.05	4831.50	16978.05	16978.05	56.19	16978.05	PASS
Blackburn Offsets	(GEMINI K 1-10) (05-123-13869)	GEMINI K 1-10	GEMINI K 1-10	OWB\OWB	Abandoned	6525.00	3221.92	6525.00	6631.94	57.76	6631.94	PASS
Blackburn Offsets	(SYLVESTER 1) (05-123-12010)	SYLVESTER 1	SYLVESTER 1	OWB\OWB	Abandoned	7890.65	3638.95	7890.65	8894.66	59.32	8894.66	PASS
Blackburn Offsets	(STEWARTS Z4 6-2-06) (05-123-26711) - Need actual survey data	STEWARTS Z4 6-2-06	STEWARTS Z4 6-2-06	OWB\OWB	Abandoned	25.00	5599.69	25.00	6646.42	59.38	15525.00	PASS
Blackburn Offsets	(VALLEY PACK X5 3-5-31) (05-123-26714)	VALLEY PACK X5 3-5-31	VALLEY PACK X5 3-5-31	OWB\OWB	Abandoned	9204.73	4949.47	9204.73	11011.78	59.60	11011.78	PASS
Blackburn Offsets	(BRANTNER 30-16) (05-123-13282)	BRANTNER 30-16	BRANTNER 30-16	OWB\OWB	Abandoned	13314.32	7705.01	13314.32	16704.58	60.20	16704.58	PASS
SEC.24-T5N-R66W	Slot #2 SEGL #18-24 (05-123-23051) SI	SEGL 18-24	SEGL 18-24 (AWB)	SEGL 18-24 (AWP#1)	Other	16978.05	4876.01	16978.05	16978.05	61.36	16978.05	PASS
	(HAYS 31-2H5) (05-123-18211)	HAYS 31-2H5	HAYS 31-2H5	OWB\OWB	Abandoned	11458.44	6376.85	11458.44	14308.30	61.85	14308.30	PASS

OFFSET WELL CLEARANCE SUMMARY (171 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
Blackburn Offsets												
SEC.24-T5N-R66W	Slot #3 SEGL #4-24 (05-123-23050) SI	SEGL 4-24	SEGL 4-24 (AWB)	SEGL 4-24 (AWP#1)	Other	16978.05	5747.11	16978.05	16978.05	61.94	16978.05	PASS
Blackburn Offsets	(SHAMROCK FEDERAL PC G 07-30D) (05-123-34885)	SHAMROCK FEDERAL PC G 07-30D	SHAMROCK FEDERAL PC G 07-30D	OWB\OWB	Producing / injecting	6525.00	5675.08	6525.00	6681.04	62.59	6681.04	PASS
Blackburn Offsets	(GP-DAIRY 1-20-19) (05-123-40328)	GP-DAIRY 1-20-19	GP-DAIRY 1-20-19	OWB\OWB	Producing / injecting	16978.05	10616.19	16978.05	16978.05	63.00	16978.05	PASS
Blackburn Offsets	(RE-1 X7 4-6-31) (05-123-31863)	RE-1 X7 4-6-31	RE-1 X7 4-6-31	OWB\OWB	Abandoned	25.00	5342.20	8425.00	9572.31	64.21	9572.31	PASS
SEC.24-T5N-R66W	Slot #1 SEGL #3-24 (05-123-20620) PA	SEGL 3-24	SEGL 3-24 (AWB)	SEGL 3-24 (AWP#1)	Other	16978.05	5481.77	16978.05	16978.05	65.07	16978.05	PASS
Blackburn Offsets	(GEMINI K1-9) (05-123-13879)	GEMINI K1-9	GEMINI K1-9	OWB\OWB	Abandoned	6525.00	3765.57	6525.00	6706.81	66.24	6706.81	PASS
SEC.24-T5N-R66W	Slot #5 SEGL #2-24 (05-123-23841) PA	SEGL 2-24	SEGL 2-24 AWB	SEGL 2-24 AWP	Drilling	16978.05	5661.46	16978.05	16978.05	67.19	16978.05	PASS
Blackburn Offsets	(HAYS 31-1H5) (05-123-11327)	HAYS 31-1H5	HAYS 31-1H5	OWB\OWB	Abandoned	11773.35	7600.42	11773.35	15576.54	68.43	15576.54	PASS
Blackburn Offsets	(MAIN Y3 6-8-31) (05-123-31835)	MAIN Y3 6-8-31	MAIN Y3 6-8-31	OWB\OWB	Suspended	325.25	5854.32	7825.00	6808.08	68.77	16625.00	PASS
Blackburn Offsets	(DABCO 1) (05-123-10955)	DABCO 1	DABCO 1	OWB\OWB	Abandoned	6522.16	4027.72	6522.16	6815.00	71.23	6815.00	PASS
Blackburn Offsets	(LASALLE PARK Y5 5-5-31) (05-123-25898)	LASALLE PARK Y5 5-5-31	LASALLE PARK Y5 5-5-31	OWB\OWB	Producing / injecting	513.22	5623.29	9025.00	11797.42	72.02	11797.42	PASS



Closest Approach Clearance Summary Report

CAPITOL 08N (REV-E.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)

Page 9 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	PDC ENERGY INC	Well	CAPITOL 08N
Field	WELD COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 08N PWB
Slot	SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)		

CALCULATION RANGE & CUTOFF		
From: 25.00ft MD	To: 16978.05ft MD	C-C Cutoff: (none)

OFFSET WELL CLEARANCE SUMMARY (171 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
Blackburn Offsets	(HUMAN BEAN Y2 5-7-31) (05-123-25900)	HUMAN BEAN Y2 5-7-31	HUMAN BEAN Y2 5-7-31	OWB\OWB	Abandoned	425.00	5646.26	8325.00	7090.82	72.53	16025.00	PASS
Blackburn Offsets	(DABCO 2) (05-123-11528)	DABCO 2	DABCO 2	OWB\OWB	Abandoned	6525.00	5157.25	6525.00	7025.00	75.78	7025.00	PASS
Blackburn Offsets	(HAYS FEDERAL 31-8H5)(05-123-18213)	HAYS FEDERAL 31-8H5	HAYS FEDERAL 31-8H5	OWB\OWB	Abandoned	10387.98	7406.00	10387.98	14516.65	76.49	14516.65	PASS
Blackburn Offsets	(GEMINI K FEDERAL 1-15) (05-123-13871)	GEMINI K FEDERAL 1-15	GEMINI K FEDERAL 1-15	OWB\OWB	Abandoned	6525.00	4312.27	6525.00	6693.89	77.02	6693.89	PASS
Blackburn Offsets	(GEMINI K 1-13) (05-123-17669)	GEMINI K 1-13	GEMINI K 1-13	OWB\OWB	Abandoned	6497.52	4550.77	6497.52	6644.36	77.29	6644.36	PASS
Blackburn Offsets	(GOODNER Y4 7-1-06) (05-123-25899)	GOODNER Y4 7-1-06	GOODNER Y4 7-1-06	OWB\OWB	Abandoned	25.00	5616.29	8125.00	6789.84	77.45	16025.00	PASS
Blackburn Offsets	(FARMERS Y7 6-6-31) (05-123-25896)	FARMERS Y7 6-6-31	FARMERS Y7 6-6-31	OWB\OWB	Abandoned	303.07	5886.27	8725.00	10320.09	79.27	13825.00	PASS
Blackburn Offsets	(H&S 1) (05-123-11529)	H&S 1	H&S 1	OWB\OWB	Abandoned	6525.00	4694.85	6525.00	6925.00	81.15	6925.00	PASS
Blackburn Offsets	(MCCOUTCHEONS Y8 7-5-31) (05-123-25895)	MCCOUTCHEONS Y8 7-5-31	MCCOUTCHEONS Y8 7-5-31	OWB\OWB	Abandoned	269.19	5898.74	9525.00	14431.70	82.71	14431.70	PASS
Blackburn Offsets	(BALLFIELD Y6 7-7-31) (05-123-25897)	BALLFIELD Y6 7-7-31	BALLFIELD Y6 7-7-31	OWB\OWB	Abandoned	421.27	5862.77	8725.00	6892.30	86.78	14025.00	PASS
Blackburn Offsets	(AMBER FEDERAL G06-21D) (05-123-34902)	AMBER FEDERAL G06-21D	AMBER FEDERAL G06-21D	OWB\OWB	Suspended	6525.00	6179.74	6525.00	6925.00	88.21	6925.00	PASS
Blackburn Offsets	(SHAMROCK FEDERAL G 07-29D) (05-123-34884)	SHAMROCK FEDERAL G 07-29D	SHAMROCK FEDERAL G 07-29D	OWB\OWB	Producing / injecting	6525.00	6554.16	6525.00	6821.48	89.01	6821.48	PASS
Blackburn Offsets	(GOODNER G FEDERAL 6-11) (05-123-12314)	GOODNER G FEDERAL 6-11	GOODNER G FEDERAL 6-11	OWB\OWB	Producing / injecting	6561.24	5753.82	6561.24	6892.47	101.43	6892.47	PASS
		AMBER FEDERAL G06-22D	AMBER FEDERAL G06-22D	OWB\OWB	Suspended	6504.37	7366.93	6504.37	6991.10	102.50	6991.10	PASS

OFFSET WELL CLEARANCE SUMMARY (171 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
Blackburn Offsets	(AMBER FEDERAL G06-22D) (05-123-34904)											
Blackburn Offsets	(CURTIS G 6-8) (05-123-21981)	CURTIS G 6-8	CURTIS G 6-8	OWB\OWB	Abandoned	1330.12	6872.21	6725.00	10268.06	104.82	10268.06	PASS
Blackburn Offsets	(AMBER G 05-32D) (05-123-34903)	AMBER G 05-32D	AMBER G 05-32D	OWB\OWB	Suspended	770.75	8100.96	6625.00	7201.44	109.42	7201.44	PASS
Blackburn Offsets	(MCCARTHY 1) (05-123-10630)	MCCARTHY 1	MCCARTHY 1	OWB\OWB	Abandoned	6525.00	6496.67	6525.00	6828.28	114.88	6828.28	PASS
Blackburn Offsets	(CURTIS G 6-7) (05-123-19429)	CURTIS G 6-7	CURTIS G 6-7	OWB\OWB	Suspended	6493.19	6556.37	6493.19	7044.86	115.08	7044.86	PASS
Blackburn Offsets	(DEVOTIE #1-6) (05-123-11773)	DEVOTIE #1-6	DEVOTIE #1-6	OWB\OWB	Abandoned	6494.51	6960.80	6494.51	6925.00	122.62	6925.00	PASS
Blackburn Offsets	(DEVOTIE 2-6) (05-123-14919)	DEVOTIE 2-6	DEVOTIE 2-6	OWB\OWB	Abandoned	6525.00	7540.92	6525.00	6855.07	129.42	6855.07	PASS
Blackburn Offsets	(MERCURE 6-1) (05-123-13626)	MERCURE 6-1	MERCURE 6-1	OWB\OWB	Abandoned	6525.00	8703.47	6525.00	6925.00	152.40	6925.00	PASS