

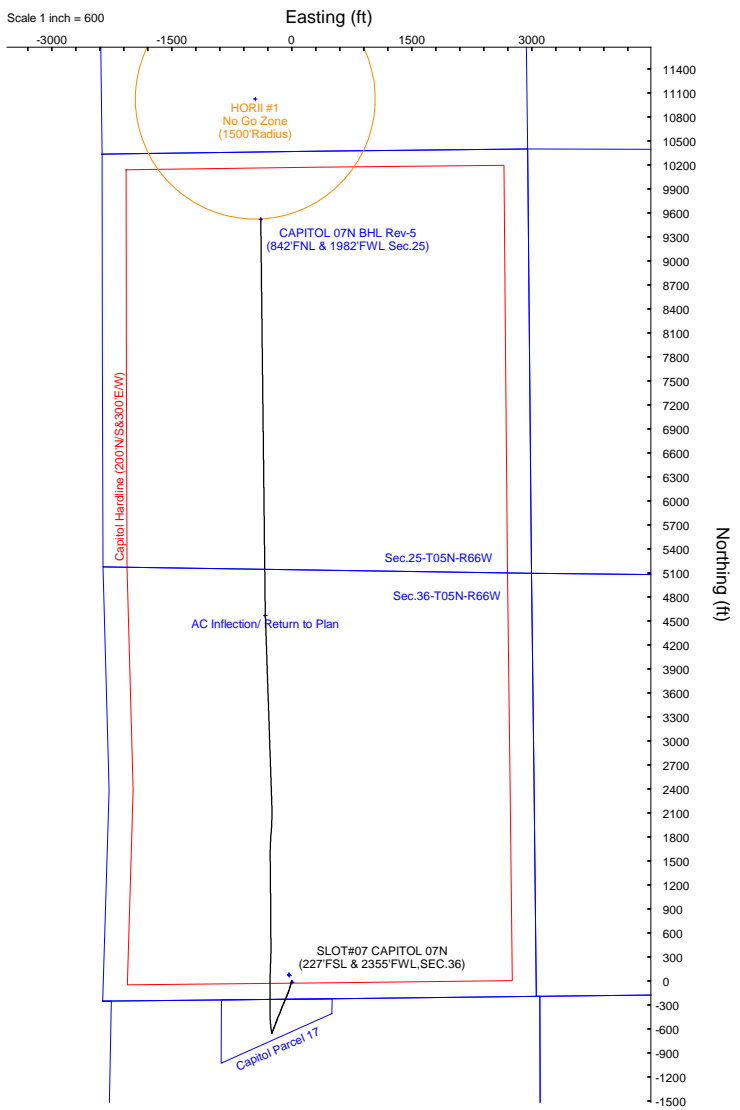
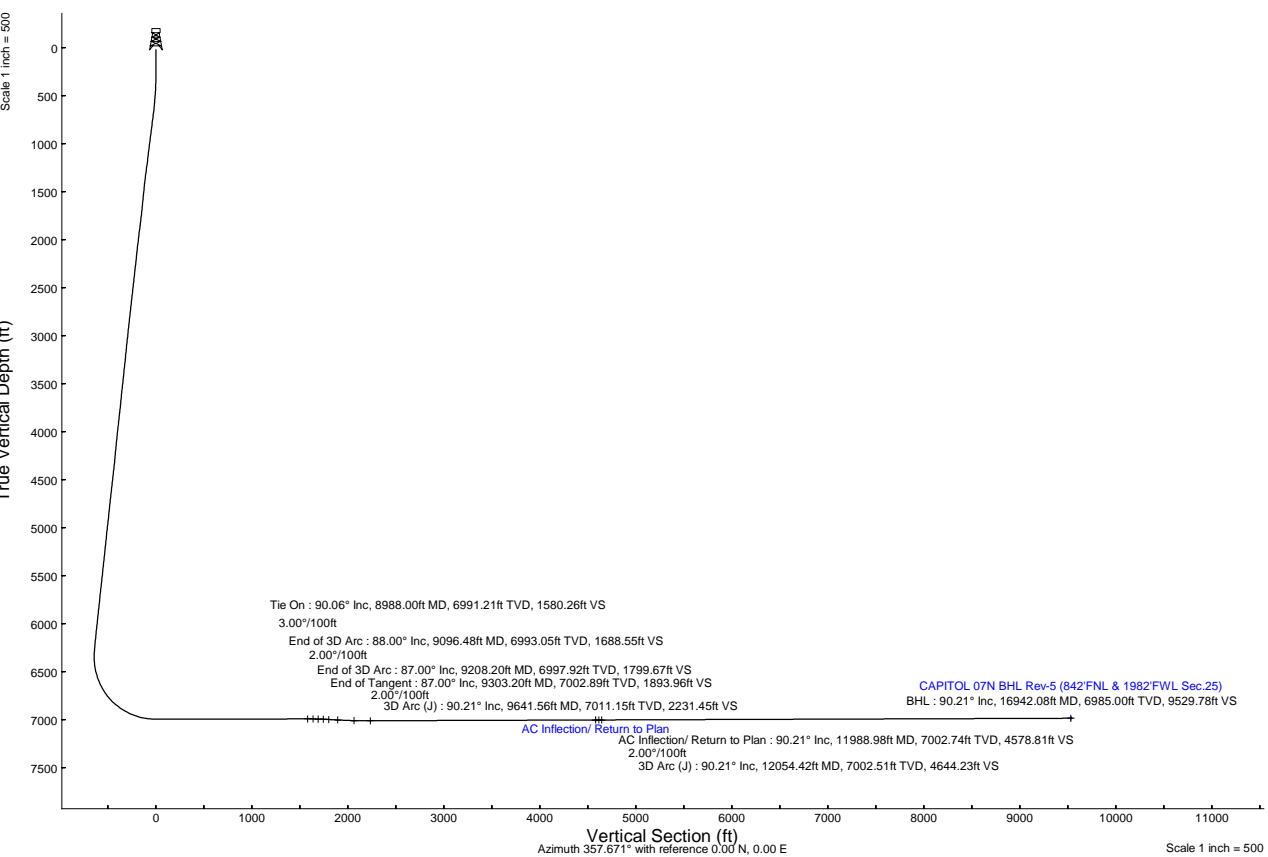
PDC ENERGY INC

Area: COLORADO Well: CAPITOL 07N ST01
 Field: WELD COUNTY (NAD83/GRID) UWI/Legal:
 Facility: SEC.36-T05N-R66W Wellbore: CAPITOL 07N ST01 PWB
 Slot: SLOT#07 CAPITOL 07N (227FSL & 2355FWL,SEC.36) Wellpath: CAPITOL 07N ST01 (Rev-A.0) PWP

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	8988.00	90.060	359.480	6991.21	1570.60	-269.47	0.42	1580.26
End of 3D Arc	9096.48	88.000	2.000	6993.05	1679.04	-268.07	3.00	1688.55
End of 3D Arc	9208.20	87.000	4.000	6997.92	1790.50	-262.23	2.00	1799.67
End of Tangent	9303.20	87.000	4.000	7002.89	1885.13	-255.61	0.00	1893.96
3D Arc (J)	9641.56	90.205	358.037	7011.15	2223.15	-249.61	2.00	2231.45
AC Inflection/ Return to Plan	11988.98	90.205	358.037	7002.74	4569.17	-330.00	0.00	4578.81
3D Arc (J)	12054.42	90.205	359.346	7002.51	4634.59	-331.49	2.00	4644.23
BHL	16942.08	90.205	359.346	6985.00	9521.91	-387.26	0.00	9529.78

Plot reference wellpath is CAPITOL 07N ST01 (Rev-A.0) PWP
 True vertical depths are referenced to Rig (4664GL+25KB = 4689RKB) (RKB)
 Reference wellpath measured depths are referenced to Rig (4664GL+25KB = 4689RKB) (RKB)
 Rig (4664GL+25KB = 4689RKB) (RKB) to Mean Sea Level: 4689 feet
 Mean Sea Level to Ground level (At Slot: SLOT#07 CAPITOL 07N (227FSL & 2355FWL,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 2025-07-30; Database: WA, Denver

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.36-T05N-R66W	3215510.944	1371026.295	40°20'57.4472N	104°43'36.3716W
SLOT#07 CAPITOL 07N (227FSL & 2355FWL,SEC.36)	3215546.143	1370944.160	40°20'56.6264N	104°43'35.9263W



HDCM2024-1.0 (1900.0 to 2025.0) Op: 86.52° Field: 51811.1 nT
 Magnetic North is 7.67 degrees East of True North (at 2024-05-22)
 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 07N ST01 (Rev-A.0) PWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	CAPITOL 07N ST01
Field	WELD COUNTY (NAD83/GRID)	UWI/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 07N ST01 PWB
Slot	SLOT#07 CAPITOL 07N (227'FSL & 2355'FWL,SEC.36)	Sidetrack from	CAPITOL 07N OWB AWP at 8988.00 MD

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet [2231]	Software System	WellArchitect® 7.0
North Reference	Grid	Report Generated By	Guenaler on 2025-07-30 at 6:00:27 PM
Scale	0.999958	Last Updated	2025-07-30
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	-82.76	35.20	3215546.14	1370944.18	40.3490629°	-104.7266462°
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#07 CAPITOL 07N (227'FSL & 2355'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	357.671°



Planned Wellpath Report

CAPITOL 07N ST01 (Rev-A.0) PWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	CAPITOL 07N ST01
Field	WELD COUNTY (NAD83/GRID)	UWI/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 07N ST01 PWB
Slot	SLOT#07 CAPITOL 07N (227'FSL & 2355'FWL,SEC.36)	Sidetrack from	CAPITOL 07N OWB AWP at 8988.00 MD

WELLPATH DATA (183 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	14.670	0.00	0.00	0.00	0.00	40.3490629	-104.7266462	0.00	
25.00	0.000	14.670	25.00	0.00	0.00	0.00	40.3490629	-104.7266462	0.00	
205.00	0.260	14.670	205.00	0.39	0.40	0.10	40.3490640	-104.7266458	0.14	
296.00	1.320	193.800	295.99	-0.42	-0.42	-0.09	40.3490617	-104.7266465	1.74	
388.00	2.020	202.060	387.95	-2.91	-2.95	-0.96	40.3490548	-104.7266497	0.80	
481.00	4.130	195.900	480.81	-7.59	-7.70	-2.49	40.3490418	-104.7266554	2.29	
573.00	5.450	198.890	572.49	-14.81	-15.02	-4.81	40.3490218	-104.7266639	1.46	
668.00	7.300	194.150	666.90	-24.80	-25.14	-7.75	40.3489941	-104.7266748	2.02	
761.00	7.740	195.030	759.10	-36.44	-36.91	-10.82	40.3489618	-104.7266862	0.49	
855.00	7.650	196.960	852.25	-48.39	-49.01	-14.28	40.3489287	-104.7266990	0.29	
949.00	7.470	196.960	945.44	-60.06	-60.84	-17.89	40.3488963	-104.7267123	0.19	
1043.00	7.390	197.310	1038.65	-71.53	-72.46	-21.47	40.3488645	-104.7267255	0.10	
1136.00	7.390	197.140	1130.87	-82.80	-83.88	-25.01	40.3488332	-104.7267386	0.02	
1231.00	8.000	195.730	1225.02	-94.84	-96.08	-28.61	40.3487998	-104.7267518	0.67	
1324.00	7.830	195.730	1317.13	-107.02	-108.41	-32.08	40.3487661	-104.7267647	0.18	
1418.00	6.770	199.600	1410.37	-118.25	-119.79	-35.67	40.3487349	-104.7267779	1.24	
1512.00	6.070	199.240	1503.78	-128.01	-129.71	-39.17	40.3487078	-104.7267908	0.75	
1559.00	6.240	198.540	1550.51	-132.71	-134.47	-40.80	40.3486948	-104.7267968	0.40	
1673.00	6.190	202.950	1663.84	-144.05	-146.01	-45.17	40.3486632	-104.7268128	0.42	First BH OWB Survey
1767.00	7.520	203.010	1757.17	-154.19	-156.34	-49.55	40.3486350	-104.7268288	1.41	
1860.00	7.730	202.250	1849.34	-165.38	-167.73	-54.29	40.3486038	-104.7268462	0.25	
1953.00	7.530	201.940	1941.52	-176.63	-179.17	-58.94	40.3485725	-104.7268632	0.22	
2047.00	7.680	202.540	2034.69	-187.94	-190.68	-63.65	40.3485410	-104.7268805	0.18	
2141.00	6.840	203.860	2127.94	-198.66	-201.60	-68.32	40.3485112	-104.7268976	0.91	
2235.00	6.990	203.010	2221.26	-208.85	-211.99	-72.82	40.3484828	-104.7269141	0.19	
2328.00	6.810	202.900	2313.58	-218.96	-222.28	-77.18	40.3484546	-104.7269300	0.19	
2422.00	7.080	202.920	2406.89	-229.24	-232.74	-81.60	40.3484260	-104.7269462	0.29	
2516.00	7.140	202.280	2500.17	-239.79	-243.49	-86.07	40.3483966	-104.7269626	0.11	
2610.00	7.030	200.740	2593.45	-250.39	-254.27	-90.33	40.3483671	-104.7269782	0.23	
2704.00	7.080	203.110	2686.74	-260.91	-264.98	-94.64	40.3483378	-104.7269940	0.31	
2798.00	6.750	201.940	2780.06	-271.18	-275.43	-98.97	40.3483092	-104.7270099	0.38	
2892.00	7.040	205.470	2873.38	-281.31	-285.76	-103.52	40.3482810	-104.7270265	0.55	
2985.00	6.740	203.560	2965.70	-291.26	-295.90	-108.15	40.3482533	-104.7270434	0.41	
3079.00	6.680	203.550	3059.06	-301.15	-305.97	-112.54	40.3482257	-104.7270595	0.06	
3172.00	6.240	202.030	3151.47	-310.62	-315.62	-116.59	40.3481994	-104.7270744	0.51	
3266.00	6.520	199.520	3244.89	-320.22	-325.38	-120.29	40.3481727	-104.7270879	0.42	
3360.00	6.550	203.130	3338.28	-330.02	-335.34	-124.18	40.3481454	-104.7271022	0.44	
3453.00	6.570	201.480	3430.67	-339.68	-345.17	-128.21	40.3481185	-104.7271170	0.20	
3547.00	6.960	202.050	3524.01	-349.78	-355.45	-132.32	40.3480904	-104.7271320	0.42	
3641.00	5.940	202.810	3617.42	-359.37	-365.22	-136.35	40.3480637	-104.7271468	1.09	
3735.00	6.630	197.970	3710.85	-368.87	-374.86	-139.91	40.3480373	-104.7271598	0.92	
3828.00	6.880	199.620	3803.21	-379.07	-385.22	-143.43	40.3480090	-104.7271728	0.34	
3923.00	6.670	199.910	3897.54	-389.45	-395.76	-147.22	40.3479801	-104.7271867	0.22	
4017.00	6.720	200.770	3990.90	-399.56	-406.04	-151.03	40.3479520	-104.7272007	0.12	

WELLPATH DATA (183 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4111.00	6.420	208.130	4084.29	-409.15	-415.81	-155.46	40.3479253	-104.7272169	0.95	
4204.00	6.500	201.200	4176.70	-418.46	-425.31	-159.81	40.3478993	-104.7272328	0.84	
4299.00	6.050	208.260	4271.13	-427.70	-434.73	-164.13	40.3478736	-104.7272486	0.94	
4393.00	7.030	203.440	4364.52	-437.15	-444.37	-168.76	40.3478472	-104.7272655	1.19	
4486.00	6.870	201.150	4456.84	-447.37	-454.78	-173.03	40.3478187	-104.7272812	0.34	
4579.00	6.780	203.610	4549.18	-457.41	-465.00	-177.24	40.3477908	-104.7272966	0.33	
4672.00	6.730	195.640	4641.53	-467.53	-475.28	-180.91	40.3477627	-104.7273101	1.01	
4766.00	6.840	199.230	4734.87	-477.98	-485.87	-184.24	40.3477337	-104.7273223	0.47	
4860.00	6.830	198.840	4828.21	-488.40	-496.44	-187.88	40.3477047	-104.7273358	0.05	
4954.00	6.650	200.880	4921.56	-498.61	-506.82	-191.63	40.3476764	-104.7273495	0.32	
5048.00	6.590	201.500	5014.93	-508.55	-516.92	-195.55	40.3476487	-104.7273639	0.10	
5142.00	6.590	201.660	5108.31	-518.41	-526.95	-199.51	40.3476213	-104.7273784	0.02	
5236.00	6.520	201.030	5201.69	-528.24	-536.95	-203.42	40.3475939	-104.7273928	0.11	
5330.00	6.610	200.040	5295.08	-538.14	-547.01	-207.19	40.3475664	-104.7274066	0.15	
5424.00	6.550	201.430	5388.46	-548.05	-557.08	-211.00	40.3475388	-104.7274206	0.18	
5518.00	6.840	200.340	5481.82	-558.12	-567.32	-214.91	40.3475108	-104.7274349	0.34	
5613.00	6.720	200.940	5576.15	-568.45	-577.82	-218.86	40.3474821	-104.7274494	0.15	
5706.00	6.500	200.160	5668.54	-578.31	-587.84	-222.62	40.3474547	-104.7274632	0.26	
5799.00	6.640	201.240	5760.93	-588.10	-597.80	-226.38	40.3474275	-104.7274770	0.20	
5892.00	6.590	200.000	5853.31	-597.97	-607.82	-230.15	40.3474000	-104.7274909	0.16	
5986.00	6.490	200.370	5946.69	-607.86	-617.87	-233.85	40.3473725	-104.7275044	0.12	



Planned Wellpath Report

CAPITOL 07N ST01 (Rev-A.0) PWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	CAPITOL 07N ST01
Field	WELD COUNTY (NAD83/GRID)	UWI/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 07N ST01 PWB
Slot	SLOT#07 CAPITOL 07N (227'FSL & 2355'FWL,SEC.36)	Sidetrack from	CAPITOL 07N OWB AWP at 8988.00 MD

WELLPATH DATA (183 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
6080.00	6.530	201.020	6040.09	-617.67	-627.84	-237.61	40.3473453	-104.7275183	0.09	
6174.00	6.510	200.700	6133.48	-627.48	-637.81	-241.41	40.3473180	-104.7275322	0.04	
6268.00	6.450	201.080	6226.88	-637.23	-647.72	-245.20	40.3472909	-104.7275461	0.08	
6362.00	2.680	195.590	6320.56	-644.16	-654.77	-247.69	40.3472716	-104.7275552	4.03	
6455.00	6.500	348.980	6413.41	-641.02	-651.69	-249.28	40.3472801	-104.7275609	9.65	
6549.00	13.650	349.700	6505.90	-624.76	-635.54	-252.29	40.3473245	-104.7275711	7.61	
6643.00	22.080	350.390	6595.28	-596.20	-607.15	-257.23	40.3474025	-104.7275880	8.97	
6738.00	29.550	354.190	6680.75	-555.04	-566.18	-262.59	40.3475151	-104.7276059	8.05	
6832.00	38.770	355.730	6758.45	-502.38	-513.66	-267.13	40.3476594	-104.7276206	9.85	
6926.00	48.470	357.150	6826.42	-437.62	-449.01	-271.08	40.3478369	-104.7276328	10.37	
7020.00	55.190	1.060	6884.49	-363.82	-375.18	-272.12	40.3480396	-104.7276342	7.86	
7114.00	65.220	0.940	6931.14	-282.48	-293.73	-270.70	40.3482631	-104.7276265	10.67	
7208.00	71.680	0.220	6965.65	-195.21	-206.35	-269.83	40.3485030	-104.7276207	6.91	
7302.00	82.280	359.490	6986.80	-103.83	-114.90	-270.08	40.3487540	-104.7276187	11.30	
7397.00	90.250	0.200	6992.98	-9.17	-20.18	-270.33	40.3490140	-104.7276166	8.42	
7490.00	90.030	0.750	6992.75	83.71	72.82	-269.56	40.3492692	-104.7276110	0.64	
7583.00	90.120	2.420	6992.63	176.49	165.78	-266.99	40.3495243	-104.7275988	1.80	
7677.00	90.120	2.170	6992.43	270.19	259.71	-263.22	40.3497820	-104.7275824	0.27	
7770.00	90.120	0.830	6992.24	362.98	352.67	-260.79	40.3500371	-104.7275708	1.44	
7863.00	90.150	359.770	6992.02	455.88	445.67	-260.30	40.3502924	-104.7275661	1.14	
7957.00	89.450	359.410	6992.35	549.82	539.67	-260.97	40.3505504	-104.7275656	0.84	
8050.00	89.570	359.530	6993.14	642.78	632.66	-261.83	40.3508057	-104.7275658	0.18	
8144.00	89.940	359.560	6993.54	736.72	726.65	-262.58	40.3510637	-104.7275655	0.39	
8238.00	89.630	359.480	6993.90	830.67	820.65	-263.37	40.3513217	-104.7275654	0.34	
8331.00	90.220	359.900	6994.02	923.62	913.65	-263.87	40.3515770	-104.7275643	0.78	
8426.00	90.590	0.050	6993.35	1018.54	1008.65	-263.91	40.3518378	-104.7275615	0.42	
8520.00	90.180	358.530	6992.72	1112.49	1102.63	-265.08	40.3520958	-104.7275627	1.67	
8614.00	90.220	359.590	6992.39	1206.46	1196.62	-266.62	40.3523538	-104.7275653	1.13	
8708.00	90.090	359.070	6992.13	1300.42	1290.61	-267.72	40.3526118	-104.7275663	0.57	
8801.00	90.180	359.870	6991.91	1393.38	1383.61	-268.58	40.3528671	-104.7275665	0.87	
8895.00	90.310	359.780	6991.51	1487.31	1477.60	-268.87	40.3531251	-104.7275646	0.17	
8988.00	90.060	359.480	6991.21	1580.26	1570.60	-269.47	40.3533804	-104.7275638	0.42	Tie On
9088.00	88.161	1.803	6992.76	1680.10	1670.57	-268.35	40.3536547	-104.7275567	3.00	
9096.48	88.000	2.000	6993.05	1688.55	1679.04	-268.07	40.3536780	-104.7275554	3.00	End of 3D Arc
9188.00	87.181	3.638	6996.90	1779.62	1770.37	-263.57	40.3539285	-104.7275364	2.00	
9208.20	87.000	4.000	6997.92	1799.67	1790.50	-262.23	40.3539837	-104.7275310	2.00	End of 3D Arc
9288.00	87.000	4.000	7002.10	1878.88	1869.99	-256.67	40.3542018	-104.7275086	0.00	
9303.20	87.000	4.000	7002.89	1893.96	1885.13	-255.61	40.3542434	-104.7275043	0.00	End of Tangent
9388.00	87.802	2.504	7006.74	1978.27	1969.71	-250.80	40.3544754	-104.7274844	2.00	
9488.00	88.749	0.742	7009.75	2077.99	2069.62	-247.97	40.3547495	-104.7274711	2.00	
9588.00	89.697	358.980	7011.11	2177.90	2169.60	-248.22	40.3550240	-104.7274689	2.00	
9641.56	90.205	358.037	7011.15	2231.45	2223.15	-249.61	40.3551710	-104.7274722	2.00	3D Arc (J)
9688.00	90.205	358.037	7010.99	2277.89	2269.56	-251.20	40.3552984	-104.7274765	0.00	
9788.00	90.205	358.037	7010.63	2377.89	2369.50	-254.62	40.3555728	-104.7274856	0.00	

WELLPATH DATA (183 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
9888.00	90.205	358.037	7010.27	2477.88	2469.44	-258.05	40.3558472	-104.7274948	0.00	
9988.00	90.205	358.037	7009.91	2577.88	2569.38	-261.47	40.3561216	-104.7275039	0.00	
10088.00	90.205	358.037	7009.55	2677.88	2669.32	-264.90	40.3563960	-104.7275131	0.00	
10188.00	90.205	358.037	7009.19	2777.88	2769.26	-268.32	40.3566704	-104.7275223	0.00	
10288.00	90.205	358.037	7008.84	2877.87	2869.20	-271.75	40.3569448	-104.7275314	0.00	
10388.00	90.205	358.037	7008.48	2977.87	2969.14	-275.17	40.3572192	-104.7275406	0.00	
10488.00	90.205	358.037	7008.12	3077.87	3069.08	-278.60	40.3574936	-104.7275498	0.00	
10588.00	90.205	358.037	7007.76	3177.87	3169.02	-282.02	40.3577680	-104.7275589	0.00	
10688.00	90.205	358.037	7007.40	3277.86	3268.96	-285.45	40.3580424	-104.7275681	0.00	
10788.00	90.205	358.037	7007.04	3377.86	3368.90	-288.87	40.3583168	-104.7275773	0.00	
10888.00	90.205	358.037	7006.69	3477.86	3468.85	-292.30	40.3585912	-104.7275864	0.00	
10988.00	90.205	358.037	7006.33	3577.86	3568.79	-295.72	40.3588656	-104.7275956	0.00	
11088.00	90.205	358.037	7005.97	3677.85	3668.73	-299.14	40.3591400	-104.7276047	0.00	
11188.00	90.205	358.037	7005.61	3777.85	3768.67	-302.57	40.3594144	-104.7276139	0.00	
11288.00	90.205	358.037	7005.25	3877.85	3868.61	-305.99	40.3596888	-104.7276231	0.00	
11388.00	90.205	358.037	7004.89	3977.84	3968.55	-309.42	40.3599632	-104.7276322	0.00	
11488.00	90.205	358.037	7004.54	4077.84	4068.49	-312.84	40.3602376	-104.7276414	0.00	
11588.00	90.205	358.037	7004.18	4177.84	4168.43	-316.27	40.3605120	-104.7276506	0.00	
11688.00	90.205	358.037	7003.82	4277.84	4268.37	-319.69	40.3607864	-104.7276597	0.00	
11788.00	90.205	358.037	7003.46	4377.83	4368.31	-323.12	40.3610608	-104.7276689	0.00	
11888.00	90.205	358.037	7003.10	4477.83	4468.25	-326.54	40.3613352	-104.7276781	0.00	



Planned Wellpath Report

CAPITOL 07N ST01 (Rev-A.0) PWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	CAPITOL 07N ST01
Field	WELD COUNTY (NAD83/GRID)	UWI/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 07N ST01 PWB
Slot	SLOT#07 CAPITOL 07N (227'FSL & 2355'FWL,SEC.36)	Sidetrack from	CAPITOL 07N OWB AWP at 8988.00 MD

WELLPATH DATA (183 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11988.00	90.205	358.037	7002.74	4577.83	4568.19	-329.97	40.3616096	-104.7276872	0.00	
11988.98	90.205	358.037	7002.74 ¹	4578.81	4569.17	-330.00	40.3616123	-104.7276873	0.00	AC Inflection/ Return to Plan
12054.42	90.205	359.346	7002.51	4644.23	4634.59	-331.49	40.3617919	-104.7276906	2.00	3D Arc (J)
12088.00	90.205	359.346	7002.39	4677.80	4668.17	-331.88	40.3618841	-104.7276910	0.00	
12188.00	90.205	359.346	7002.03	4777.76	4768.16	-333.02	40.3621586	-104.7276919	0.00	
12288.00	90.205	359.346	7001.67	4877.71	4868.16	-334.16	40.3624331	-104.7276929	0.00	
12388.00	90.205	359.346	7001.31	4977.67	4968.15	-335.30	40.3627076	-104.7276939	0.00	
12488.00	90.205	359.346	7000.95	5077.63	5068.14	-336.44	40.3629821	-104.7276948	0.00	
12588.00	90.205	359.346	7000.59	5177.58	5168.14	-337.58	40.3632565	-104.7276958	0.00	
12688.00	90.205	359.346	7000.24	5277.54	5268.13	-338.72	40.3635310	-104.7276968	0.00	
12788.00	90.205	359.346	6999.88	5377.50	5368.12	-339.86	40.3638055	-104.7276977	0.00	
12888.00	90.205	359.346	6999.52	5477.45	5468.11	-341.00	40.3640800	-104.7276987	0.00	
12988.00	90.205	359.346	6999.16	5577.41	5568.11	-342.15	40.3643545	-104.7276997	0.00	
13088.00	90.205	359.346	6998.80	5677.37	5668.10	-343.29	40.3646290	-104.7277006	0.00	
13188.00	90.205	359.346	6998.45	5777.32	5768.09	-344.43	40.3649035	-104.7277016	0.00	
13288.00	90.205	359.346	6998.09	5877.28	5868.09	-345.57	40.3651780	-104.7277026	0.00	
13388.00	90.205	359.346	6997.73	5977.24	5968.08	-346.71	40.3654525	-104.7277036	0.00	
13488.00	90.205	359.346	6997.37	6077.19	6068.07	-347.85	40.3657269	-104.7277045	0.00	
13588.00	90.205	359.346	6997.01	6177.15	6168.06	-348.99	40.3660014	-104.7277055	0.00	
13688.00	90.205	359.346	6996.65	6277.11	6268.06	-350.13	40.3662759	-104.7277065	0.00	
13788.00	90.205	359.346	6996.30	6377.06	6368.05	-351.27	40.3665504	-104.7277074	0.00	
13888.00	90.205	359.346	6995.94	6477.02	6468.04	-352.41	40.3668249	-104.7277084	0.00	
13988.00	90.205	359.346	6995.58	6576.98	6568.04	-353.56	40.3670994	-104.7277094	0.00	
14088.00	90.205	359.346	6995.22	6676.93	6668.03	-354.70	40.3673739	-104.7277103	0.00	
14188.00	90.205	359.346	6994.86	6776.89	6768.02	-355.84	40.3676484	-104.7277113	0.00	
14288.00	90.205	359.346	6994.51	6876.85	6868.01	-356.98	40.3679228	-104.7277123	0.00	
14388.00	90.205	359.346	6994.15	6976.80	6968.01	-358.12	40.3681973	-104.7277132	0.00	
14488.00	90.205	359.346	6993.79	7076.76	7068.00	-359.26	40.3684718	-104.7277142	0.00	
14588.00	90.205	359.346	6993.43	7176.72	7167.99	-360.40	40.3687463	-104.7277152	0.00	
14688.00	90.205	359.346	6993.07	7276.67	7267.99	-361.54	40.3690208	-104.7277162	0.00	
14788.00	90.205	359.346	6992.72	7376.63	7367.98	-362.68	40.3692953	-104.7277171	0.00	
14888.00	90.205	359.346	6992.36	7476.59	7467.97	-363.82	40.3695698	-104.7277181	0.00	
14988.00	90.205	359.346	6992.00	7576.54	7567.96	-364.96	40.3698443	-104.7277191	0.00	
15088.00	90.205	359.346	6991.64	7676.50	7667.96	-366.11	40.3701188	-104.7277200	0.00	
15188.00	90.205	359.346	6991.28	7776.46	7767.95	-367.25	40.3703932	-104.7277210	0.00	
15288.00	90.205	359.346	6990.92	7876.41	7867.94	-368.39	40.3706677	-104.7277220	0.00	
15388.00	90.205	359.346	6990.57	7976.37	7967.94	-369.53	40.3709422	-104.7277229	0.00	
15488.00	90.205	359.346	6990.21	8076.33	8067.93	-370.67	40.3712167	-104.7277239	0.00	
15588.00	90.205	359.346	6989.85	8176.28	8167.92	-371.81	40.3714912	-104.7277249	0.00	
15688.00	90.205	359.346	6989.49	8276.24	8267.91	-372.95	40.3717657	-104.7277258	0.00	
15788.00	90.205	359.346	6989.13	8376.20	8367.91	-374.09	40.3720402	-104.7277268	0.00	
15888.00	90.205	359.346	6988.78	8476.15	8467.90	-375.23	40.3723147	-104.7277278	0.00	
15988.00	90.205	359.346	6988.42	8576.11	8567.89	-376.37	40.3725892	-104.7277288	0.00	

WELLPATH DATA (183 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16088.00	90.205	359.346	6988.06	8676.07	8667.89	-377.52	40.3728636	-104.7277297	0.00	
16188.00	90.205	359.346	6987.70	8776.02	8767.88	-378.66	40.3731381	-104.7277307	0.00	
16288.00	90.205	359.346	6987.34	8875.98	8867.87	-379.80	40.3734126	-104.7277317	0.00	
16388.00	90.205	359.346	6986.98	8975.94	8967.86	-380.94	40.3736871	-104.7277326	0.00	
16488.00	90.205	359.346	6986.63	9075.89	9067.86	-382.08	40.3739616	-104.7277336	0.00	
16588.00	90.205	359.346	6986.27	9175.85	9167.85	-383.22	40.3742361	-104.7277346	0.00	
16688.00	90.205	359.346	6985.91	9275.81	9267.84	-384.36	40.3745106	-104.7277355	0.00	
16788.00	90.205	359.346	6985.55	9375.76	9367.84	-385.50	40.3747851	-104.7277365	0.00	
16888.00	90.205	359.346	6985.19	9475.72	9467.83	-386.64	40.3750595	-104.7277375	0.00	
16942.08	90.205	359.346	6985.00 ²	9529.78	9521.91	-387.26	40.3752080	-104.7277380	0.00	BHL



Planned Wellpath Report

CAPITOL 07N ST01 (Rev-A.0) PWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	CAPITOL 07N ST01
Field	WELD COUNTY (NAD83/GRID)	UWI/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 07N ST01 PWB
Slot	SLOT#07 CAPITOL 07N (227'FSL & 2355'FWL,SEC.36)	Sidetrack from	CAPITOL 07N OWB AWP at 8988.00 MD

HOLE & CASING SECTIONS - Ref Wellbore: CAPITOL 07N ST01 PWB Ref Wellpath: CAPITOL 07N ST01 (Rev-A.0) PWP

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
8 1/2in Open Hole	8988.00	16942.08	7954.08	6991.21	6985.00	1570.60	-269.47	9521.91	-387.26

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	-3749.90	2504.22	3218050.25	1367194.45	40.3387098	-104.7177809	polygon
	2D Polygon:: dimensions not calculated								
Sec.06-T04N-R65W	N/A	-38.00	-3749.90	2504.22	3218050.25	1367194.45	40.3387098	-104.7177809	polygon
	2D Polygon:: dimensions not calculated								
Sec.25-T05N-R66W	N/A	-38.00	-3749.90	2504.22	3218050.25	1367194.45	40.3387098	-104.7177809	polygon
	2D Polygon:: dimensions not calculated								
Sec.30-T05N-R65W	N/A	-38.00	-3749.90	2504.22	3218050.25	1367194.45	40.3387098	-104.7177809	polygon
	2D Polygon:: dimensions not calculated								
Sec.31-T05N-R65W	N/A	-38.00	-3749.90	2504.22	3218050.25	1367194.45	40.3387098	-104.7177809	polygon
	2D Polygon:: dimensions not calculated								
Sec.36-T05N-R66W	N/A	-38.00	-3749.90	2504.22	3218050.25	1367194.45	40.3387098	-104.7177809	polygon
	2D Polygon:: dimensions not calculated								
Sec.24-T05N-R66W	N/A	-6.00	82.76	-35.20	3215510.94	1371026.94	40.3492909	-104.7267699	polygon
	2D Polygon:: dimensions not calculated								
2) CAPITOL 07N BHL Rev-5 (842'FNL & 1982'FWL Sec.25)	16942.08	6985.00	9521.91	-387.26	3215158.90	1380465.67	40.3752080	-104.7277380	point
1) AC Inflection/ Return to Plan	11988.98	7002.74	4569.17	-330.00	3215216.16	1375513.15	40.3616123	-104.7276873	point
HORII #1 No Go Zone (1500'Radius)	N/A	7099.00	11024.87	-456.63	3215089.53	1381968.57	40.3793350	-104.7279400	circle
	2D Circle: radius 1500.								
Capitol Hardline (200'N/S&300'E/W)	N/A	7199.00	69.01	-29.31	3215516.83	1371013.18	40.3492530	-104.7267492	polygon
	2D Polygon:: dimensions not calculated								
Capitol Parcel 17	N/A	7200.00	-13.82	5.86	3215552.00	1370930.36	40.3490248	-104.7266256	polygon
	2D Polygon:: dimensions not calculated								

SURVEY PROGRAM SPECIFICATION

Sec. Num	Sec. Size [in]	Course Len. [ft]	Tool Type	Tool Error Model Name	Survey Interval		Override Interval			Wellbore
					Start MD [ft]	End MD [ft]	Override Previous	Start MD [ft]	End MD [ft]	
1		N/A	OWSG MWD rev2	OWSG MWD rev2 - Standard	25.00	1559.00	No			CAPITOL 07N OWB AWB
Comments: 13.5 Surface Hole OWSG MWD rev2 - Standard										
2		N/A	OWSG MWD rev2	OWSG MWD rev2 (MS+IFR1)	1559.00	8988.00	No			CAPITOL 07N OWB AWB

SURVEY PROGRAM SPECIFICATION										
Sec. Num	Sec. Size [in]	Course Len. [ft]	Tool Type	Tool Error Model Name	Survey Interval		Override Interval			Wellbore
					Start MD [ft]	End MD [ft]	Override Previous	Start MD [ft]	End MD [ft]	
Comments: 8.5" Lucida OWSG MWD rev2 (MS+IFR1) <1673' - 9364'>										
3	8 1/2	100.00	OWSG MWD rev2	OWSG MWD rev2 + IFR1	8988.00	16942.08	No			CAPITOL 07N ST01 PWB



Planned Wellpath Report

CAPITOL 07N ST01 (Rev-A.0) PWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	CAPITOL 07N ST01
Field	WELD COUNTY (NAD83/GRID)	UWI/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 07N ST01 PWB
Slot	SLOT#07 CAPITOL 07N (227'FSL & 2355'FWL,SEC.36)	Sidetrack from	CAPITOL 07N OWB AWP at 8988.00 MD

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1673.00	6.190	202.950	1663.84	First BH OWB Survey

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
8988.00	90.060	359.480	6991.21	Tie On
9096.48	88.000	2.000	6993.05	End of 3D Arc
9208.20	87.000	4.000	6997.92	End of 3D Arc
9303.20	87.000	4.000	7002.89	End of Tangent
9641.56	90.205	358.037	7011.15	3D Arc (J)
11988.98	90.205	358.037	7002.74	AC Inflection/ Return to Plan
12054.42	90.205	359.346	7002.51	3D Arc (J)
16942.08	90.205	359.346	6985.00	BHL



Closest Approach Clearance Summary Report

CAPITOL 07N ST01 (Rev-A.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)
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REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	CAPITOL 07N ST01
Field	WELD COUNTY (NAD83/GRID)	UWI/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 07N ST01 PWB
Slot	SLOT#07 CAPITOL 07N (227'FSL & 2355'FWL,SEC.36)	Sidetrack from	CAPITOL 07N OWB AWP at 8988.00 MD

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet [2231]	Software System	WellArchitect® 7.0
North Reference	Grid	Report Generated By	Guenaler on 2025-07-30 at 5:54:48 PM
Scale	0.999958	Last Updated	2025-07-30
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	-82.76	35.20	3215546.14	1370944.18	40°20'56.6264"N	104°43'35.9263"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#07 CAPITOL 07N (227'FSL & 2355'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
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

PROXIMITY-SCAN RULE

Rule Name	Purpose	Type	Plane	Limit	Warning	SD	σ method	ProjUncert	SM	HC (default)	Surf unc
SPE WPTS Stop Drilling HSE Risk (2017)	HSE	Ratio	Closest Approach	1.00	1.10	3.50	RSS	1.64ft	0.98ft	yes (36in)	yes

Dist - (RefHC+OffHC) - Cone - SM / SD * RSS(RefPosUncert,OffPosUncert,ProjUncert)

SURVEY PROGRAM SPECIFICATION										
Sec. Num	Sec. Size [in]	Course Len. [ft]	Tool Type	Tool Error Model Name	Survey Interval		Override Interval			Wellbore
					Start MD [ft]	End MD [ft]	Override Previous	Start MD [ft]	End MD [ft]	
1		N/A	OWSG MWD rev2	OWSG MWD rev2 - Standard	25.00	1559.00	No			CAPITOL 07N OWB AWB
			Comments: 13.5 Surface Hole OWSG MWD rev2 - Standard							
2		N/A	OWSG MWD rev2	OWSG MWD rev2 (MS+IFR1)	1559.00	8988.00	No			CAPITOL 07N OWB AWB
			Comments: 8.5" Lucida OWSG MWD rev2 (MS+IFR1) <1673' - 9364'>							
3	8 1/2	100.00	OWSG MWD rev2	OWSG MWD rev2 + IFR1	8988.00	16942.08	No			CAPITOL 07N ST01 PWB



Closest Approach Clearance Summary Report

CAPITOL 07N ST01 (Rev-A.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)
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REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	CAPITOL 07N ST01
Field	WELD COUNTY (NAD83/GRID)	UWI/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 07N ST01 PWB
Slot	SLOT#07 CAPITOL 07N (227'FSL & 2355'FWL,SEC.36)	Sidetrack from	CAPITOL 07N OWB AWP at 8988.00 MD

CALCULATION RANGE & CUTOFF

From: 25.00ft MD	To: 16942.08ft MD	C-C Cutoff: (none)
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OFFSET WELL CLEARANCE SUMMARY (179 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.36-T05N-R66W	SLOT#07 CAPITOL 07N (227'FSL & 2355'FWL,SEC.36)	CAPITOL 07N OWB	CAPITOL 07N OWB AWB	CAPITOL 07N OWB AWP	Drilling	8988.00	0.00	8988.00	8988.01	-0.11	8988.01	FAIL
Blackburn Offsets	(ANDERSON-COOMBS 1) (05-123-11649)	ANDERSON-COOMBS 1	ANDERSON-COOMBS 1	OWB\OWB	Abandoned	14549.36	37.67	14549.36	14549.36	0.00	14549.36	FAIL
Blackburn Offsets	(STATE-ELK 1) (05-123-12916)	STATE-ELK 1	STATE-ELK 1	OWB\OWB	Abandoned	10681.25	198.64	10681.25	10681.23	0.02	10681.23	FAIL
Blackburn Offsets	(HILL STATE 18-36) (05-123-22263)	HILL STATE 18-36	HILL STATE 18-36	OWB\OWB	Abandoned	11164.46	568.22	11164.46	11164.30	0.07	11164.30	FAIL
Blackburn Offsets	(CURTIS UNIT 1) (05-123-11914)	CURTIS UNIT 1	CURTIS UNIT 1	OWB\OWB	Abandoned	13101.29	1298.81	13101.29	13100.49	0.15	13100.49	FAIL
Blackburn Offsets	(ANDERSON COOMBS 6) (05-123-12852)	ANDERSON COOMBS 6	ANDERSON COOMBS 6	OWB\OWB	Abandoned	16942.08	1367.36	16942.08	16942.08	0.16	16942.08	FAIL
Blackburn Offsets	(ISHIGURO 5) (05-123-12892)	ISHIGURO 5	ISHIGURO 5	OWB\OWB	Abandoned	10657.65	1440.01	10657.65	10656.60	0.17	10656.60	FAIL
Blackburn Offsets	(PEPPLER 3-36) (05-123-13289)	PEPPLER 3-36	PEPPLER 3-36	OWB\OWB	Suspended	10205.95	1562.93	10205.95	10204.74	0.18	10204.74	FAIL
Blackburn Offsets	(REEVE, FREEDA 2-1) (05-123-14918)	REEVE, FREEDA 2-1	REEVE, FREEDA 2-1	OWB\OWB	Abandoned	8988.00	2853.18	8988.00	8988.00	0.33	8988.00	FAIL
Blackburn Offsets	(ISHIGURO 2) (05-123-12900)	ISHIGURO 2	ISHIGURO 2	OWB\OWB	Abandoned	12096.80	37.15	12096.80	12096.61	0.38	12096.61	FAIL
Blackburn Offsets	(ANDERSON-COOMBS 2) (05-123-12848)	ANDERSON-COOMBS 2	ANDERSON-COOMBS 2	OWB\OWB	Abandoned	15838.06	65.55	15838.06	15838.69	0.42	15838.69	FAIL
Blackburn Offsets	(CUNNINGHAM UNIT 1) (05-123-11835)	CUNNINGHAM UNIT 1	CUNNINGHAM UNIT 1	OWB\OWB	Abandoned	14395.05	3929.94	14395.05	14387.35	0.46	14387.35	FAIL
Blackburn Offsets	(VAUGHAN 12-30) (05-123-12596)	VAUGHAN 12-30	VAUGHAN 12-30	OWB\OWB	Abandoned	15588.01	4174.94	15588.01	15579.36	0.49	15579.36	FAIL
Blackburn Offsets	(NOE 1-30) (05-123-13288)	NOE 1-30	NOE 1-30	OWB\OWB	Abandoned	12975.30	4227.02	12975.30	12966.33	0.49	12966.33	FAIL
Blackburn Offsets	(GREEN 1) (05-123-11874)	GREEN 1	GREEN 1	OWB\OWB	Abandoned	13237.11	57.24	13237.11	13238.07	0.50	13238.07	FAIL
Blackburn Offsets	(STENZEL 1 - 31) (05-123-13295)	STENZEL 1 - 31	STENZEL 1 - 31	OWB\OWB	Abandoned	11912.32	5069.80	11912.32	11899.92	0.59	11899.92	FAIL
Blackburn Offsets	(SYLVESTER 31-6H5) (05-123-18190)	SYLVESTER 31-6H5	SYLVESTER 31-6H5	OWB\OWB	Abandoned	10466.44	5292.99	10466.44	10452.22	0.62	10452.22	FAIL
SEC.24-T5N-R66W	SLOT#12 HORII #1 (05-123-11135) PA	HORII #1	HORII #1 AWB	HORII #1 AWP	Abandoned	16942.08	1504.56	16942.08	16942.08	0.70	16942.08	FAIL
Blackburn Offsets	(GEMINI K 1-14) (05-123-13870)	GEMINI K 1-14	GEMINI K 1-14	OWB\OWB	Abandoned	8988.00	6473.98	8988.00	8988.00	0.75	8988.00	FAIL
Blackburn Offsets	(GEMINI G FEDERAL 6-33) (05-123-30688)	GEMINI G FEDERAL 6-33	GEMINI G FEDERAL 6-33	OWB\OWB	Suspended	8988.00	6620.89	8988.00	8988.00	0.77	8988.00	FAIL
Blackburn Offsets	(GEMINI K FEDERAL 1-16) (05-123-13872)	GEMINI K FEDERAL 1-16	GEMINI K FEDERAL 1-16	OWB\OWB	Abandoned	8988.00	6782.26	8988.00	8988.00	0.79	8988.00	FAIL
SEC.24-T5N-R66W	SLOT#10 DUELL #1 (05-123-11750) PA	DUELL #1	DUELL #1 AWB	DUELL #1 AWP	Abandoned	16942.08	2003.59	16942.08	16942.08	0.93	16942.08	FAIL
Blackburn Offsets	(BROWN 1) (05-123-12689)	BROWN 1	BROWN 1	OWB\OWB	Abandoned	9114.62	67.88	9114.62	9116.75	1.00	9116.75	WARN
Blackburn Offsets	(GOODNER 6-1) (05-123-13912)	GOODNER 6-1	GOODNER 6-1	OWB\OWB	Abandoned	8988.00	9383.80	8988.00	8988.00	1.09	8988.00	WARN
Blackburn Offsets	(SYLVESTER 36-9H6) (05-123-12507)	SYLVESTER 36-9H6	SYLVESTER 36-9H6	SYLVESTER 36-9H6 AWP	Producing / injecting	8988.00	2543.01	8988.00	9219.04	1.19	9219.04	PASS
Blackburn Offsets	(SYLVESTER 36-16H6) (05-123-18113)	SYLVESTER 36-16H6	SYLVESTER 36-16H6	SYLVESTER 36-16H6 AWP	Producing / injecting	8988.00	2740.86	8988.00	8988.00	1.29	8988.00	PASS
SEC.24-T5N-R66W	SLOT#13 HORII #2 (05-123-11748) PA	HORII #2	HORII #2 AWB	HORII #2 AWP	Abandoned	16942.08	2826.47	16942.08	16942.08	1.31	16942.08	PASS
SEC.36-T05N-R66W	SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)	CAPITOL 08N	CAPITOL 08N PWB	CAPITOL 08N (REV-E.0) PWP	Planned	9572.40	262.81	13988.00	16942.08	1.43	16942.08	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	16942.08	318.46	16942.08	16942.08	1.44	16942.08	PASS
SEC.36-T05N-R66W	SLOT#08 CAPITOL 08N (213'FSL & 2361'FWL,SEC.36)	CAPITOL 08N	CAPITOL 08N AWB	CAPITOL 08N AWP	Drilling	9733.49	267.68	16225.00	16925.00	1.56	16925.00	PASS
Blackburn Offsets	(ISHIGURO 17-36) (05-123-25592)	ISHIGURO 17-36	ISHIGURO 17-36	ISHIGURO 17-36 AWP	Producing / injecting	11364.60	1870.62	11364.60	11364.29	1.75	11364.29	PASS
Blackburn Offsets	(SYLVESTER 31-12H5) (05-123-18191)	SYLVESTER 31-12H5	SYLVESTER 31-12H5	SYLVESTER 31-12H5 AWP	Producing / injecting	9451.27	3958.36	9451.27	9475.72	1.85	9475.72	PASS
SEC.24-T5N-R66W	SLOT#15 RKW #1 (05-123-10763) PA	RKW #1	RKW #1 AWB	RKW #1 AWP	Abandoned	16942.08	4319.51	16942.08	16942.08	2.00	16942.08	PASS
SEC.24-T5N-R66W	SLOT#14 MEYER #1 (05-123-12474) PA	MEYER #1	MEYER #1 AWB	MEYER #1 AWP	Abandoned	16942.08	4593.19	16942.08	16942.08	2.12	16942.08	PASS
Blackburn Offsets	(ANDERSON COOMBS 3) (05-123-12849)	ANDERSON COOMBS 3	ANDERSON COOMBS 3	OWB\OWB	Abandoned	16942.08	186.78	16942.08	16942.08	2.60	16942.08	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	16942.08	623.59	16942.08	16942.08	2.82	16942.08	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	8988.00	7441.39	8988.00	8988.00	3.47	8988.00	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	8988.00	7551.34	8988.00	8988.00	3.52	8988.00	PASS

OFFSET WELL CLEARANCE SUMMARY (179 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 LIBRARY 20W-25-17) (05-123-45033)	AD FED LIBRARY 20W-25-17	AD FED LIBRARY 20W-25-17	OWB\OWB	Suspended	16942.08	1668.35	16942.08	16942.08	3.78	16942.08	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	16942.08	1483.52	16942.08	16718.28	3.83	16718.28	PASS
Blackburn Offsets	(AD FED DAIRY 20W-25-16) (05-123-45937)	AD FED DAIRY 20W-25-16	AD FED DAIRY 20W-25-16	OWB\OWB	Producing / injecting	16942.08	1853.55	16942.08	16942.08	3.95	16942.08	PASS
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	16942.08	1952.45	16942.08	16942.08	4.02	16942.08	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	16942.08	2172.67	16942.08	16942.08	4.15	16942.08	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	16942.08	937.82	16942.08	16942.08	4.26	16942.08	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	16942.08	2354.50	16942.08	16942.08	4.35	16942.08	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	16942.08	2522.76	16942.08	16942.08	4.56	16942.08	PASS
Blackburn Offsets	(CURTIS 23-25) (05-123-31134)	CURTIS 23-25	CURTIS 23-25	OWB\OWB	Producing / injecting	13904.51	600.11	13904.51	13925.00	4.68	13925.00	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	16942.08	2809.24	16942.08	16942.08	4.92	16942.08	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	16942.08	2941.83	16942.08	16942.08	5.13	16942.08	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	16942.08	1247.12	16942.08	16942.08	5.66	16942.08	PASS
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	16942.08	3344.09	16942.08	16942.08	5.70	16942.08	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	16942.08	3566.24	16942.08	16942.08	6.00	16942.08	PASS
Blackburn Offsets	(CURTIS 36-25) (05-123-31207)	CURTIS 36-25	CURTIS 36-25	OWB\OWB	Producing / injecting	12611.93	695.70	12611.93	12635.01	6.34	12635.01	PASS
SEC.36-T05N-R66W	SLOT#02 CAPITOL 02N (296'FSL & 2323'FWL,SEC.36)	CAPITOL 02N	CAPITOL 02N PWB	CAPITOL 02N (REV-F.0) PWP	Planned	16942.08	1563.68	16942.08	16942.08	7.11	16942.08	PASS
Blackburn Offsets	(ISHIGURO 21-36) (05-123-28121)	ISHIGURO 21-36	ISHIGURO 21-36	OWB\OWB	Abandoned	11254.95	696.26	11254.95	11325.00	7.56	11325.00	PASS
Blackburn Offsets	(WASS 4) (05-123-11757)	WASS 4	WASS 4	OWB\OWB	Abandoned	16942.08	1345.61	16942.08	16942.08	7.82	16942.08	PASS
Blackburn Offsets	(ISHIGURO 25-36) (05-123-28120)	ISHIGURO 25-36	ISHIGURO 25-36	OWb\OWb	Producing / injecting	9962.73	733.81	9962.73	10061.80	7.93	10061.80	PASS
SEC.36-T05N-R66W	SLOT#01 CAPITOL 01N (310'FSL & 2317'FWL,SEC.36)	CAPITOL 01N	CAPITOL 01N PWB	CAPITOL 01N (REV-E.0) PWP	Planned	16942.08	1869.33	16942.08	16942.08	8.48	16942.08	PASS
Blackburn Offsets	(WASS 2) (05-123-11668)	WASS 2	WASS 2	OWB\OWB	Abandoned	15799.56	1334.12	15799.56	15925.00	8.69	15925.00	PASS



Closest Approach Clearance Summary Report

CAPITOL 07N ST01 (Rev-A.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)
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REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	CAPITOL 07N ST01
Field	WELD COUNTY (NAD83/GRID)	UWI/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 07N ST01 PWB
Slot	SLOT#07 CAPITOL 07N (227'FSL & 2355'FWL,SEC.36)	Sidetrack from	CAPITOL 07N OWB AWP at 8988.00 MD

CALCULATION RANGE & CUTOFF

From: 25.00ft MD	To: 16942.08ft MD	C-C Cutoff: (none)
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OFFSET WELL CLEARANCE SUMMARY (179 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 [ft]	Diverging from MD [ft]	Ref MD of Min Ratio [ft]	Min Ratio	Min Ratio Dvrg from [ft]	Rule Status
Blackburn Offsets	(ANDERSON COOMBS 5) (05-123-12851)	ANDERSON COOMBS 5	ANDERSON COOMBS 5	OWB\OWB	Abandoned	15891.68	1416.31	15891.68	16025.00	9.09	16125.00	PASS
Blackburn Offsets	(ANDERSON COOMBS 4) (05-123-12850)	ANDERSON COOMBS 4	ANDERSON COOMBS 4	OWB\OWB	Abandoned	14483.50	1388.51	14483.50	14625.00	10.44	14725.00	PASS
Blackburn Offsets	(CURTIS 15-25) (05-123-31132)	CURTIS 15-25	CURTIS 15-25	OWB\OWB	Abandoned	13334.81	1215.91	13334.81	13425.00	10.77	13525.00	PASS
Blackburn Offsets	(WASS 3X) (05-123-13279)	WASS 3X	WASS 3X	OWB\OWB	Abandoned	14497.97	1457.81	14497.97	14625.00	11.06	14725.00	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	16942.08	3735.39	16942.08	16942.08	13.30	16942.08	PASS
Blackburn Offsets	(WASS 5) (05-123-13781)	WASS 5	WASS 5	OWB\OWB	Abandoned	16921.95	2349.35	16921.95	16942.08	13.64	16942.08	PASS
Blackburn Offsets	(ISHIGURO 1) (05-123-11904)	ISHIGURO 1	ISHIGURO 1	OWB\OWB	Abandoned	11923.34	1313.96	11923.34	12125.00	13.94	12225.00	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	16942.08	3984.24	16942.08	16942.08	14.13	16942.08	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	16942.08	4183.81	16942.08	16942.08	14.87	16942.08	PASS
Blackburn Offsets	STATE-HUME #90750 (05-123-12899)	STATE-HUME #90750	STATE-HUME #90750	OWB\OWB	Abandoned	11764.89	1389.37	11764.89	11925.00	15.11	12025.00	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	16942.08	4308.64	16942.08	16942.08	15.21	16942.08	PASS
Blackburn Offsets	(KFKA J 25-13) (05-123-19224)	KFKA J 25-13	KFKA J 25-13	OWB\OWB	Abandoned	13072.81	1713.36	13072.81	13325.00	15.37	13525.00	PASS
Blackburn Offsets	(CAVANAGH 36-10H6) (05-123-18232)	CAVANAGH 36-10H6	CAVANAGH 36-10H6	OWB\OWB	Abandoned	9236.77	1073.68	9236.77	9252.65	15.82	9325.00	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	16942.08	4571.34	16942.08	16942.08	16.09	16942.08	PASS
Blackburn Offsets	(REHMER 36-14H6) (05-123-18686)	REHMER 36-14H6	REHMER 36-14H6	OWB\OWB	Abandoned	8988.00	1045.92	8988.00	9025.00	16.80	9025.00	PASS
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	16942.08	4805.58	16942.08	16942.08	16.89	16942.08	PASS
Blackburn Offsets	(WASS 6) (05-123-13265)	WASS 6	WASS 6	OWB\OWB	Abandoned	15619.48	2637.35	15619.48	16025.00	17.21	16425.00	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	16942.08	4917.68	16942.08	16942.08	17.30	16942.08	PASS
Blackburn Offsets	(CURTIS 37-25) (05-123-31136)	CURTIS 37-25	CURTIS 37-25	OWB\OWB	Abandoned	12589.76	1957.57	12589.76	12925.00	18.77	13225.00	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	8988.00	2118.47	8988.00	9025.00	19.22	9025.00	PASS
Blackburn Offsets	(WASS 1) (05-123-10976)	WASS 1	WASS 1	OWB\OWB	Abandoned	14423.48	2715.22	14423.48	14925.00	20.34	15425.00	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	16942.08	4816.77	16942.08	16942.08	21.90	16942.08	PASS
Blackburn Offsets	(ISHIGURO 24-36) (05-123-28119)	ISHIGURO 24-36	ISHIGURO 24-36	OWB\OWB	Abandoned	9891.69	2000.59	9891.69	10025.00	21.98	10225.00	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	16942.08	5649.47	16942.08	16942.08	22.32	16942.08	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	16942.08	5826.31	16942.08	16942.08	22.86	16942.08	PASS
Blackburn Offsets	(PEPLER 2-36) (05-123-14438)	PEPLER 2-36	PEPLER 2-36	OWB\OWB	Abandoned	9088.00	1582.91	9088.00	9128.21	23.49	9325.00	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	16942.08	6043.36	16942.08	16942.08	23.56	16942.08	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	16942.08	3446.34	16942.08	16942.08	24.39	16942.08	PASS

OFFSET WELL CLEARANCE SUMMARY (179 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	16942.08	6281.00	16942.08	16942.08	24.43	16942.08	PASS
Blackburn Offsets	(ISHIGURO 3) (05-123-12891)	ISHIGURO 3	ISHIGURO 3	OWB\OWB	Abandoned	11761.59	2593.90	11761.59	12425.00	27.49	13025.00	PASS
Blackburn Offsets	(ISHIGURO 30-31) (05-123-28189)	ISHIGURO 30-31	ISHIGURO 30-31	OWB\OWB	Producing / injecting	12388.72	3392.02	12388.72	13425.00	28.58	14225.00	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	16942.08	4446.61	16942.08	16942.08	29.94	16942.08	PASS
SEC.24-T5N-R66W	SLOT#11 DUELL #2 (05-123-12788) PA	DUELL #2	DUELL #2 AWB	DUELL #2 AWP	Abandoned	16942.08	3165.38	16942.08	16942.08	30.02	16942.08	PASS
Blackburn Offsets	(PEPPLER 1-36) (05-123-13270)	PEPPLER 1-36	PEPPLER 1-36	OWB\OWB	Abandoned	8988.00	1995.45	8988.00	9025.00	30.97	9025.00	PASS
Blackburn Offsets	(HAMBLEN 1-30) (05-123-13151) - Could not confirm gyro from ECMC	HAMBLEN 1-30	HAMBLEN 1-30	OWB\OWB	Abandoned	15562.50	5099.57	15562.50	16825.00	31.66	16925.00	PASS
Blackburn Offsets	(LOEFFLER K 01-67-1HN) (05-123-35835)	LOEFFLER K 01-67-1HN	LOEFFLER K 01-67-1HN	OWB\OWB	Suspended	8988.00	3443.06	8988.00	9025.00	32.19	9025.00	PASS
Blackburn Offsets	(ISHIGURO 6) (05-123-12893)	ISHIGURO 6	ISHIGURO 6	OWB\OWB	Abandoned	10516.41	2629.96	10516.41	11225.00	33.51	11925.00	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	8988.00	2796.30	8988.00	9025.00	35.48	9025.00	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	16942.08	5225.12	16942.08	16942.08	36.69	16942.08	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	16942.08	4969.08	16942.08	16942.08	37.23	16942.08	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	16942.08	4918.09	16942.08	16942.08	37.58	16942.08	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	8988.00	5812.97	8988.00	9025.00	38.04	9025.00	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	8988.00	4632.62	8988.00	8988.00	38.19	8988.00	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	8988.00	4109.76	8988.00	9025.00	38.74	9025.00	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	14027.24	5483.88	14027.24	16025.00	39.33	16825.00	PASS
Blackburn Offsets	(SYLVESTER F 31-32D) (05-123-33215)	SYLVESTER F 31-32D	SYLVESTER F 31-32D	OWB\OWB	Producing / injecting	9688.67	3190.94	9688.67	10425.00	39.46	11725.00	PASS
Blackburn Offsets	(FREEDA REEVE 4-1) (05-123-15319)	FREEDA REEVE 4-1	FREEDA REEVE 4-1	OWB\OWB	Abandoned	8988.00	2467.25	8988.00	9025.00	39.87	9025.00	PASS
Blackburn Offsets	(ISHIGURO 4) (05-123-12924)	ISHIGURO 4	ISHIGURO 4	OWB\OWB	Abandoned	11765.87	3993.17	11765.87	13325.00	39.90	14825.00	PASS
Blackburn Offsets	(LOEFFLER K 01-65HN) (05-123-37739)	LOEFFLER K 01-65HN	LOEFFLER K 01-65HN	OWB\OWB	Producing / injecting	8988.00	4356.81	8988.00	9025.00	40.56	9025.00	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	13190.64	5208.27	13190.64	15225.00	41.54	16825.00	PASS
Blackburn Offsets	(SYLVESTER 31-5H5) (05-123-18189) - Could not verify surveys	SYLVESTER 31-5H5	SYLVESTER 31-5H5	OWB\OWB	Abandoned	10380.43	3951.98	10380.43	12125.00	42.83	13625.00	PASS
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	16942.08	4127.73	16942.08	16942.08	43.72	16942.08	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	16942.08	5764.68	16942.08	16942.08	44.13	16942.08	PASS
Blackburn Offsets	(COMMONS Z2 2-2-06) (05-123-26712)	COMMONS Z2 2-2-06	COMMONS Z2 2-2-06	OWB\OWB	Producing / injecting	8988.00	5454.44	8988.00	8988.00	44.44	16825.00	PASS
Blackburn Offsets	(EVANS INDUSTRIAL PARK 2) (05-123-16656)	EVANS INDUSTRIAL PARK 2	EVANS INDUSTRIAL PARK 2	OWB\OWB\	Abandoned	14416.21	6798.43	14416.21	16825.00	44.52	16925.00	PASS
Blackburn Offsets	(LOEFFLER 1-18) (05-123-11673)	LOEFFLER 1-18	LOEFFLER 1-18	OWB\OWB	Producing / injecting	8988.00	2850.80	8988.00	9025.00	47.90	9025.00	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	16942.08	4865.59	16942.08	16942.08	48.38	16942.08	PASS
Blackburn Offsets	(SYLVESTER 1-116) (05-123-18157)	SYLVESTER 1-116	SYLVESTER 1-116	OWB\OWB	Abandoned	8988.00	3373.88	8988.00	9025.00	48.39	9025.00	PASS
Blackburn Offsets	(SYLVESTER G 06-30D) (05-123-33120)	SYLVESTER G 06-30D	SYLVESTER G 06-30D	OWB\OWB	Producing / injecting	8988.00	3682.24	8988.00	9025.00	48.84	9025.00	PASS



Closest Approach Clearance Summary Report

CAPITOL 07N ST01 (Rev-A.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)
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REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	CAPITOL 07N ST01
Field	WELD COUNTY (NAD83/GRID)	UWI/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 07N ST01 PWB
Slot	SLOT#07 CAPITOL 07N (227'FSL & 2355'FWL,SEC.36)	Sidetrack from	CAPITOL 07N OWB AWP at 8988.00 MD

CALCULATION RANGE & CUTOFF

From: 25.00ft MD	To: 16942.08ft MD	C-C Cutoff: (none)
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OFFSET WELL CLEARANCE SUMMARY (179 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 [ft]	Diverging from MD [ft]	Ref MD of Min Ratio [ft]	Min Ratio	Min Ratio Dvrg from [ft]	Rule Status
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	13266.68	6656.54	13266.68	16425.00	49.08	16925.00	PASS
Blackburn Offsets	(BRANTNER 30-9) (05-123-13310)	BRANTNER 30-9	BRANTNER 30-9	OWB\OWB	Abandoned	14347.54	7850.11	14347.54	16925.00	50.03	16925.00	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	16942.08	4102.59	16942.08	16942.08	51.40	16942.08	PASS
Blackburn Offsets	(SYLVESTER F 31-20D) (05-123-33217)	SYLVESTER F 31-20D	SYLVESTER F 31-20D	OWB\OWB	Abandoned	9808.78	4589.54	9808.78	11925.00	52.11	14425.00	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	8988.00	4663.89	8988.00	9525.00	53.04	12325.00	PASS
Blackburn Offsets	(SYLVESTER F 31-33) (05-123-33216)	SYLVESTER F 31-33	SYLVESTER F 31-33	OWB\OWB	Producing / injecting	8988.00	3535.81	8988.00	9425.00	53.35	11625.00	PASS
Blackburn Offsets	(BRANTNER 30-16) (05-123-13282)	BRANTNER 30-16	BRANTNER 30-16	OWB\OWB	Abandoned	13326.28	8018.70	13326.28	16825.00	55.31	16925.00	PASS
Blackburn Offsets	(SANDAU X4 3-1-06) (05-123-26717)	SANDAU X4 3-1-06	SANDAU X4 3-1-06	OWB\OWB	Abandoned	8988.00	5703.09	8988.00	8988.00	55.48	16825.00	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	8988.00	5299.53	8988.00	9025.00	55.59	16825.00	PASS
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	16942.08	5695.25	16942.08	16942.08	55.82	16942.08	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	16942.08	5482.06	16942.08	16942.08	56.30	16942.08	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	16942.08	10927.92	16942.08	16942.08	58.89	16942.08	PASS
Blackburn Offsets	(FREEDA REEVE 3-1) (05-123-15083)	FREEDA REEVE 3-1	FREEDA REEVE 3-1	OWB\OWB	Abandoned	8988.00	3730.35	8988.00	9025.00	58.90	9025.00	PASS
Blackburn Offsets	(HAYS 31-2H5) (05-123-18211)	HAYS 31-2H5	HAYS 31-2H5	OWB\OWB	Abandoned	11316.94	6677.23	11316.94	15225.00	59.41	16825.00	PASS
Blackburn Offsets	(REHMER 1) (05-123-12607)	REHMER 1	REHMER 1	Wellbore #1OWB\OWB	Abandoned	8988.00	2941.50	8988.00	8988.55	61.01	9225.00	PASS
Blackburn Offsets	(REEVE, FREDA 1-1) (05-123-11780)	REEVE, FREDA 1-1	REEVE, FREDA 1-1	OWB\OWB	Abandoned	8988.00	3844.98	8988.00	9025.00	61.43	9025.00	PASS
Blackburn Offsets	(SYLVESTER 1) (05-123-12010)	SYLVESTER 1	SYLVESTER 1	OWB\OWB	Abandoned	8988.00	4076.94	8988.00	9025.00	61.93	12625.00	PASS
Blackburn Offsets	(LOEFFLER K 01-66-1HN) (05-123-35834)	LOEFFLER K 01-66-1HN	LOEFFLER K 01-66-1HN	OWB\OWB	Abandoned	8988.00	4481.98	8988.00	9025.00	62.63	9025.00	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	9425.00	5217.24	9425.00	11725.00	62.83	16025.00	PASS
Blackburn Offsets	(HAYS 31-1H5) (05-123-11327)	HAYS 31-1H5	HAYS 31-1H5	OWB\OWB	Abandoned	11604.79	7907.52	11604.79	16625.00	63.41	16925.00	PASS
Blackburn Offsets	(COLE X6 4-8-31) (05-123-31836)	COLE X6 4-8-31	COLE X6 4-8-31	OWB\OWB	Abandoned	8988.00	6158.09	8988.00	8988.00	66.97	16825.00	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	8988.00	5773.78	8988.00	9025.00	67.22	16825.00	PASS
Blackburn Offsets	(LOEFFLER #2-24) (05-123-11888)	LOEFFLER #2-24	LOEFFLER #2-24	OWB\OWB	Producing / injecting	8988.00	4044.34	8988.00	9025.00	68.13	9025.00	PASS
Blackburn Offsets	(UNION PACIFIC 1-1) (05-123-14011)	UNION PACIFIC 1-1	UNION PACIFIC 1-1	OWB\OWB	Abandoned	8988.00	4437.36	8988.00	9025.00	68.80	9025.00	PASS
Blackburn Offsets	(HAYS FEDERAL 31-8H5)(05-123-18213)	HAYS FEDERAL 31-8H5	HAYS FEDERAL 31-8H5	OWB\OWB	Abandoned	10224.29	7680.65	10224.29	15725.00	72.13	16925.00	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	9388.00	6507.02	9388.00	13325.00	73.18	16825.00	PASS
Blackburn Offsets	(ELLIS Y1 5-1-06) (05-123-25901)	ELLIS Y1 5-1-06	ELLIS Y1 5-1-06	OWB\OWB	Abandoned	8988.00	6814.82	8988.00	8988.00	75.31	16925.00	PASS
Blackburn Offsets	(GEMINI K1-11) (05-123-15177)	GEMINI K1-11	GEMINI K1-11	OWB\OWB	Suspended	8988.00	4766.09	8988.00	9025.00	76.08	9025.00	PASS
Blackburn Offsets	(GEMINI K1-12) (05-123-15197)	GEMINI K1-12	GEMINI K1-12	OWB\OWB	Suspended	8988.00	4963.50	8988.00	9025.00	78.99	9025.00	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	8988.00	7678.30	8988.00	9025.00	79.82	9025.00	PASS
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	8988.00	6558.27	8988.00	9006.63	80.26	16825.00	PASS
Blackburn Offsets	(MAIN Y3 6-8-31) (05-123-31835)	MAIN Y3 6-8-31	MAIN Y3 6-8-31	OWB\OWB	Suspended	8988.00	7129.71	8988.00	8996.11	81.91	16925.00	PASS
Blackburn Offsets	(FARMERS Y7 6-6-31) (05-123-25896)	FARMERS Y7 6-6-31	FARMERS Y7 6-6-31	OWB\OWB	Abandoned	8988.00	7264.79	9303.20	9025.00	82.88	16925.00	PASS
Blackburn Offsets	(MCCOUTCHEONS Y8 7-5-31) (05-123-25895)	MCCOUTCHEONS Y8 7-5-31	MCCOUTCHEONS Y8 7-5-31	OWB\OWB	Abandoned	9564.05	7726.38	9564.05	14525.00	83.69	16925.00	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	8988.00	7262.65	8988.00	8988.00	83.93	16925.00	PASS
Blackburn Offsets	(DABCO 1) (05-123-10955)	DABCO 1	DABCO 1	OWB\OWB	Abandoned	8988.00	5443.13	8988.00	9025.00	84.81	9025.00	PASS
Blackburn Offsets	(DABCO 2) (05-123-11528)	DABCO 2	DABCO 2	OWB\OWB	Abandoned	8988.00	6409.67	8988.00	9025.00	86.09	15725.00	PASS
Blackburn Offsets	(GEMINI K 1-10) (05-123-13869)	GEMINI K 1-10	GEMINI K 1-10	OWB\OWB	Abandoned	8988.00	5375.02	8988.00	9025.00	86.21	9025.00	PASS

OFFSET WELL CLEARANCE SUMMARY (179 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	(BALLFIELD Y6 7-7-31) (05-123-25897)	BALLFIELD Y6 7-7-31	BALLFIELD Y6 7-7-31	OWB\OWB	Abandoned	8988.00	7508.13	9225.00	15425.00	88.72	16925.00	PASS
Blackburn Offsets	(GEMINI K1-9) (05-123-13879)	GEMINI K1-9	GEMINI K1-9	OWB\OWB	Abandoned	8988.00	5733.19	8988.00	9025.00	89.86	9025.00	PASS
Blackburn Offsets	(GOODNER Y4 7-1-06) (05-123-25899)	GOODNER Y4 7-1-06	GOODNER Y4 7-1-06	OWB\OWB	Abandoned	8988.00	7401.14	8988.00	9001.92	93.11	16925.00	PASS
Blackburn Offsets	(H&S 1) (05-123-11529)	H&S 1	H&S 1	OWB\OWB	Abandoned	8988.00	6430.63	8988.00	9025.00	98.31	9025.00	PASS
Blackburn Offsets	(AMBER FEDERAL G06-21D) (05-123-34902)	AMBER FEDERAL G06-21D	AMBER FEDERAL G06-21D	OWB\OWB	Suspended	8988.00	7481.15	8988.00	9025.00	98.83	16825.00	PASS
Blackburn Offsets	(GEMINI K 1-13) (05-123-17669)	GEMINI K 1-13	GEMINI K 1-13	OWB\OWB	Abandoned	8988.00	6586.40	8988.00	9025.00	99.48	9025.00	PASS
Blackburn Offsets	(GEMINI K FEDERAL 1-15) (05-123-13871)	GEMINI K FEDERAL 1-15	GEMINI K FEDERAL 1-15	OWB\OWB	Abandoned	8988.00	6471.31	8988.00	9025.00	103.06	9025.00	PASS
Blackburn Offsets	(CURTIS G 6-8) (05-123-21981)	CURTIS G 6-8	CURTIS G 6-8	OWB\OWB	Abandoned	8988.00	8734.84	8988.00	12825.00	106.62	16825.00	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	8988.00	8439.85	8988.00	9025.00	106.69	9025.00	PASS
Blackburn Offsets	(AMBER FEDERAL G06-22D) (05-123-34904)	AMBER FEDERAL G06-22D	AMBER FEDERAL G06-22D	OWB\OWB	Suspended	8988.00	8522.43	8988.00	9025.00	110.62	16825.00	PASS
Blackburn Offsets	(AMBER G 05-32D) (05-123-34903)	AMBER G 05-32D	AMBER G 05-32D	OWB\OWB	Suspended	8988.00	9587.89	8988.00	9025.00	112.48	16825.00	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	8988.00	7247.87	8988.00	9025.00	112.81	16825.00	PASS
Blackburn Offsets	(CURTIS G 6-7) (05-123-19429)	CURTIS G 6-7	CURTIS G 6-7	OWB\OWB	Suspended	8988.00	7735.14	8988.00	9025.00	119.53	16825.00	PASS
Blackburn Offsets	(MCCARTHY 1) (05-123-10630)	MCCARTHY 1	MCCARTHY 1	OWB\OWB	Abandoned	8988.00	8214.55	8988.00	9025.00	128.82	16825.00	PASS
Blackburn Offsets	(DEVOTIE #1-6) (05-123-11773)	DEVOTIE #1-6	DEVOTIE #1-6	OWB\OWB	Abandoned	8988.00	8317.23	8988.00	9025.00	129.09	16825.00	PASS
SEC.36-T05N-R66W	SLOT#01 CAPITOL 01N (310'FSL & 2317'FWL,SEC.36)	CAPITOL 01N	CAPITOL 01N AWB	CAPITOL 01N AWP	Drilling	8988.00	5588.12	8988.00	13025.00	132.56	16825.00	PASS
SEC.36-T05N-R66W	SLOT#02 CAPITOL 02N (296'FSL & 2323'FWL,SEC.36)	CAPITOL 02N	CAPITOL 02N AWB	CAPITOL 02N AWP	Drilling	8988.00	5617.14	8988.00	13125.00	133.22	16825.00	PASS
SEC.36-T05N-R66W	SLOT#03 CAPITOL 03N (282'FSL & 2329'FWL,SEC.36)	CAPITOL 03N	CAPITOL 03N AWB	CAPITOL 03N AWP	Drilling	8988.00	5631.62	8988.00	13125.00	133.85	16825.00	PASS
SEC.36-T05N-R66W	SLOT#04 CAPITOL 04N (268'FSL & 2336'FWL,SEC.36)	CAPITOL 04N	CAPITOL 04N AWB	CAPITOL 04N AWP	Drilling	8988.00	5621.43	8988.00	13025.00	134.22	16825.00	PASS
SEC.36-T05N-R66W	SLOT#05 CAPITOL 05N (254'FSL & 2342'FWL,SEC.36)	CAPITOL 05N	CAPITOL 05N AWB	CAPITOL 05N AWP	Drilling	8988.00	5632.03	8988.00	13125.00	134.68	16825.00	PASS
SEC.36-T05N-R66W	SLOT#06 CAPITOL 06N (241'FSL & 2348'FWL,SEC.36)	CAPITOL 06N	CAPITOL 06N AWB	CAPITOL 06N AWP	Drilling	8988.00	5642.60	8988.00	13025.00	135.25	16825.00	PASS



Closest Approach Clearance Summary Report

CAPITOL 07N ST01 (Rev-A.0) PWP - SPE WPTS Stop Drilling HSE Risk (2017)
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REFERENCE WELLPATH IDENTIFICATION

Operator	PDC ENERGY INC	Well	CAPITOL 07N ST01
Field	WELD COUNTY (NAD83/GRID)	UWI/Legal	
Facility	SEC.36-T05N-R66W	Wellbore	CAPITOL 07N ST01 PWB
Slot	SLOT#07 CAPITOL 07N (227'FSL & 2355'FWL,SEC.36)	Sidetrack from	CAPITOL 07N OWB AWP at 8988.00 MD

CALCULATION RANGE & CUTOFF

From: 25.00ft MD	To: 16942.08ft MD	C-C Cutoff: (none)
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OFFSET WELL CLEARANCE SUMMARY (179 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	(DEVOTIE 2-6) (05-123-14919)	DEVOTIE 2-6	DEVOTIE 2-6	OWB\OWB	Abandoned	8988.00	9102.27	8988.00	9025.00	139.15	16825.00	PASS
Blackburn Offsets	(MERCURE 6-1) (05-123-13626)	MERCURE 6-1	MERCURE 6-1	OWB\OWB	Abandoned	8988.00	10132.63	8988.00	14725.00	156.66	16925.00	PASS