

PETROSHARE

Location: COLORADO Slot: SLOT#05 ACKARD NORTH 2-35-2CDH (600°FSL & 1995°FWL, SEC.02)
Field: ADAMS COUNTY (NAD83/ GRID NORTH) Well: ACKARD NORTH 2-35-2CDH
Facility: SEC.02-T03S-R66W Wellbore: ACKARD NORTH 2-35-2CDH PWB

Plot reference wellpath is ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (13KB) (RKB) * - Wellpath was transformed from a different geodetic datum
Measured depths are referenced to RIG (13KB) (RKB) North Reference: Grid north
RIG (13KB) (RKB) to Mean Sea Level: 5213 feet Scale: True distance
Mean Sea Level to Ground level (At Slot: SLOT#05 ACKARD NORTH 2-35-2CDH (600°FSL & 1995°FWL, SEC.02)): 0 feet Depths are in feet
Coordinates are in feet referenced to Slot Created by: cantrayal on 2017-10-24
Database: WellArchitectDB

Location Information

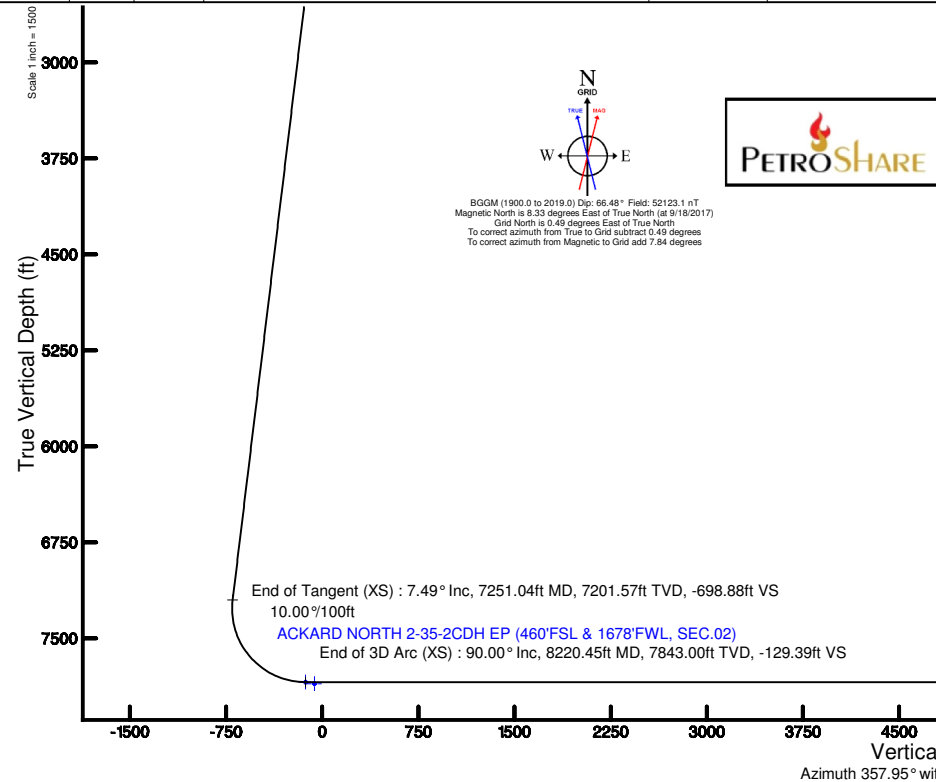
Facility Name				Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.02-T03S-R66W				3211634.960	1207893.832	39°54'05.673"N	104°44'44.357"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SLOT#05 ACKARD NORTH 2-35-2CDH (600°FSL & 1995°FWL, SEC.02)	0.11	59.99	3211694.946	1207893.946	39°54'05.669"N	104°44'43.588"W	
RIG (13KB) (RKB) to Ground level (At Slot: SLOT#05 ACKARD NORTH 2-35-2CDH (600°FSL & 1995°FWL, SEC.02))						5213ft	
Mean Sea Level to Ground level (At Slot: SLOT#05 ACKARD NORTH 2-35-2CDH (600°FSL & 1995°FWL, SEC.02))						0ft	
RIG (13KB) (RKB) to Mean Sea Level						5213ft	

Hole and Casing Sections

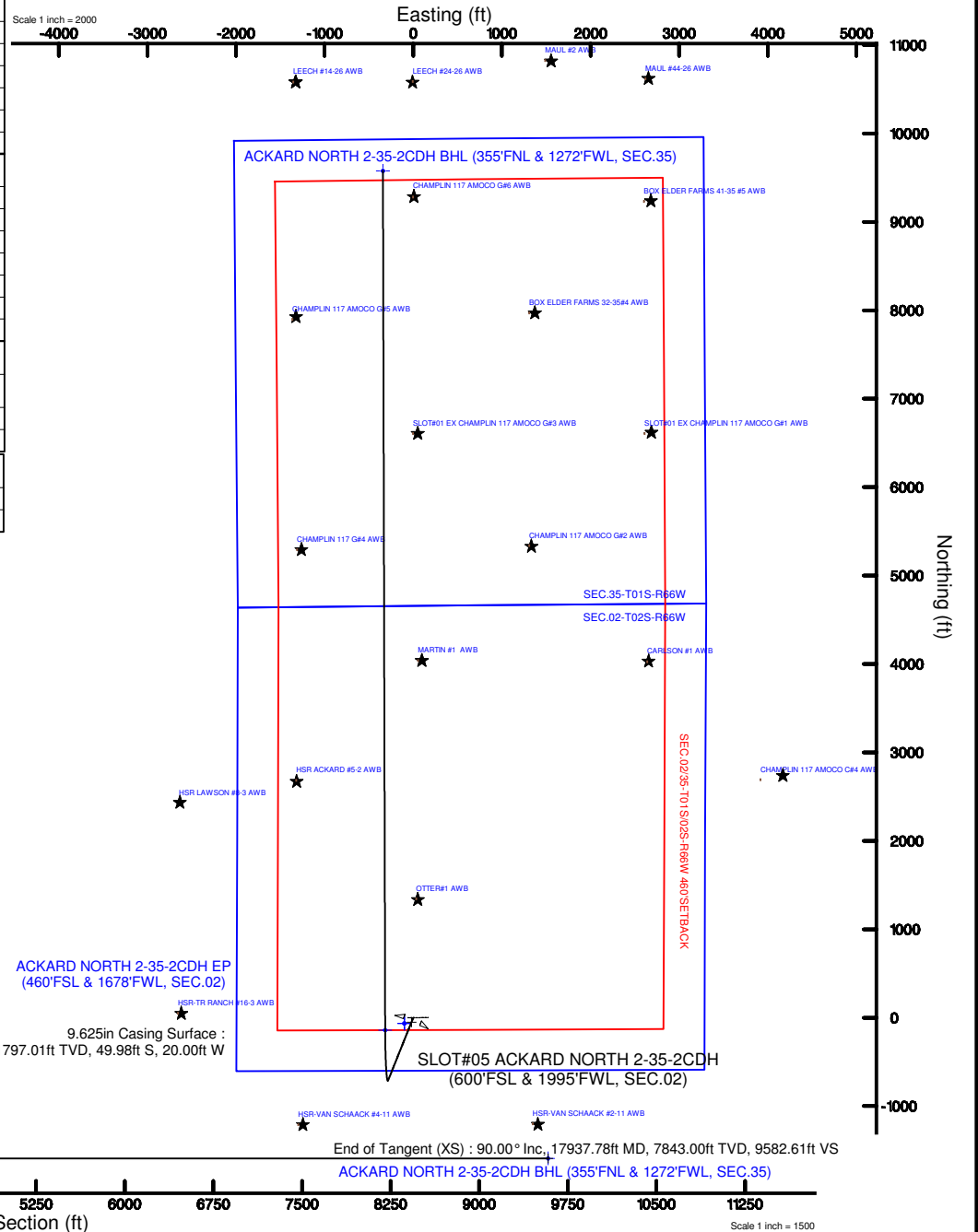
Name	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start Local N (ft)	Start Local E (ft)	End Local N (ft)	End Local E (ft)	Wellbore
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1797.01	0.00	0.00	-49.98	-20.00	ACKARD NORTH 2-35-2CDH PWB
8.5in Open Hole	1800.00	17937.78	16137.78	1797.01	7843.00	-49.98	-20.00	9576.50	-342.33	ACKARD NORTH 2-35-2CDH PWB

Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
13.00	19125.24	BHI NavTrak	Custom BHI NavTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gr model)		ACKARD NORTH 2-35-2CDH PWB



Scale 1 inch = 2000





Planned Wellpath Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.0
North Reference	Grid	User	Cantryat
Scale	0.999975	Report Generated	10/20/2017 at 10:17:12 AM
Convergence at slot	0.49° East	Database/Source file	WellArchitectDB/ACKARD_NORTH_2-35-2CDH_PWP_REV._A.0_.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.11	59.99	3211694.95	1207893.95	39°54'05.669"N	104°44'43.588"W
Facility Reference Pt			3211634.96	1207893.83	39°54'05.673"N	104°44'44.357"W
Field Reference Pt			3175478.75	1240632.48	39°59'31.992"N	104°52'25.320"W

WELLPATH DATUM

Calculation method	Minimum curvature	RIG (13'KB) (RKB) to Facility Vertical Datum	5213.00ft
Horizontal Reference Pt	Slot	RIG (13'KB) (RKB) to Mean Sea Level	5213.00ft
Vertical Reference Pt	RIG (13'KB) (RKB)	RIG (13'KB) (RKB) to Ground Level at Slot (SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02))	5213.00ft
MD Reference Pt	RIG (13'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	357.95°



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REFERENCE WELLPATH IDENTIFICATION			
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Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH DATA (196 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	201.808	0.00	0.00	0.00	0.00	39°54'05.669"N	104°44'43.588"W	0.00	
13.00	0.000	201.808	13.00	0.00	0.00	0.00	39°54'05.669"N	104°44'43.588"W	0.00	Tie On
113.00†	0.000	201.808	113.00	0.00	0.00	0.00	39°54'05.669"N	104°44'43.588"W	0.00	
213.00†	0.000	201.808	213.00	0.00	0.00	0.00	39°54'05.669"N	104°44'43.588"W	0.00	
313.00†	0.000	201.808	313.00	0.00	0.00	0.00	39°54'05.669"N	104°44'43.588"W	0.00	
413.00†	0.000	201.808	413.00	0.00	0.00	0.00	39°54'05.669"N	104°44'43.588"W	0.00	
513.00†	0.000	201.808	513.00	0.00	0.00	0.00	39°54'05.669"N	104°44'43.588"W	0.00	
613.00†	0.000	201.808	613.00	0.00	0.00	0.00	39°54'05.669"N	104°44'43.588"W	0.00	
713.00†	0.000	201.808	713.00	0.00	0.00	0.00	39°54'05.669"N	104°44'43.588"W	0.00	
813.00†	0.000	201.808	813.00	0.00	0.00	0.00	39°54'05.669"N	104°44'43.588"W	0.00	
913.00†	0.000	201.808	913.00	0.00	0.00	0.00	39°54'05.669"N	104°44'43.588"W	0.00	
1013.00†	0.000	201.808	1013.00	0.00	0.00	0.00	39°54'05.669"N	104°44'43.588"W	0.00	
1113.00†	0.000	201.808	1113.00	0.00	0.00	0.00	39°54'05.669"N	104°44'43.588"W	0.00	
1200.00	0.000	201.808	1200.00	0.00	0.00	0.00	39°54'05.669"N	104°44'43.588"W	0.00	End of Tangent
1213.00†	0.260	201.808	1213.00	-0.03	-0.03	-0.01	39°54'05.669"N	104°44'43.588"W	2.00	
1313.00†	2.260	201.808	1312.97	-2.04	-2.07	-0.83	39°54'05.649"N	104°44'43.598"W	2.00	
1413.00†	4.260	201.808	1412.80	-7.24	-7.35	-2.94	39°54'05.597"N	104°44'43.626"W	2.00	
1513.00†	6.260	201.808	1512.38	-15.62	-15.86	-6.35	39°54'05.513"N	104°44'43.671"W	2.00	
1574.38	7.488	201.808	1573.31	-22.34	-22.68	-9.07	39°54'05.446"N	104°44'43.707"W	2.00	End of Build (XS)
1613.00†	7.488	201.808	1611.61	-26.94	-27.35	-10.94	39°54'05.400"N	104°44'43.731"W	0.00	
1651.72†	7.488	201.808	1650.00	-31.56	-32.04	-12.82	39°54'05.354"N	104°44'43.756"W	0.00	Fox Hills
1713.00†	7.488	201.808	1710.75	-38.86	-39.45	-15.79	39°54'05.281"N	104°44'43.794"W	0.00	
1813.00†	7.488	201.808	1809.90	-50.78	-51.55	-20.63	39°54'05.162"N	104°44'43.858"W	0.00	
1913.00†	7.488	201.808	1909.05	-62.70	-63.65	-25.47	39°54'05.042"N	104°44'43.921"W	0.00	
2013.00†	7.488	201.808	2008.20	-74.62	-75.75	-30.31	39°54'04.923"N	104°44'43.985"W	0.00	
2113.00†	7.488	201.808	2107.34	-86.53	-87.84	-35.15	39°54'04.804"N	104°44'44.048"W	0.00	
2213.00†	7.488	201.808	2206.49	-98.45	-99.94	-39.99	39°54'04.685"N	104°44'44.112"W	0.00	
2313.00†	7.488	201.808	2305.64	-110.37	-112.04	-44.83	39°54'04.566"N	104°44'44.175"W	0.00	
2413.00†	7.488	201.808	2404.78	-122.29	-124.14	-49.67	39°54'04.447"N	104°44'44.238"W	0.00	
2513.00†	7.488	201.808	2503.93	-134.20	-136.24	-54.51	39°54'04.328"N	104°44'44.302"W	0.00	



Planned Wellpath Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)

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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH DATA (196 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2613.00†	7.488	201.808	2603.08	-146.12	-148.34	-59.35	39°54'04.208"N	104°44'44.365"W	0.00	
2713.00†	7.488	201.808	2702.23	-158.04	-160.44	-64.20	39°54'04.089"N	104°44'44.429"W	0.00	
2813.00†	7.488	201.808	2801.37	-169.96	-172.53	-69.04	39°54'03.970"N	104°44'44.492"W	0.00	
2913.00†	7.488	201.808	2900.52	-181.88	-184.63	-73.88	39°54'03.851"N	104°44'44.556"W	0.00	
3013.00†	7.488	201.808	2999.67	-193.79	-196.73	-78.72	39°54'03.732"N	104°44'44.619"W	0.00	
3113.00†	7.488	201.808	3098.82	-205.71	-208.83	-83.56	39°54'03.613"N	104°44'44.683"W	0.00	
3213.00†	7.488	201.808	3197.96	-217.63	-220.93	-88.40	39°54'03.493"N	104°44'44.746"W	0.00	
3313.00†	7.488	201.808	3297.11	-229.55	-233.03	-93.24	39°54'03.374"N	104°44'44.809"W	0.00	
3413.00†	7.488	201.808	3396.26	-241.47	-245.13	-98.08	39°54'03.255"N	104°44'44.873"W	0.00	
3513.00†	7.488	201.808	3495.41	-253.38	-257.22	-102.92	39°54'03.136"N	104°44'44.936"W	0.00	
3613.00†	7.488	201.808	3594.55	-265.30	-269.32	-107.76	39°54'03.017"N	104°44'45.000"W	0.00	
3713.00†	7.488	201.808	3693.70	-277.22	-281.42	-112.60	39°54'02.898"N	104°44'45.063"W	0.00	
3813.00†	7.488	201.808	3792.85	-289.14	-293.52	-117.45	39°54'02.779"N	104°44'45.127"W	0.00	
3913.00†	7.488	201.808	3891.99	-301.05	-305.62	-122.29	39°54'02.659"N	104°44'45.190"W	0.00	
4013.00†	7.488	201.808	3991.14	-312.97	-317.72	-127.13	39°54'02.540"N	104°44'45.253"W	0.00	
4113.00†	7.488	201.808	4090.29	-324.89	-329.82	-131.97	39°54'02.421"N	104°44'45.317"W	0.00	
4213.00†	7.488	201.808	4189.44	-336.81	-341.91	-136.81	39°54'02.302"N	104°44'45.380"W	0.00	
4313.00†	7.488	201.808	4288.58	-348.73	-354.01	-141.65	39°54'02.183"N	104°44'45.444"W	0.00	
4413.00†	7.488	201.808	4387.73	-360.64	-366.11	-146.49	39°54'02.064"N	104°44'45.507"W	0.00	
4513.00†	7.488	201.808	4486.88	-372.56	-378.21	-151.33	39°54'01.944"N	104°44'45.571"W	0.00	
4613.00†	7.488	201.808	4586.03	-384.48	-390.31	-156.17	39°54'01.825"N	104°44'45.634"W	0.00	
4713.00†	7.488	201.808	4685.17	-396.40	-402.41	-161.01	39°54'01.706"N	104°44'45.697"W	0.00	
4813.00†	7.488	201.808	4784.32	-408.32	-414.51	-165.86	39°54'01.587"N	104°44'45.761"W	0.00	
4913.00†	7.488	201.808	4883.47	-420.23	-426.60	-170.70	39°54'01.468"N	104°44'45.824"W	0.00	
5013.00†	7.488	201.808	4982.61	-432.15	-438.70	-175.54	39°54'01.349"N	104°44'45.888"W	0.00	
5113.00†	7.488	201.808	5081.76	-444.07	-450.80	-180.38	39°54'01.230"N	104°44'45.951"W	0.00	
5131.39†	7.488	201.808	5100.00	-446.26	-453.03	-181.27	39°54'01.208"N	104°44'45.963"W	0.00	Sussex / Shannon
5213.00†	7.488	201.808	5180.91	-455.99	-462.90	-185.22	39°54'01.110"N	104°44'46.015"W	0.00	
5313.00†	7.488	201.808	5280.06	-467.90	-475.00	-190.06	39°54'00.991"N	104°44'46.078"W	0.00	
5413.00†	7.488	201.808	5379.20	-479.82	-487.10	-194.90	39°54'00.872"N	104°44'46.141"W	0.00	



Planned Wellpath Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH DATA (196 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5513.00†	7.488	201.808	5478.35	-491.74	-499.19	-199.74	39°54'00.753"N	104°44'46.205"W	0.00	
5613.00†	7.488	201.808	5577.50	-503.66	-511.29	-204.58	39°54'00.634"N	104°44'46.268"W	0.00	
5713.00†	7.488	201.808	5676.65	-515.58	-523.39	-209.42	39°54'00.515"N	104°44'46.332"W	0.00	
5813.00†	7.488	201.808	5775.79	-527.49	-535.49	-214.27	39°54'00.396"N	104°44'46.395"W	0.00	
5913.00†	7.488	201.808	5874.94	-539.41	-547.59	-219.11	39°54'00.276"N	104°44'46.459"W	0.00	
6013.00†	7.488	201.808	5974.09	-551.33	-559.69	-223.95	39°54'00.157"N	104°44'46.522"W	0.00	
6113.00†	7.488	201.808	6073.24	-563.25	-571.79	-228.79	39°54'00.038"N	104°44'46.585"W	0.00	
6213.00†	7.488	201.808	6172.38	-575.17	-583.88	-233.63	39°53'59.919"N	104°44'46.649"W	0.00	
6313.00†	7.488	201.808	6271.53	-587.08	-595.98	-238.47	39°53'59.800"N	104°44'46.712"W	0.00	
6413.00†	7.488	201.808	6370.68	-599.00	-608.08	-243.31	39°53'59.681"N	104°44'46.776"W	0.00	
6513.00†	7.488	201.808	6469.82	-610.92	-620.18	-248.15	39°53'59.561"N	104°44'46.839"W	0.00	
6613.00†	7.488	201.808	6568.97	-622.84	-632.28	-252.99	39°53'59.442"N	104°44'46.903"W	0.00	
6713.00†	7.488	201.808	6668.12	-634.75	-644.38	-257.83	39°53'59.323"N	104°44'46.966"W	0.00	
6813.00†	7.488	201.808	6767.27	-646.67	-656.48	-262.68	39°53'59.204"N	104°44'47.030"W	0.00	
6913.00†	7.488	201.808	6866.41	-658.59	-668.57	-267.52	39°53'59.085"N	104°44'47.093"W	0.00	
7013.00†	7.488	201.808	6965.56	-670.51	-680.67	-272.36	39°53'58.966"N	104°44'47.156"W	0.00	
7113.00†	7.488	201.808	7064.71	-682.43	-692.77	-277.20	39°53'58.847"N	104°44'47.220"W	0.00	
7213.00†	7.488	201.808	7163.86	-694.34	-704.87	-282.04	39°53'58.727"N	104°44'47.283"W	0.00	
7251.04	7.488	201.808	7201.57	-698.88	-709.47	-283.88	39°53'58.682"N	104°44'47.307"W	0.00	End of Tangent (XS)
7313.00†	2.911	255.004	7263.29	-702.93	-713.63	-286.90	39°53'58.641"N	104°44'47.347"W	10.00	
7413.00†	9.669	343.085	7362.77	-695.36	-706.23	-291.81	39°53'58.715"N	104°44'47.409"W	10.00	
7508.62†	19.018	351.653	7455.31	-672.06	-683.08	-296.42	39°53'58.944"N	104°44'47.465"W	10.00	Niobrara A Chalk
7513.00†	19.451	351.851	7459.45	-670.62	-681.66	-296.63	39°53'58.958"N	104°44'47.468"W	10.00	
7530.41†	21.174	352.561	7475.77	-664.61	-675.67	-297.44	39°53'59.017"N	104°44'47.478"W	10.00	Niobrara A Marl
7613.00†	29.378	354.842	7550.39	-629.47	-640.64	-301.20	39°53'59.364"N	104°44'47.522"W	10.00	
7681.28†	36.177	355.997	7607.77	-592.56	-603.81	-304.12	39°53'59.728"N	104°44'47.556"W	10.00	Niobrara B Chalk
7711.02†	39.141	356.388	7631.31	-574.41	-585.69	-305.32	39°53'59.907"N	104°44'47.569"W	10.00	Niobrara B Marl
7713.00†	39.339	356.412	7632.84	-573.15	-584.44	-305.40	39°53'59.919"N	104°44'47.570"W	10.00	
7775.38†	45.560	357.088	7678.85	-531.08	-542.42	-307.77	39°54'00.335"N	104°44'47.596"W	10.00	Niobrara C Chalk
7813.00†	49.314	357.429	7704.29	-503.38	-514.75	-309.10	39°54'00.608"N	104°44'47.610"W	10.00	



Planned Wellpath Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)

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REFERENCE WELLPATH IDENTIFICATION

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Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH DATA (196 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7818.36†	49.849	357.474	7707.77	-499.29	-510.67	-309.28	39°54'00.649"N	104°44'47.612"W	10.00	Niobrara C Marl
7913.00†	59.296	358.178	7762.57	-422.27	-433.70	-312.17	39°54'01.410"N	104°44'47.640"W	10.00	
8013.00†	69.281	358.785	7805.90	-332.29	-343.74	-314.54	39°54'02.299"N	104°44'47.661"W	10.00	
8048.13†	72.789	358.978	7817.31	-299.08	-310.54	-315.19	39°54'02.627"N	104°44'47.666"W	10.00	Fort Hays
8113.00†	79.268	359.316	7832.97	-236.17	-247.62	-316.12	39°54'03.249"N	104°44'47.671"W	10.00	
8213.00†	89.255	359.813	7842.95	-136.84	-148.25	-316.87	39°54'04.231"N	104°44'47.669"W	10.00	
8220.45	90.000	359.850	7843.00†	-129.39	-140.80	-316.89	39°54'04.305"N	104°44'47.669"W	10.00	End of 3D Arc (XS)
8313.00†	90.000	359.850	7843.00	-36.89	-48.25	-317.13	39°54'05.219"N	104°44'47.662"W	0.00	
8413.00†	90.000	359.850	7843.00	63.05	51.75	-317.40	39°54'06.207"N	104°44'47.654"W	0.00	
8513.00†	90.000	359.850	7843.00	163.00	151.75	-317.66	39°54'07.196"N	104°44'47.647"W	0.00	
8613.00†	90.000	359.850	7843.00	262.94	251.75	-317.92	39°54'08.184"N	104°44'47.639"W	0.00	
8713.00†	90.000	359.850	7843.00	362.89	351.75	-318.18	39°54'09.172"N	104°44'47.632"W	0.00	
8813.00†	90.000	359.850	7843.00	462.83	451.74	-318.44	39°54'10.160"N	104°44'47.624"W	0.00	
8913.00†	90.000	359.850	7843.00	562.78	551.74	-318.70	39°54'11.148"N	104°44'47.617"W	0.00	
9013.00†	90.000	359.850	7843.00	662.72	651.74	-318.97	39°54'12.137"N	104°44'47.609"W	0.00	
9113.00†	90.000	359.850	7843.00	762.67	751.74	-319.23	39°54'13.125"N	104°44'47.602"W	0.00	
9213.00†	90.000	359.850	7843.00	862.61	851.74	-319.49	39°54'14.113"N	104°44'47.594"W	0.00	
9313.00†	90.000	359.850	7843.00	962.56	951.74	-319.75	39°54'15.101"N	104°44'47.586"W	0.00	
9413.00†	90.000	359.850	7843.00	1062.50	1051.74	-320.01	39°54'16.090"N	104°44'47.579"W	0.00	
9513.00†	90.000	359.850	7843.00	1162.45	1151.74	-320.28	39°54'17.078"N	104°44'47.571"W	0.00	
9613.00†	90.000	359.850	7843.00	1262.39	1251.74	-320.54	39°54'18.066"N	104°44'47.564"W	0.00	
9713.00†	90.000	359.850	7843.00	1362.34	1351.74	-320.80	39°54'19.054"N	104°44'47.556"W	0.00	
9813.00†	90.000	359.850	7843.00	1462.28	1451.74	-321.06	39°54'20.043"N	104°44'47.549"W	0.00	
9913.00†	90.000	359.850	7843.00	1562.23	1551.74	-321.32	39°54'21.031"N	104°44'47.541"W	0.00	
10013.00†	90.000	359.850	7843.00	1662.17	1651.74	-321.58	39°54'22.019"N	104°44'47.534"W	0.00	
10113.00†	90.000	359.850	7843.00	1762.12	1751.74	-321.85	39°54'23.007"N	104°44'47.526"W	0.00	
10213.00†	90.000	359.850	7843.00	1862.07	1851.74	-322.11	39°54'23.995"N	104°44'47.519"W	0.00	
10313.00†	90.000	359.850	7843.00	1962.01	1951.74	-322.37	39°54'24.984"N	104°44'47.511"W	0.00	
10413.00†	90.000	359.850	7843.00	2061.96	2051.74	-322.63	39°54'25.972"N	104°44'47.504"W	0.00	
10513.00†	90.000	359.850	7843.00	2161.90	2151.74	-322.89	39°54'26.960"N	104°44'47.496"W	0.00	



Planned Wellpath Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)

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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH DATA (196 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10613.00†	90.000	359.850	7843.00	2261.85	2251.74	-323.15	39°54'27.948"N	104°44'47.488"W	0.00	
10713.00†	90.000	359.850	7843.00	2361.79	2351.74	-323.42	39°54'28.937"N	104°44'47.481"W	0.00	
10813.00†	90.000	359.850	7843.00	2461.74	2451.74	-323.68	39°54'29.925"N	104°44'47.473"W	0.00	
10913.00†	90.000	359.850	7843.00	2561.68	2551.74	-323.94	39°54'30.913"N	104°44'47.466"W	0.00	
11013.00†	90.000	359.850	7843.00	2661.63	2651.74	-324.20	39°54'31.901"N	104°44'47.458"W	0.00	
11113.00†	90.000	359.850	7843.00	2761.57	2751.74	-324.46	39°54'32.890"N	104°44'47.451"W	0.00	
11213.00†	90.000	359.850	7843.00	2861.52	2851.74	-324.72	39°54'33.878"N	104°44'47.443"W	0.00	
11313.00†	90.000	359.850	7843.00	2961.46	2951.74	-324.99	39°54'34.866"N	104°44'47.436"W	0.00	
11413.00†	90.000	359.850	7843.00	3061.41	3051.74	-325.25	39°54'35.854"N	104°44'47.428"W	0.00	
11513.00†	90.000	359.850	7843.00	3161.35	3151.74	-325.51	39°54'36.842"N	104°44'47.421"W	0.00	
11613.00†	90.000	359.850	7843.00	3261.30	3251.74	-325.77	39°54'37.831"N	104°44'47.413"W	0.00	
11713.00†	90.000	359.850	7843.00	3361.24	3351.74	-326.03	39°54'38.819"N	104°44'47.405"W	0.00	
11813.00†	90.000	359.850	7843.00	3461.19	3451.73	-326.30	39°54'39.807"N	104°44'47.398"W	0.00	
11913.00†	90.000	359.850	7843.00	3561.13	3551.73	-326.56	39°54'40.795"N	104°44'47.390"W	0.00	
12013.00†	90.000	359.850	7843.00	3661.08	3651.73	-326.82	39°54'41.784"N	104°44'47.383"W	0.00	
12113.00†	90.000	359.850	7843.00	3761.02	3751.73	-327.08	39°54'42.772"N	104°44'47.375"W	0.00	
12213.00†	90.000	359.850	7843.00	3860.97	3851.73	-327.34	39°54'43.760"N	104°44'47.368"W	0.00	
12313.00†	90.000	359.850	7843.00	3960.91	3951.73	-327.60	39°54'44.748"N	104°44'47.360"W	0.00	
12413.00†	90.000	359.850	7843.00	4060.86	4051.73	-327.87	39°54'45.737"N	104°44'47.353"W	0.00	
12513.00†	90.000	359.850	7843.00	4160.80	4151.73	-328.13	39°54'46.725"N	104°44'47.345"W	0.00	
12613.00†	90.000	359.850	7843.00	4260.75	4251.73	-328.39	39°54'47.713"N	104°44'47.338"W	0.00	
12713.00†	90.000	359.850	7843.00	4360.69	4351.73	-328.65	39°54'48.701"N	104°44'47.330"W	0.00	
12813.00†	90.000	359.850	7843.00	4460.64	4451.73	-328.91	39°54'49.690"N	104°44'47.322"W	0.00	
12913.00†	90.000	359.850	7843.00	4560.58	4551.73	-329.17	39°54'50.678"N	104°44'47.315"W	0.00	
13013.00†	90.000	359.850	7843.00	4660.53	4651.73	-329.44	39°54'51.666"N	104°44'47.307"W	0.00	
13113.00†	90.000	359.850	7843.00	4760.48	4751.73	-329.70	39°54'52.654"N	104°44'47.300"W	0.00	
13213.00†	90.000	359.850	7843.00	4860.42	4851.73	-329.96	39°54'53.642"N	104°44'47.292"W	0.00	
13313.00†	90.000	359.850	7843.00	4960.37	4951.73	-330.22	39°54'54.631"N	104°44'47.285"W	0.00	
13413.00†	90.000	359.850	7843.00	5060.31	5051.73	-330.48	39°54'55.619"N	104°44'47.277"W	0.00	
13513.00†	90.000	359.850	7843.00	5160.26	5151.73	-330.74	39°54'56.607"N	104°44'47.270"W	0.00	



Planned Wellpath Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH DATA (196 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13613.00†	90.000	359.850	7843.00	5260.20	5251.73	-331.01	39°54'57.595"N	104°44'47.262"W	0.00	
13713.00†	90.000	359.850	7843.00	5360.15	5351.73	-331.27	39°54'58.584"N	104°44'47.254"W	0.00	
13813.00†	90.000	359.850	7843.00	5460.09	5451.73	-331.53	39°54'59.572"N	104°44'47.247"W	0.00	
13913.00†	90.000	359.850	7843.00	5560.04	5551.73	-331.79	39°55'00.560"N	104°44'47.239"W	0.00	
14013.00†	90.000	359.850	7843.00	5659.98	5651.73	-332.05	39°55'01.548"N	104°44'47.232"W	0.00	
14113.00†	90.000	359.850	7843.00	5759.93	5751.73	-332.32	39°55'02.537"N	104°44'47.224"W	0.00	
14213.00†	90.000	359.850	7843.00	5859.87	5851.73	-332.58	39°55'03.525"N	104°44'47.217"W	0.00	
14313.00†	90.000	359.850	7843.00	5959.82	5951.73	-332.84	39°55'04.513"N	104°44'47.209"W	0.00	
14413.00†	90.000	359.850	7843.00	6059.76	6051.73	-333.10	39°55'05.501"N	104°44'47.202"W	0.00	
14513.00†	90.000	359.850	7843.00	6159.71	6151.73	-333.36	39°55'06.489"N	104°44'47.194"W	0.00	
14613.00†	90.000	359.850	7843.00	6259.65	6251.73	-333.62	39°55'07.478"N	104°44'47.187"W	0.00	
14713.00†	90.000	359.850	7843.00	6359.60	6351.72	-333.89	39°55'08.466"N	104°44'47.179"W	0.00	
14813.00†	90.000	359.850	7843.00	6459.54	6451.72	-334.15	39°55'09.454"N	104°44'47.171"W	0.00	
14913.00†	90.000	359.850	7843.00	6559.49	6551.72	-334.41	39°55'10.442"N	104°44'47.164"W	0.00	
15013.00†	90.000	359.850	7843.00	6659.43	6651.72	-334.67	39°55'11.431"N	104°44'47.156"W	0.00	
15113.00†	90.000	359.850	7843.00	6759.38	6751.72	-334.93	39°55'12.419"N	104°44'47.149"W	0.00	
15213.00†	90.000	359.850	7843.00	6859.32	6851.72	-335.19	39°55'13.407"N	104°44'47.141"W	0.00	
15313.00†	90.000	359.850	7843.00	6959.27	6951.72	-335.46	39°55'14.395"N	104°44'47.134"W	0.00	
15413.00†	90.000	359.850	7843.00	7059.21	7051.72	-335.72	39°55'15.384"N	104°44'47.126"W	0.00	
15513.00†	90.000	359.850	7843.00	7159.16	7151.72	-335.98	39°55'16.372"N	104°44'47.119"W	0.00	
15613.00†	90.000	359.850	7843.00	7259.10	7251.72	-336.24	39°55'17.360"N	104°44'47.111"W	0.00	
15713.00†	90.000	359.850	7843.00	7359.05	7351.72	-336.50	39°55'18.348"N	104°44'47.104"W	0.00	
15813.00†	90.000	359.850	7843.00	7459.00	7451.72	-336.76	39°55'19.336"N	104°44'47.096"W	0.00	
15913.00†	90.000	359.850	7843.00	7558.94	7551.72	-337.03	39°55'20.325"N	104°44'47.088"W	0.00	
16013.00†	90.000	359.850	7843.00	7658.89	7651.72	-337.29	39°55'21.313"N	104°44'47.081"W	0.00	
16113.00†	90.000	359.850	7843.00	7758.83	7751.72	-337.55	39°55'22.301"N	104°44'47.073"W	0.00	
16213.00†	90.000	359.850	7843.00	7858.78	7851.72	-337.81	39°55'23.289"N	104°44'47.066"W	0.00	
16313.00†	90.000	359.850	7843.00	7958.72	7951.72	-338.07	39°55'24.278"N	104°44'47.058"W	0.00	
16413.00†	90.000	359.850	7843.00	8058.67	8051.72	-338.33	39°55'25.266"N	104°44'47.051"W	0.00	
16513.00†	90.000	359.850	7843.00	8158.61	8151.72	-338.60	39°55'26.254"N	104°44'47.043"W	0.00	



Planned Wellpath Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)

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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH DATA (196 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16613.00†	90.000	359.850	7843.00	8258.56	8251.72	-338.86	39°55'27.242"N	104°44'47.036"W	0.00	
16713.00†	90.000	359.850	7843.00	8358.50	8351.72	-339.12	39°55'28.231"N	104°44'47.028"W	0.00	
16813.00†	90.000	359.850	7843.00	8458.45	8451.72	-339.38	39°55'29.219"N	104°44'47.021"W	0.00	
16913.00†	90.000	359.850	7843.00	8558.39	8551.72	-339.64	39°55'30.207"N	104°44'47.013"W	0.00	
17013.00†	90.000	359.850	7843.00	8658.34	8651.72	-339.91	39°55'31.195"N	104°44'47.005"W	0.00	
17113.00†	90.000	359.850	7843.00	8758.28	8751.72	-340.17	39°55'32.183"N	104°44'46.998"W	0.00	
17213.00†	90.000	359.850	7843.00	8858.23	8851.72	-340.43	39°55'33.172"N	104°44'46.990"W	0.00	
17313.00†	90.000	359.850	7843.00	8958.17	8951.72	-340.69	39°55'34.160"N	104°44'46.983"W	0.00	
17413.00†	90.000	359.850	7843.00	9058.12	9051.72	-340.95	39°55'35.148"N	104°44'46.975"W	0.00	
17513.00†	90.000	359.850	7843.00	9158.06	9151.72	-341.21	39°55'36.136"N	104°44'46.968"W	0.00	
17613.00†	90.000	359.850	7843.00	9258.01	9251.71	-341.48	39°55'37.125"N	104°44'46.960"W	0.00	
17713.00†	90.000	359.850	7843.00	9357.95	9351.71	-341.74	39°55'38.113"N	104°44'46.953"W	0.00	
17813.00†	90.000	359.850	7843.00	9457.90	9451.71	-342.00	39°55'39.101"N	104°44'46.945"W	0.00	
17913.00†	90.000	359.850	7843.00	9557.84	9551.71	-342.26	39°55'40.089"N	104°44'46.937"W	0.00	
17937.78†	90.000	359.850	7843.00	9582.61	9576.49	-342.33	39°55'40.334"N	104°44'46.936"W	0.00	Codell
17937.78	90.000	359.850	7843.00 ²	9582.61	9576.50	-342.33	39°55'40.334"N	104°44'46.936"W	0.00	End of Tangent (XS)

HOLE & CASING SECTIONS

- Ref Wellbore: ACKARD NORTH 2-35-2CDH PWB Ref Wellpath: ACKARD NORTH 2-35-2CDH PWP (REV. A.0)

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]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1797.01	0.00	0.00	-49.98	-20.00
8.5in Open Hole	1800.00	17937.78	16137.78	1797.01	7843.00	-49.98	-20.00	9576.50	-342.33



Planned Wellpath Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.02-T02S-R66W		0.00	-64.53	-100.18	3211594.77	1207829.42	39°54'05.040"N	104°44'44.880"W	polygon
SEC.35-T01S-R66W		0.00	-64.53	-100.18	3211594.77	1207829.42	39°54'05.040"N	104°44'44.880"W	polygon
2) ACKARD NORTH 2-35-2CDH BHL (355'FNL & 1272'FWL, SEC.35)		7843.00	9576.48	-342.36	3211352.60	1217470.17	39°55'40.334"N	104°44'46.936"W	point
1) ACKARD NORTH 2-35-2CDH EP (460'FSL & 1678'FWL, SEC.02)		7843.00	-140.75	-316.90	3211378.06	1207753.20	39°54'04.305"N	104°44'47.669"W	point
SEC.02/35-T01S/02S-R66W 460'SETBACK		7855.00	-64.53	-100.18	3211594.77	1207829.42	39°54'05.040"N	104°44'44.880"W	polygon

SURVEY PROGRAM -

Ref Wellbore: ACKARD NORTH 2-35-2CDH PWB Ref Wellpath: ACKARD NORTH 2-35-2CDH PWP (REV. A.0)

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	19125.24	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		ACKARD NORTH 2-35- 2CDH PWB



Planned Wellpath Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1651.72	7.488	201.808	1650.00	Fox Hills
5131.39	7.488	201.808	5100.00	Sussex / Shannon
7508.62	19.018	351.653	7455.31	Niobrara A Chalk
7530.41	21.174	352.561	7475.77	Niobrara A Marl
7681.28	36.177	355.997	7607.77	Niobrara B Chalk
7711.02	39.141	356.388	7631.31	Niobrara B Marl
7775.38	45.560	357.088	7678.85	Niobrara C Chalk
7818.36	49.849	357.474	7707.77	Niobrara C Marl
8048.13	72.789	358.978	7817.31	Fort Hays
17937.78	90.000	359.850	7843.00	Codell



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.1
North Reference	Grid	User	Bushjamh
Scale	0.999975	Report Generated	11/3/2017 at 8:10:06 AM
Convergence at slot	0.49° East	Database/Source file	Denver/ACKARD_NORTH_2-35-2CDH_PWP_REV_A.0_CR.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.11	59.99	3211694.95	1207893.95	39°54'05.669"N	104°44'43.588"W
Facility Reference Pt			3211634.96	1207893.83	39°54'05.673"N	104°44'44.357"W
Field Reference Pt			3175478.75	1240632.48	39°59'31.992"N	104°52'25.320"W

WELLPATH DATUM

Calculation method	Minimum Curvature	RIG (13'KB) (RKB) to Facility Vertical Datum	5213.00ft
Horizontal Reference Pt	Slot	RIG (13'KB) (RKB) to Mean Sea Level	5213.00ft
Vertical Reference Pt	RIG (13'KB) (RKB)	RIG (13'KB) (RKB) to Ground Level at Slot (SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02))	5213.00ft
MD Reference Pt	RIG (13'KB) (RKB)		
Field Vertical Reference	Mean Sea Level		

POSITIONAL UNCERTAINTY CALCULATION SETTINGS

Ellipse Confidence Limit	3.00 Std Dev	Ellipse Start MD	13.00ft	Surface Position Uncertainty	included
Declination	8.33° East of TN	Dip Angle	66.48°	Mag Field Strength	52123 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



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

ANTI-COLLISION RULE

Rule Name	Baker Hughes Stop Drilling (offset is HSE risk)	Rule Based On	Ratio
Plane of Rule	Closest Approach	Threshold Value	1.00
Include Casing & Hole Size	yes	Apply Cone of Safety	no

HOLE & CASING SECTIONS - Ref Wellbore: ACKARD NORTH 2-35-2CDH PWB Ref Wellpath: ACKARD NORTH 2-35-2CDH PWP (REV. A.0)

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]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1797.01	0.00	0.00	-49.98	-20.00
8.5in Open Hole	1800.00	17937.78	16137.78	1797.01	7843.00	-49.98	-20.00	9576.50	-342.33

SURVEY PROGRAM - Ref Wellbore: ACKARD NORTH 2-35-2CDH PWB Ref Wellpath: ACKARD NORTH 2-35-2CDH PWP (REV. A.0)

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	19125.24	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		ACKARD NORTH 2-35-2CDH PWB



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CALCULATION RANGE & CUTOFF

From: 13.00ft MD	To: 17937.78ft MD	C-C Cutoff: 1000.00 ft
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OFFSET WELL CLEARANCE SUMMARY (36 Offset Wellpaths selected) Ratios are calculated in Closest Approach plane

Offset Facility	Offset Slot	Offset Well	Offset Wellbore	Offset Wellpath	C-C Clearance Distance			ACR 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]	ACR Status
SEC.35-T1S-R66W	SLOT#01 EX BOX ELDER FARMS 41-35 #5 (660'FNL & 660'FEL, SEC.35, PA, 8315)	BOX ELDER FARMS 41-35 #5	BOX ELDER FARMS 41-35 #5 AWB	BOX ELDER FARMS 41-35 #5BOX ELDER FARMS 41-35 #5 AWP	17588.00	2945.26	17588.00	17588.00	0.28	17588.00	FAIL
SEC.35-T01S-R66W	SLOT#01 EX CHAMPLIN 117 AMOCO G #6 (660'FNL & 1980'FWL, SEC.35,8308,PR)	CHAMPLIN 117 AMOCO G#6	CHAMPLIN 117 AMOCO G#6 AWB	CHAMPLIN 117 AMOCO G#6 AWP	17644.97	337.44	17644.97	17644.97	0.67	17644.97	FAIL
SEC.02-T03S-R66W	SLOT#07 ACKARD NORTH 2-35-2NCH (600'FSL & 2025'FWL, SEC.02)	ACKARD NORTH 2-35-2NCH	ACKARD NORTH 2-35-2NCH PWB	ACKARD NORTH 2-35-2NCH PWP (REV. A.0)	13.00	30.02	17937.78	17937.78	0.77	17937.78	FAIL
SEC.35-T01S-R66W	SLOT#01 EX CHAMPLIN 117 AMOCO G#3 (1980'FSL & 1980'FWL, SEC.35, PA,8360)	SLOT#01 EX CHAMPLIN 117 AMOCO G#3	SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWB	SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWP	14970.56	332.73	14970.56	14970.57	0.79	14970.57	FAIL
SEC.02-T03S-R66W	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)	ACKARD NORTH 2-35-1NBH	ACKARD NORTH 2-35-1NBH PWB	ACKARD NORTH 2-35-1NBH PWP (REV. A.0)	13.00	15.01	1013.00	17937.78	0.86	17937.78	FAIL
SEC.02-T02S-R66W	SLOT#01 EX MARTIN #1 (600'FNL & 2040'FWL, SEC.02,8400, SI)	MARTIN #1	MARTIN #1 AWB	MARTIN #1 AWP	12402.89	380.69	12402.89	12403.43	1.11	12403.43	PASS
SEC.02-T03S-R66W	SLOT#06 ACKARD NORTH 2-35-2NAH (600'FSL & 2010'FWL, SEC.02)	ACKARD NORTH 2-35-2NAH	ACKARD NORTH 2-35-2NAH PWB	ACKARD NORTH 2-35-2NAH PWP (REV. A.0)	13.00	14.98	7087.37	7087.37	1.18	17937.78	PASS
SEC.02-T02S-R66W	SLOT#17 EX OTTER#1 (1980'FSL & 1980'FWL, SEC.02, PR, 8390)	OTTER#1	OTTER#1 AWB	OTTER#1 AWP	9709.66	355.04	9709.66	9709.66	1.34	9709.66	PASS
SEC.02-T03S-R66W	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)	ACKARD NORTH 2-35-1NCH	ACKARD NORTH 2-35-1NCH PWB	ACKARD NORTH 2-35-1NCH PWP (REV-A.0)	13.00	29.96	17913.00	17937.78	1.39	17937.78	PASS
SEC.02-T03S-R66W	SLOT#08 ACKARD NORTH 2-35-2NBH (600'FSL & 2040'FWL, SEC.02)	ACKARD NORTH 2-35-2NBH	ACKARD NORTH 2-35-2NBH	ACKARD NORTH 2-35-2NBH PWP (REV. A.0)	13.00	45.00	17937.78	17937.78	1.45	17937.78	PASS
SEC.02-T03S-R66W	SLOT#09 ACKARD NORTH 2-35-3NCH (600'FSL & 2055'FWL, SEC.02)	ACKARD NORTH 2-35-3NCH	ACKARD NORTH 2-35-3NCH PWB	ACKARD NORTH 2-35-3NCH PWP (REV. A.0)	13.00	59.99	1200.00	17937.78	1.91	17937.78	PASS
SEC.02-T03S-R66W	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)	ACKARD NORTH 2-35-1CDH	ACKARD NORTH 2-35-1CDH PWB	ACKARD NORTH 2-35-1CDH PWP (REV-A.0)	13.00	59.99	17913.00	17937.78	2.02	17937.78	PASS
SEC.02-T03S-R66W	SLOT#02 ACKARD NORTH 2-35-1NAH (600'FSL & 1950'FWL, SEC.02)	ACKARD NORTH 2-35-1NAH	ACKARD NORTH 2-35-1NAH PWB	ACKARD NORTH 2-35-1NAH PWP (REV-A.0)	13.00	44.98	813.00	17937.78	2.03	17937.78	PASS
SEC.35-T01S-R66W	SLOT#02 EX CHAMPLIN 117 AMOCO G #5 (1980'FNL & 660'FWL, SEC.35,8340,PR)	CHAMPLIN 117 AMOCO G#5	CHAMPLIN 117 AMOCO G#5 AWB	CHAMPLIN 117 AMOCO G#5 AWP	16267.62	1025.99	16267.62	16328.71	2.24	16328.71	PASS
SEC.35-T01S-R66W	SLOT#04 EX CHAMPLIN 117 G#4 (660'FSL & 660'FWL, SEC.35,8350, PR)	CHAMPLIN 117 G#4	CHAMPLIN 117 G#4 AWB	CHAMPLIN 117 G#4 AWP	13658.98	978.23	13658.98	13733.30	2.58	13733.30	PASS
SEC.02-T03S-R66W	SLOT#10 ACKARD NORTH 2-35-3NBH (600'FSL & 2070'FWL, SEC.02)	ACKARD NORTH 2-35-3NBH	ACKARD NORTH 2-35-3NBH PWB	ACKARD NORTH 2-35-3NBH PWP (REV. A.0)	13.00	75.00	1200.00	17937.78	2.60	17937.78	PASS
SEC.02-T03S-R66W	SLOT#11 ACKARD NORTH 2-35-3NAH (600'FSL & 2085'FWL, SEC.02)	ACKARD NORTH 2-35-3NAH	ACKARD NORTH 2-35-3NAH PWB	ACKARD NORTH 2-35-3NAH PWP (REV. A.0)	13.00	89.95	1200.00	17937.78	3.18	17937.78	PASS
SEC.02-T03S-R66W	SLOT#12 ACKARD NORTH 2-35-3CDH (600'FSL & 2100'FWL, SEC.02)	ACKARD NORTH 2-35-3CDH	ACKARD NORTH 2-35-3CDH PWB	ACKARD NORTH 2-35-3CDH PWP (REV. A.0)	13.00	104.96	1200.00	17937.78	3.21	17937.78	PASS
SEC.02-T02S-R66W	SLOT#02 EX HSR ACKARD #5-2 (1980'FNL & 656'FWL, SEC.02,8400, PR)	HSR ACKARD #5-2	HSR ACKARD #5-2 AWB	HSR ACKARD #5-2 AWP	11054.17	995.54	11054.17	11155.90	3.29	11155.90	PASS
SEC.26-T01S-R66W	SLOT#03 EX LEECH #24-26 (659'FSL & 2026'FWL, SEC.26,8296, PR)	LEECH #24-26	LEECH #24-26 AWB	LEECH #24-26 AWP	17937.78	1069.72	17937.78	17937.78	3.34	17937.78	PASS
SEC.26-T01S-R66W	SLOT#04 EX LEECH #14-26 (663'FSL & 673'FWL, SEC.26,8313, PR)	LEECH #14-26	LEECH #14-26 AWB	LEECH #14-26 AWP	17937.78	1430.88	17937.78	17937.78	3.45	17937.78	PASS
SEC.35-T01S-R66W	SLOT#03 EX BOX ELDER FARMS 32-35#4 (1980'FNL & 1980'FEL, SEC.35, 8312 PR)	BOX ELDER FARMS 32-35#4	BOX ELDER FARMS 32-35#4 AWB	BOX ELDER FARMS 32-35#4 AWP	16331.76	1646.32	16331.76	16427.96	3.57	16427.96	PASS
SEC.02-T03S-R66W	SLOT#13 ACKARD NORTH 2-35-4NCH (600'FSL & 2115'FWL, SEC.02)	ACKARD NORTH 2-35-4NCH	ACKARD NORTH 2-35-4NCH PWB	ACKARD NORTH 2-35-4NCH PWP (REV. A.0)	13.00	120.00	1200.00	17937.78	3.90	17937.78	PASS
SEC.35-T01S-R66W	SLOT#01 EX CHAMPLIN 117 AMOCO G#2 (660'FSL & 1980'FEL, SEC.35, PA, 8360)	CHAMPLIN 117 AMOCO G#2	CHAMPLIN 117 AMOCO G#2 AWB	CHAMPLIN 117 AMOCO G#2 AWP	13699.60	1640.95	13699.60	13813.00	4.30	13813.00	PASS
SEC.02-T03S-R66W	SLOT#14 ACKARD NORTH 2-35-4NBH (600'FSL & 2130'FWL, SEC.02)	ACKARD NORTH 2-35-4NBH	ACKARD NORTH 2-35-4NBH	ACKARD NORTH 2-35-4NBH PWP (REV. A.0)	13.00	134.95	1013.00	17937.78	4.58	17937.78	PASS



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CALCULATION RANGE & CUTOFF

From: 13.00ft MD	To: 17937.78ft MD	C-C Cutoff: 1000.00 ft
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OFFSET WELL CLEARANCE SUMMARY (36 Offset Wellpaths selected) Ratios are calculated in Closest Approach plane

Offset Facility	Offset Slot	Offset Well	Offset Wellbore	Offset Wellpath	C-C Clearance Distance			ACR 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]	ACR Status
SEC.11-T02S-R66W	SLOT#01 EX HSR-VAN SCHAACK #4-11 (623'FNL & 696'FWL, SEC.11, 8374, PR)	HSR-VAN SCHAACK #4-11	HSR-VAN SCHAACK #4-11 AWB	HSR-VAN SCHAACK #4-11 AWP	7379.05	1121.72	7379.05	7513.00	4.74	7513.00	PASS
SEC.26-T01S-R66W	SLOT#02 EX MAUL #2 (859'FSL & 1800'FEL, SEC.26,8280, PR)	MAUL #2	MAUL #2 AWB	MAUL #2 AWP	17937.78	2220.26	17937.78	17937.78	4.79	17937.78	PASS
SEC.02-T03S-R66W	SLOT#15 ACKARD NORTH 2-35-4NAH (600'FSL & 2145'FWL, SEC.02)	ACKARD NORTH 2-35-4NAH	ACKARD NORTH 2-35-4NAH PWB	ACKARD NORTH 2-35-4NAH PWP (REV. A.0)	13.00	149.96	913.00	17937.78	5.14	17937.78	PASS
SEC.02-T03S-R66W	SLOT#16 ACKARD NORTH 2-35-4CDH (600'FSL & 2160'FWL, SEC.02)	ACKARD NORTH 2-35-4CDH	ACKARD NORTH 2-35-4CDH PWB	ACKARD NORTH 2-35-4CDH PWP (REV. A.0)	13.00	164.97	813.00	17937.78	5.22	17937.78	PASS
SEC.26-T01S-R66W	SLOT#01 EX MAUL #44-26 (660'FSL & 652'FEL, SEC.26,8289, PR)	MAUL #44-26	MAUL #44-26 AWB	MAUL #44-26 AWP	17937.78	3140.44	17937.78	17937.78	6.34	17937.78	PASS
SEC.35-T01S-R66W	SLOT#02 EX CHAMPLIN 117 AMOCO G#1 (1980'FSL & 660'FEL, SEC.35, PA,8360)	SLOT#01 EX CHAMPLIN 117 AMOCO G#1	SLOT#01 EX CHAMPLIN 117 AMOCO G#1 AWB	SLOT#01 EX CHAMPLIN 117 AMOCO G#1 AWP	14963.00	2944.19	14963.00	15339.42	6.95	15339.42	PASS
SEC.11-T02S-R66W	SLOT#01 EX HSR-VAN SCHAACK #2-11 (608'FNL & 1956'FEL, SEC.11,8384, PR)	HSR-VAN SCHAACK #2-11	HSR-VAN SCHAACK #2-11 AWB	HSR-VAN SCHAACK #2-11 AWP	6075.50	1696.42	6075.50	7513.00	7.17	7513.00	PASS
SEC.03-T02S-R66W	SLOT#01 EX HSR LAWSON #8-3 (2080'FNL & 660'FEL, SEC.03,8598, PR)	HSR LAWSON #8-3	HSR LAWSON #8-3 AWB	HSR LAWSON #8-3 AWP	10793.32	2319.60	10793.32	11266.30	7.72	11266.30	PASS
SEC.02-T02S-R66W	SLOT#01 EX CARLSON #1 (660'FNL & 660'FEL, SEC.02,8400, PR)	CARLSON #1	CARLSON #1 AWB	CARLSON #1 AWP	12388.00	2967.23	12388.00	12879.18	8.55	12879.18	PASS
SEC.03-T02S-R66W	SLOT#02 EX HSR-TR RANCH #16-3 (660'FSL & 660'FEL, SEC.03,8362, PR)	HSR-TR RANCH #16-3	HSR-TR RANCH #16-3 AWB	HSR-TR RANCH #16-3 AWP	8425.50	2339.27	8425.50	8688.72	9.57	8688.72	PASS
SEC.01-T02S-R66W	SLOT#01 EX CHAMPLIN 117 AMOCO C#4 (1980'FNL & 660'FWL, SEC.01, PR, 8410)	CHAMPLIN 117 AMOCO C#4	CHAMPLIN 117 AMOCO C#4 AWB	CHAMPLIN 117 AMOCO C#4 AWP	11050.50	4243.32	11050.50	12213.00	13.39	12213.00	PASS



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: BOX ELDER FARMS 41-35 #5 AWB Offset Wellpath: BOX ELDER FARMS 41-35 #5BOX ELDER FARMS 41-35 #5 AWP

Facility: SEC.35-T1S-R66W Slot: SLOT#01 EX BOX ELDER FARMS 41-35 #5 (660'FNL & 660'FEL, SEC.35, PA, 8315) Well: BOX ELDER FARMS 41-35 #5 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	-13.00	24.00	9237.20	2603.83	15.74	9597.18	25.40	390.07	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: BOX ELDER FARMS 41-35 #5 AWB Offset Wellpath: BOX ELDER FARMS 41-35 #5BOX ELDER FARMS 41-35 #5 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: BOX ELDER FARMS 41-35 #5 AWB Offset Wellpath: BOX ELDER FARMS 41-35 #5BOX ELDER FARMS 41-35 #5 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8315.00	BHI Drift Indicator - Estimated Azimuth (Standard)	ASSUMED VERTICAL TO TD <8315>	BOX ELDER FARMS 41-35 #5 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: BOX ELDER FARMS 41-35 #5 AWB Offset Wellpath: BOX ELDER FARMS 41-35 #5BOX ELDER FARMS 41-35 #5 AWP

MD Reference: Rig on SLOT#01 EX BOX ELDER FARMS 41-35 #5 (660'FNL & 660'FEL, SEC.35, PA, 8315) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: CHAMPLIN 117 AMOCO G#6 AWB Offset Wellpath: CHAMPLIN 117 AMOCO G#6 AWP

Facility: SEC.35-T01S-R66W Slot: SLOT#01 EX CHAMPLIN 117 AMOCO G #6 (660'FNL & 1980'FWL, SEC.35,8308,PR) Well: CHAMPLIN 117 AMOCO G#6 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	-13.00	65.00	9284.44	-4.12	-0.03	9284.59	25.40	377.37	PASS
113.00†	113.00	0.00	0.00	35.00	113.00	9284.44	-4.12	-0.03	9284.44	50.83	185.58	PASS
213.00†	213.00	0.00	0.00	135.00	213.00	9284.44	-4.12	-0.03	9284.44	53.17	177.27	PASS
313.00†	313.00	0.00	0.00	235.00	313.00	9284.44	-4.12	-0.03	9284.44	55.52	169.66	PASS
413.00†	413.00	0.00	0.00	335.00	413.00	9284.44	-4.12	-0.03	9284.44	57.88	162.66	PASS
513.00†	513.00	0.00	0.00	435.00	513.00	9284.44	-4.12	-0.03	9284.44	60.23	156.21	PASS
613.00†	613.00	0.00	0.00	535.00	613.00	9284.44	-4.12	-0.03	9284.44	62.60	150.24	PASS
713.00†	713.00	0.00	0.00	635.00	713.00	9284.44	-4.12	-0.03	9284.44	64.96	144.70	PASS
813.00†	813.00	0.00	0.00	735.00	813.00	9284.44	-4.12	-0.03	9284.44	67.33	139.54	PASS
913.00†	913.00	0.00	0.00	835.00	913.00	9284.44	-4.12	-0.03	9284.44	69.70	134.74	PASS
1013.00†	1013.00	0.00	0.00	935.00	1013.00	9284.44	-4.12	-0.03	9284.44	72.08	130.24	PASS
1113.00†	1113.00	0.00	0.00	1035.00	1113.00	9284.44	-4.12	-0.03	9284.44	74.46	126.03	PASS
1200.00	1200.00	0.00	0.00	1122.00	1200.00	9284.44	-4.12	-0.03	9284.44	76.54	122.58	PASS
1213.00†	1213.00	-0.03	-0.01	1135.00	1213.00	9284.44	-4.12	158.17	9284.47	76.85	122.08	PASS
1313.00†	1312.97	-2.07	-0.83	1234.97	1312.97	9284.44	-4.12	158.16	9286.51	79.25	118.37	PASS
1413.00†	1412.80	-7.35	-2.94	1334.80	1412.80	9284.44	-4.12	158.13	9291.79	81.69	114.86	PASS
1513.00†	1512.38	-15.86	-6.35	1434.38	1512.38	9284.44	-4.12	158.09	9300.30	84.13	111.60	PASS
1574.38	1573.31	-22.68	-9.07	1495.31	1573.31	9284.44	-4.12	158.05	9307.12	85.62	109.72	PASS
1613.00†	1611.61	-27.35	-10.94	1533.61	1611.61	9284.44	-4.12	158.07	9311.79	86.54	108.59	PASS
1713.00†	1710.75	-39.45	-15.79	1632.75	1710.75	9284.44	-4.12	158.10	9323.90	88.93	105.79	PASS
1813.00†	1809.90	-51.55	-20.63	1731.90	1809.90	9284.44	-4.12	158.12	9336.00	91.23	103.13	PASS
1913.00†	1909.05	-63.65	-25.47	1831.05	1909.05	9284.44	-4.12	158.15	9348.11	93.63	100.60	PASS
2013.00†	2008.20	-75.75	-30.31	1930.20	2008.20	9284.44	-4.12	158.18	9360.22	96.03	98.19	PASS
2113.00†	2107.34	-87.84	-35.15	2029.34	2107.34	9284.44	-4.12	158.21	9372.34	98.44	95.89	PASS
2213.00†	2206.49	-99.94	-39.99	2128.49	2206.49	9284.44	-4.12	158.24	9384.45	100.85	93.70	PASS
2313.00†	2305.64	-112.04	-44.83	2227.64	2305.64	9284.44	-4.12	158.27	9396.57	103.27	91.61	PASS
2413.00†	2404.78	-124.14	-49.67	2326.78	2404.78	9284.44	-4.12	158.30	9408.69	105.69	89.61	PASS
2513.00†	2503.93	-136.24	-54.51	2425.93	2503.93	9284.44	-4.12	158.33	9420.81	108.12	87.70	PASS
2613.00†	2603.08	-148.34	-59.35	2525.08	2603.08	9284.44	-4.12	158.36	9432.94	110.55	85.87	PASS
2713.00†	2702.23	-160.44	-64.20	2624.23	2702.23	9284.44	-4.12	158.39	9445.07	112.99	84.11	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: CHAMPLIN 117 AMOCO G#6 AWB Offset Wellpath: CHAMPLIN 117 AMOCO G#6 AWP

Facility: SEC.35-T01S-R66W Slot: SLOT#01 EX CHAMPLIN 117 AMOCO G #6 (660'FNL & 1980'FWL, SEC.35,8308,PR) Well: CHAMPLIN 117 AMOCO G#6 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2801.37	-172.53	-69.04	2723.37	2801.37	9284.44	-4.12	158.42	9457.20	115.43	82.43	PASS
2913.00†	2900.52	-184.63	-73.88	2822.52	2900.52	9284.44	-4.12	158.45	9469.33	117.88	80.81	PASS
3013.00†	2999.67	-196.73	-78.72	2921.67	2999.67	9284.44	-4.12	158.48	9481.46	120.33	79.26	PASS
3113.00†	3098.82	-208.83	-83.56	3020.82	3098.82	9284.44	-4.12	158.51	9493.60	122.79	77.76	PASS
3213.00†	3197.96	-220.93	-88.40	3119.96	3197.96	9284.44	-4.12	158.53	9505.74	125.25	76.32	PASS
3313.00†	3297.11	-233.03	-93.24	3219.11	3297.11	9284.44	-4.12	158.56	9517.88	127.71	74.94	PASS
3413.00†	3396.26	-245.13	-98.08	3318.26	3396.26	9284.44	-4.12	158.59	9530.03	130.18	73.60	PASS
3513.00†	3495.41	-257.22	-102.92	3417.41	3495.41	9284.44	-4.12	158.62	9542.17	132.65	72.32	PASS
3613.00†	3594.55	-269.32	-107.76	3516.55	3594.55	9284.44	-4.12	158.65	9554.32	135.13	71.07	PASS
3713.00†	3693.70	-281.42	-112.60	3615.70	3693.70	9284.44	-4.12	158.68	9566.48	137.61	69.88	PASS
3813.00†	3792.85	-293.52	-117.45	3714.85	3792.85	9284.44	-4.12	158.71	9578.63	140.09	68.72	PASS
3913.00†	3891.99	-305.62	-122.29	3813.99	3891.99	9284.44	-4.12	158.73	9590.79	142.58	67.60	PASS
4013.00†	3991.14	-317.72	-127.13	3913.14	3991.14	9284.44	-4.12	158.76	9602.94	145.07	66.52	PASS
4113.00†	4090.29	-329.82	-131.97	4012.29	4090.29	9284.44	-4.12	158.79	9615.10	147.57	65.47	PASS
4213.00†	4189.44	-341.91	-136.81	4111.44	4189.44	9284.44	-4.12	158.82	9627.27	150.06	64.45	PASS
4313.00†	4288.58	-354.01	-141.65	4210.58	4288.58	9284.44	-4.12	158.85	9639.43	152.57	63.47	PASS
4413.00†	4387.73	-366.11	-146.49	4309.73	4387.73	9284.44	-4.12	158.87	9651.60	155.07	62.52	PASS
4513.00†	4486.88	-378.21	-151.33	4408.88	4486.88	9284.44	-4.12	158.90	9663.77	157.58	61.60	PASS
4613.00†	4586.03	-390.31	-156.17	4508.03	4586.03	9284.44	-4.12	158.93	9675.94	160.10	60.70	PASS
4713.00†	4685.17	-402.41	-161.01	4607.17	4685.17	9284.44	-4.12	158.96	9688.12	162.61	59.83	PASS
4813.00†	4784.32	-414.51	-165.86	4706.32	4784.32	9284.44	-4.12	158.98	9700.29	165.13	58.99	PASS
4913.00†	4883.47	-426.60	-170.70	4805.47	4883.47	9284.44	-4.12	159.01	9712.47	167.65	58.17	PASS
5013.00†	4982.61	-438.70	-175.54	4904.61	4982.61	9284.44	-4.12	159.04	9724.65	170.18	57.38	PASS
5113.00†	5081.76	-450.80	-180.38	5003.76	5081.76	9284.44	-4.12	159.07	9736.83	172.71	56.61	PASS
5213.00†	5180.91	-462.90	-185.22	5102.91	5180.91	9284.44	-4.12	159.09	9749.02	175.24	55.85	PASS
5313.00†	5280.06	-475.00	-190.06	5202.06	5280.06	9284.44	-4.12	159.12	9761.21	177.77	55.12	PASS
5413.00†	5379.20	-487.10	-194.90	5301.20	5379.20	9284.44	-4.12	159.15	9773.40	180.31	54.41	PASS
5513.00†	5478.35	-499.19	-199.74	5400.35	5478.35	9284.44	-4.12	159.18	9785.59	182.85	53.72	PASS
5613.00†	5577.50	-511.29	-204.58	5499.50	5577.50	9284.44	-4.12	159.20	9797.78	185.39	53.05	PASS
5713.00†	5676.65	-523.39	-209.42	5598.65	5676.65	9284.44	-4.12	159.23	9809.98	187.94	52.39	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: CHAMPLIN 117 AMOCO G#6 AWB Offset Wellpath: CHAMPLIN 117 AMOCO G#6 AWP

Facility: SEC.35-T01S-R66W Slot: SLOT#01 EX CHAMPLIN 117 AMOCO G #6 (660'FNL & 1980'FWL, SEC.35,8308,PR) Well: CHAMPLIN 117 AMOCO G#6 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5775.79	-535.49	-214.27	5697.79	5775.79	9284.44	-4.12	159.26	9822.18	190.49	51.75	PASS
5913.00†	5874.94	-547.59	-219.11	5796.94	5874.94	9284.44	-4.12	159.28	9834.38	193.04	51.13	PASS
6013.00†	5974.09	-559.69	-223.95	5896.09	5974.09	9284.44	-4.12	159.31	9846.58	195.59	50.52	PASS
6113.00†	6073.24	-571.79	-228.79	5995.24	6073.24	9284.44	-4.12	159.34	9858.79	198.14	49.93	PASS
6213.00†	6172.38	-583.88	-233.63	6094.38	6172.38	9284.44	-4.12	159.36	9870.99	200.70	49.35	PASS
6313.00†	6271.53	-595.98	-238.47	6193.53	6271.53	9284.44	-4.12	159.39	9883.20	203.26	48.79	PASS
6413.00†	6370.68	-608.08	-243.31	6292.68	6370.68	9284.44	-4.12	159.42	9895.41	205.82	48.24	PASS
6513.00†	6469.82	-620.18	-248.15	6391.82	6469.82	9284.44	-4.12	159.44	9907.62	208.39	47.70	PASS
6613.00†	6568.97	-632.28	-252.99	6490.97	6568.97	9284.44	-4.12	159.47	9919.84	210.95	47.18	PASS
6713.00†	6668.12	-644.38	-257.83	6590.12	6668.12	9284.44	-4.12	159.50	9932.06	213.52	46.67	PASS
6813.00†	6767.27	-656.48	-262.68	6689.27	6767.27	9284.44	-4.12	159.52	9944.28	216.09	46.17	PASS
6913.00†	6866.41	-668.57	-267.52	6788.41	6866.41	9284.44	-4.12	159.55	9956.50	218.66	45.68	PASS
7013.00†	6965.56	-680.67	-272.36	6887.56	6965.56	9284.44	-4.12	159.57	9968.72	221.24	45.20	PASS
7113.00†	7064.71	-692.77	-277.20	6986.71	7064.71	9284.44	-4.12	159.60	9980.95	223.82	44.73	PASS
7213.00†	7163.86	-704.87	-282.04	7085.86	7163.86	9284.44	-4.12	159.63	9993.17	226.39	44.28	PASS
7251.04	7201.57	-709.47	-283.88	7123.57	7201.57	9284.44	-4.12	159.64	9997.83	227.37	44.10	PASS
7313.00†	7263.29	-713.63	-286.90	7185.29	7263.29	9284.44	-4.12	106.60	10002.07	228.99	43.81	PASS
7413.00†	7362.77	-706.23	-291.81	7284.77	7362.77	9284.44	-4.12	18.81	9994.81	231.94	43.22	PASS
7513.00†	7459.45	-681.66	-296.63	7381.45	7459.45	9284.44	-4.12	10.41	9970.39	235.56	42.45	PASS
7613.00†	7550.39	-640.64	-301.20	7472.39	7550.39	9284.44	-4.12	7.88	9929.52	238.70	41.72	PASS
7713.00†	7632.84	-584.44	-305.40	7554.84	7632.84	9284.44	-4.12	6.89	9873.47	241.43	41.01	PASS
7813.00†	7704.29	-514.75	-309.10	7626.29	7704.29	9284.44	-4.12	6.66	9803.93	243.70	40.34	PASS
7913.00†	7762.57	-433.70	-312.17	7684.57	7762.57	9284.44	-4.12	7.10	9723.02	245.48	39.72	PASS
8013.00†	7805.90	-343.74	-314.54	7727.90	7805.90	9284.44	-4.12	8.60	9633.19	246.74	39.15	PASS
8113.00†	7832.97	-247.62	-316.12	7754.97	7832.97	9284.44	-4.12	13.49	9537.17	247.50	38.64	PASS
8213.00†	7842.95	-148.25	-316.87	7764.95	7842.95	9284.44	-4.12	70.36	9437.87	247.78	38.20	PASS
8220.45	7843.00	-140.80	-316.89	7765.00	7843.00	9284.44	-4.12	90.00	9430.43	247.79	38.16	PASS
8313.00†	7843.00	-48.25	-317.13	7765.00	7843.00	9284.44	-4.12	90.00	9337.94	247.82	37.79	PASS
8413.00†	7843.00	51.75	-317.40	7765.00	7843.00	9284.44	-4.12	90.00	9238.01	247.85	37.38	PASS
8513.00†	7843.00	151.75	-317.66	7765.00	7843.00	9284.44	-4.12	90.00	9138.07	247.88	36.97	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: CHAMPLIN 117 AMOCO G#6 AWB Offset Wellpath: CHAMPLIN 117 AMOCO G#6 AWP												
Facility: SEC.35-T01S-R66W Slot: SLOT#01 EX CHAMPLIN 117 AMOCO G #6 (660'FNL & 1980'FWL, SEC.35,8308,PR) Well: CHAMPLIN 117 AMOCO G#6 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
8613.00†	7843.00	251.75	-317.92	7765.00	7843.00	9284.44	-4.12	90.00	9038.14	247.91	36.56	PASS
8713.00†	7843.00	351.75	-318.18	7765.00	7843.00	9284.44	-4.12	90.00	8938.21	247.95	36.15	PASS
8813.00†	7843.00	451.74	-318.44	7765.00	7843.00	9284.44	-4.12	90.00	8838.28	247.99	35.74	PASS
8913.00†	7843.00	551.74	-318.70	7765.00	7843.00	9284.44	-4.12	90.00	8738.36	248.03	35.33	PASS
9013.00†	7843.00	651.74	-318.97	7765.00	7843.00	9284.44	-4.12	90.00	8638.43	248.08	34.92	PASS
9113.00†	7843.00	751.74	-319.23	7765.00	7843.00	9284.44	-4.12	90.00	8538.51	248.13	34.51	PASS
9213.00†	7843.00	851.74	-319.49	7765.00	7843.00	9284.44	-4.12	90.00	8438.59	248.18	34.10	PASS
9313.00†	7843.00	951.74	-319.75	7765.00	7843.00	9284.44	-4.12	90.00	8338.67	248.23	33.69	PASS
9413.00†	7843.00	1051.74	-320.01	7765.00	7843.00	9284.44	-4.12	90.00	8238.75	248.29	33.27	PASS
9513.00†	7843.00	1151.74	-320.28	7765.00	7843.00	9284.44	-4.12	90.00	8138.84	248.34	32.86	PASS
9613.00†	7843.00	1251.74	-320.54	7765.00	7843.00	9284.44	-4.12	90.00	8038.93	248.41	32.45	PASS
9713.00†	7843.00	1351.74	-320.80	7765.00	7843.00	9284.44	-4.12	90.00	7939.02	248.47	32.04	PASS
9813.00†	7843.00	1451.74	-321.06	7765.00	7843.00	9284.44	-4.12	90.00	7839.11	248.54	31.63	PASS
9913.00†	7843.00	1551.74	-321.32	7765.00	7843.00	9284.44	-4.12	90.00	7739.20	248.61	31.22	PASS
10013.00†	7843.00	1651.74	-321.58	7765.00	7843.00	9284.44	-4.12	90.00	7639.30	248.68	30.80	PASS
10113.00†	7843.00	1751.74	-321.85	7765.00	7843.00	9284.44	-4.12	90.00	7539.40	248.76	30.39	PASS
10213.00†	7843.00	1851.74	-322.11	7765.00	7843.00	9284.44	-4.12	90.00	7439.50	248.84	29.98	PASS
10313.00†	7843.00	1951.74	-322.37	7765.00	7843.00	9284.44	-4.12	90.00	7339.60	248.93	29.57	PASS
10413.00†	7843.00	2051.74	-322.63	7765.00	7843.00	9284.44	-4.12	90.00	7239.71	249.01	29.15	PASS
10513.00†	7843.00	2151.74	-322.89	7765.00	7843.00	9284.44	-4.12	90.00	7139.82	249.10	28.74	PASS
10613.00†	7843.00	2251.74	-323.15	7765.00	7843.00	9284.44	-4.12	90.00	7039.93	249.20	28.33	PASS
10713.00†	7843.00	2351.74	-323.42	7765.00	7843.00	9284.44	-4.12	90.00	6940.05	249.30	27.91	PASS
10813.00†	7843.00	2451.74	-323.68	7765.00	7843.00	9284.44	-4.12	90.00	6840.17	249.40	27.50	PASS
10913.00†	7843.00	2551.74	-323.94	7765.00	7843.00	9284.44	-4.12	90.00	6740.29	249.51	27.09	PASS
11013.00†	7843.00	2651.74	-324.20	7765.00	7843.00	9284.44	-4.12	90.00	6640.42	249.62	26.67	PASS
11113.00†	7843.00	2751.74	-324.46	7765.00	7843.00	9284.44	-4.12	90.00	6540.55	249.74	26.26	PASS
11213.00†	7843.00	2851.74	-324.72	7765.00	7843.00	9284.44	-4.12	90.00	6440.69	249.86	25.85	PASS
11313.00†	7843.00	2951.74	-324.99	7765.00	7843.00	9284.44	-4.12	90.00	6340.83	249.99	25.43	PASS
11413.00†	7843.00	3051.74	-325.25	7765.00	7843.00	9284.44	-4.12	90.00	6240.97	250.12	25.02	PASS
11513.00†	7843.00	3151.74	-325.51	7765.00	7843.00	9284.44	-4.12	90.00	6141.12	250.25	24.61	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: CHAMPLIN 117 AMOCO G#6 AWB Offset Wellpath: CHAMPLIN 117 AMOCO G#6 AWP

Facility: SEC.35-T01S-R66W Slot: SLOT#01 EX CHAMPLIN 117 AMOCO G #6 (660'FNL & 1980'FWL, SEC.35,8308,PR) Well: CHAMPLIN 117 AMOCO G#6 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11613.00†	7843.00	3251.74	-325.77	7765.00	7843.00	9284.44	-4.12	90.00	6041.27	250.39	24.19	PASS
11713.00†	7843.00	3351.74	-326.03	7765.00	7843.00	9284.44	-4.12	90.00	5941.43	250.54	23.78	PASS
11813.00†	7843.00	3451.73	-326.30	7765.00	7843.00	9284.44	-4.12	90.00	5841.60	250.70	23.36	PASS
11913.00†	7843.00	3551.73	-326.56	7765.00	7843.00	9284.44	-4.12	90.00	5741.77	250.86	22.95	PASS
12013.00†	7843.00	3651.73	-326.82	7765.00	7843.00	9284.44	-4.12	90.00	5641.94	251.02	22.54	PASS
12113.00†	7843.00	3751.73	-327.08	7765.00	7843.00	9284.44	-4.12	90.00	5542.12	251.20	22.12	PASS
12213.00†	7843.00	3851.73	-327.34	7765.00	7843.00	9284.44	-4.12	90.00	5442.31	251.38	21.71	PASS
12313.00†	7843.00	3951.73	-327.60	7765.00	7843.00	9284.44	-4.12	90.00	5342.51	251.57	21.29	PASS
12413.00†	7843.00	4051.73	-327.87	7765.00	7843.00	9284.44	-4.12	90.00	5242.71	251.76	20.88	PASS
12513.00†	7843.00	4151.73	-328.13	7765.00	7843.00	9284.44	-4.12	90.00	5142.92	251.97	20.47	PASS
12613.00†	7843.00	4251.73	-328.39	7765.00	7843.00	9284.44	-4.12	90.00	5043.14	252.18	20.05	PASS
12713.00†	7843.00	4351.73	-328.65	7765.00	7843.00	9284.44	-4.12	90.00	4943.37	252.41	19.64	PASS
12813.00†	7843.00	4451.73	-328.91	7765.00	7843.00	9284.44	-4.12	90.00	4843.61	252.65	19.22	PASS
12913.00†	7843.00	4551.73	-329.17	7765.00	7843.00	9284.44	-4.12	90.00	4743.86	252.89	18.81	PASS
13013.00†	7843.00	4651.73	-329.44	7765.00	7843.00	9284.44	-4.12	90.00	4644.12	253.15	18.39	PASS
13113.00†	7843.00	4751.73	-329.70	7765.00	7843.00	9284.44	-4.12	90.00	4544.39	253.42	17.98	PASS
13213.00†	7843.00	4851.73	-329.96	7765.00	7843.00	9284.44	-4.12	90.00	4444.67	253.71	17.56	PASS
13313.00†	7843.00	4951.73	-330.22	7765.00	7843.00	9284.44	-4.12	90.00	4344.96	254.01	17.15	PASS
13413.00†	7843.00	5051.73	-330.48	7765.00	7843.00	9284.44	-4.12	90.00	4245.27	254.33	16.74	PASS
13513.00†	7843.00	5151.73	-330.74	7765.00	7843.00	9284.44	-4.12	90.00	4145.60	254.66	16.32	PASS
13613.00†	7843.00	5251.73	-331.01	7765.00	7843.00	9284.44	-4.12	90.00	4045.94	255.02	15.91	PASS
13713.00†	7843.00	5351.73	-331.27	7765.00	7843.00	9284.44	-4.12	90.00	3946.29	255.39	15.49	PASS
13813.00†	7843.00	5451.73	-331.53	7765.00	7843.00	9284.44	-4.12	90.00	3846.67	255.79	15.08	PASS
13913.00†	7843.00	5551.73	-331.79	7765.00	7843.00	9284.44	-4.12	90.00	3747.07	256.21	14.66	PASS
14013.00†	7843.00	5651.73	-332.05	7765.00	7843.00	9284.44	-4.12	90.00	3647.48	256.65	14.25	PASS
14113.00†	7843.00	5751.73	-332.32	7765.00	7843.00	9284.44	-4.12	90.00	3547.92	257.13	13.83	PASS
14213.00†	7843.00	5851.73	-332.58	7765.00	7843.00	9284.44	-4.12	90.00	3448.39	257.63	13.42	PASS
14313.00†	7843.00	5951.73	-332.84	7765.00	7843.00	9284.44	-4.12	90.00	3348.88	258.18	13.00	PASS
14413.00†	7843.00	6051.73	-333.10	7765.00	7843.00	9284.44	-4.12	90.00	3249.41	258.76	12.59	PASS
14513.00†	7843.00	6151.73	-333.36	7765.00	7843.00	9284.44	-4.12	90.00	3149.97	259.38	12.17	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: CHAMPLIN 117 AMOCO G#6 AWB Offset Wellpath: CHAMPLIN 117 AMOCO G#6 AWP

Facility: SEC.35-T01S-R66W Slot: SLOT#01 EX CHAMPLIN 117 AMOCO G #6 (660'FNL & 1980'FWL, SEC.35,8308,PR) Well: CHAMPLIN 117 AMOCO G#6 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
14613.00†	7843.00	6251.73	-333.62	7765.00	7843.00	9284.44	-4.12	90.00	3050.56	260.05	11.76	PASS
14713.00†	7843.00	6351.72	-333.89	7765.00	7843.00	9284.44	-4.12	90.00	2951.20	260.78	11.35	PASS
14813.00†	7843.00	6451.72	-334.15	7765.00	7843.00	9284.44	-4.12	90.00	2851.87	261.56	10.93	PASS
14913.00†	7843.00	6551.72	-334.41	7765.00	7843.00	9284.44	-4.12	90.00	2752.60	262.41	10.52	PASS
15013.00†	7843.00	6651.72	-334.67	7765.00	7843.00	9284.44	-4.12	90.00	2653.39	263.34	10.10	PASS
15113.00†	7843.00	6751.72	-334.93	7765.00	7843.00	9284.44	-4.12	90.00	2554.23	264.35	9.69	PASS
15213.00†	7843.00	6851.72	-335.19	7765.00	7843.00	9284.44	-4.12	90.00	2455.14	265.45	9.27	PASS
15313.00†	7843.00	6951.72	-335.46	7765.00	7843.00	9284.44	-4.12	90.00	2356.13	266.67	8.86	PASS
15413.00†	7843.00	7051.72	-335.72	7765.00	7843.00	9284.44	-4.12	90.00	2257.21	268.01	8.44	PASS
15513.00†	7843.00	7151.72	-335.98	7765.00	7843.00	9284.44	-4.12	90.00	2158.38	269.49	8.03	PASS
15613.00†	7843.00	7251.72	-336.24	7765.00	7843.00	9284.44	-4.12	90.00	2059.67	271.14	7.61	PASS
15713.00†	7843.00	7351.72	-336.50	7765.00	7843.00	9284.44	-4.12	90.00	1961.09	272.98	7.20	PASS
15813.00†	7843.00	7451.72	-336.76	7765.00	7843.00	9284.44	-4.12	90.00	1862.66	275.05	6.79	PASS
15913.00†	7843.00	7551.72	-337.03	7765.00	7843.00	9284.44	-4.12	90.00	1764.41	277.38	6.37	PASS
16013.00†	7843.00	7651.72	-337.29	7765.00	7843.00	9284.44	-4.12	90.00	1666.36	280.02	5.96	PASS
16113.00†	7843.00	7751.72	-337.55	7765.00	7843.00	9284.44	-4.12	90.00	1568.57	283.04	5.55	PASS
16213.00†	7843.00	7851.72	-337.81	7765.00	7843.00	9284.44	-4.12	90.00	1471.07	286.50	5.14	PASS
16313.00†	7843.00	7951.72	-338.07	7765.00	7843.00	9284.44	-4.12	90.00	1373.92	290.51	4.74	PASS
16413.00†	7843.00	8051.72	-338.33	7765.00	7843.00	9284.44	-4.12	90.00	1277.22	295.18	4.33	PASS
16513.00†	7843.00	8151.72	-338.60	7765.00	7843.00	9284.44	-4.12	90.00	1181.07	300.68	3.93	PASS
16613.00†	7843.00	8251.72	-338.86	7765.00	7843.00	9284.44	-4.12	90.00	1085.62	307.19	3.54	PASS
16713.00†	7843.00	8351.72	-339.12	7765.00	7843.00	9284.44	-4.12	90.00	991.06	315.00	3.15	PASS
16813.00†	7843.00	8451.72	-339.38	7765.00	7843.00	9284.44	-4.12	90.00	897.68	324.47	2.77	PASS
16913.00†	7843.00	8551.72	-339.64	7765.00	7843.00	9284.44	-4.12	90.00	805.89	336.06	2.40	PASS
17013.00†	7843.00	8651.72	-339.91	7765.00	7843.00	9284.44	-4.12	90.00	716.30	350.43	2.05	PASS
17113.00†	7843.00	8751.72	-340.17	7765.00	7843.00	9284.44	-4.12	90.00	629.86	368.36	1.71	PASS
17213.00†	7843.00	8851.72	-340.43	7765.00	7843.00	9284.44	-4.12	90.00	548.04	390.76	1.40	PASS
17313.00†	7843.00	8951.72	-340.69	7765.00	7843.00	9284.44	-4.12	90.00	473.27	418.23	1.13	PASS
17413.00†	7843.00	9051.72	-340.95	7765.00	7843.00	9284.44	-4.12	90.00	409.41	449.85	0.91	FAIL
17513.00†	7843.00	9151.72	-341.21	7765.00	7843.00	9284.44	-4.12	90.00	362.28	480.49	0.75	FAIL

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: CHAMPLIN 117 AMOCO G#6 AWP Offset Wellpath: CHAMPLIN 117 AMOCO G#6 AWP

Facility: SEC.35-T01S-R66W Slot: SLOT#01 EX CHAMPLIN 117 AMOCO G #6 (660'FNL & 1980'FWL, SEC.35,8308,PR) Well: CHAMPLIN 117 AMOCO G#6 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
17613.00†	7843.00	9251.71	-341.48	7765.00	7843.00	9284.44	-4.12	90.00	338.94	498.92	0.68	FAIL
17644.97†	7843.00	9283.69	-341.56	7765.00	7843.00	9284.44	-4.12	90.00	337.44	500.21	0.67	FAIL
17645.09†	7843.00	9283.81	-341.56	7764.88	7842.88	9284.44	-4.12	89.98	337.44	500.21	0.67	FAIL
17713.00†	7843.00	9351.71	-341.74	7765.00	7843.00	9284.44	-4.12	90.00	344.26	494.61	0.70	FAIL
17813.00†	7843.00	9451.71	-342.00	7765.00	7843.00	9284.44	-4.12	90.00	377.02	470.36	0.80	FAIL
17913.00†	7843.00	9551.71	-342.26	7765.00	7843.00	9284.44	-4.12	90.00	431.02	438.51	0.98	FAIL
17937.78	7843.00	9576.50	-342.33	7765.00	7843.00	9284.44	-4.12	90.00	446.86	430.65	1.04	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: CHAMPLIN 117 AMOCO G#6 AWP Offset Wellpath: CHAMPLIN 117 AMOCO G#6 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: CHAMPLIN 117 AMOCO G#6 AWP Offset Wellpath: CHAMPLIN 117 AMOCO G#6 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8308.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8308>	CHAMPLIN 117 AMOCO G#6 AWP

OFFSET WELLPATH REFERENCE - Offset Wellbore: CHAMPLIN 117 AMOCO G#6 AWP Offset Wellpath: CHAMPLIN 117 AMOCO G#6 AWP

MD Reference: Rig on SLOT#01 EX CHAMPLIN 117 AOMOCO G #6 (660'FNL & 1980'FWL, SEC.35,8308,PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NCH PWB Offset Wellpath: ACKARD NORTH 2-35-2NCH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#07 ACKARD NORTH 2-35-2NCH (600'FSL & 2025'FWL, SEC.02) Well: ACKARD NORTH 2-35-2NCH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	13.00	13.00	0.11	30.02	89.79	30.02	1.40	48.70	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.11	30.02	89.79	30.02	1.72	31.88	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.11	30.02	89.79	30.02	2.28	19.72	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.11	30.02	89.79	30.02	2.89	14.03	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.11	30.02	89.79	30.02	3.50	10.83	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.11	30.02	89.79	30.02	4.12	8.81	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.11	30.02	89.79	30.02	4.74	7.42	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.11	30.02	89.79	30.02	5.36	6.40	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.11	30.02	89.79	30.02	5.99	5.63	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.11	30.02	89.79	30.02	6.61	5.03	PASS
1013.00†	1013.00	0.00	0.00	1013.00	1013.00	0.11	30.02	89.79	30.02	7.24	4.54	PASS
1113.00†	1113.00	0.00	0.00	1113.00	1113.00	0.11	30.02	89.79	30.02	7.87	4.14	PASS
1200.00	1200.00	0.00	0.00	1200.00	1200.00	0.11	30.02	89.79	30.02	8.41	3.84	PASS
1213.00†	1213.00	-0.03	-0.01	1213.00	1213.00	0.11	30.02	-112.07	30.03	8.49	3.80	PASS
1313.00†	1312.97	-2.07	-0.83	1312.97	1312.97	0.11	30.02	-115.83	30.93	9.14	3.61	PASS
1413.00†	1412.80	-7.35	-2.94	1412.83	1412.83	0.08	30.02	-124.44	33.79	9.89	3.63	PASS
1513.00†	1512.38	-15.86	-6.35	1512.84	1512.81	-2.11	30.19	-132.32	39.04	10.72	3.85	PASS
1574.38	1573.31	-22.68	-9.07	1574.30	1574.19	-5.18	30.43	-135.57	43.21	11.24	4.06	PASS
1613.00†	1611.61	-27.35	-10.94	1613.02	1612.82	-7.78	30.63	-136.91	45.96	11.53	4.21	PASS
1713.00†	1710.75	-39.45	-15.79	1713.45	1712.82	-16.97	31.33	-137.27	52.24	12.23	4.50	PASS
1813.00†	1809.90	-51.55	-20.63	1813.66	1812.27	-29.31	32.27	-134.58	57.43	12.80	4.69	PASS
1913.00†	1909.05	-63.65	-25.47	1913.49	1911.25	-42.18	33.26	-131.84	62.57	13.50	4.84	PASS
2013.00†	2008.20	-75.75	-30.31	2013.31	2010.24	-55.05	34.25	-129.52	67.82	14.24	4.96	PASS
2113.00†	2107.34	-87.84	-35.15	2113.14	2109.23	-67.92	35.23	-127.53	73.17	15.03	5.06	PASS
2213.00†	2206.49	-99.94	-39.99	2212.97	2208.22	-80.79	36.22	-125.81	78.60	15.86	5.14	PASS
2313.00†	2305.64	-112.04	-44.83	2312.79	2307.21	-93.66	37.21	-124.32	84.09	16.70	5.21	PASS
2413.00†	2404.78	-124.14	-49.67	2412.62	2406.20	-106.54	38.19	-123.01	89.62	17.57	5.27	PASS
2513.00†	2503.93	-136.24	-54.51	2512.45	2505.19	-119.41	39.18	-121.86	95.20	18.46	5.32	PASS
2613.00†	2603.08	-148.34	-59.35	2612.28	2604.18	-132.28	40.16	-120.83	100.81	19.36	5.37	PASS
2713.00†	2702.23	-160.44	-64.20	2712.10	2703.16	-145.15	41.15	-119.91	106.45	20.27	5.40	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NCH PWB Offset Wellpath: ACKARD NORTH 2-35-2NCH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#07 ACKARD NORTH 2-35-2NCH (600'FSL & 2025'FWL, SEC.02) Well: ACKARD NORTH 2-35-2NCH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2801.37	-172.53	-69.04	2811.93	2802.15	-158.02	42.14	-119.08	112.12	21.20	5.44	PASS
2913.00†	2900.52	-184.63	-73.88	2911.76	2901.14	-170.89	43.12	-118.34	117.81	22.13	5.47	PASS
3013.00†	2999.67	-196.73	-78.72	3011.58	3000.13	-183.76	44.11	-117.66	123.51	23.07	5.49	PASS
3113.00†	3098.82	-208.83	-83.56	3111.41	3099.12	-196.63	45.10	-117.04	129.23	24.02	5.51	PASS
3213.00†	3197.96	-220.93	-88.40	3211.24	3198.11	-209.50	46.08	-116.47	134.97	24.97	5.53	PASS
3313.00†	3297.11	-233.03	-93.24	3311.06	3297.10	-222.38	47.07	-115.96	140.71	25.93	5.55	PASS
3413.00†	3396.26	-245.13	-98.08	3410.89	3396.09	-235.25	48.06	-115.48	146.47	26.89	5.57	PASS
3513.00†	3495.41	-257.22	-102.92	3510.72	3495.08	-248.12	49.04	-115.03	152.24	27.85	5.58	PASS
3613.00†	3594.55	-269.32	-107.76	3610.54	3594.06	-260.99	50.03	-114.62	158.01	28.82	5.60	PASS
3713.00†	3693.70	-281.42	-112.60	3710.37	3693.05	-273.86	51.01	-114.24	163.79	29.79	5.61	PASS
3813.00†	3792.85	-293.52	-117.45	3810.20	3792.04	-286.73	52.00	-113.89	169.58	30.76	5.62	PASS
3913.00†	3891.99	-305.62	-122.29	3910.03	3891.03	-299.60	52.99	-113.56	175.38	31.74	5.63	PASS
4013.00†	3991.14	-317.72	-127.13	4009.85	3990.02	-312.47	53.97	-113.25	181.18	32.71	5.64	PASS
4113.00†	4090.29	-329.82	-131.97	4109.68	4089.01	-325.34	54.96	-112.95	186.99	33.69	5.65	PASS
4213.00†	4189.44	-341.91	-136.81	4209.51	4188.00	-338.22	55.95	-112.68	192.80	34.67	5.66	PASS
4313.00†	4288.58	-354.01	-141.65	4309.33	4286.99	-351.09	56.93	-112.42	198.61	35.66	5.66	PASS
4413.00†	4387.73	-366.11	-146.49	4409.16	4385.97	-363.96	57.92	-112.18	204.43	36.64	5.67	PASS
4513.00†	4486.88	-378.21	-151.33	4508.99	4484.96	-376.83	58.90	-111.95	210.25	37.63	5.68	PASS
4613.00†	4586.03	-390.31	-156.17	4608.81	4583.95	-389.70	59.89	-111.73	216.07	38.61	5.68	PASS
4713.00†	4685.17	-402.41	-161.01	4708.64	4682.94	-402.57	60.88	-111.53	221.90	39.60	5.69	PASS
4813.00†	4784.32	-414.51	-165.86	4808.47	4781.93	-415.44	61.86	-111.33	227.73	40.59	5.69	PASS
4913.00†	4883.47	-426.60	-170.70	4908.30	4880.92	-428.31	62.85	-111.15	233.57	41.58	5.70	PASS
5013.00†	4982.61	-438.70	-175.54	5008.12	4979.91	-441.18	63.84	-110.97	239.40	42.57	5.70	PASS
5113.00†	5081.76	-450.80	-180.38	5107.95	5078.90	-454.05	64.82	-110.80	245.24	43.56	5.71	PASS
5213.00†	5180.91	-462.90	-185.22	5207.78	5177.88	-466.93	65.81	-110.64	251.08	44.55	5.71	PASS
5313.00†	5280.06	-475.00	-190.06	5307.60	5276.87	-479.80	66.79	-110.49	256.92	45.54	5.71	PASS
5413.00†	5379.20	-487.10	-194.90	5407.43	5375.86	-492.67	67.78	-110.34	262.76	46.53	5.72	PASS
5513.00†	5478.35	-499.19	-199.74	5507.26	5474.85	-505.54	68.77	-110.20	268.61	47.53	5.72	PASS
5613.00†	5577.50	-511.29	-204.58	5607.08	5573.84	-518.41	69.75	-110.07	274.45	48.52	5.73	PASS
5713.00†	5676.65	-523.39	-209.42	5706.91	5672.83	-531.28	70.74	-109.94	280.30	49.51	5.73	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NCH PWB Offset Wellpath: ACKARD NORTH 2-35-2NCH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#07 ACKARD NORTH 2-35-2NCH (600'FSL & 2025'FWL, SEC.02) Well: ACKARD NORTH 2-35-2NCH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5775.79	-535.49	-214.27	5806.74	5771.82	-544.15	71.73	-109.82	286.15	50.51	5.73	PASS
5913.00†	5874.94	-547.59	-219.11	5906.56	5870.81	-557.02	72.71	-109.70	292.00	51.50	5.73	PASS
6013.00†	5974.09	-559.69	-223.95	6006.39	5969.80	-569.89	73.70	-109.59	297.85	52.50	5.74	PASS
6113.00†	6073.24	-571.79	-228.79	6106.22	6068.78	-582.77	74.68	-109.48	303.70	53.50	5.74	PASS
6213.00†	6172.38	-583.88	-233.63	6206.05	6167.77	-595.64	75.67	-109.37	309.56	54.49	5.74	PASS
6313.00†	6271.53	-595.98	-238.47	6305.87	6266.76	-608.51	76.66	-109.27	315.41	55.49	5.74	PASS
6413.00†	6370.68	-608.08	-243.31	6405.70	6365.75	-621.38	77.64	-109.17	321.27	56.49	5.75	PASS
6513.00†	6469.82	-620.18	-248.15	6505.53	6464.74	-634.25	78.63	-109.08	327.12	57.48	5.75	PASS
6613.00†	6568.97	-632.28	-252.99	6605.35	6563.73	-647.12	79.62	-108.99	332.98	58.48	5.75	PASS
6713.00†	6668.12	-644.38	-257.83	6705.18	6662.72	-659.99	80.60	-108.90	338.84	59.48	5.75	PASS
6813.00†	6767.27	-656.48	-262.68	6805.01	6761.71	-672.86	81.59	-108.82	344.70	60.48	5.76	PASS
6913.00†	6866.41	-668.57	-267.52	6904.83	6860.69	-685.73	82.57	-108.74	350.56	61.48	5.76	PASS
7013.00†	6965.56	-680.67	-272.36	7004.66	6959.68	-698.61	83.56	-108.66	356.42	62.47	5.76	PASS
7113.00†	7064.71	-692.77	-277.20	7105.46	7059.71	-710.89	84.56	-108.69	362.24	63.46	5.76	PASS
7213.00†	7163.86	-704.87	-282.04	7206.80	7160.91	-709.95	85.53	-110.80	367.61	64.93	5.71	PASS
7251.04	7201.57	-709.47	-283.88	7243.67	7197.47	-705.18	85.87	-112.22	369.79	65.78	5.67	PASS
7313.00†	7263.29	-713.63	-286.90	7301.90	7254.36	-692.89	86.38	-168.16	373.97	67.19	5.61	PASS
7413.00†	7362.77	-706.23	-291.81	7392.78	7339.85	-662.36	87.12	99.60	382.15	67.25	5.73	PASS
7513.00†	7459.45	-681.66	-296.63	7480.42	7416.74	-620.48	87.75	87.07	391.55	67.57	5.85	PASS
7613.00†	7550.39	-640.64	-301.20	7565.42	7484.37	-569.13	88.27	80.79	401.45	66.06	6.13	PASS
7713.00†	7632.84	-584.44	-305.40	7648.30	7542.31	-509.96	88.67	76.46	411.14	64.31	6.45	PASS
7813.00†	7704.29	-514.75	-309.10	7729.52	7590.23	-444.47	88.96	73.25	420.00	62.53	6.78	PASS
7913.00†	7762.57	-433.70	-312.17	7809.47	7627.90	-374.03	89.14	70.88	427.49	60.89	7.09	PASS
8013.00†	7805.90	-343.74	-314.54	7888.49	7655.15	-299.92	89.21	69.23	433.19	59.42	7.37	PASS
8113.00†	7832.97	-247.62	-316.12	7966.91	7671.86	-223.36	89.17	68.24	436.81	58.34	7.57	PASS
8213.00†	7842.95	-148.25	-316.87	8045.03	7677.97	-145.55	89.02	67.88	438.15	57.53	7.70	PASS
8220.45	7843.00	-140.80	-316.89	8050.85	7678.00	-139.73	89.01	67.88	438.16	57.47	7.71	PASS
8313.00†	7843.00	-48.25	-317.13	8143.39	7678.00	-47.19	88.77	67.88	438.16	57.09	7.76	PASS
8413.00†	7843.00	51.75	-317.40	8243.39	7678.00	52.81	88.51	67.88	438.16	57.25	7.74	PASS
8513.00†	7843.00	151.75	-317.66	8343.39	7678.00	152.81	88.24	67.88	438.16	58.01	7.63	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NCH PWB Offset Wellpath: ACKARD NORTH 2-35-2NCH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#07 ACKARD NORTH 2-35-2NCH (600'FSL & 2025'FWL, SEC.02) Well: ACKARD NORTH 2-35-2NCH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
8613.00†	7843.00	251.75	-317.92	8443.39	7678.00	252.81	87.98	67.88	438.16	59.34	7.46	PASS
8713.00†	7843.00	351.75	-318.18	8543.39	7678.00	352.81	87.72	67.88	438.16	61.21	7.23	PASS
8813.00†	7843.00	451.74	-318.44	8643.39	7678.00	452.81	87.46	67.88	438.16	63.59	6.96	PASS
8913.00†	7843.00	551.74	-318.70	8743.39	7678.00	552.81	87.20	67.88	438.16	66.41	6.66	PASS
9013.00†	7843.00	651.74	-318.97	8843.39	7678.00	652.81	86.93	67.88	438.16	69.61	6.35	PASS
9113.00†	7843.00	751.74	-319.23	8943.39	7678.00	752.81	86.67	67.88	438.16	73.14	6.04	PASS
9213.00†	7843.00	851.74	-319.49	9043.39	7678.00	852.81	86.41	67.88	438.16	76.86	5.74	PASS
9313.00†	7843.00	951.74	-319.75	9143.39	7678.00	952.81	86.15	67.88	438.16	81.03	5.45	PASS
9413.00†	7843.00	1051.74	-320.01	9243.39	7678.00	1052.81	85.89	67.88	438.16	85.31	5.17	PASS
9513.00†	7843.00	1151.74	-320.28	9343.39	7678.00	1152.81	85.63	67.88	438.16	89.76	4.91	PASS
9613.00†	7843.00	1251.74	-320.54	9443.39	7678.00	1252.80	85.36	67.88	438.16	94.38	4.67	PASS
9713.00†	7843.00	1351.74	-320.80	9543.39	7678.00	1352.80	85.10	67.88	438.16	99.13	4.44	PASS
9813.00†	7843.00	1451.74	-321.06	9643.39	7678.00	1452.80	84.84	67.88	438.16	103.98	4.24	PASS
9913.00†	7843.00	1551.74	-321.32	9743.39	7678.00	1552.80	84.58	67.88	438.16	108.94	4.04	PASS
10013.00†	7843.00	1651.74	-321.58	9843.39	7678.00	1652.80	84.32	67.88	438.16	113.98	3.86	PASS
10113.00†	7843.00	1751.74	-321.85	9943.39	7678.00	1752.80	84.06	67.88	438.16	119.10	3.69	PASS
10213.00†	7843.00	1851.74	-322.11	10043.39	7678.00	1852.80	83.79	67.88	438.16	124.29	3.54	PASS
10313.00†	7843.00	1951.74	-322.37	10143.39	7678.00	1952.80	83.53	67.88	438.16	129.53	3.40	PASS
10413.00†	7843.00	2051.74	-322.63	10243.39	7678.00	2052.80	83.27	67.88	438.16	134.83	3.26	PASS
10513.00†	7843.00	2151.74	-322.89	10343.39	7678.00	2152.80	83.01	67.88	438.16	140.17	3.14	PASS
10613.00†	7843.00	2251.74	-323.15	10443.39	7678.00	2252.80	82.75	67.88	438.16	145.55	3.02	PASS
10713.00†	7843.00	2351.74	-323.42	10543.39	7678.00	2352.80	82.48	67.88	438.16	150.96	2.91	PASS
10813.00†	7843.00	2451.74	-323.68	10643.39	7678.00	2452.80	82.22	67.88	438.16	156.41	2.81	PASS
10913.00†	7843.00	2551.74	-323.94	10743.39	7678.00	2552.80	81.96	67.88	438.16	161.89	2.71	PASS
11013.00†	7843.00	2651.74	-324.20	10843.39	7678.00	2652.80	81.70	67.88	438.16	167.39	2.62	PASS
11113.00†	7843.00	2751.74	-324.46	10943.39	7678.00	2752.80	81.44	67.88	438.16	172.92	2.54	PASS
11213.00†	7843.00	2851.74	-324.72	11043.39	7678.00	2852.80	81.18	67.88	438.16	178.47	2.46	PASS
11313.00†	7843.00	2951.74	-324.99	11143.39	7678.00	2952.80	80.91	67.88	438.16	184.03	2.39	PASS
11413.00†	7843.00	3051.74	-325.25	11243.39	7678.00	3052.80	80.65	67.88	438.16	189.62	2.32	PASS
11513.00†	7843.00	3151.74	-325.51	11343.39	7678.00	3152.80	80.39	67.88	438.16	195.22	2.25	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NCH PWB Offset Wellpath: ACKARD NORTH 2-35-2NCH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#07 ACKARD NORTH 2-35-2NCH (600'FSL & 2025'FWL, SEC.02) Well: ACKARD NORTH 2-35-2NCH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11613.00†	7843.00	3251.74	-325.77	11443.39	7678.00	3252.80	80.13	67.88	438.16	200.84	2.19	PASS
11713.00†	7843.00	3351.74	-326.03	11543.39	7678.00	3352.80	79.87	67.88	438.16	206.47	2.13	PASS
11813.00†	7843.00	3451.73	-326.30	11643.39	7678.00	3452.80	79.61	67.88	438.16	212.11	2.07	PASS
11913.00†	7843.00	3551.73	-326.56	11743.39	7678.00	3552.80	79.34	67.88	438.16	217.76	2.02	PASS
12013.00†	7843.00	3651.73	-326.82	11843.39	7678.00	3652.80	79.08	67.88	438.16	223.43	1.96	PASS
12113.00†	7843.00	3751.73	-327.08	11943.39	7678.00	3752.80	78.82	67.88	438.16	229.10	1.92	PASS
12213.00†	7843.00	3851.73	-327.34	12043.39	7678.00	3852.80	78.56	67.88	438.16	234.79	1.87	PASS
12313.00†	7843.00	3951.73	-327.60	12143.39	7678.00	3952.80	78.30	67.88	438.16	240.48	1.82	PASS
12413.00†	7843.00	4051.73	-327.87	12243.39	7678.00	4052.80	78.03	67.88	438.16	246.18	1.78	PASS
12513.00†	7843.00	4151.73	-328.13	12343.39	7678.00	4152.79	77.77	67.88	438.16	251.89	1.74	PASS
12613.00†	7843.00	4251.73	-328.39	12443.39	7678.00	4252.79	77.51	67.88	438.16	257.60	1.70	PASS
12713.00†	7843.00	4351.73	-328.65	12543.39	7678.00	4352.79	77.25	67.88	438.16	263.32	1.67	PASS
12813.00†	7843.00	4451.73	-328.91	12643.39	7678.00	4452.79	76.99	67.88	438.16	269.05	1.63	PASS
12913.00†	7843.00	4551.73	-329.17	12743.39	7678.00	4552.79	76.73	67.88	438.16	274.78	1.60	PASS
13013.00†	7843.00	4651.73	-329.44	12843.39	7678.00	4652.79	76.46	67.88	438.16	280.52	1.56	PASS
13113.00†	7843.00	4751.73	-329.70	12943.39	7678.00	4752.79	76.20	67.88	438.16	286.26	1.53	PASS
13213.00†	7843.00	4851.73	-329.96	13043.39	7678.00	4852.79	75.94	67.88	438.16	292.01	1.50	PASS
13313.00†	7843.00	4951.73	-330.22	13143.39	7678.00	4952.79	75.68	67.88	438.16	297.76	1.47	PASS
13413.00†	7843.00	5051.73	-330.48	13243.39	7678.00	5052.79	75.42	67.88	438.16	303.52	1.44	PASS
13513.00†	7843.00	5151.73	-330.74	13343.39	7678.00	5152.79	75.15	67.88	438.16	309.28	1.42	PASS
13613.00†	7843.00	5251.73	-331.01	13443.39	7678.00	5252.79	74.89	67.88	438.16	315.04	1.39	PASS
13713.00†	7843.00	5351.73	-331.27	13543.39	7678.00	5352.79	74.63	67.88	438.16	320.81	1.37	PASS
13813.00†	7843.00	5451.73	-331.53	13643.39	7678.00	5452.79	74.37	67.88	438.16	326.58	1.34	PASS
13913.00†	7843.00	5551.73	-331.79	13743.39	7678.00	5552.79	74.11	67.88	438.16	332.35	1.32	PASS
14013.00†	7843.00	5651.73	-332.05	13843.39	7678.00	5652.79	73.85	67.88	438.16	338.13	1.30	PASS
14113.00†	7843.00	5751.73	-332.32	13943.39	7678.00	5752.79	73.58	67.88	438.16	343.91	1.27	PASS
14213.00†	7843.00	5851.73	-332.58	14043.39	7678.00	5852.79	73.32	67.88	438.16	349.69	1.25	PASS
14313.00†	7843.00	5951.73	-332.84	14143.39	7678.00	5952.79	73.06	67.88	438.16	355.48	1.23	PASS
14413.00†	7843.00	6051.73	-333.10	14243.39	7678.00	6052.79	72.80	67.88	438.16	361.26	1.21	PASS
14513.00†	7843.00	6151.73	-333.36	14343.39	7678.00	6152.79	72.54	67.88	438.16	367.05	1.19	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NCH PWB Offset Wellpath: ACKARD NORTH 2-35-2NCH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#07 ACKARD NORTH 2-35-2NCH (600'FSL & 2025'FWL, SEC.02) Well: ACKARD NORTH 2-35-2NCH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
14613.00†	7843.00	6251.73	-333.62	14443.39	7678.00	6252.79	72.28	67.88	438.16	372.84	1.18	PASS
14713.00†	7843.00	6351.72	-333.89	14543.39	7678.00	6352.79	72.01	67.88	438.16	378.64	1.16	PASS
14813.00†	7843.00	6451.72	-334.15	14643.39	7678.00	6452.79	71.75	67.88	438.16	384.43	1.14	PASS
14913.00†	7843.00	6551.72	-334.41	14743.39	7678.00	6552.79	71.49	67.88	438.16	390.23	1.12	PASS
15013.00†	7843.00	6651.72	-334.67	14843.39	7678.00	6652.79	71.23	67.88	438.16	396.03	1.11	PASS
15113.00†	7843.00	6751.72	-334.93	14943.39	7678.00	6752.79	70.97	67.88	438.16	401.83	1.09	PASS
15213.00†	7843.00	6851.72	-335.19	15043.39	7678.00	6852.79	70.70	67.88	438.16	407.64	1.08	PASS
15313.00†	7843.00	6951.72	-335.46	15143.39	7678.00	6952.79	70.44	67.88	438.16	413.44	1.06	PASS
15413.00†	7843.00	7051.72	-335.72	15243.39	7678.00	7052.78	70.18	67.88	438.16	419.25	1.05	PASS
15513.00†	7843.00	7151.72	-335.98	15343.39	7678.00	7152.78	69.92	67.88	438.15	425.05	1.03	PASS
15613.00†	7843.00	7251.72	-336.24	15443.39	7678.00	7252.78	69.66	67.88	438.15	430.86	1.02	PASS
15713.00†	7843.00	7351.72	-336.50	15543.39	7678.00	7352.78	69.40	67.88	438.15	436.67	1.00	PASS
15813.00†	7843.00	7451.72	-336.76	15643.39	7678.00	7452.78	69.13	67.88	438.15	442.49	0.99	FAIL
15913.00†	7843.00	7551.72	-337.03	15743.39	7678.00	7552.78	68.87	67.88	438.15	448.30	0.98	FAIL
16013.00†	7843.00	7651.72	-337.29	15843.39	7678.00	7652.78	68.61	67.88	438.15	454.11	0.96	FAIL
16113.00†	7843.00	7751.72	-337.55	15943.39	7678.00	7752.78	68.35	67.88	438.15	459.93	0.95	FAIL
16213.00†	7843.00	7851.72	-337.81	16043.39	7678.00	7852.78	68.09	67.88	438.15	465.74	0.94	FAIL
16313.00†	7843.00	7951.72	-338.07	16143.39	7678.00	7952.78	67.83	67.88	438.15	471.56	0.93	FAIL
16413.00†	7843.00	8051.72	-338.33	16243.39	7678.00	8052.78	67.56	67.88	438.15	477.38	0.92	FAIL
16513.00†	7843.00	8151.72	-338.60	16343.39	7678.00	8152.78	67.30	67.88	438.15	483.20	0.91	FAIL
16613.00†	7843.00	8251.72	-338.86	16443.39	7678.00	8252.78	67.04	67.88	438.15	489.02	0.90	FAIL
16713.00†	7843.00	8351.72	-339.12	16543.39	7678.00	8352.78	66.78	67.88	438.15	494.84	0.89	FAIL
16813.00†	7843.00	8451.72	-339.38	16643.39	7678.00	8452.78	66.52	67.88	438.15	500.67	0.87	FAIL
16913.00†	7843.00	8551.72	-339.64	16743.39	7678.00	8552.78	66.25	67.88	438.15	506.49	0.86	FAIL
17013.00†	7843.00	8651.72	-339.91	16843.39	7678.00	8652.78	65.99	67.88	438.15	512.31	0.86	FAIL
17113.00†	7843.00	8751.72	-340.17	16943.39	7678.00	8752.78	65.73	67.88	438.15	518.14	0.85	FAIL
17213.00†	7843.00	8851.72	-340.43	17043.39	7678.00	8852.78	65.47	67.88	438.15	523.96	0.84	FAIL
17313.00†	7843.00	8951.72	-340.69	17143.39	7678.00	8952.78	65.21	67.88	438.15	529.79	0.83	FAIL
17413.00†	7843.00	9051.72	-340.95	17243.39	7678.00	9052.78	64.95	67.88	438.15	535.62	0.82	FAIL
17513.00†	7843.00	9151.72	-341.21	17343.39	7678.00	9152.78	64.68	67.88	438.15	541.45	0.81	FAIL

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NCH PWB Offset Wellpath: ACKARD NORTH 2-35-2NCH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#07 ACKARD NORTH 2-35-2NCH (600'FSL & 2025'FWL, SEC.02) Well: ACKARD NORTH 2-35-2NCH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
17613.00†	7843.00	9251.71	-341.48	17443.39	7678.00	9252.78	64.42	67.88	438.15	547.28	0.80	FAIL
17713.00†	7843.00	9351.71	-341.74	17543.39	7678.00	9352.78	64.16	67.88	438.15	553.10	0.79	FAIL
17813.00†	7843.00	9451.71	-342.00	17643.39	7678.00	9452.78	63.90	67.88	438.15	558.93	0.78	FAIL
17913.00†	7843.00	9551.71	-342.26	17743.39	7678.00	9552.78	63.64	67.88	438.15	564.77	0.78	FAIL
17937.78	7843.00	9576.50	-342.33	17768.17	7678.00	9577.56	63.57	67.88	438.15	566.21	0.77	FAIL

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: ACKARD NORTH 2-35-2NCH PWB Offset Wellpath: ACKARD NORTH 2-35-2NCH PWP (REV. A.0)

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

HOLE & CASING SECTIONS - Offset Wellbore: ACKARD NORTH 2-35-2NCH PWB Offset Wellpath: ACKARD NORTH 2-35-2NCH PWP (REV. A.0)

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]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1798.72	0.07	18.30	-8.36	18.95
8.5in Open Hole	1800.00	17770.56	15970.56	1798.72	7678.00	-8.36	18.95	2920.00	28.53

SURVEY PROGRAM - Offset Wellbore: ACKARD NORTH 2-35-2NCH PWB Offset Wellpath: ACKARD NORTH 2-35-2NCH PWP (REV. A.0)

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	20586.05	Custom BHI NaviTrak (Standard Rotating) (Rockies 0.03Gt model)		ACKARD NORTH 2-35-2NCH PWB



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

OFFSET WELLPATH REFERENCE - Offset Wellbore: ACKARD NORTH 2-35-2NCH PWB Offset Wellpath: ACKARD NORTH 2-35-2NCH PWP (REV. A.0)	
MD Reference: RIG (13'KB) (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	13.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWB Offset Wellpath: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWP

Facility: SEC.35-T01S-R66W Slot: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 (1980'FSL & 1980'FWL, SEC.35, PA,8360) Well: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	-13.00	21.00	6610.17	-1.83	-0.02	6610.18	25.40	268.65	PASS
113.00†	113.00	0.00	0.00	79.00	113.00	6610.17	-1.83	-0.02	6610.17	51.86	129.46	PASS
213.00†	213.00	0.00	0.00	179.00	213.00	6610.17	-1.83	-0.02	6610.17	54.20	123.77	PASS
313.00†	313.00	0.00	0.00	279.00	313.00	6610.17	-1.83	-0.02	6610.17	56.56	118.55	PASS
413.00†	413.00	0.00	0.00	379.00	413.00	6610.17	-1.83	-0.02	6610.17	58.91	113.74	PASS
513.00†	513.00	0.00	0.00	479.00	513.00	6610.17	-1.83	-0.02	6610.17	61.27	109.30	PASS
613.00†	613.00	0.00	0.00	579.00	613.00	6610.17	-1.83	-0.02	6610.17	63.63	105.19	PASS
713.00†	713.00	0.00	0.00	679.00	713.00	6610.17	-1.83	-0.02	6610.17	66.00	101.37	PASS
813.00†	813.00	0.00	0.00	779.00	813.00	6610.17	-1.83	-0.02	6610.17	68.37	97.81	PASS
913.00†	913.00	0.00	0.00	879.00	913.00	6610.17	-1.83	-0.02	6610.17	70.75	94.49	PASS
1013.00†	1013.00	0.00	0.00	979.00	1013.00	6610.17	-1.83	-0.02	6610.17	73.13	91.39	PASS
1113.00†	1113.00	0.00	0.00	1079.00	1113.00	6610.17	-1.83	-0.02	6610.17	75.51	88.47	PASS
1200.00	1200.00	0.00	0.00	1166.00	1200.00	6610.17	-1.83	-0.02	6610.17	77.59	86.08	PASS
1213.00†	1213.00	-0.03	-0.01	1179.00	1213.00	6610.17	-1.83	158.18	6610.20	77.90	85.73	PASS
1313.00†	1312.97	-2.07	-0.83	1278.97	1312.97	6610.17	-1.83	158.17	6612.24	80.30	83.17	PASS
1413.00†	1412.80	-7.35	-2.94	1378.80	1412.80	6610.17	-1.83	158.15	6617.52	82.74	80.75	PASS
1513.00†	1512.38	-15.86	-6.35	1478.38	1512.38	6610.17	-1.83	158.11	6626.03	85.19	78.51	PASS
1574.38	1573.31	-22.68	-9.07	1539.31	1573.31	6610.17	-1.83	158.09	6632.86	86.67	77.23	PASS
1613.00†	1611.61	-27.35	-10.94	1577.61	1611.61	6610.17	-1.83	158.10	6637.53	87.60	76.46	PASS
1713.00†	1710.75	-39.45	-15.79	1676.75	1710.75	6610.17	-1.83	158.14	6649.64	89.99	74.55	PASS
1813.00†	1809.90	-51.55	-20.63	1775.90	1809.90	6610.17	-1.83	158.19	6661.75	92.29	72.73	PASS
1913.00†	1909.05	-63.65	-25.47	1875.05	1909.05	6610.17	-1.83	158.23	6673.86	94.69	71.01	PASS
2013.00†	2008.20	-75.75	-30.31	1974.20	2008.20	6610.17	-1.83	158.27	6685.98	97.09	69.36	PASS
2113.00†	2107.34	-87.84	-35.15	2073.34	2107.34	6610.17	-1.83	158.31	6698.10	99.50	67.79	PASS
2213.00†	2206.49	-99.94	-39.99	2172.49	2206.49	6610.17	-1.83	158.35	6710.22	101.92	66.29	PASS
2313.00†	2305.64	-112.04	-44.83	2271.64	2305.64	6610.17	-1.83	158.39	6722.35	104.34	64.86	PASS
2413.00†	2404.78	-124.14	-49.67	2370.78	2404.78	6610.17	-1.83	158.43	6734.48	106.76	63.49	PASS
2513.00†	2503.93	-136.24	-54.51	2469.93	2503.93	6610.17	-1.83	158.47	6746.62	109.19	62.18	PASS
2613.00†	2603.08	-148.34	-59.35	2569.08	2603.08	6610.17	-1.83	158.51	6758.76	111.62	60.93	PASS
2713.00†	2702.23	-160.44	-64.20	2668.23	2702.23	6610.17	-1.83	158.55	6770.90	114.06	59.73	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWP Offset Wellpath: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWP

Facility: SEC.35-T01S-R66W Slot: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 (1980'FSL & 1980'FWL, SEC.35, PA,8360) Well: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2801.37	-172.53	-69.04	2767.37	2801.37	6610.17	-1.83	158.59	6783.04	116.51	58.57	PASS
2913.00†	2900.52	-184.63	-73.88	2866.52	2900.52	6610.17	-1.83	158.63	6795.19	118.95	57.46	PASS
3013.00†	2999.67	-196.73	-78.72	2965.67	2999.67	6610.17	-1.83	158.67	6807.34	121.41	56.39	PASS
3113.00†	3098.82	-208.83	-83.56	3064.82	3098.82	6610.17	-1.83	158.71	6819.49	123.86	55.37	PASS
3213.00†	3197.96	-220.93	-88.40	3163.96	3197.96	6610.17	-1.83	158.75	6831.65	126.32	54.38	PASS
3313.00†	3297.11	-233.03	-93.24	3263.11	3297.11	6610.17	-1.83	158.79	6843.81	128.79	53.43	PASS
3413.00†	3396.26	-245.13	-98.08	3362.26	3396.26	6610.17	-1.83	158.83	6855.97	131.26	52.51	PASS
3513.00†	3495.41	-257.22	-102.92	3461.41	3495.41	6610.17	-1.83	158.87	6868.14	133.73	51.63	PASS
3613.00†	3594.55	-269.32	-107.76	3560.55	3594.55	6610.17	-1.83	158.91	6880.31	136.21	50.77	PASS
3713.00†	3693.70	-281.42	-112.60	3659.70	3693.70	6610.17	-1.83	158.95	6892.48	138.69	49.95	PASS
3813.00†	3792.85	-293.52	-117.45	3758.85	3792.85	6610.17	-1.83	158.99	6904.66	141.18	49.15	PASS
3913.00†	3891.99	-305.62	-122.29	3857.99	3891.99	6610.17	-1.83	159.03	6916.84	143.67	48.38	PASS
4013.00†	3991.14	-317.72	-127.13	3957.14	3991.14	6610.17	-1.83	159.07	6929.02	146.16	47.63	PASS
4113.00†	4090.29	-329.82	-131.97	4056.29	4090.29	6610.17	-1.83	159.10	6941.21	148.65	46.91	PASS
4213.00†	4189.44	-341.91	-136.81	4155.44	4189.44	6610.17	-1.83	159.14	6953.40	151.15	46.21	PASS
4313.00†	4288.58	-354.01	-141.65	4254.58	4288.58	6610.17	-1.83	159.18	6965.59	153.66	45.54	PASS
4413.00†	4387.73	-366.11	-146.49	4353.73	4387.73	6610.17	-1.83	159.22	6977.78	156.16	44.88	PASS
4513.00†	4486.88	-378.21	-151.33	4452.88	4486.88	6610.17	-1.83	159.26	6989.98	158.68	44.25	PASS
4613.00†	4586.03	-390.31	-156.17	4552.03	4586.03	6610.17	-1.83	159.29	7002.18	161.19	43.63	PASS
4713.00†	4685.17	-402.41	-161.01	4651.17	4685.17	6610.17	-1.83	159.33	7014.39	163.71	43.03	PASS
4813.00†	4784.32	-414.51	-165.86	4750.32	4784.32	6610.17	-1.83	159.37	7026.59	166.23	42.45	PASS
4913.00†	4883.47	-426.60	-170.70	4849.47	4883.47	6610.17	-1.83	159.41	7038.80	168.75	41.88	PASS
5013.00†	4982.61	-438.70	-175.54	4948.61	4982.61	6610.17	-1.83	159.44	7051.02	171.27	41.33	PASS
5113.00†	5081.76	-450.80	-180.38	5047.76	5081.76	6610.17	-1.83	159.48	7063.23	173.80	40.80	PASS
5213.00†	5180.91	-462.90	-185.22	5146.91	5180.91	6610.17	-1.83	159.52	7075.45	176.34	40.28	PASS
5313.00†	5280.06	-475.00	-190.06	5246.06	5280.06	6610.17	-1.83	159.55	7087.67	178.87	39.78	PASS
5413.00†	5379.20	-487.10	-194.90	5345.20	5379.20	6610.17	-1.83	159.59	7099.89	181.41	39.29	PASS
5513.00†	5478.35	-499.19	-199.74	5444.35	5478.35	6610.17	-1.83	159.63	7112.12	183.95	38.81	PASS
5613.00†	5577.50	-511.29	-204.58	5543.50	5577.50	6610.17	-1.83	159.66	7124.35	186.49	38.34	PASS
5713.00†	5676.65	-523.39	-209.42	5642.65	5676.65	6610.17	-1.83	159.70	7136.58	189.04	37.89	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWB Offset Wellpath: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWP

Facility: SEC.35-T01S-R66W Slot: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 (1980'FSL & 1980'FWL, SEC.35, PA,8360) Well: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5775.79	-535.49	-214.27	5741.79	5775.79	6610.17	-1.83	159.74	7148.82	191.58	37.45	PASS
5913.00†	5874.94	-547.59	-219.11	5840.94	5874.94	6610.17	-1.83	159.77	7161.06	194.14	37.02	PASS
6013.00†	5974.09	-559.69	-223.95	5940.09	5974.09	6610.17	-1.83	159.81	7173.30	196.69	36.60	PASS
6113.00†	6073.24	-571.79	-228.79	6039.24	6073.24	6610.17	-1.83	159.84	7185.54	199.24	36.19	PASS
6213.00†	6172.38	-583.88	-233.63	6138.38	6172.38	6610.17	-1.83	159.88	7197.79	201.80	35.79	PASS
6313.00†	6271.53	-595.98	-238.47	6237.53	6271.53	6610.17	-1.83	159.92	7210.04	204.36	35.40	PASS
6413.00†	6370.68	-608.08	-243.31	6336.68	6370.68	6610.17	-1.83	159.95	7222.29	206.92	35.02	PASS
6513.00†	6469.82	-620.18	-248.15	6435.82	6469.82	6610.17	-1.83	159.99	7234.55	209.49	34.65	PASS
6613.00†	6568.97	-632.28	-252.99	6534.97	6568.97	6610.17	-1.83	160.02	7246.81	212.05	34.29	PASS
6713.00†	6668.12	-644.38	-257.83	6634.12	6668.12	6610.17	-1.83	160.06	7259.07	214.62	33.93	PASS
6813.00†	6767.27	-656.48	-262.68	6733.27	6767.27	6610.17	-1.83	160.09	7271.33	217.19	33.58	PASS
6913.00†	6866.41	-668.57	-267.52	6832.41	6866.41	6610.17	-1.83	160.13	7283.59	219.77	33.25	PASS
7013.00†	6965.56	-680.67	-272.36	6931.56	6965.56	6610.17	-1.83	160.16	7295.86	222.34	32.92	PASS
7113.00†	7064.71	-692.77	-277.20	7030.71	7064.71	6610.17	-1.83	160.20	7308.13	224.92	32.59	PASS
7213.00†	7163.86	-704.87	-282.04	7129.86	7163.86	6610.17	-1.83	160.23	7320.41	227.49	32.28	PASS
7251.04	7201.57	-709.47	-283.88	7167.57	7201.57	6610.17	-1.83	160.24	7325.08	228.48	32.16	PASS
7313.00†	7263.29	-713.63	-286.90	7229.29	7263.29	6610.17	-1.83	107.20	7329.35	230.09	31.95	PASS
7413.00†	7362.77	-706.23	-291.81	7328.77	7362.77	6610.17	-1.83	19.44	7322.15	233.05	31.51	PASS
7513.00†	7459.45	-681.66	-296.63	7425.45	7459.45	6610.17	-1.83	11.08	7297.79	236.69	30.92	PASS
7613.00†	7550.39	-640.64	-301.20	7516.39	7550.39	6610.17	-1.83	8.62	7256.99	239.84	30.34	PASS
7713.00†	7632.84	-584.44	-305.40	7598.84	7632.84	6610.17	-1.83	7.74	7201.01	242.58	29.77	PASS
7813.00†	7704.29	-514.75	-309.10	7670.29	7704.29	6610.17	-1.83	7.71	7131.54	244.86	29.21	PASS
7913.00†	7762.57	-433.70	-312.17	7728.57	7762.57	6610.17	-1.83	8.46	7050.70	246.64	28.67	PASS
8013.00†	7805.90	-343.74	-314.54	7771.90	7805.90	6610.17	-1.83	10.61	6960.94	247.91	28.16	PASS
8113.00†	7832.97	-247.62	-316.12	7798.97	7832.97	6610.17	-1.83	17.24	6864.99	248.68	27.68	PASS
8213.00†	7842.95	-148.25	-316.87	7808.95	7842.95	6610.17	-1.83	75.40	6765.76	248.97	27.25	PASS
8220.45	7843.00	-140.80	-316.89	7809.00	7843.00	6610.17	-1.83	90.00	6758.32	248.98	27.22	PASS
8313.00†	7843.00	-48.25	-317.13	7809.00	7843.00	6610.17	-1.83	90.00	6665.89	249.01	26.84	PASS
8413.00†	7843.00	51.75	-317.40	7809.00	7843.00	6610.17	-1.83	90.00	6566.01	249.06	26.44	PASS
8513.00†	7843.00	151.75	-317.66	7809.00	7843.00	6610.17	-1.83	90.00	6466.14	249.10	26.03	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWP Offset Wellpath: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWP

Facility: SEC.35-T01S-R66W Slot: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 (1980'FSL & 1980'FWL, SEC.35, PA,8360) Well: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
8613.00†	7843.00	251.75	-317.92	7809.00	7843.00	6610.17	-1.83	90.00	6366.28	249.15	25.62	PASS
8713.00†	7843.00	351.75	-318.18	7809.00	7843.00	6610.17	-1.83	90.00	6266.42	249.20	25.21	PASS
8813.00†	7843.00	451.74	-318.44	7809.00	7843.00	6610.17	-1.83	90.00	6166.56	249.26	24.81	PASS
8913.00†	7843.00	551.74	-318.70	7809.00	7843.00	6610.17	-1.83	90.00	6066.71	249.32	24.40	PASS
9013.00†	7843.00	651.74	-318.97	7809.00	7843.00	6610.17	-1.83	90.00	5966.86	249.38	23.99	PASS
9113.00†	7843.00	751.74	-319.23	7809.00	7843.00	6610.17	-1.83	90.00	5867.02	249.45	23.58	PASS
9213.00†	7843.00	851.74	-319.49	7809.00	7843.00	6610.17	-1.83	90.00	5767.18	249.52	23.18	PASS
9313.00†	7843.00	951.74	-319.75	7809.00	7843.00	6610.17	-1.83	90.00	5667.35	249.59	22.77	PASS
9413.00†	7843.00	1051.74	-320.01	7809.00	7843.00	6610.17	-1.83	90.00	5567.53	249.67	22.36	PASS
9513.00†	7843.00	1151.74	-320.28	7809.00	7843.00	6610.17	-1.83	90.00	5467.71	249.76	21.95	PASS
9613.00†	7843.00	1251.74	-320.54	7809.00	7843.00	6610.17	-1.83	90.00	5367.90	249.85	21.54	PASS
9713.00†	7843.00	1351.74	-320.80	7809.00	7843.00	6610.17	-1.83	90.00	5268.10	249.94	21.13	PASS
9813.00†	7843.00	1451.74	-321.06	7809.00	7843.00	6610.17	-1.83	90.00	5168.30	250.05	20.73	PASS
9913.00†	7843.00	1551.74	-321.32	7809.00	7843.00	6610.17	-1.83	90.00	5068.51	250.15	20.32	PASS
10013.00†	7843.00	1651.74	-321.58	7809.00	7843.00	6610.17	-1.83	90.00	4968.73	250.27	19.91	PASS
10113.00†	7843.00	1751.74	-321.85	7809.00	7843.00	6610.17	-1.83	90.00	4868.96	250.39	19.50	PASS
10213.00†	7843.00	1851.74	-322.11	7809.00	7843.00	6610.17	-1.83	90.00	4769.20	250.51	19.09	PASS
10313.00†	7843.00	1951.74	-322.37	7809.00	7843.00	6610.17	-1.83	90.00	4669.45	250.65	18.68	PASS
10413.00†	7843.00	2051.74	-322.63	7809.00	7843.00	6610.17	-1.83	90.00	4569.71	250.79	18.27	PASS
10513.00†	7843.00	2151.74	-322.89	7809.00	7843.00	6610.17	-1.83	90.00	4469.98	250.94	17.86	PASS
10613.00†	7843.00	2251.74	-323.15	7809.00	7843.00	6610.17	-1.83	90.00	4370.26	251.10	17.45	PASS
10713.00†	7843.00	2351.74	-323.42	7809.00	7843.00	6610.17	-1.83	90.00	4270.56	251.27	17.04	PASS
10813.00†	7843.00	2451.74	-323.68	7809.00	7843.00	6610.17	-1.83	90.00	4170.87	251.45	16.63	PASS
10913.00†	7843.00	2551.74	-323.94	7809.00	7843.00	6610.17	-1.83	90.00	4071.20	251.64	16.22	PASS
11013.00†	7843.00	2651.74	-324.20	7809.00	7843.00	6610.17	-1.83	90.00	3971.54	251.84	15.81	PASS
11113.00†	7843.00	2751.74	-324.46	7809.00	7843.00	6610.17	-1.83	90.00	3871.90	252.06	15.40	PASS
11213.00†	7843.00	2851.74	-324.72	7809.00	7843.00	6610.17	-1.83	90.00	3772.28	252.29	14.99	PASS
11313.00†	7843.00	2951.74	-324.99	7809.00	7843.00	6610.17	-1.83	90.00	3672.68	252.54	14.58	PASS
11413.00†	7843.00	3051.74	-325.25	7809.00	7843.00	6610.17	-1.83	90.00	3573.10	252.80	14.17	PASS
11513.00†	7843.00	3151.74	-325.51	7809.00	7843.00	6610.17	-1.83	90.00	3473.55	253.09	13.76	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWB Offset Wellpath: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWP

Facility: SEC.35-T01S-R66W Slot: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 (1980'FSL & 1980'FWL, SEC.35, PA,8360) Well: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11613.00†	7843.00	3251.74	-325.77	7809.00	7843.00	6610.17	-1.83	90.00	3374.02	253.39	13.35	PASS
11713.00†	7843.00	3351.74	-326.03	7809.00	7843.00	6610.17	-1.83	90.00	3274.53	253.72	12.94	PASS
11813.00†	7843.00	3451.73	-326.30	7809.00	7843.00	6610.17	-1.83	90.00	3175.06	254.07	12.53	PASS
11913.00†	7843.00	3551.73	-326.56	7809.00	7843.00	6610.17	-1.83	90.00	3075.63	254.45	12.12	PASS
12013.00†	7843.00	3651.73	-326.82	7809.00	7843.00	6610.17	-1.83	90.00	2976.24	254.86	11.71	PASS
12113.00†	7843.00	3751.73	-327.08	7809.00	7843.00	6610.17	-1.83	90.00	2876.88	255.31	11.30	PASS
12213.00†	7843.00	3851.73	-327.34	7809.00	7843.00	6610.17	-1.83	90.00	2777.58	255.80	10.89	PASS
12313.00†	7843.00	3951.73	-327.60	7809.00	7843.00	6610.17	-1.83	90.00	2678.33	256.33	10.47	PASS
12413.00†	7843.00	4051.73	-327.87	7809.00	7843.00	6610.17	-1.83	90.00	2579.13	256.91	10.06	PASS
12513.00†	7843.00	4151.73	-328.13	7809.00	7843.00	6610.17	-1.83	90.00	2480.00	257.55	9.65	PASS
12613.00†	7843.00	4251.73	-328.39	7809.00	7843.00	6610.17	-1.83	90.00	2380.94	258.26	9.24	PASS
12713.00†	7843.00	4351.73	-328.65	7809.00	7843.00	6610.17	-1.83	90.00	2281.97	259.04	8.83	PASS
12813.00†	7843.00	4451.73	-328.91	7809.00	7843.00	6610.17	-1.83	90.00	2183.08	259.91	8.42	PASS
12913.00†	7843.00	4551.73	-329.17	7809.00	7843.00	6610.17	-1.83	90.00	2084.31	260.88	8.01	PASS
13013.00†	7843.00	4651.73	-329.44	7809.00	7843.00	6610.17	-1.83	90.00	1985.65	261.97	7.60	PASS
13113.00†	7843.00	4751.73	-329.70	7809.00	7843.00	6610.17	-1.83	90.00	1887.14	263.20	7.19	PASS
13213.00†	7843.00	4851.73	-329.96	7809.00	7843.00	6610.17	-1.83	90.00	1788.80	264.59	6.78	PASS
13313.00†	7843.00	4951.73	-330.22	7809.00	7843.00	6610.17	-1.83	90.00	1690.64	266.18	6.37	PASS
13413.00†	7843.00	5051.73	-330.48	7809.00	7843.00	6610.17	-1.83	90.00	1592.72	268.01	5.96	PASS
13513.00†	7843.00	5151.73	-330.74	7809.00	7843.00	6610.17	-1.83	90.00	1495.07	270.11	5.55	PASS
13613.00†	7843.00	5251.73	-331.01	7809.00	7843.00	6610.17	-1.83	90.00	1397.76	272.56	5.14	PASS
13713.00†	7843.00	5351.73	-331.27	7809.00	7843.00	6610.17	-1.83	90.00	1300.85	275.44	4.73	PASS
13813.00†	7843.00	5451.73	-331.53	7809.00	7843.00	6610.17	-1.83	90.00	1204.45	278.85	4.33	PASS
13913.00†	7843.00	5551.73	-331.79	7809.00	7843.00	6610.17	-1.83	90.00	1108.68	282.91	3.93	PASS
14013.00†	7843.00	5651.73	-332.05	7809.00	7843.00	6610.17	-1.83	90.00	1013.74	287.82	3.53	PASS
14113.00†	7843.00	5751.73	-332.32	7809.00	7843.00	6610.17	-1.83	90.00	919.86	293.80	3.14	PASS
14213.00†	7843.00	5851.73	-332.58	7809.00	7843.00	6610.17	-1.83	90.00	827.43	301.18	2.75	PASS
14313.00†	7843.00	5951.73	-332.84	7809.00	7843.00	6610.17	-1.83	90.00	736.97	310.39	2.38	PASS
14413.00†	7843.00	6051.73	-333.10	7809.00	7843.00	6610.17	-1.83	90.00	649.31	321.98	2.02	PASS
14513.00†	7843.00	6151.73	-333.36	7809.00	7843.00	6610.17	-1.83	90.00	565.76	336.61	1.68	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWB Offset Wellpath: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWP

Facility: SEC.35-T01S-R66W Slot: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 (1980'FSL & 1980'FWL, SEC.35, PA,8360) Well: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
14613.00†	7843.00	6251.73	-333.62	7809.00	7843.00	6610.17	-1.83	90.00	488.44	354.88	1.38	PASS
14713.00†	7843.00	6351.72	-333.89	7809.00	7843.00	6610.17	-1.83	90.00	420.78	376.63	1.12	PASS
14813.00†	7843.00	6451.72	-334.15	7809.00	7843.00	6610.17	-1.83	90.00	368.16	399.26	0.92	FAIL
14913.00†	7843.00	6551.72	-334.41	7809.00	7843.00	6610.17	-1.83	90.00	337.67	415.68	0.81	FAIL
14970.56†	7843.00	6609.28	-334.56	7809.00	7843.00	6610.17	-1.83	90.00	332.73	418.63	0.79	FAIL
14970.57†	7843.00	6609.29	-334.56	7809.07	7843.07	6610.17	-1.83	90.01	332.73	418.63	0.79	FAIL
15013.00†	7843.00	6651.72	-334.67	7809.00	7843.00	6610.17	-1.83	90.00	335.42	417.00	0.80	FAIL
15113.00†	7843.00	6751.72	-334.93	7809.00	7843.00	6610.17	-1.83	90.00	361.93	402.36	0.90	FAIL
15213.00†	7843.00	6851.72	-335.19	7809.00	7843.00	6610.17	-1.83	90.00	411.68	380.11	1.08	PASS
15313.00†	7843.00	6951.72	-335.46	7809.00	7843.00	6610.17	-1.83	90.00	477.45	358.02	1.33	PASS
15413.00†	7843.00	7051.72	-335.72	7809.00	7843.00	6610.17	-1.83	90.00	553.58	339.25	1.63	PASS
15513.00†	7843.00	7151.72	-335.98	7809.00	7843.00	6610.17	-1.83	90.00	636.34	324.19	1.96	PASS
15613.00†	7843.00	7251.72	-336.24	7809.00	7843.00	6610.17	-1.83	90.00	723.47	312.30	2.32	PASS
15713.00†	7843.00	7351.72	-336.50	7809.00	7843.00	6610.17	-1.83	90.00	813.57	302.91	2.69	PASS
15813.00†	7843.00	7451.72	-336.76	7809.00	7843.00	6610.17	-1.83	90.00	905.75	295.43	3.07	PASS
15913.00†	7843.00	7551.72	-337.03	7809.00	7843.00	6610.17	-1.83	90.00	999.43	289.42	3.46	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWB Offset Wellpath: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWB Offset Wellpath: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8360.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8360>	SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWB



Clearance Report
ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

OFFSET WELLPATH REFERENCE - Offset Wellbore: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWB Offset Wellpath: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWP	
MD Reference: Rig on SLOT#01 EX CHAMPLIN 117 AMOCO G#3 (1980'FSL & 1980'FWL, SEC.35, PA,8360) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1NBH PWB Offset Wellpath: ACKARD NORTH 2-35-1NBH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02) Well: ACKARD NORTH 2-35-1NBH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	13.00	13.00	-0.02	-15.01	-90.07	15.01	1.40	23.68	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	-0.02	-15.01	-90.07	15.01	1.72	15.50	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	-0.02	-15.01	-90.07	15.01	2.28	9.59	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	-0.02	-15.01	-90.07	15.01	2.89	6.82	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	-0.02	-15.01	-90.07	15.01	3.50	5.27	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	-0.02	-15.01	-90.07	15.01	4.12	4.28	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	-0.02	-15.01	-90.07	15.01	4.74	3.61	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	-0.02	-15.01	-90.07	15.01	5.36	3.11	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	-0.02	-15.01	-90.07	15.01	5.99	2.74	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	-0.02	-15.01	-90.07	15.01	6.61	2.44	PASS
1013.00†	1013.00	0.00	0.00	1013.00	1013.00	-0.02	-15.01	-90.07	15.01	7.24	2.21	PASS
1113.00†	1113.00	0.00	0.00	1112.95	1112.95	-0.04	-15.03	-90.15	15.03	7.87	2.01	PASS
1200.00	1200.00	0.00	0.00	1199.61	1199.59	-1.31	-16.16	-94.63	16.22	8.46	2.01	PASS
1213.00†	1213.00	-0.03	-0.01	1212.55	1212.52	-1.67	-16.48	62.50	16.56	8.55	2.03	PASS
1313.00†	1312.97	-2.07	-0.83	1312.00	1311.80	-5.87	-20.23	57.03	19.81	9.43	2.20	PASS
1413.00†	1412.80	-7.35	-2.94	1411.29	1410.68	-12.62	-26.26	55.22	24.01	10.38	2.42	PASS
1513.00†	1512.38	-15.86	-6.35	1510.42	1509.02	-21.91	-34.56	55.64	29.05	11.27	2.70	PASS
1574.38	1573.31	-22.68	-9.07	1571.17	1569.05	-28.86	-40.76	56.56	32.56	11.75	2.90	PASS
1613.00†	1611.61	-27.35	-10.94	1609.64	1606.98	-33.63	-45.02	57.14	34.95	12.02	3.05	PASS
1713.00†	1710.75	-39.45	-15.79	1709.44	1705.39	-46.02	-56.09	58.31	41.18	12.68	3.40	PASS
1813.00†	1809.90	-51.55	-20.63	1809.25	1803.80	-58.42	-67.15	59.17	47.43	13.31	3.71	PASS
1913.00†	1909.05	-63.65	-25.47	1909.05	1902.21	-70.82	-78.22	59.83	53.68	14.06	3.97	PASS
2013.00†	2008.20	-75.75	-30.31	2008.85	2000.62	-83.21	-89.29	60.36	59.93	14.85	4.19	PASS
2113.00†	2107.34	-87.84	-35.15	2108.65	2099.03	-95.61	-100.36	60.78	66.19	15.67	4.38	PASS
2213.00†	2206.49	-99.94	-39.99	2208.46	2197.44	-108.00	-111.43	61.13	72.46	16.49	4.55	PASS
2313.00†	2305.64	-112.04	-44.83	2308.26	2295.85	-120.40	-122.50	61.43	78.72	17.34	4.69	PASS
2413.00†	2404.78	-124.14	-49.67	2408.06	2394.26	-132.80	-133.56	61.68	84.99	18.21	4.82	PASS
2513.00†	2503.93	-136.24	-54.51	2507.86	2492.67	-145.19	-144.63	61.90	91.26	19.09	4.93	PASS
2613.00†	2603.08	-148.34	-59.35	2607.67	2591.08	-157.59	-155.70	62.09	97.53	19.98	5.03	PASS
2713.00†	2702.23	-160.44	-64.20	2707.47	2689.49	-169.99	-166.77	62.25	103.80	20.87	5.11	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1NBH PWB Offset Wellpath: ACKARD NORTH 2-35-1NBH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02) Well: ACKARD NORTH 2-35-1NBH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2801.37	-172.53	-69.04	2807.27	2787.90	-182.38	-177.84	62.40	110.07	21.78	5.19	PASS
2913.00†	2900.52	-184.63	-73.88	2907.08	2886.31	-194.78	-188.91	62.53	116.35	22.69	5.26	PASS
3013.00†	2999.67	-196.73	-78.72	3006.88	2984.71	-207.18	-199.97	62.65	122.62	23.61	5.32	PASS
3113.00†	3098.82	-208.83	-83.56	3106.68	3083.12	-219.57	-211.04	62.76	128.89	24.54	5.38	PASS
3213.00†	3197.96	-220.93	-88.40	3206.48	3181.53	-231.97	-222.11	62.85	135.17	25.47	5.43	PASS
3313.00†	3297.11	-233.03	-93.24	3306.29	3279.94	-244.37	-233.18	62.94	141.44	26.40	5.48	PASS
3413.00†	3396.26	-245.13	-98.08	3406.09	3378.35	-256.76	-244.25	63.02	147.72	27.34	5.52	PASS
3513.00†	3495.41	-257.22	-102.92	3505.89	3476.76	-269.16	-255.32	63.10	153.99	28.28	5.56	PASS
3613.00†	3594.55	-269.32	-107.76	3605.69	3575.17	-281.56	-266.38	63.16	160.27	29.22	5.60	PASS
3713.00†	3693.70	-281.42	-112.60	3705.50	3673.58	-293.95	-277.45	63.23	166.54	30.17	5.63	PASS
3813.00†	3792.85	-293.52	-117.45	3805.30	3771.99	-306.35	-288.52	63.29	172.82	31.12	5.66	PASS
3913.00†	3891.99	-305.62	-122.29	3905.10	3870.40	-318.75	-299.59	63.34	179.09	32.07	5.69	PASS
4013.00†	3991.14	-317.72	-127.13	4004.91	3968.81	-331.14	-310.66	63.39	185.37	33.02	5.72	PASS
4113.00†	4090.29	-329.82	-131.97	4104.71	4067.22	-343.54	-321.73	63.44	191.65	33.98	5.74	PASS
4213.00†	4189.44	-341.91	-136.81	4204.51	4165.63	-355.93	-332.79	63.48	197.92	34.93	5.76	PASS
4313.00†	4288.58	-354.01	-141.65	4304.31	4264.04	-368.33	-343.86	63.52	204.20	35.89	5.78	PASS
4413.00†	4387.73	-366.11	-146.49	4404.12	4362.45	-380.73	-354.93	63.56	210.48	36.85	5.80	PASS
4513.00†	4486.88	-378.21	-151.33	4503.92	4460.86	-393.12	-366.00	63.60	216.75	37.81	5.82	PASS
4613.00†	4586.03	-390.31	-156.17	4603.72	4559.26	-405.52	-377.07	63.63	223.03	38.77	5.84	PASS
4713.00†	4685.17	-402.41	-161.01	4703.52	4657.67	-417.92	-388.14	63.67	229.31	39.74	5.86	PASS
4813.00†	4784.32	-414.51	-165.86	4803.33	4756.08	-430.31	-399.20	63.70	235.58	40.70	5.87	PASS
4913.00†	4883.47	-426.60	-170.70	4903.13	4854.49	-442.71	-410.27	63.73	241.86	41.67	5.89	PASS
5013.00†	4982.61	-438.70	-175.54	5002.93	4952.90	-455.11	-421.34	63.76	248.14	42.63	5.90	PASS
5113.00†	5081.76	-450.80	-180.38	5102.74	5051.31	-467.50	-432.41	63.78	254.41	43.60	5.91	PASS
5213.00†	5180.91	-462.90	-185.22	5202.54	5149.72	-479.90	-443.48	63.81	260.69	44.57	5.93	PASS
5313.00†	5280.06	-475.00	-190.06	5302.34	5248.13	-492.30	-454.55	63.83	266.97	45.54	5.94	PASS
5413.00†	5379.20	-487.10	-194.90	5402.14	5346.54	-504.69	-465.61	63.86	273.24	46.51	5.95	PASS
5513.00†	5478.35	-499.19	-199.74	5501.95	5444.95	-517.09	-476.68	63.88	279.52	47.48	5.96	PASS
5613.00†	5577.50	-511.29	-204.58	5601.75	5543.36	-529.49	-487.75	63.90	285.80	48.45	5.97	PASS
5713.00†	5676.65	-523.39	-209.42	5701.55	5641.77	-541.88	-498.82	63.92	292.08	49.42	5.98	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1NBH PWB Offset Wellpath: ACKARD NORTH 2-35-1NBH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02) Well: ACKARD NORTH 2-35-1NBH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5775.79	-535.49	-214.27	5801.35	5740.18	-554.28	-509.89	63.94	298.35	50.39	5.99	PASS
5913.00†	5874.94	-547.59	-219.11	5901.16	5838.59	-566.68	-520.96	63.96	304.63	51.36	6.00	PASS
6013.00†	5974.09	-559.69	-223.95	6000.96	5937.00	-579.07	-532.02	63.97	310.91	52.34	6.01	PASS
6113.00†	6073.24	-571.79	-228.79	6100.76	6035.41	-591.47	-543.09	63.99	317.18	53.31	6.02	PASS
6213.00†	6172.38	-583.88	-233.63	6200.57	6133.81	-603.86	-554.16	64.01	323.46	54.28	6.02	PASS
6313.00†	6271.53	-595.98	-238.47	6300.37	6232.22	-616.26	-565.23	64.02	329.74	55.26	6.03	PASS
6413.00†	6370.68	-608.08	-243.31	6400.17	6330.63	-628.66	-576.30	64.04	336.02	56.23	6.04	PASS
6513.00†	6469.82	-620.18	-248.15	6499.97	6429.04	-641.05	-587.37	64.05	342.29	57.21	6.05	PASS
6613.00†	6568.97	-632.28	-252.99	6599.78	6527.45	-653.45	-598.43	64.07	348.57	58.18	6.05	PASS
6713.00†	6668.12	-644.38	-257.83	6699.58	6625.86	-665.85	-609.50	64.08	354.85	59.16	6.06	PASS
6813.00†	6767.27	-656.48	-262.68	6799.38	6724.27	-678.24	-620.57	64.09	361.13	60.13	6.06	PASS
6913.00†	6866.41	-668.57	-267.52	6899.19	6822.68	-690.64	-631.64	64.11	367.40	61.11	6.07	PASS
7013.00†	6965.56	-680.67	-272.36	6998.99	6921.09	-703.04	-642.71	64.12	373.68	62.09	6.08	PASS
7113.00†	7064.71	-692.77	-277.20	7100.37	7021.22	-713.98	-653.97	64.38	379.87	63.12	6.08	PASS
7213.00†	7163.86	-704.87	-282.04	7201.16	7121.16	-710.01	-665.26	66.83	385.63	64.60	6.02	PASS
7251.04	7201.57	-709.47	-283.88	7237.57	7156.88	-704.24	-669.30	68.33	388.04	65.34	5.99	PASS
7313.00†	7263.29	-713.63	-286.90	7294.91	7212.18	-690.56	-675.58	18.30	392.70	66.29	5.98	PASS
7413.00†	7362.77	-706.23	-291.81	7384.19	7294.84	-658.39	-684.99	-64.95	401.86	66.08	6.14	PASS
7513.00†	7459.45	-681.66	-296.63	7470.13	7368.79	-615.60	-693.44	-69.30	412.36	66.94	6.21	PASS
7613.00†	7550.39	-640.64	-301.20	7553.37	7433.58	-563.98	-700.88	-68.36	423.40	65.27	6.55	PASS
7713.00†	7632.84	-584.44	-305.40	7634.48	7488.91	-505.13	-707.28	-66.54	434.18	63.17	6.94	PASS
7813.00†	7704.29	-514.75	-309.10	7713.90	7534.58	-440.43	-712.60	-64.71	444.01	60.90	7.36	PASS
7913.00†	7762.57	-433.70	-312.17	7792.07	7570.41	-371.17	-716.82	-63.15	452.30	58.77	7.78	PASS
8013.00†	7805.90	-343.74	-314.54	7869.31	7596.31	-298.52	-719.93	-61.99	458.61	57.05	8.13	PASS
8113.00†	7832.97	-247.62	-316.12	7945.96	7612.18	-223.61	-721.92	-61.27	462.60	56.02	8.35	PASS
8213.00†	7842.95	-148.25	-316.87	8022.31	7617.97	-147.55	-722.77	-61.00	464.08	55.54	8.45	PASS
8220.45	7843.00	-140.80	-316.89	8028.00	7618.00	-141.86	-722.79	-61.00	464.09	55.52	8.45	PASS
8313.00†	7843.00	-48.25	-317.13	8120.54	7618.00	-49.32	-723.03	-61.00	464.09	55.40	8.47	PASS
8413.00†	7843.00	51.75	-317.40	8220.54	7618.00	50.68	-723.29	-61.00	464.09	55.82	8.41	PASS
8513.00†	7843.00	151.75	-317.66	8320.54	7618.00	150.68	-723.56	-61.00	464.09	56.81	8.26	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1NBH PWB Offset Wellpath: ACKARD NORTH 2-35-1NBH PWP (REV. A.0)												
Facility: SEC.02-T03S-R66W		Slot: SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)		Well: ACKARD NORTH 2-35-1NBH		Threshold Value=1.00		† = interpolated/extrapolated station				
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
8613.00†	7843.00	251.75	-317.92	8420.54	7618.00	250.68	-723.82	-61.00	464.09	58.32	8.04	PASS
8713.00†	7843.00	351.75	-318.18	8520.54	7618.00	350.68	-724.08	-61.00	464.09	60.31	7.77	PASS
8813.00†	7843.00	451.74	-318.44	8620.54	7618.00	450.68	-724.34	-61.00	464.09	62.74	7.47	PASS
8913.00†	7843.00	551.74	-318.70	8720.54	7618.00	550.68	-724.60	-61.00	464.09	65.57	7.14	PASS
9013.00†	7843.00	651.74	-318.97	8820.54	7618.00	650.68	-724.87	-61.00	464.09	68.54	6.83	PASS
9113.00†	7843.00	751.74	-319.23	8920.54	7618.00	750.68	-725.13	-61.00	464.09	72.19	6.48	PASS
9213.00†	7843.00	851.74	-319.49	9020.54	7618.00	850.68	-725.39	-61.00	464.09	75.91	6.16	PASS
9313.00†	7843.00	951.74	-319.75	9120.54	7618.00	950.68	-725.65	-61.00	464.09	79.84	5.86	PASS
9413.00†	7843.00	1051.74	-320.01	9220.54	7618.00	1050.68	-725.91	-61.00	464.09	83.96	5.57	PASS
9513.00†	7843.00	1151.74	-320.28	9320.54	7618.00	1150.68	-726.17	-61.00	464.09	88.25	5.29	PASS
9613.00†	7843.00	1251.74	-320.54	9420.54	7618.00	1250.68	-726.44	-61.00	464.09	92.67	5.04	PASS
9713.00†	7843.00	1351.74	-320.80	9520.54	7618.00	1350.68	-726.70	-61.00	464.09	97.21	4.80	PASS
9813.00†	7843.00	1451.74	-321.06	9620.54	7618.00	1450.68	-726.96	-61.00	464.09	101.86	4.58	PASS
9913.00†	7843.00	1551.74	-321.32	9720.54	7618.00	1550.68	-727.22	-61.00	464.09	106.59	4.38	PASS
10013.00†	7843.00	1651.74	-321.58	9820.54	7618.00	1650.68	-727.48	-61.00	464.09	111.41	4.19	PASS
10113.00†	7843.00	1751.74	-321.85	9920.54	7618.00	1750.68	-727.75	-61.00	464.09	116.29	4.01	PASS
10213.00†	7843.00	1851.74	-322.11	10020.54	7618.00	1850.68	-728.01	-61.00	464.09	121.23	3.84	PASS
10313.00†	7843.00	1951.74	-322.37	10120.54	7618.00	1950.68	-728.27	-61.00	464.09	126.23	3.69	PASS
10413.00†	7843.00	2051.74	-322.63	10220.54	7618.00	2050.68	-728.53	-61.00	464.09	131.27	3.55	PASS
10513.00†	7843.00	2151.74	-322.89	10320.54	7618.00	2150.68	-728.79	-61.00	464.09	136.37	3.42	PASS
10613.00†	7843.00	2251.74	-323.15	10420.54	7618.00	2250.68	-729.05	-61.00	464.09	141.48	3.29	PASS
10713.00†	7843.00	2351.74	-323.42	10520.54	7618.00	2350.68	-729.32	-61.00	464.09	146.64	3.18	PASS
10813.00†	7843.00	2451.74	-323.68	10620.54	7618.00	2450.68	-729.58	-61.00	464.09	151.82	3.07	PASS
10913.00†	7843.00	2551.74	-323.94	10720.54	7618.00	2550.68	-729.84	-61.00	464.09	157.04	2.96	PASS
11013.00†	7843.00	2651.74	-324.20	10820.54	7618.00	2650.67	-730.10	-61.00	464.09	162.27	2.87	PASS
11113.00†	7843.00	2751.74	-324.46	10920.54	7618.00	2750.67	-730.36	-61.00	464.09	167.53	2.78	PASS
11213.00†	7843.00	2851.74	-324.72	11020.54	7618.00	2850.67	-730.63	-61.00	464.09	172.81	2.69	PASS
11313.00†	7843.00	2951.74	-324.99	11120.54	7618.00	2950.67	-730.89	-61.00	464.09	178.11	2.61	PASS
11413.00†	7843.00	3051.74	-325.25	11220.54	7618.00	3050.67	-731.15	-61.00	464.09	183.43	2.54	PASS
11513.00†	7843.00	3151.74	-325.51	11320.54	7618.00	3150.67	-731.41	-61.00	464.09	188.76	2.46	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1NBH PWB Offset Wellpath: ACKARD NORTH 2-35-1NBH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02) Well: ACKARD NORTH 2-35-1NBH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11613.00†	7843.00	3251.74	-325.77	11420.54	7618.00	3250.67	-731.67	-61.00	464.09	194.10	2.40	PASS
11713.00†	7843.00	3351.74	-326.03	11520.54	7618.00	3350.67	-731.93	-61.00	464.09	199.46	2.33	PASS
11813.00†	7843.00	3451.73	-326.30	11620.54	7618.00	3450.67	-732.20	-61.00	464.09	204.82	2.27	PASS
11913.00†	7843.00	3551.73	-326.56	11720.54	7618.00	3550.67	-732.46	-61.00	464.09	210.20	2.21	PASS
12013.00†	7843.00	3651.73	-326.82	11820.54	7618.00	3650.67	-732.72	-61.00	464.09	215.59	2.16	PASS
12113.00†	7843.00	3751.73	-327.08	11920.54	7618.00	3750.67	-732.98	-61.00	464.09	220.99	2.10	PASS
12213.00†	7843.00	3851.73	-327.34	12020.54	7618.00	3850.67	-733.24	-61.00	464.09	226.40	2.05	PASS
12313.00†	7843.00	3951.73	-327.60	12120.54	7618.00	3950.67	-733.51	-61.00	464.09	231.81	2.01	PASS
12413.00†	7843.00	4051.73	-327.87	12220.54	7618.00	4050.67	-733.77	-61.00	464.09	237.24	1.96	PASS
12513.00†	7843.00	4151.73	-328.13	12320.54	7618.00	4150.67	-734.03	-61.00	464.09	242.67	1.92	PASS
12613.00†	7843.00	4251.73	-328.39	12420.54	7618.00	4250.67	-734.29	-61.00	464.09	248.10	1.87	PASS
12713.00†	7843.00	4351.73	-328.65	12520.54	7618.00	4350.67	-734.55	-61.00	464.09	253.55	1.83	PASS
12813.00†	7843.00	4451.73	-328.91	12620.54	7618.00	4450.67	-734.81	-61.00	464.09	259.00	1.79	PASS
12913.00†	7843.00	4551.73	-329.17	12720.54	7618.00	4550.67	-735.08	-61.00	464.09	264.45	1.76	PASS
13013.00†	7843.00	4651.73	-329.44	12820.54	7618.00	4650.67	-735.34	-61.00	464.09	269.91	1.72	PASS
13113.00†	7843.00	4751.73	-329.70	12920.54	7618.00	4750.67	-735.60	-61.00	464.09	275.37	1.69	PASS
13213.00†	7843.00	4851.73	-329.96	13020.54	7618.00	4850.67	-735.86	-61.00	464.09	280.84	1.65	PASS
13313.00†	7843.00	4951.73	-330.22	13120.54	7618.00	4950.67	-736.12	-61.00	464.09	286.31	1.62	PASS
13413.00†	7843.00	5051.73	-330.48	13220.54	7618.00	5050.67	-736.39	-61.00	464.09	291.79	1.59	PASS
13513.00†	7843.00	5151.73	-330.74	13320.54	7618.00	5150.67	-736.65	-61.00	464.09	297.27	1.56	PASS
13613.00†	7843.00	5251.73	-331.01	13420.54	7618.00	5250.67	-736.91	-61.00	464.09	302.75	1.53	PASS
13713.00†	7843.00	5351.73	-331.27	13520.54	7618.00	5350.67	-737.17	-61.00	464.09	308.24	1.51	PASS
13813.00†	7843.00	5451.73	-331.53	13620.54	7618.00	5450.67	-737.43	-61.00	464.09	313.73	1.48	PASS
13913.00†	7843.00	5551.73	-331.79	13720.54	7618.00	5550.66	-737.70	-61.00	464.09	319.23	1.45	PASS
14013.00†	7843.00	5651.73	-332.05	13820.54	7618.00	5650.66	-737.96	-61.00	464.09	324.72	1.43	PASS
14113.00†	7843.00	5751.73	-332.32	13920.54	7618.00	5750.66	-738.22	-61.00	464.09	330.22	1.41	PASS
14213.00†	7843.00	5851.73	-332.58	14020.54	7618.00	5850.66	-738.48	-61.00	464.09	335.72	1.38	PASS
14313.00†	7843.00	5951.73	-332.84	14120.54	7618.00	5950.66	-738.74	-61.00	464.09	341.23	1.36	PASS
14413.00†	7843.00	6051.73	-333.10	14220.54	7618.00	6050.66	-739.00	-61.00	464.09	346.73	1.34	PASS
14513.00†	7843.00	6151.73	-333.36	14320.54	7618.00	6150.66	-739.27	-61.00	464.09	352.24	1.32	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1NBH PWB Offset Wellpath: ACKARD NORTH 2-35-1NBH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02) Well: ACKARD NORTH 2-35-1NBH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
14613.00†	7843.00	6251.73	-333.62	14420.54	7618.00	6250.66	-739.53	-61.00	464.10	357.75	1.30	PASS
14713.00†	7843.00	6351.72	-333.89	14520.54	7618.00	6350.66	-739.79	-61.00	464.10	363.27	1.28	PASS
14813.00†	7843.00	6451.72	-334.15	14620.54	7618.00	6450.66	-740.05	-61.00	464.10	368.78	1.26	PASS
14913.00†	7843.00	6551.72	-334.41	14720.54	7618.00	6550.66	-740.31	-61.00	464.10	374.30	1.24	PASS
15013.00†	7843.00	6651.72	-334.67	14820.54	7618.00	6650.66	-740.58	-61.00	464.10	379.82	1.22	PASS
15113.00†	7843.00	6751.72	-334.93	14920.54	7618.00	6750.66	-740.84	-61.00	464.10	385.34	1.20	PASS
15213.00†	7843.00	6851.72	-335.19	15020.54	7618.00	6850.66	-741.10	-61.00	464.10	390.86	1.19	PASS
15313.00†	7843.00	6951.72	-335.46	15120.54	7618.00	6950.66	-741.36	-61.00	464.10	396.38	1.17	PASS
15413.00†	7843.00	7051.72	-335.72	15220.54	7618.00	7050.66	-741.62	-61.00	464.10	401.91	1.16	PASS
15513.00†	7843.00	7151.72	-335.98	15320.54	7618.00	7150.66	-741.88	-61.00	464.10	407.43	1.14	PASS
15613.00†	7843.00	7251.72	-336.24	15420.54	7618.00	7250.66	-742.15	-61.00	464.10	412.96	1.12	PASS
15713.00†	7843.00	7351.72	-336.50	15520.54	7618.00	7350.66	-742.41	-61.00	464.10	418.49	1.11	PASS
15813.00†	7843.00	7451.72	-336.76	15620.54	7618.00	7450.66	-742.67	-61.00	464.10	424.02	1.09	PASS
15913.00†	7843.00	7551.72	-337.03	15720.54	7618.00	7550.66	-742.93	-61.00	464.10	429.55	1.08	PASS
16013.00†	7843.00	7651.72	-337.29	15820.54	7618.00	7650.66	-743.19	-61.00	464.10	435.09	1.07	PASS
16113.00†	7843.00	7751.72	-337.55	15920.54	7618.00	7750.66	-743.46	-61.00	464.10	440.62	1.05	PASS
16213.00†	7843.00	7851.72	-337.81	16020.54	7618.00	7850.66	-743.72	-61.00	464.10	446.15	1.04	PASS
16313.00†	7843.00	7951.72	-338.07	16120.54	7618.00	7950.66	-743.98	-61.00	464.10	451.69	1.03	PASS
16413.00†	7843.00	8051.72	-338.33	16220.54	7618.00	8050.66	-744.24	-61.00	464.10	457.23	1.02	PASS
16513.00†	7843.00	8151.72	-338.60	16320.54	7618.00	8150.66	-744.50	-61.00	464.10	462.77	1.00	PASS
16613.00†	7843.00	8251.72	-338.86	16420.54	7618.00	8250.66	-744.76	-61.00	464.10	468.30	0.99	FAIL
16713.00†	7843.00	8351.72	-339.12	16520.54	7618.00	8350.66	-745.03	-61.00	464.10	473.84	0.98	FAIL
16813.00†	7843.00	8451.72	-339.38	16620.54	7618.00	8450.65	-745.29	-61.00	464.10	479.39	0.97	FAIL
16913.00†	7843.00	8551.72	-339.64	16720.54	7618.00	8550.65	-745.55	-61.00	464.10	484.93	0.96	FAIL
17013.00†	7843.00	8651.72	-339.91	16820.54	7618.00	8650.65	-745.81	-61.00	464.10	490.47	0.95	FAIL
17113.00†	7843.00	8751.72	-340.17	16920.54	7618.00	8750.65	-746.07	-61.00	464.10	496.01	0.94	FAIL
17213.00†	7843.00	8851.72	-340.43	17020.54	7618.00	8850.65	-746.34	-61.00	464.10	501.56	0.93	FAIL
17313.00†	7843.00	8951.72	-340.69	17120.54	7618.00	8950.65	-746.60	-61.00	464.10	507.10	0.92	FAIL
17413.00†	7843.00	9051.72	-340.95	17220.54	7618.00	9050.65	-746.86	-61.00	464.10	512.65	0.91	FAIL
17513.00†	7843.00	9151.72	-341.21	17320.54	7618.00	9150.65	-747.12	-61.00	464.10	518.19	0.90	FAIL

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1NBH PWB Offset Wellpath: ACKARD NORTH 2-35-1NBH PWP (REV. A.0)												
Facility: SEC.02-T03S-R66W Slot: SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02) Well: ACKARD NORTH 2-35-1NBH Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
17613.00†	7843.00	9251.71	-341.48	17420.54	7618.00	9250.65	-747.38	-61.00	464.10	523.74	0.89	FAIL
17713.00†	7843.00	9351.71	-341.74	17520.54	7618.00	9350.65	-747.64	-61.00	464.10	529.29	0.88	FAIL
17813.00†	7843.00	9451.71	-342.00	17620.54	7618.00	9450.65	-747.91	-61.00	464.10	534.84	0.87	FAIL
17913.00†	7843.00	9551.71	-342.26	17720.54	7618.00	9550.65	-748.17	-61.00	464.10	540.38	0.86	FAIL
17937.78	7843.00	9576.50	-342.33	17742.92	7618.00	9573.03	-748.23	-61.00	464.10	541.86	0.86	FAIL

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: ACKARD NORTH 2-35-1NBH PWB Offset Wellpath: ACKARD NORTH 2-35-1NBH PWP (REV. A.0)				
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

HOLE & CASING SECTIONS - Offset Wellbore: ACKARD NORTH 2-35-1NBH PWB Offset Wellpath: ACKARD NORTH 2-35-1NBH PWP (REV. A.0)									
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]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1794.69	-0.01	-9.15	-17.46	-24.73
8.5in Open Hole	1800.00	17742.92	15942.92	1794.69	7618.00	-17.46	-24.73	2917.85	-232.63

SURVEY PROGRAM - Offset Wellbore: ACKARD NORTH 2-35-1NBH PWB Offset Wellpath: ACKARD NORTH 2-35-1NBH PWP (REV. A.0)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	17742.92	Custom BHI NaviTrak (Standard Rotating) (Rockies 0.03Gt model)		ACKARD NORTH 2-35-1NBH PWB



Clearance Report
ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

OFFSET WELLPATH REFERENCE - Offset Wellbore: ACKARD NORTH 2-35-1NBH PWB Offset Wellpath: ACKARD NORTH 2-35-1NBH PWP (REV. A.0)	
MD Reference: RIG (13'KB) (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	13.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: MARTIN #1 AWB Offset Wellpath: MARTIN #1 AWP												
Facility: SEC.02-T03S-R66W		Slot: SLOT#01 EX MARTIN #1 (600'FNL & 2040'FWL, SEC.02,8400, SI)		Well: MARTIN #1		Threshold Value=1.00		† = interpolated/extrapolated station				
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	27.00	13.00	4042.36	52.85	0.75	4042.71	50.64	81.10	PASS
113.00†	113.00	0.00	0.00	127.00	113.00	4042.36	52.85	0.75	4042.71	52.98	77.46	PASS
213.00†	213.00	0.00	0.00	227.00	213.00	4042.36	52.85	0.75	4042.71	55.33	74.12	PASS
313.00†	313.00	0.00	0.00	327.00	313.00	4042.36	52.85	0.75	4042.71	57.68	71.06	PASS
413.00†	413.00	0.00	0.00	427.00	413.00	4042.36	52.85	0.75	4042.71	60.04	68.23	PASS
513.00†	513.00	0.00	0.00	527.00	513.00	4042.36	52.85	0.75	4042.71	62.40	65.62	PASS
613.00†	613.00	0.00	0.00	627.00	613.00	4042.36	52.85	0.75	4042.71	64.76	63.19	PASS
713.00†	713.00	0.00	0.00	727.00	713.00	4042.36	52.85	0.75	4042.71	67.13	60.94	PASS
813.00†	813.00	0.00	0.00	827.00	813.00	4042.36	52.85	0.75	4042.71	69.51	58.83	PASS
913.00†	913.00	0.00	0.00	927.00	913.00	4042.36	52.85	0.75	4042.71	71.88	56.86	PASS
1013.00†	1013.00	0.00	0.00	1027.00	1013.00	4042.36	52.85	0.75	4042.71	74.26	55.02	PASS
1113.00†	1113.00	0.00	0.00	1127.00	1113.00	4042.36	52.85	0.75	4042.71	76.65	53.29	PASS
1200.00	1200.00	0.00	0.00	1214.00	1200.00	4042.36	52.85	0.75	4042.71	78.72	51.87	PASS
1213.00†	1213.00	-0.03	-0.01	1227.00	1213.00	4042.36	52.85	158.94	4042.74	79.03	51.67	PASS
1313.00†	1312.97	-2.07	-0.83	1326.97	1312.97	4042.36	52.85	158.94	4044.79	81.44	50.15	PASS
1413.00†	1412.80	-7.35	-2.94	1426.80	1412.80	4042.36	52.85	158.93	4050.10	83.89	48.74	PASS
1513.00†	1512.38	-15.86	-6.35	1526.38	1512.38	4042.36	52.85	158.91	4058.66	86.33	47.44	PASS
1574.38	1573.31	-22.68	-9.07	1587.31	1573.31	4042.36	52.85	158.90	4065.52	87.82	46.71	PASS
1613.00†	1611.61	-27.35	-10.94	1625.61	1611.61	4042.36	52.85	158.93	4070.22	88.74	46.27	PASS
1713.00†	1710.75	-39.45	-15.79	1724.75	1710.75	4042.36	52.85	158.99	4082.39	91.13	45.18	PASS
1813.00†	1809.90	-51.55	-20.63	1823.90	1809.90	4042.36	52.85	159.06	4094.57	93.44	44.15	PASS
1913.00†	1909.05	-63.65	-25.47	1923.05	1909.05	4042.36	52.85	159.12	4106.76	95.84	43.16	PASS
2013.00†	2008.20	-75.75	-30.31	2022.20	2008.20	4042.36	52.85	159.19	4118.95	98.24	42.22	PASS
2113.00†	2107.34	-87.84	-35.15	2121.34	2107.34	4042.36	52.85	159.25	4131.15	100.65	41.33	PASS
2213.00†	2206.49	-99.94	-39.99	2220.49	2206.49	4042.36	52.85	159.31	4143.35	103.07	40.47	PASS
2313.00†	2305.64	-112.04	-44.83	2319.64	2305.64	4042.36	52.85	159.38	4155.55	105.49	39.65	PASS
2413.00†	2404.78	-124.14	-49.67	2418.78	2404.78	4042.36	52.85	159.44	4167.77	107.91	38.87	PASS
2513.00†	2503.93	-136.24	-54.51	2517.93	2503.93	4042.36	52.85	159.50	4179.98	110.34	38.12	PASS
2613.00†	2603.08	-148.34	-59.35	2617.08	2603.08	4042.36	52.85	159.57	4192.20	112.78	37.40	PASS
2713.00†	2702.23	-160.44	-64.20	2716.23	2702.23	4042.36	52.85	159.63	4204.43	115.22	36.71	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: MARTIN #1 AWB Offset Wellpath: MARTIN #1 AWP

Facility: SEC.02-T02S-R66W Slot: SLOT#01 EX MARTIN #1 (600'FNL & 2040'FWL, SEC.02,8400, SI) Well: MARTIN #1 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2801.37	-172.53	-69.04	2815.37	2801.37	4042.36	52.85	159.69	4216.66	117.66	36.05	PASS
2913.00†	2900.52	-184.63	-73.88	2914.52	2900.52	4042.36	52.85	159.75	4228.90	120.11	35.41	PASS
3013.00†	2999.67	-196.73	-78.72	3013.67	2999.67	4042.36	52.85	159.81	4241.14	122.56	34.80	PASS
3113.00†	3098.82	-208.83	-83.56	3112.82	3098.82	4042.36	52.85	159.87	4253.38	125.02	34.21	PASS
3213.00†	3197.96	-220.93	-88.40	3211.96	3197.96	4042.36	52.85	159.93	4265.63	127.48	33.64	PASS
3313.00†	3297.11	-233.03	-93.24	3311.11	3297.11	4042.36	52.85	159.99	4277.89	129.94	33.10	PASS
3413.00†	3396.26	-245.13	-98.08	3410.26	3396.26	4042.36	52.85	160.05	4290.15	132.41	32.57	PASS
3513.00†	3495.41	-257.22	-102.92	3509.41	3495.41	4042.36	52.85	160.11	4302.41	134.88	32.06	PASS
3613.00†	3594.55	-269.32	-107.76	3608.55	3594.55	4042.36	52.85	160.17	4314.68	137.36	31.57	PASS
3713.00†	3693.70	-281.42	-112.60	3707.70	3693.70	4042.36	52.85	160.23	4326.95	139.84	31.09	PASS
3813.00†	3792.85	-293.52	-117.45	3806.85	3792.85	4042.36	52.85	160.29	4339.23	142.33	30.64	PASS
3913.00†	3891.99	-305.62	-122.29	3905.99	3891.99	4042.36	52.85	160.34	4351.51	144.82	30.19	PASS
4013.00†	3991.14	-317.72	-127.13	4005.14	3991.14	4042.36	52.85	160.40	4363.79	147.31	29.76	PASS
4113.00†	4090.29	-329.82	-131.97	4104.29	4090.29	4042.36	52.85	160.46	4376.08	149.80	29.35	PASS
4213.00†	4189.44	-341.91	-136.81	4203.44	4189.44	4042.36	52.85	160.51	4388.38	152.30	28.94	PASS
4313.00†	4288.58	-354.01	-141.65	4302.58	4288.58	4042.36	52.85	160.57	4400.68	154.80	28.55	PASS
4413.00†	4387.73	-366.11	-146.49	4401.73	4387.73	4042.36	52.85	160.63	4412.98	157.31	28.18	PASS
4513.00†	4486.88	-378.21	-151.33	4500.88	4486.88	4042.36	52.85	160.68	4425.29	159.82	27.81	PASS
4613.00†	4586.03	-390.31	-156.17	4600.03	4586.03	4042.36	52.85	160.74	4437.60	162.33	27.45	PASS
4713.00†	4685.17	-402.41	-161.01	4699.17	4685.17	4042.36	52.85	160.79	4449.91	164.85	27.11	PASS
4813.00†	4784.32	-414.51	-165.86	4798.32	4784.32	4042.36	52.85	160.85	4462.23	167.36	26.77	PASS
4913.00†	4883.47	-426.60	-170.70	4897.47	4883.47	4042.36	52.85	160.91	4474.56	169.89	26.44	PASS
5013.00†	4982.61	-438.70	-175.54	4996.61	4982.61	4042.36	52.85	160.96	4486.88	172.41	26.13	PASS
5113.00†	5081.76	-450.80	-180.38	5095.76	5081.76	4042.36	52.85	161.01	4499.21	174.94	25.82	PASS
5213.00†	5180.91	-462.90	-185.22	5194.91	5180.91	4042.36	52.85	161.07	4511.55	177.47	25.52	PASS
5313.00†	5280.06	-475.00	-190.06	5294.06	5280.06	4042.36	52.85	161.12	4523.89	180.00	25.23	PASS
5413.00†	5379.20	-487.10	-194.90	5393.20	5379.20	4042.36	52.85	161.17	4536.23	182.54	24.94	PASS
5513.00†	5478.35	-499.19	-199.74	5492.35	5478.35	4042.36	52.85	161.23	4548.58	185.07	24.67	PASS
5613.00†	5577.50	-511.29	-204.58	5591.50	5577.50	4042.36	52.85	161.28	4560.93	187.61	24.40	PASS
5713.00†	5676.65	-523.39	-209.42	5690.65	5676.65	4042.36	52.85	161.33	4573.28	190.16	24.14	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: MARTIN #1 AWB Offset Wellpath: MARTIN #1 AWP

Facility: SEC.02-T02S-R66W Slot: SLOT#01 EX MARTIN #1 (600'FNL & 2040'FWL, SEC.02,8400, SI) Well: MARTIN #1 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5775.79	-535.49	-214.27	5789.79	5775.79	4042.36	52.85	161.38	4585.64	192.70	23.88	PASS
5913.00†	5874.94	-547.59	-219.11	5888.94	5874.94	4042.36	52.85	161.44	4598.00	195.25	23.63	PASS
6013.00†	5974.09	-559.69	-223.95	5988.09	5974.09	4042.36	52.85	161.49	4610.37	197.80	23.39	PASS
6113.00†	6073.24	-571.79	-228.79	6087.24	6073.24	4042.36	52.85	161.54	4622.74	200.36	23.15	PASS
6213.00†	6172.38	-583.88	-233.63	6186.38	6172.38	4042.36	52.85	161.59	4635.11	202.91	22.92	PASS
6313.00†	6271.53	-595.98	-238.47	6285.53	6271.53	4042.36	52.85	161.64	4647.49	205.47	22.69	PASS
6413.00†	6370.68	-608.08	-243.31	6384.68	6370.68	4042.36	52.85	161.69	4659.87	208.03	22.47	PASS
6513.00†	6469.82	-620.18	-248.15	6483.82	6469.82	4042.36	52.85	161.74	4672.25	210.59	22.26	PASS
6613.00†	6568.97	-632.28	-252.99	6582.97	6568.97	4042.36	52.85	161.79	4684.64	213.15	22.05	PASS
6713.00†	6668.12	-644.38	-257.83	6682.12	6668.12	4042.36	52.85	161.84	4697.03	215.72	21.84	PASS
6813.00†	6767.27	-656.48	-262.68	6781.27	6767.27	4042.36	52.85	161.89	4709.42	218.29	21.64	PASS
6913.00†	6866.41	-668.57	-267.52	6880.41	6866.41	4042.36	52.85	161.94	4721.82	220.86	21.45	PASS
7013.00†	6965.56	-680.67	-272.36	6979.56	6965.56	4042.36	52.85	161.99	4734.22	223.43	21.25	PASS
7113.00†	7064.71	-692.77	-277.20	7078.71	7064.71	4042.36	52.85	162.04	4746.62	226.00	21.07	PASS
7213.00†	7163.86	-704.87	-282.04	7177.86	7163.86	4042.36	52.85	162.08	4759.03	228.57	20.88	PASS
7251.04	7201.57	-709.47	-283.88	7215.57	7201.57	4042.36	52.85	162.10	4763.75	229.55	20.81	PASS
7313.00†	7263.29	-713.63	-286.90	7277.29	7263.29	4042.36	52.85	109.06	4768.12	231.17	20.69	PASS
7413.00†	7362.77	-706.23	-291.81	7376.77	7362.77	4042.36	52.85	21.34	4761.09	234.16	20.39	PASS
7513.00†	7459.45	-681.66	-296.63	7473.45	7459.45	4042.36	52.85	13.10	4736.93	237.87	19.97	PASS
7613.00†	7550.39	-640.64	-301.20	7564.39	7550.39	4042.36	52.85	10.85	4696.37	241.03	19.54	PASS
7713.00†	7632.84	-584.44	-305.40	7646.84	7632.84	4042.36	52.85	10.32	4640.65	243.78	19.09	PASS
7813.00†	7704.29	-514.75	-309.10	7718.29	7704.29	4042.36	52.85	10.84	4571.46	246.07	18.63	PASS
7913.00†	7762.57	-433.70	-312.17	7776.57	7762.57	4042.36	52.85	12.55	4490.92	247.87	18.17	PASS
8013.00†	7805.90	-343.74	-314.54	7819.90	7805.90	4042.36	52.85	16.55	4401.47	249.16	17.71	PASS
8113.00†	7832.97	-247.62	-316.12	7846.97	7832.97	4042.36	52.85	27.77	4305.82	249.95	17.27	PASS
8213.00†	7842.95	-148.25	-316.87	7856.95	7842.95	4042.36	52.85	81.92	4206.89	250.28	16.85	PASS
8220.45	7843.00	-140.80	-316.89	7857.00	7843.00	4042.36	52.85	90.00	4199.47	250.29	16.82	PASS
8313.00†	7843.00	-48.25	-317.13	7857.00	7843.00	4042.36	52.85	90.00	4107.32	250.35	16.45	PASS
8413.00†	7843.00	51.75	-317.40	7857.00	7843.00	4042.36	52.85	90.00	4007.76	250.43	16.05	PASS
8513.00†	7843.00	151.75	-317.66	7857.00	7843.00	4042.36	52.85	90.00	3908.22	250.52	15.64	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: MARTIN #1 AWB Offset Wellpath: MARTIN #1 AWP

Facility: SEC.02-T02S-R66W Slot: SLOT#01 EX MARTIN #1 (600'FNL & 2040'FWL, SEC.02,8400, SI) Well: MARTIN #1 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
8613.00†	7843.00	251.75	-317.92	7857.00	7843.00	4042.36	52.85	90.00	3808.71	250.61	15.24	PASS
8713.00†	7843.00	351.75	-318.18	7857.00	7843.00	4042.36	52.85	90.00	3709.22	250.71	14.83	PASS
8813.00†	7843.00	451.74	-318.44	7857.00	7843.00	4042.36	52.85	90.00	3609.76	250.82	14.43	PASS
8913.00†	7843.00	551.74	-318.70	7857.00	7843.00	4042.36	52.85	90.00	3510.34	250.95	14.03	PASS
9013.00†	7843.00	651.74	-318.97	7857.00	7843.00	4042.36	52.85	90.00	3410.95	251.08	13.62	PASS
9113.00†	7843.00	751.74	-319.23	7857.00	7843.00	4042.36	52.85	90.00	3311.59	251.23	13.22	PASS
9213.00†	7843.00	851.74	-319.49	7857.00	7843.00	4042.36	52.85	90.00	3212.27	251.38	12.81	PASS
9313.00†	7843.00	951.74	-319.75	7857.00	7843.00	4042.36	52.85	90.00	3113.00	251.56	12.41	PASS
9413.00†	7843.00	1051.74	-320.01	7857.00	7843.00	4042.36	52.85	90.00	3013.78	251.75	12.00	PASS
9513.00†	7843.00	1151.74	-320.28	7857.00	7843.00	4042.36	52.85	90.00	2914.60	251.96	11.60	PASS
9613.00†	7843.00	1251.74	-320.54	7857.00	7843.00	4042.36	52.85	90.00	2815.49	252.19	11.19	PASS
9713.00†	7843.00	1351.74	-320.80	7857.00	7843.00	4042.36	52.85	90.00	2716.44	252.45	10.79	PASS
9813.00†	7843.00	1451.74	-321.06	7857.00	7843.00	4042.36	52.85	90.00	2617.47	252.73	10.38	PASS
9913.00†	7843.00	1551.74	-321.32	7857.00	7843.00	4042.36	52.85	90.00	2518.57	253.05	9.98	PASS
10013.00†	7843.00	1651.74	-321.58	7857.00	7843.00	4042.36	52.85	90.00	2419.77	253.40	9.57	PASS
10113.00†	7843.00	1751.74	-321.85	7857.00	7843.00	4042.36	52.85	90.00	2321.07	253.79	9.17	PASS
10213.00†	7843.00	1851.74	-322.11	7857.00	7843.00	4042.36	52.85	90.00	2222.48	254.22	8.76	PASS
10313.00†	7843.00	1951.74	-322.37	7857.00	7843.00	4042.36	52.85	90.00	2124.03	254.72	8.36	PASS
10413.00†	7843.00	2051.74	-322.63	7857.00	7843.00	4042.36	52.85	90.00	2025.73	255.28	7.95	PASS
10513.00†	7843.00	2151.74	-322.89	7857.00	7843.00	4042.36	52.85	90.00	1927.60	255.91	7.55	PASS
10613.00†	7843.00	2251.74	-323.15	7857.00	7843.00	4042.36	52.85	90.00	1829.68	256.64	7.15	PASS
10713.00†	7843.00	2351.74	-323.42	7857.00	7843.00	4042.36	52.85	90.00	1731.99	257.47	6.74	PASS
10813.00†	7843.00	2451.74	-323.68	7857.00	7843.00	4042.36	52.85	90.00	1634.58	258.44	6.34	PASS
10913.00†	7843.00	2551.74	-323.94	7857.00	7843.00	4042.36	52.85	90.00	1537.51	259.56	5.94	PASS
11013.00†	7843.00	2651.74	-324.20	7857.00	7843.00	4042.36	52.85	90.00	1440.84	260.87	5.54	PASS
11113.00†	7843.00	2751.74	-324.46	7857.00	7843.00	4042.36	52.85	90.00	1344.65	262.43	5.14	PASS
11213.00†	7843.00	2851.74	-324.72	7857.00	7843.00	4042.36	52.85	90.00	1249.06	264.28	4.74	PASS
11313.00†	7843.00	2951.74	-324.99	7857.00	7843.00	4042.36	52.85	90.00	1154.22	266.51	4.34	PASS
11413.00†	7843.00	3051.74	-325.25	7857.00	7843.00	4042.36	52.85	90.00	1060.33	269.21	3.95	PASS
11513.00†	7843.00	3151.74	-325.51	7857.00	7843.00	4042.36	52.85	90.00	967.66	272.51	3.56	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: MARTIN #1 AWB Offset Wellpath: MARTIN #1 AWP

Facility: SEC.02-T02S-R66W Slot: SLOT#01 EX MARTIN #1 (600'FNL & 2040'FWL, SEC.02,8400, SI) Well: MARTIN #1 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11613.00†	7843.00	3251.74	-325.77	7857.00	7843.00	4042.36	52.85	90.00	876.61	276.58	3.18	PASS
11713.00†	7843.00	3351.74	-326.03	7857.00	7843.00	4042.36	52.85	90.00	787.73	281.64	2.80	PASS
11813.00†	7843.00	3451.73	-326.30	7857.00	7843.00	4042.36	52.85	90.00	701.85	287.97	2.44	PASS
11913.00†	7843.00	3551.73	-326.56	7857.00	7843.00	4042.36	52.85	90.00	620.21	295.85	2.10	PASS
12013.00†	7843.00	3651.73	-326.82	7857.00	7843.00	4042.36	52.85	90.00	544.74	305.51	1.78	PASS
12113.00†	7843.00	3751.73	-327.08	7857.00	7843.00	4042.36	52.85	90.00	478.34	316.80	1.51	PASS
12213.00†	7843.00	3851.73	-327.34	7857.00	7843.00	4042.36	52.85	90.00	425.30	328.60	1.29	PASS
12313.00†	7843.00	3951.73	-327.60	7857.00	7843.00	4042.36	52.85	90.00	391.10	338.11	1.16	PASS
12402.89†	7843.00	4041.62	-327.84	7856.80	7842.80	4042.36	52.85	89.97	380.69	341.50	1.11	PASS
12403.43†	7843.00	4042.17	-327.84	7857.00	7843.00	4042.36	52.85	90.00	380.69	341.51	1.11	PASS
12413.00†	7843.00	4051.73	-327.87	7857.00	7843.00	4042.36	52.85	90.00	380.83	341.49	1.12	PASS
12513.00†	7843.00	4151.73	-328.13	7857.00	7843.00	4042.36	52.85	90.00	396.36	337.06	1.18	PASS
12613.00†	7843.00	4251.73	-328.39	7857.00	7843.00	4042.36	52.85	90.00	434.94	327.17	1.33	PASS
12713.00†	7843.00	4351.73	-328.65	7857.00	7843.00	4042.36	52.85	90.00	491.17	315.61	1.56	PASS
12813.00†	7843.00	4451.73	-328.91	7857.00	7843.00	4042.36	52.85	90.00	559.75	304.83	1.84	PASS
12913.00†	7843.00	4551.73	-329.17	7857.00	7843.00	4042.36	52.85	90.00	636.71	295.71	2.16	PASS
13013.00†	7843.00	4651.73	-329.44	7857.00	7843.00	4042.36	52.85	90.00	719.35	288.30	2.50	PASS
13113.00†	7843.00	4751.73	-329.70	7857.00	7843.00	4042.36	52.85	90.00	805.94	282.37	2.86	PASS
13213.00†	7843.00	4851.73	-329.96	7857.00	7843.00	4042.36	52.85	90.00	895.33	277.63	3.23	PASS
13313.00†	7843.00	4951.73	-330.22	7857.00	7843.00	4042.36	52.85	90.00	986.76	273.82	3.61	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: MARTIN #1 AWB Offset Wellpath: MARTIN #1 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH COMPOSITION - Offset Wellbore: MARTIN #1 AWB Offset Wellpath: MARTIN #1 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8400.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8400>	MARTIN #1 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: MARTIN #1 AWB Offset Wellpath: MARTIN #1 AWP	
MD Reference: Rig on SLOT#01 EX MARTIN #1 (600'FNL & 2040'FWL, SEC.02,8400, SI) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NAH PWB Offset Wellpath: ACKARD NORTH 2-35-2NAH PWP (REV. A.0)												
Facility: SEC.02-T03S-R66W		Slot: SLOT#06 ACKARD NORTH 2-35-2NAH (600'FSL & 2010'FWL, SEC.02)		Well: ACKARD NORTH 2-35-2NAH		Threshold Value=1.00 † = interpolated/extrapolated station						
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	13.00	13.00	0.05	14.98	89.79	14.98	1.40	23.63	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.05	14.98	89.79	14.98	1.72	15.47	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.05	14.98	89.79	14.98	2.28	9.57	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.05	14.98	89.79	14.98	2.89	6.81	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.05	14.98	89.79	14.98	3.50	5.26	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.05	14.98	89.79	14.98	4.12	4.28	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.05	14.98	89.79	14.98	4.74	3.60	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.05	14.98	89.79	14.98	5.36	3.11	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.05	14.98	89.79	14.98	5.99	2.73	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.05	14.98	89.79	14.98	6.61	2.44	PASS
1013.00†	1013.00	0.00	0.00	1013.00	1013.00	0.05	14.98	89.79	14.98	7.24	2.20	PASS
1113.00†	1113.00	0.00	0.00	1113.00	1113.00	0.05	14.98	89.79	14.98	7.87	2.01	PASS
1200.00	1200.00	0.00	0.00	1200.00	1200.00	0.05	14.98	89.79	14.98	8.41	1.86	PASS
1213.00†	1213.00	-0.03	-0.01	1213.00	1213.00	0.05	14.98	-112.12	14.99	8.49	1.85	PASS
1313.00†	1312.97	-2.07	-0.83	1313.00	1313.00	0.03	14.97	-119.35	15.94	9.14	1.81	PASS
1413.00†	1412.80	-7.35	-2.94	1413.22	1413.19	-2.09	14.36	-128.70	18.08	9.95	1.89	PASS
1513.00†	1512.38	-15.86	-6.35	1513.57	1513.37	-7.59	12.77	-135.25	20.85	10.91	1.98	PASS
1574.38	1573.31	-22.68	-9.07	1575.21	1574.79	-12.63	11.31	-138.13	22.77	11.48	2.06	PASS
1613.00†	1611.61	-27.35	-10.94	1614.03	1613.40	-16.46	10.20	-139.19	23.85	11.83	2.09	PASS
1713.00†	1710.75	-39.45	-15.79	1714.50	1713.06	-28.64	6.67	-137.74	25.03	12.53	2.07	PASS
1813.00†	1809.90	-51.55	-20.63	1814.49	1812.10	-41.85	2.85	-134.47	25.49	13.05	2.01	PASS
1913.00†	1909.05	-63.65	-25.47	1914.48	1911.14	-55.07	-0.98	-131.33	26.03	13.73	1.94	PASS
2013.00†	2008.20	-75.75	-30.31	2014.47	2010.18	-68.28	-4.81	-128.33	26.65	14.46	1.89	PASS
2113.00†	2107.34	-87.84	-35.15	2114.45	2109.21	-81.49	-8.63	-125.47	27.33	15.24	1.83	PASS
2213.00†	2206.49	-99.94	-39.99	2214.44	2208.25	-94.71	-12.46	-122.75	28.08	16.07	1.78	PASS
2313.00†	2305.64	-112.04	-44.83	2314.43	2307.29	-107.92	-16.29	-120.18	28.89	16.93	1.74	PASS
2413.00†	2404.78	-124.14	-49.67	2414.42	2406.33	-121.14	-20.11	-117.76	29.75	17.83	1.70	PASS
2513.00†	2503.93	-136.24	-54.51	2514.41	2505.37	-134.35	-23.94	-115.47	30.67	18.75	1.66	PASS
2613.00†	2603.08	-148.34	-59.35	2614.40	2604.40	-147.56	-27.76	-113.32	31.63	19.70	1.63	PASS
2713.00†	2702.23	-160.44	-64.20	2714.39	2703.44	-160.78	-31.59	-111.30	32.63	20.66	1.60	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NAH PWB Offset Wellpath: ACKARD NORTH 2-35-2NAH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#06 ACKARD NORTH 2-35-2NAH (600'FSL & 2010'FWL, SEC.02) Well: ACKARD NORTH 2-35-2NAH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2801.37	-172.53	-69.04	2814.37	2802.48	-173.99	-35.42	-109.41	33.67	21.64	1.57	PASS
2913.00†	2900.52	-184.63	-73.88	2914.36	2901.52	-187.20	-39.24	-107.62	34.74	22.64	1.55	PASS
3013.00†	2999.67	-196.73	-78.72	3014.35	3000.55	-200.42	-43.07	-105.95	35.85	23.64	1.53	PASS
3113.00†	3098.82	-208.83	-83.56	3114.34	3099.59	-213.63	-46.90	-104.38	36.98	24.64	1.52	PASS
3213.00†	3197.96	-220.93	-88.40	3214.33	3198.63	-226.85	-50.72	-102.90	38.14	25.65	1.50	PASS
3313.00†	3297.11	-233.03	-93.24	3314.32	3297.67	-240.06	-54.55	-101.51	39.33	26.67	1.49	PASS
3413.00†	3396.26	-245.13	-98.08	3414.31	3396.70	-253.27	-58.38	-100.21	40.54	27.68	1.48	PASS
3513.00†	3495.41	-257.22	-102.92	3514.29	3495.74	-266.49	-62.20	-98.98	41.76	28.70	1.47	PASS
3613.00†	3594.55	-269.32	-107.76	3614.28	3594.78	-279.70	-66.03	-97.81	43.01	29.72	1.46	PASS
3713.00†	3693.70	-281.42	-112.60	3714.27	3693.82	-292.92	-69.86	-96.72	44.27	30.74	1.45	PASS
3813.00†	3792.85	-293.52	-117.45	3814.26	3792.86	-306.13	-73.68	-95.69	45.54	31.76	1.44	PASS
3913.00†	3891.99	-305.62	-122.29	3914.25	3891.89	-319.34	-77.51	-94.71	46.83	32.78	1.44	PASS
4013.00†	3991.14	-317.72	-127.13	4014.24	3990.93	-332.56	-81.34	-93.79	48.14	33.80	1.43	PASS
4113.00†	4090.29	-329.82	-131.97	4114.23	4089.97	-345.77	-85.16	-92.91	49.45	34.81	1.43	PASS
4213.00†	4189.44	-341.91	-136.81	4214.21	4189.01	-358.99	-88.99	-92.08	50.78	35.83	1.43	PASS
4313.00†	4288.58	-354.01	-141.65	4314.20	4288.04	-372.20	-92.81	-91.29	52.12	36.84	1.42	PASS
4413.00†	4387.73	-366.11	-146.49	4414.19	4387.08	-385.41	-96.64	-90.54	53.46	37.86	1.42	PASS
4513.00†	4486.88	-378.21	-151.33	4514.18	4486.12	-398.63	-100.47	-89.83	54.82	38.87	1.42	PASS
4613.00†	4586.03	-390.31	-156.17	4614.17	4585.16	-411.84	-104.29	-89.16	56.18	39.88	1.42	PASS
4713.00†	4685.17	-402.41	-161.01	4714.16	4684.19	-425.06	-108.12	-88.51	57.55	40.89	1.41	PASS
4813.00†	4784.32	-414.51	-165.86	4814.15	4783.23	-438.27	-111.95	-87.90	58.92	41.89	1.41	PASS
4913.00†	4883.47	-426.60	-170.70	4914.13	4882.27	-451.48	-115.77	-87.31	60.31	42.90	1.41	PASS
5013.00†	4982.61	-438.70	-175.54	5014.12	4981.31	-464.70	-119.60	-86.75	61.70	43.91	1.41	PASS
5113.00†	5081.76	-450.80	-180.38	5114.11	5080.35	-477.91	-123.43	-86.22	63.09	44.91	1.41	PASS
5213.00†	5180.91	-462.90	-185.22	5214.10	5179.38	-491.13	-127.25	-85.70	64.49	45.91	1.41	PASS
5313.00†	5280.06	-475.00	-190.06	5314.09	5278.42	-504.34	-131.08	-85.21	65.90	46.91	1.41	PASS
5413.00†	5379.20	-487.10	-194.90	5414.08	5377.46	-517.55	-134.91	-84.74	67.31	47.91	1.41	PASS
5513.00†	5478.35	-499.19	-199.74	5514.07	5476.50	-530.77	-138.73	-84.29	68.72	48.91	1.41	PASS
5613.00†	5577.50	-511.29	-204.58	5614.05	5575.53	-543.98	-142.56	-83.86	70.14	49.91	1.41	PASS
5713.00†	5676.65	-523.39	-209.42	5714.04	5674.57	-557.19	-146.38	-83.45	71.56	50.91	1.41	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NAH PWB Offset Wellpath: ACKARD NORTH 2-35-2NAH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#06 ACKARD NORTH 2-35-2NAH (600'FSL & 2010'FWL, SEC.02) Well: ACKARD NORTH 2-35-2NAH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5775.79	-535.49	-214.27	5814.03	5773.61	-570.41	-150.21	-83.05	72.99	51.90	1.41	PASS
5913.00†	5874.94	-547.59	-219.11	5914.02	5872.65	-583.62	-154.04	-82.66	74.42	52.90	1.41	PASS
6013.00†	5974.09	-559.69	-223.95	6014.01	5971.68	-596.84	-157.86	-82.29	75.85	53.89	1.41	PASS
6113.00†	6073.24	-571.79	-228.79	6114.00	6070.72	-610.05	-161.69	-81.94	77.28	54.89	1.41	PASS
6213.00†	6172.38	-583.88	-233.63	6213.99	6169.76	-623.26	-165.52	-81.60	78.72	55.88	1.41	PASS
6313.00†	6271.53	-595.98	-238.47	6313.97	6268.80	-636.48	-169.34	-81.27	80.16	56.87	1.41	PASS
6413.00†	6370.68	-608.08	-243.31	6413.96	6367.84	-649.69	-173.17	-80.95	81.60	57.86	1.42	PASS
6513.00†	6469.82	-620.18	-248.15	6513.95	6466.87	-662.91	-177.00	-80.64	83.05	58.85	1.42	PASS
6613.00†	6568.97	-632.28	-252.99	6613.94	6565.91	-676.12	-180.82	-80.34	84.50	59.84	1.42	PASS
6713.00†	6668.12	-644.38	-257.83	6713.93	6664.95	-689.33	-184.65	-80.06	85.95	60.83	1.42	PASS
6813.00†	6767.27	-656.48	-262.68	6813.92	6763.99	-702.55	-188.48	-79.78	87.40	61.82	1.42	PASS
6913.00†	6866.41	-668.57	-267.52	6918.75	6868.13	-713.22	-192.51	-81.27	87.31	62.91	1.39	PASS
7013.00†	6965.56	-680.67	-272.36	7023.67	6972.61	-706.45	-196.60	-93.65	80.33	64.52	1.25	PASS
7087.37†	7039.30	-689.67	-275.96	7095.56	7042.68	-690.85	-199.37	-111.07	76.67	65.14	1.18	PASS
7113.00†	7064.71	-692.77	-277.20	7118.78	7064.83	-683.94	-200.25	-118.16	77.45	64.68	1.20	PASS
7213.00†	7163.86	-704.87	-282.04	7201.01	7140.64	-652.40	-203.29	-144.17	97.43	58.33	1.68	PASS
7251.04	7201.57	-709.47	-283.88	7228.80	7165.13	-639.33	-204.28	-151.78	112.18	55.97	2.02	PASS
7313.00†	7263.29	-713.63	-286.90	7271.86	7201.77	-616.76	-205.77	144.08	140.54	53.36	2.66	PASS
7413.00†	7362.77	-706.23	-291.81	7338.98	7255.20	-576.27	-207.96	45.35	188.39	52.03	3.66	PASS
7513.00†	7459.45	-681.66	-296.63	7403.86	7302.03	-531.45	-209.90	30.62	234.23	52.56	4.50	PASS
7613.00†	7550.39	-640.64	-301.20	7467.09	7342.50	-482.95	-211.60	24.04	275.89	52.39	5.32	PASS
7713.00†	7632.84	-584.44	-305.40	7529.09	7376.77	-431.33	-213.08	20.23	312.31	52.05	6.07	PASS
7813.00†	7704.29	-514.75	-309.10	7590.18	7404.89	-377.15	-214.31	17.82	342.86	52.05	6.66	PASS
7913.00†	7762.57	-433.70	-312.17	7650.59	7426.88	-320.92	-215.32	16.24	367.13	52.21	7.12	PASS
8013.00†	7805.90	-343.74	-314.54	7710.54	7442.74	-263.14	-216.09	15.24	384.80	52.61	7.40	PASS
8113.00†	7832.97	-247.62	-316.12	7770.18	7452.44	-204.33	-216.62	14.68	395.69	53.31	7.51	PASS
8213.00†	7842.95	-148.25	-316.87	7829.67	7455.98	-144.97	-216.91	14.49	399.68	54.16	7.46	PASS
8220.45	7843.00	-140.80	-316.89	7834.11	7456.00	-140.53	-216.92	14.48	399.70	54.17	7.46	PASS
8313.00†	7843.00	-48.25	-317.13	7926.65	7456.00	-47.99	-217.17	14.48	399.70	54.56	7.41	PASS
8413.00†	7843.00	51.75	-317.40	8026.65	7456.00	52.01	-217.43	14.48	399.70	55.11	7.33	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NAH PWB Offset Wellpath: ACKARD NORTH 2-35-2NAH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#06 ACKARD NORTH 2-35-2NAH (600'FSL & 2010'FWL, SEC.02) Well: ACKARD NORTH 2-35-2NAH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
8513.00†	7843.00	151.75	-317.66	8126.65	7456.00	152.01	-217.69	14.48	399.70	55.78	7.24	PASS
8613.00†	7843.00	251.75	-317.92	8226.65	7456.00	252.01	-217.95	14.48	399.70	56.58	7.14	PASS
8713.00†	7843.00	351.75	-318.18	8326.65	7456.00	352.01	-218.21	14.48	399.70	57.48	7.03	PASS
8813.00†	7843.00	451.74	-318.44	8426.65	7456.00	452.01	-218.47	14.48	399.70	58.49	6.91	PASS
8913.00†	7843.00	551.74	-318.70	8526.65	7456.00	552.01	-218.74	14.48	399.70	59.61	6.77	PASS
9013.00†	7843.00	651.74	-318.97	8626.65	7456.00	652.01	-219.00	14.48	399.70	60.82	6.64	PASS
9113.00†	7843.00	751.74	-319.23	8726.65	7456.00	752.01	-219.26	14.48	399.70	62.12	6.50	PASS
9213.00†	7843.00	851.74	-319.49	8826.65	7456.00	852.01	-219.52	14.48	399.70	63.51	6.35	PASS
9313.00†	7843.00	951.74	-319.75	8926.65	7456.00	952.00	-219.78	14.48	399.70	64.95	6.21	PASS
9413.00†	7843.00	1051.74	-320.01	9026.65	7456.00	1052.00	-220.04	14.48	399.70	66.53	6.06	PASS
9513.00†	7843.00	1151.74	-320.28	9126.65	7456.00	1152.00	-220.31	14.48	399.70	68.14	5.92	PASS
9613.00†	7843.00	1251.74	-320.54	9226.65	7456.00	1252.00	-220.57	14.48	399.70	69.82	5.77	PASS
9713.00†	7843.00	1351.74	-320.80	9326.65	7456.00	1352.00	-220.83	14.48	399.70	71.56	5.63	PASS
9813.00†	7843.00	1451.74	-321.06	9426.65	7456.00	1452.00	-221.09	14.48	399.70	73.36	5.49	PASS
9913.00†	7843.00	1551.74	-321.32	9526.65	7456.00	1552.00	-221.35	14.48	399.70	75.21	5.36	PASS
10013.00†	7843.00	1651.74	-321.58	9626.65	7456.00	1652.00	-221.61	14.48	399.70	77.11	5.22	PASS
10113.00†	7843.00	1751.74	-321.85	9726.65	7456.00	1752.00	-221.88	14.48	399.70	79.05	5.09	PASS
10213.00†	7843.00	1851.74	-322.11	9826.65	7456.00	1852.00	-222.14	14.48	399.70	81.03	4.97	PASS
10313.00†	7843.00	1951.74	-322.37	9926.65	7456.00	1952.00	-222.40	14.48	399.70	83.05	4.85	PASS
10413.00†	7843.00	2051.74	-322.63	10026.65	7456.00	2052.00	-222.66	14.48	399.70	85.11	4.73	PASS
10513.00†	7843.00	2151.74	-322.89	10126.65	7456.00	2152.00	-222.92	14.48	399.70	87.20	4.61	PASS
10613.00†	7843.00	2251.74	-323.15	10226.65	7456.00	2252.00	-223.18	14.48	399.70	89.32	4.50	PASS
10713.00†	7843.00	2351.74	-323.42	10326.65	7456.00	2352.00	-223.45	14.48	399.70	91.47	4.40	PASS
10813.00†	7843.00	2451.74	-323.68	10426.65	7456.00	2452.00	-223.71	14.48	399.70	93.65	4.29	PASS
10913.00†	7843.00	2551.74	-323.94	10526.65	7456.00	2552.00	-223.97	14.48	399.70	95.85	4.19	PASS
11013.00†	7843.00	2651.74	-324.20	10626.65	7456.00	2652.00	-224.23	14.48	399.70	98.08	4.10	PASS
11113.00†	7843.00	2751.74	-324.46	10726.65	7456.00	2752.00	-224.49	14.48	399.70	100.32	4.01	PASS
11213.00†	7843.00	2851.74	-324.72	10826.65	7456.00	2852.00	-224.75	14.48	399.70	102.59	3.92	PASS
11313.00†	7843.00	2951.74	-324.99	10926.65	7456.00	2952.00	-225.01	14.48	399.70	104.88	3.83	PASS
11413.00†	7843.00	3051.74	-325.25	11026.65	7456.00	3052.00	-225.28	14.48	399.70	107.18	3.75	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NAH PWB Offset Wellpath: ACKARD NORTH 2-35-2NAH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#06 ACKARD NORTH 2-35-2NAH (600'FSL & 2010'FWL, SEC.02) Well: ACKARD NORTH 2-35-2NAH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11513.00†	7843.00	3151.74	-325.51	11126.65	7456.00	3152.00	-225.54	14.48	399.70	109.50	3.67	PASS
11613.00†	7843.00	3251.74	-325.77	11226.65	7456.00	3252.00	-225.80	14.48	399.70	111.83	3.59	PASS
11713.00†	7843.00	3351.74	-326.03	11326.65	7456.00	3352.00	-226.06	14.48	399.70	114.18	3.52	PASS
11813.00†	7843.00	3451.73	-326.30	11426.65	7456.00	3452.00	-226.32	14.48	399.70	116.55	3.44	PASS
11913.00†	7843.00	3551.73	-326.56	11526.65	7456.00	3552.00	-226.58	14.48	399.70	118.92	3.38	PASS
12013.00†	7843.00	3651.73	-326.82	11626.65	7456.00	3652.00	-226.85	14.48	399.70	121.31	3.31	PASS
12113.00†	7843.00	3751.73	-327.08	11726.65	7456.00	3752.00	-227.11	14.48	399.70	123.71	3.24	PASS
12213.00†	7843.00	3851.73	-327.34	11826.65	7456.00	3851.99	-227.37	14.48	399.70	126.12	3.18	PASS
12313.00†	7843.00	3951.73	-327.60	11926.65	7456.00	3951.99	-227.63	14.49	399.70	128.54	3.12	PASS
12413.00†	7843.00	4051.73	-327.87	12026.65	7456.00	4051.99	-227.89	14.49	399.70	130.97	3.06	PASS
12513.00†	7843.00	4151.73	-328.13	12126.65	7456.00	4151.99	-228.15	14.49	399.70	133.41	3.01	PASS
12613.00†	7843.00	4251.73	-328.39	12226.65	7456.00	4251.99	-228.42	14.49	399.70	135.86	2.95	PASS
12713.00†	7843.00	4351.73	-328.65	12326.65	7456.00	4351.99	-228.68	14.49	399.70	138.32	2.90	PASS
12813.00†	7843.00	4451.73	-328.91	12426.65	7456.00	4451.99	-228.94	14.49	399.70	140.78	2.85	PASS
12913.00†	7843.00	4551.73	-329.17	12526.65	7456.00	4551.99	-229.20	14.49	399.70	143.25	2.80	PASS
13013.00†	7843.00	4651.73	-329.44	12626.65	7456.00	4651.99	-229.46	14.49	399.70	145.73	2.75	PASS
13113.00†	7843.00	4751.73	-329.70	12726.65	7456.00	4751.99	-229.72	14.49	399.70	148.21	2.71	PASS
13213.00†	7843.00	4851.73	-329.96	12826.65	7456.00	4851.99	-229.99	14.49	399.70	150.70	2.66	PASS
13313.00†	7843.00	4951.73	-330.22	12926.65	7456.00	4951.99	-230.25	14.49	399.70	153.20	2.62	PASS
13413.00†	7843.00	5051.73	-330.48	13026.65	7456.00	5051.99	-230.51	14.49	399.70	155.70	2.57	PASS
13513.00†	7843.00	5151.73	-330.74	13126.65	7456.00	5151.99	-230.77	14.49	399.70	158.21	2.53	PASS
13613.00†	7843.00	5251.73	-331.01	13226.65	7456.00	5251.99	-231.03	14.49	399.70	160.72	2.49	PASS
13713.00†	7843.00	5351.73	-331.27	13326.65	7456.00	5351.99	-231.29	14.49	399.70	163.24	2.45	PASS
13813.00†	7843.00	5451.73	-331.53	13426.65	7456.00	5451.99	-231.55	14.49	399.71	165.76	2.42	PASS
13913.00†	7843.00	5551.73	-331.79	13526.65	7456.00	5551.99	-231.82	14.49	399.71	168.28	2.38	PASS
14013.00†	7843.00	5651.73	-332.05	13626.65	7456.00	5651.99	-232.08	14.49	399.71	170.81	2.35	PASS
14113.00†	7843.00	5751.73	-332.32	13726.65	7456.00	5751.99	-232.34	14.49	399.71	173.35	2.31	PASS
14213.00†	7843.00	5851.73	-332.58	13826.65	7456.00	5851.99	-232.60	14.49	399.71	175.89	2.28	PASS
14313.00†	7843.00	5951.73	-332.84	13926.65	7456.00	5951.99	-232.86	14.49	399.71	178.43	2.25	PASS
14413.00†	7843.00	6051.73	-333.10	14026.65	7456.00	6051.99	-233.12	14.49	399.71	180.97	2.21	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NAH PWB Offset Wellpath: ACKARD NORTH 2-35-2NAH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#06 ACKARD NORTH 2-35-2NAH (600'FSL & 2010'FWL, SEC.02) Well: ACKARD NORTH 2-35-2NAH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
14513.00†	7843.00	6151.73	-333.36	14126.65	7456.00	6151.99	-233.39	14.49	399.71	183.52	2.18	PASS
14613.00†	7843.00	6251.73	-333.62	14226.65	7456.00	6251.99	-233.65	14.49	399.71	186.08	2.15	PASS
14713.00†	7843.00	6351.72	-333.89	14326.65	7456.00	6351.99	-233.91	14.49	399.71	188.63	2.12	PASS
14813.00†	7843.00	6451.72	-334.15	14426.65	7456.00	6451.99	-234.17	14.49	399.71	191.19	2.09	PASS
14913.00†	7843.00	6551.72	-334.41	14526.65	7456.00	6551.99	-234.43	14.49	399.71	193.75	2.07	PASS
15013.00†	7843.00	6651.72	-334.67	14626.65	7456.00	6651.99	-234.69	14.49	399.71	196.31	2.04	PASS
15113.00†	7843.00	6751.72	-334.93	14726.65	7456.00	6751.98	-234.96	14.49	399.71	198.88	2.01	PASS
15213.00†	7843.00	6851.72	-335.19	14826.65	7456.00	6851.98	-235.22	14.49	399.71	201.45	1.99	PASS
15313.00†	7843.00	6951.72	-335.46	14926.65	7456.00	6951.98	-235.48	14.49	399.71	204.02	1.96	PASS
15413.00†	7843.00	7051.72	-335.72	15026.65	7456.00	7051.98	-235.74	14.49	399.71	206.60	1.94	PASS
15513.00†	7843.00	7151.72	-335.98	15126.65	7456.00	7151.98	-236.00	14.49	399.71	209.17	1.91	PASS
15613.00†	7843.00	7251.72	-336.24	15226.65	7456.00	7251.98	-236.26	14.49	399.71	211.75	1.89	PASS
15713.00†	7843.00	7351.72	-336.50	15326.65	7456.00	7351.98	-236.52	14.49	399.71	214.33	1.87	PASS
15813.00†	7843.00	7451.72	-336.76	15426.65	7456.00	7451.98	-236.79	14.49	399.71	216.92	1.85	PASS
15913.00†	7843.00	7551.72	-337.03	15526.65	7456.00	7551.98	-237.05	14.49	399.71	219.50	1.82	PASS
16013.00†	7843.00	7651.72	-337.29	15626.65	7456.00	7651.98	-237.31	14.49	399.71	222.09	1.80	PASS
16113.00†	7843.00	7751.72	-337.55	15726.65	7456.00	7751.98	-237.57	14.49	399.71	224.68	1.78	PASS
16213.00†	7843.00	7851.72	-337.81	15826.65	7456.00	7851.98	-237.83	14.49	399.71	227.27	1.76	PASS
16313.00†	7843.00	7951.72	-338.07	15926.65	7456.00	7951.98	-238.09	14.49	399.71	229.86	1.74	PASS
16413.00†	7843.00	8051.72	-338.33	16026.65	7456.00	8051.98	-238.36	14.49	399.71	232.45	1.72	PASS
16513.00†	7843.00	8151.72	-338.60	16126.65	7456.00	8151.98	-238.62	14.49	399.71	235.05	1.70	PASS
16613.00†	7843.00	8251.72	-338.86	16226.65	7456.00	8251.98	-238.88	14.49	399.71	237.64	1.68	PASS
16713.00†	7843.00	8351.72	-339.12	16326.65	7456.00	8351.98	-239.14	14.49	399.71	240.24	1.67	PASS
16813.00†	7843.00	8451.72	-339.38	16426.65	7456.00	8451.98	-239.40	14.49	399.71	242.84	1.65	PASS
16913.00†	7843.00	8551.72	-339.64	16526.65	7456.00	8551.98	-239.66	14.49	399.71	245.44	1.63	PASS
17013.00†	7843.00	8651.72	-339.91	16626.65	7456.00	8651.98	-239.93	14.49	399.71	248.05	1.61	PASS
17113.00†	7843.00	8751.72	-340.17	16726.65	7456.00	8751.98	-240.19	14.49	399.71	250.65	1.60	PASS
17213.00†	7843.00	8851.72	-340.43	16826.65	7456.00	8851.98	-240.45	14.49	399.71	253.25	1.58	PASS
17313.00†	7843.00	8951.72	-340.69	16926.65	7456.00	8951.98	-240.71	14.49	399.71	255.86	1.56	PASS
17413.00†	7843.00	9051.72	-340.95	17026.65	7456.00	9051.98	-240.97	14.49	399.71	258.47	1.55	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NAH PWB Offset Wellpath: ACKARD NORTH 2-35-2NAH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#06 ACKARD NORTH 2-35-2NAH (600'FSL & 2010'FWL, SEC.02) Well: ACKARD NORTH 2-35-2NAH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
17513.00†	7843.00	9151.72	-341.21	17126.65	7456.00	9151.98	-241.23	14.49	399.71	261.08	1.53	PASS
17613.00†	7843.00	9251.71	-341.48	17226.65	7456.00	9251.98	-241.50	14.49	399.71	263.69	1.52	PASS
17713.00†	7843.00	9351.71	-341.74	17326.65	7456.00	9351.98	-241.76	14.49	399.71	266.30	1.50	PASS
17813.00†	7843.00	9451.71	-342.00	17426.65	7456.00	9451.98	-242.02	14.49	399.71	268.91	1.49	PASS
17913.00†	7843.00	9551.71	-342.26	17526.65	7456.00	9551.98	-242.28	14.49	399.71	271.52	1.47	PASS
17937.78	7843.00	9576.50	-342.33	17551.43	7456.00	9576.76	-242.34	14.49	399.71	272.17	1.47	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: ACKARD NORTH 2-35-2NAH PWB Offset Wellpath: ACKARD NORTH 2-35-2NAH PWP (REV. A.0)

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

HOLE & CASING SECTIONS - Offset Wellbore: ACKARD NORTH 2-35-2NAH PWB Offset Wellpath: ACKARD NORTH 2-35-2NAH PWP (REV. A.0)

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]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1797.75	0.03	9.13	-12.16	5.60
8.5in Open Hole	1800.00	17752.02	15952.02	1797.75	N/A	-12.16	5.60	N/A	N/A

SURVEY PROGRAM - Offset Wellbore: ACKARD NORTH 2-35-2NAH PWB Offset Wellpath: ACKARD NORTH 2-35-2NAH PWP (REV. A.0)

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	17552.02	Custom BHI NaviTrak (Standard Rotating) (Rockies 0.03Gt model)		ACKARD NORTH 2-35-2NAH PWB



Clearance Report
ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

OFFSET WELLPATH REFERENCE - Offset Wellbore: ACKARD NORTH 2-35-2NAH PWB Offset Wellpath: ACKARD NORTH 2-35-2NAH PWP (REV. A.0)	
MD Reference: RIG (13'KB) (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	13.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: OTTER#1 AWB Offset Wellpath: OTTER#1 AWP

Facility: SEC.02-T02S-R66W Slot: SLOT#17 EX OTTER#1 (1980'FSL & 1980'FWL, SEC.02, PR, 8390) Well: OTTER#1 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	9.00	13.00	1349.34	34.25	1.45	1349.78	50.22	27.30	PASS
113.00†	113.00	0.00	0.00	109.00	113.00	1349.34	34.25	1.45	1349.78	52.56	26.06	PASS
213.00†	213.00	0.00	0.00	209.00	213.00	1349.34	34.25	1.45	1349.78	54.91	24.93	PASS
313.00†	313.00	0.00	0.00	309.00	313.00	1349.34	34.25	1.45	1349.78	57.26	23.89	PASS
413.00†	413.00	0.00	0.00	409.00	413.00	1349.34	34.25	1.45	1349.78	59.62	22.94	PASS
513.00†	513.00	0.00	0.00	509.00	513.00	1349.34	34.25	1.45	1349.78	61.98	22.05	PASS
613.00†	613.00	0.00	0.00	609.00	613.00	1349.34	34.25	1.45	1349.78	64.34	21.23	PASS
713.00†	713.00	0.00	0.00	709.00	713.00	1349.34	34.25	1.45	1349.78	66.71	20.47	PASS
813.00†	813.00	0.00	0.00	809.00	813.00	1349.34	34.25	1.45	1349.78	69.08	19.76	PASS
913.00†	913.00	0.00	0.00	909.00	913.00	1349.34	34.25	1.45	1349.78	71.46	19.09	PASS
1013.00†	1013.00	0.00	0.00	1009.00	1013.00	1349.34	34.25	1.45	1349.78	73.84	18.47	PASS
1113.00†	1113.00	0.00	0.00	1109.00	1113.00	1349.34	34.25	1.45	1349.78	76.22	17.89	PASS
1200.00	1200.00	0.00	0.00	1196.00	1200.00	1349.34	34.25	1.45	1349.78	78.30	17.41	PASS
1213.00†	1213.00	-0.03	-0.01	1209.00	1213.00	1349.34	34.25	159.65	1349.81	78.61	17.34	PASS
1313.00†	1312.97	-2.07	-0.83	1308.97	1312.97	1349.34	34.25	159.67	1351.87	81.01	16.84	PASS
1413.00†	1412.80	-7.35	-2.94	1408.80	1412.80	1349.34	34.25	159.71	1357.20	83.46	16.41	PASS
1513.00†	1512.38	-15.86	-6.35	1508.38	1512.38	1349.34	34.25	159.79	1365.81	85.90	16.04	PASS
1574.38	1573.31	-22.68	-9.07	1569.31	1573.31	1349.34	34.25	159.84	1372.71	87.39	15.84	PASS
1613.00†	1611.61	-27.35	-10.94	1607.61	1611.61	1349.34	34.25	159.92	1377.44	88.32	15.73	PASS
1713.00†	1710.75	-39.45	-15.79	1706.75	1710.75	1349.34	34.25	160.10	1389.70	90.71	15.45	PASS
1813.00†	1809.90	-51.55	-20.63	1805.90	1809.90	1349.34	34.25	160.28	1401.97	93.01	15.18	PASS
1913.00†	1909.05	-63.65	-25.47	1905.05	1909.05	1349.34	34.25	160.46	1414.25	95.41	14.93	PASS
2013.00†	2008.20	-75.75	-30.31	2004.20	2008.20	1349.34	34.25	160.63	1426.55	97.82	14.68	PASS
2113.00†	2107.34	-87.84	-35.15	2103.34	2107.34	1349.34	34.25	160.81	1438.86	100.23	14.45	PASS
2213.00†	2206.49	-99.94	-39.99	2202.49	2206.49	1349.34	34.25	160.97	1451.19	102.64	14.23	PASS
2313.00†	2305.64	-112.04	-44.83	2301.64	2305.64	1349.34	34.25	161.14	1463.52	105.06	14.02	PASS
2413.00†	2404.78	-124.14	-49.67	2400.78	2404.78	1349.34	34.25	161.30	1475.87	107.48	13.82	PASS
2513.00†	2503.93	-136.24	-54.51	2499.93	2503.93	1349.34	34.25	161.46	1488.23	109.91	13.62	PASS
2613.00†	2603.08	-148.34	-59.35	2599.08	2603.08	1349.34	34.25	161.62	1500.60	112.34	13.44	PASS
2713.00†	2702.23	-160.44	-64.20	2698.23	2702.23	1349.34	34.25	161.78	1512.99	114.78	13.26	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: OTTER#1 AWB Offset Wellpath: OTTER#1 AWP

Facility: SEC.02-T02S-R66W Slot: SLOT#17 EX OTTER#1 (1980'FSL & 1980'FWL, SEC.02, PR, 8390) Well: OTTER#1 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2801.37	-172.53	-69.04	2797.37	2801.37	1349.34	34.25	161.93	1525.38	117.22	13.09	PASS
2913.00†	2900.52	-184.63	-73.88	2896.52	2900.52	1349.34	34.25	162.08	1537.78	119.67	12.92	PASS
3013.00†	2999.67	-196.73	-78.72	2995.67	2999.67	1349.34	34.25	162.23	1550.20	122.12	12.76	PASS
3113.00†	3098.82	-208.83	-83.56	3094.82	3098.82	1349.34	34.25	162.38	1562.62	124.57	12.61	PASS
3213.00†	3197.96	-220.93	-88.40	3193.96	3197.96	1349.34	34.25	162.52	1575.06	127.03	12.46	PASS
3313.00†	3297.11	-233.03	-93.24	3293.11	3297.11	1349.34	34.25	162.66	1587.50	129.49	12.32	PASS
3413.00†	3396.26	-245.13	-98.08	3392.26	3396.26	1349.34	34.25	162.80	1599.95	131.95	12.19	PASS
3513.00†	3495.41	-257.22	-102.92	3491.41	3495.41	1349.34	34.25	162.94	1612.41	134.42	12.05	PASS
3613.00†	3594.55	-269.32	-107.76	3590.55	3594.55	1349.34	34.25	163.07	1624.89	136.90	11.93	PASS
3713.00†	3693.70	-281.42	-112.60	3689.70	3693.70	1349.34	34.25	163.20	1637.36	139.37	11.80	PASS
3813.00†	3792.85	-293.52	-117.45	3788.85	3792.85	1349.34	34.25	163.33	1649.85	141.85	11.68	PASS
3913.00†	3891.99	-305.62	-122.29	3887.99	3891.99	1349.34	34.25	163.46	1662.35	144.33	11.57	PASS
4013.00†	3991.14	-317.72	-127.13	3987.14	3991.14	1349.34	34.25	163.59	1674.85	146.82	11.46	PASS
4113.00†	4090.29	-329.82	-131.97	4086.29	4090.29	1349.34	34.25	163.71	1687.37	149.31	11.35	PASS
4213.00†	4189.44	-341.91	-136.81	4185.44	4189.44	1349.34	34.25	163.84	1699.89	151.81	11.25	PASS
4313.00†	4288.58	-354.01	-141.65	4284.58	4288.58	1349.34	34.25	163.96	1712.42	154.30	11.14	PASS
4413.00†	4387.73	-366.11	-146.49	4383.73	4387.73	1349.34	34.25	164.08	1724.95	156.80	11.05	PASS
4513.00†	4486.88	-378.21	-151.33	4482.88	4486.88	1349.34	34.25	164.20	1737.49	159.30	10.95	PASS
4613.00†	4586.03	-390.31	-156.17	4582.03	4586.03	1349.34	34.25	164.31	1750.04	161.81	10.86	PASS
4713.00†	4685.17	-402.41	-161.01	4681.17	4685.17	1349.34	34.25	164.43	1762.60	164.32	10.77	PASS
4813.00†	4784.32	-414.51	-165.86	4780.32	4784.32	1349.34	34.25	164.54	1775.16	166.83	10.68	PASS
4913.00†	4883.47	-426.60	-170.70	4879.47	4883.47	1349.34	34.25	164.65	1787.73	169.35	10.60	PASS
5013.00†	4982.61	-438.70	-175.54	4978.61	4982.61	1349.34	34.25	164.76	1800.31	171.86	10.51	PASS
5113.00†	5081.76	-450.80	-180.38	5077.76	5081.76	1349.34	34.25	164.87	1812.89	174.38	10.43	PASS
5213.00†	5180.91	-462.90	-185.22	5176.91	5180.91	1349.34	34.25	164.98	1825.48	176.91	10.36	PASS
5313.00†	5280.06	-475.00	-190.06	5276.06	5280.06	1349.34	34.25	165.08	1838.08	179.43	10.28	PASS
5413.00†	5379.20	-487.10	-194.90	5375.20	5379.20	1349.34	34.25	165.18	1850.68	181.96	10.21	PASS
5513.00†	5478.35	-499.19	-199.74	5474.35	5478.35	1349.34	34.25	165.29	1863.29	184.49	10.13	PASS
5613.00†	5577.50	-511.29	-204.58	5573.50	5577.50	1349.34	34.25	165.39	1875.90	187.02	10.06	PASS
5713.00†	5676.65	-523.39	-209.42	5672.65	5676.65	1349.34	34.25	165.49	1888.52	189.56	10.00	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: OTTER#1 AWB Offset Wellpath: OTTER#1 AWP

Facility: SEC.02-T02S-R66W Slot: SLOT#17 EX OTTER#1 (1980'FSL & 1980'FWL, SEC.02, PR, 8390) Well: OTTER#1 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5775.79	-535.49	-214.27	5771.79	5775.79	1349.34	34.25	165.59	1901.15	192.10	9.93	PASS
5913.00†	5874.94	-547.59	-219.11	5870.94	5874.94	1349.34	34.25	165.68	1913.78	194.64	9.86	PASS
6013.00†	5974.09	-559.69	-223.95	5970.09	5974.09	1349.34	34.25	165.78	1926.41	197.18	9.80	PASS
6113.00†	6073.24	-571.79	-228.79	6069.24	6073.24	1349.34	34.25	165.87	1939.05	199.72	9.74	PASS
6213.00†	6172.38	-583.88	-233.63	6168.38	6172.38	1349.34	34.25	165.97	1951.70	202.27	9.68	PASS
6313.00†	6271.53	-595.98	-238.47	6267.53	6271.53	1349.34	34.25	166.06	1964.35	204.82	9.62	PASS
6413.00†	6370.68	-608.08	-243.31	6366.68	6370.68	1349.34	34.25	166.15	1977.01	207.37	9.56	PASS
6513.00†	6469.82	-620.18	-248.15	6465.82	6469.82	1349.34	34.25	166.24	1989.67	209.92	9.51	PASS
6613.00†	6568.97	-632.28	-252.99	6564.97	6568.97	1349.34	34.25	166.33	2002.33	212.48	9.45	PASS
6713.00†	6668.12	-644.38	-257.83	6664.12	6668.12	1349.34	34.25	166.42	2015.00	215.03	9.40	PASS
6813.00†	6767.27	-656.48	-262.68	6763.27	6767.27	1349.34	34.25	166.50	2027.68	217.59	9.35	PASS
6913.00†	6866.41	-668.57	-267.52	6862.41	6866.41	1349.34	34.25	166.59	2040.36	220.15	9.29	PASS
7013.00†	6965.56	-680.67	-272.36	6961.56	6965.56	1349.34	34.25	166.67	2053.04	222.71	9.24	PASS
7113.00†	7064.71	-692.77	-277.20	7060.71	7064.71	1349.34	34.25	166.76	2065.73	225.28	9.20	PASS
7213.00†	7163.86	-704.87	-282.04	7159.86	7163.86	1349.34	34.25	166.84	2078.42	227.84	9.15	PASS
7251.04	7201.57	-709.47	-283.88	7197.57	7201.57	1349.34	34.25	166.87	2083.25	228.82	9.13	PASS
7313.00†	7263.29	-713.63	-286.90	7259.29	7263.29	1349.34	34.25	113.82	2087.82	230.43	9.09	PASS
7413.00†	7362.77	-706.23	-291.81	7358.77	7362.77	1349.34	34.25	26.25	2081.28	233.49	8.94	PASS
7513.00†	7459.45	-681.66	-296.63	7455.45	7459.45	1349.34	34.25	18.39	2057.78	237.39	8.69	PASS
7613.00†	7550.39	-640.64	-301.20	7546.39	7550.39	1349.34	34.25	16.79	2018.06	240.55	8.41	PASS
7713.00†	7632.84	-584.44	-305.40	7628.84	7632.84	1349.34	34.25	17.31	1963.38	243.31	8.09	PASS
7813.00†	7704.29	-514.75	-309.10	7700.29	7704.29	1349.34	34.25	19.51	1895.45	245.61	7.74	PASS
7913.00†	7762.57	-433.70	-312.17	7758.57	7762.57	1349.34	34.25	24.02	1816.38	247.43	7.36	PASS
8013.00†	7805.90	-343.74	-314.54	7801.90	7805.90	1349.34	34.25	32.82	1728.64	248.77	6.97	PASS
8113.00†	7832.97	-247.62	-316.12	7828.97	7832.97	1349.34	34.25	51.24	1634.95	249.62	6.57	PASS
8213.00†	7842.95	-148.25	-316.87	7838.95	7842.95	1349.34	34.25	86.87	1538.21	250.03	6.17	PASS
8220.45	7843.00	-140.80	-316.89	7839.00	7843.00	1349.34	34.25	90.00	1530.96	250.04	6.14	PASS
8313.00†	7843.00	-48.25	-317.13	7839.00	7843.00	1349.34	34.25	90.00	1441.09	250.20	5.77	PASS
8413.00†	7843.00	51.75	-317.40	7839.00	7843.00	1349.34	34.25	90.00	1344.40	250.42	5.38	PASS
8513.00†	7843.00	151.75	-317.66	7839.00	7843.00	1349.34	34.25	90.00	1248.23	250.67	4.99	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: OTTER#1 AWB Offset Wellpath: OTTER#1 AWP

Facility: SEC.02-T02S-R66W Slot: SLOT#17 EX OTTER#1 (1980'FSL & 1980'FWL, SEC.02, PR, 8390) Well: OTTER#1 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
8613.00†	7843.00	251.75	-317.92	7839.00	7843.00	1349.34	34.25	90.00	1152.71	250.99	4.60	PASS
8713.00†	7843.00	351.75	-318.18	7839.00	7843.00	1349.34	34.25	90.00	1058.02	251.38	4.22	PASS
8813.00†	7843.00	451.74	-318.44	7839.00	7843.00	1349.34	34.25	90.00	964.40	251.87	3.84	PASS
8913.00†	7843.00	551.74	-318.70	7839.00	7843.00	1349.34	34.25	90.00	872.21	252.50	3.46	PASS
9013.00†	7843.00	651.74	-318.97	7839.00	7843.00	1349.34	34.25	90.00	781.93	253.32	3.09	PASS
9113.00†	7843.00	751.74	-319.23	7839.00	7843.00	1349.34	34.25	90.00	694.31	254.39	2.73	PASS
9213.00†	7843.00	851.74	-319.49	7839.00	7843.00	1349.34	34.25	90.00	610.52	255.80	2.39	PASS
9313.00†	7843.00	951.74	-319.75	7839.00	7843.00	1349.34	34.25	90.00	532.36	257.64	2.07	PASS
9413.00†	7843.00	1051.74	-320.01	7839.00	7843.00	1349.34	34.25	90.00	462.68	259.96	1.78	PASS
9513.00†	7843.00	1151.74	-320.28	7839.00	7843.00	1349.34	34.25	90.00	405.87	262.56	1.55	PASS
9613.00†	7843.00	1251.74	-320.54	7839.00	7843.00	1349.34	34.25	90.00	367.97	264.72	1.39	PASS
9707.70†	7843.00	1346.45	-320.78	7839.00	7843.00	1349.34	34.25	90.00	355.05	265.33	1.34	PASS
9709.66†	7843.00	1348.40	-320.79	7839.18	7843.18	1349.34	34.25	90.03	355.04	265.32	1.34	PASS
9713.00†	7843.00	1351.74	-320.80	7839.00	7843.00	1349.34	34.25	90.00	355.06	265.30	1.34	PASS
9813.00†	7843.00	1451.74	-321.06	7839.00	7843.00	1349.34	34.25	90.00	369.77	263.77	1.40	PASS
9913.00†	7843.00	1551.74	-321.32	7839.00	7843.00	1349.34	34.25	90.00	409.14	260.98	1.57	PASS
10013.00†	7843.00	1651.74	-321.58	7839.00	7843.00	1349.34	34.25	90.00	466.97	258.11	1.81	PASS
10113.00†	7843.00	1751.74	-321.85	7839.00	7843.00	1349.34	34.25	90.00	537.33	255.77	2.10	PASS
10213.00†	7843.00	1851.74	-322.11	7839.00	7843.00	1349.34	34.25	90.00	615.95	254.02	2.43	PASS
10313.00†	7843.00	1951.74	-322.37	7839.00	7843.00	1349.34	34.25	90.00	700.04	252.77	2.77	PASS
10413.00†	7843.00	2051.74	-322.63	7839.00	7843.00	1349.34	34.25	90.00	787.86	251.87	3.13	PASS
10513.00†	7843.00	2151.74	-322.89	7839.00	7843.00	1349.34	34.25	90.00	878.29	251.22	3.50	PASS
10613.00†	7843.00	2251.74	-323.15	7839.00	7843.00	1349.34	34.25	90.00	970.59	250.75	3.88	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: OTTER#1 AWB Offset Wellpath: OTTER#1 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH COMPOSITION - Offset Wellbore: OTTER#1 AWB Offset Wellpath: OTTER#1 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8390.00	Drift Indicator - Inclination Only (Actual Survey)	ASUMED VERTICAL <8390>	OTTER#1 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: OTTER#1 AWB Offset Wellpath: OTTER#1 AWP	
MD Reference: Rig on SLOT#17 EX OTTER#1 (1980'FSL & 1980'FWL, SEC.02, PR, 8390) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1NCH PWB Offset Wellpath: ACKARD NORTH 2-35-1NCH PWP (REV-A.0)												
Facility: SEC.02-T03S-R66W Slot: SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02) Well: ACKARD NORTH 2-35-1NCH Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	13.00	13.00	-0.07	-29.96	-90.14	29.96	1.40	48.60	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	-0.07	-29.96	-90.14	29.96	1.72	31.63	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	-0.07	-29.96	-90.14	29.96	2.29	19.55	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	-0.07	-29.96	-90.14	29.96	2.90	13.92	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	-0.07	-29.96	-90.14	29.96	3.51	10.76	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	-0.07	-29.96	-90.14	29.96	4.13	8.76	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	-0.07	-29.96	-90.14	29.96	4.75	7.38	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	-0.07	-29.96	-90.14	29.96	5.38	6.37	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	-0.07	-29.96	-90.14	29.96	6.00	5.61	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	-0.07	-29.96	-90.14	29.96	6.63	5.00	PASS
1013.00†	1013.00	0.00	0.00	1012.89	1012.89	-0.09	-29.99	-90.17	29.99	7.25	4.52	PASS
1113.00†	1113.00	0.00	0.00	1111.99	1111.96	-1.35	-31.74	-92.44	31.79	7.95	4.33	PASS
1200.00	1200.00	0.00	0.00	1198.00	1197.84	-4.07	-35.52	-96.53	35.81	8.75	4.40	PASS
1213.00†	1213.00	-0.03	-0.01	1210.82	1210.63	-4.60	-36.26	60.98	36.61	8.87	4.44	PASS
1313.00†	1312.97	-2.07	-0.83	1309.33	1308.73	-9.82	-43.51	57.73	43.58	9.79	4.76	PASS
1413.00†	1412.80	-7.35	-2.94	1407.50	1406.13	-16.97	-53.45	57.01	51.85	10.72	5.15	PASS
1513.00†	1512.38	-15.86	-6.35	1505.30	1502.68	-26.04	-66.04	57.82	61.33	11.60	5.60	PASS
1574.38	1573.31	-22.68	-9.07	1565.12	1561.46	-32.53	-75.06	58.78	67.76	12.11	5.92	PASS
1613.00†	1611.61	-27.35	-10.94	1602.79	1598.35	-36.98	-81.24	59.40	72.18	12.38	6.16	PASS
1713.00†	1710.75	-39.45	-15.79	1702.06	1695.48	-48.98	-97.92	60.58	84.08	13.05	6.80	PASS
1813.00†	1809.90	-51.55	-20.63	1801.34	1792.60	-60.98	-114.59	61.46	96.01	13.66	7.36	PASS
1913.00†	1909.05	-63.65	-25.47	1900.62	1889.73	-72.98	-131.27	62.15	107.95	14.41	7.82	PASS
2013.00†	2008.20	-75.75	-30.31	1999.89	1986.86	-84.98	-147.94	62.70	119.91	15.22	8.21	PASS
2113.00†	2107.34	-87.84	-35.15	2099.17	2083.99	-96.98	-164.62	63.15	131.87	16.01	8.57	PASS
2213.00†	2206.49	-99.94	-39.99	2198.45	2181.12	-108.98	-181.29	63.52	143.84	16.85	8.87	PASS
2313.00†	2305.64	-112.04	-44.83	2297.72	2278.24	-120.98	-197.96	63.84	155.82	17.70	9.13	PASS
2413.00†	2404.78	-124.14	-49.67	2397.00	2375.37	-132.98	-214.64	64.11	167.80	18.58	9.35	PASS
2513.00†	2503.93	-136.24	-54.51	2496.28	2472.50	-144.98	-231.31	64.35	179.79	19.46	9.55	PASS
2613.00†	2603.08	-148.34	-59.35	2595.55	2569.63	-156.98	-247.99	64.56	191.77	20.36	9.72	PASS
2713.00†	2702.23	-160.44	-64.20	2694.83	2666.76	-168.98	-264.66	64.74	203.76	21.27	9.87	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1NCH PWB Offset Wellpath: ACKARD NORTH 2-35-1NCH PWP (REV-A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02) Well: ACKARD NORTH 2-35-1NCH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2801.37	-172.53	-69.04	2794.11	2763.88	-180.98	-281.34	64.90	215.75	22.19	10.01	PASS
2913.00†	2900.52	-184.63	-73.88	2893.38	2861.01	-192.98	-298.01	65.05	227.74	23.12	10.13	PASS
3013.00†	2999.67	-196.73	-78.72	2992.66	2958.14	-204.98	-314.69	65.18	239.74	24.06	10.24	PASS
3113.00†	3098.82	-208.83	-83.56	3091.94	3055.27	-216.98	-331.36	65.30	251.73	25.00	10.34	PASS
3213.00†	3197.96	-220.93	-88.40	3191.21	3152.39	-228.98	-348.04	65.40	263.73	25.94	10.42	PASS
3313.00†	3297.11	-233.03	-93.24	3290.49	3249.52	-240.98	-364.71	65.50	275.72	26.89	10.50	PASS
3413.00†	3396.26	-245.13	-98.08	3389.77	3346.65	-252.98	-381.38	65.59	287.72	27.85	10.58	PASS
3513.00†	3495.41	-257.22	-102.92	3489.04	3443.78	-264.98	-398.06	65.67	299.72	28.81	10.64	PASS
3613.00†	3594.55	-269.32	-107.76	3588.32	3540.91	-276.99	-414.73	65.75	311.72	29.77	10.70	PASS
3713.00†	3693.70	-281.42	-112.60	3687.60	3638.03	-288.99	-431.41	65.82	323.72	30.74	10.76	PASS
3813.00†	3792.85	-293.52	-117.45	3786.87	3735.16	-300.99	-448.08	65.89	335.71	31.71	10.81	PASS
3913.00†	3891.99	-305.62	-122.29	3886.15	3832.29	-312.99	-464.76	65.95	347.71	32.68	10.85	PASS
4013.00†	3991.14	-317.72	-127.13	3985.43	3929.42	-324.99	-481.43	66.00	359.71	33.65	10.90	PASS
4113.00†	4090.29	-329.82	-131.97	4084.70	4026.55	-336.99	-498.11	66.06	371.71	34.63	10.94	PASS
4213.00†	4189.44	-341.91	-136.81	4183.98	4123.67	-348.99	-514.78	66.11	383.72	35.60	10.98	PASS
4313.00†	4288.58	-354.01	-141.65	4283.26	4220.80	-360.99	-531.46	66.15	395.72	36.58	11.01	PASS
4413.00†	4387.73	-366.11	-146.49	4382.53	4317.93	-372.99	-548.13	66.20	407.72	37.57	11.04	PASS
4513.00†	4486.88	-378.21	-151.33	4481.81	4415.06	-384.99	-564.80	66.24	419.72	38.55	11.07	PASS
4613.00†	4586.03	-390.31	-156.17	4581.09	4512.19	-396.99	-581.48	66.28	431.72	39.53	11.10	PASS
4713.00†	4685.17	-402.41	-161.01	4680.37	4609.31	-408.99	-598.15	66.32	443.72	40.52	11.13	PASS
4813.00†	4784.32	-414.51	-165.86	4779.64	4706.44	-420.99	-614.83	66.35	455.72	41.51	11.15	PASS
4913.00†	4883.47	-426.60	-170.70	4878.92	4803.57	-432.99	-631.50	66.38	467.73	42.49	11.18	PASS
5013.00†	4982.61	-438.70	-175.54	4978.20	4900.70	-444.99	-648.18	66.42	479.73	43.48	11.20	PASS
5113.00†	5081.76	-450.80	-180.38	5077.47	4997.82	-456.99	-664.85	66.45	491.73	44.47	11.22	PASS
5213.00†	5180.91	-462.90	-185.22	5176.75	5094.95	-468.99	-681.53	66.47	503.73	45.47	11.24	PASS
5313.00†	5280.06	-475.00	-190.06	5276.03	5192.08	-480.99	-698.20	66.50	515.74	46.46	11.26	PASS
5413.00†	5379.20	-487.10	-194.90	5375.30	5289.21	-492.99	-714.88	66.53	527.74	47.45	11.28	PASS
5513.00†	5478.35	-499.19	-199.74	5474.58	5386.34	-504.99	-731.55	66.55	539.74	48.44	11.29	PASS
5613.00†	5577.50	-511.29	-204.58	5573.86	5483.46	-516.99	-748.22	66.58	551.74	49.44	11.31	PASS
5713.00†	5676.65	-523.39	-209.42	5673.13	5580.59	-528.99	-764.90	66.60	563.75	50.43	11.32	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1NCH PWB Offset Wellpath: ACKARD NORTH 2-35-1NCH PWP (REV-A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02) Well: ACKARD NORTH 2-35-1NCH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5775.79	-535.49	-214.27	5772.41	5677.72	-540.99	-781.57	66.62	575.75	51.43	11.34	PASS
5913.00†	5874.94	-547.59	-219.11	5871.69	5774.85	-552.99	-798.25	66.64	587.75	52.43	11.35	PASS
6013.00†	5974.09	-559.69	-223.95	5970.96	5871.98	-564.99	-814.92	66.66	599.76	53.42	11.36	PASS
6113.00†	6073.24	-571.79	-228.79	6070.24	5969.10	-577.00	-831.60	66.68	611.76	54.42	11.38	PASS
6213.00†	6172.38	-583.88	-233.63	6169.52	6066.23	-589.00	-848.27	66.70	623.76	55.42	11.39	PASS
6313.00†	6271.53	-595.98	-238.47	6268.79	6163.36	-601.00	-864.95	66.72	635.77	56.42	11.40	PASS
6413.00†	6370.68	-608.08	-243.31	6368.07	6260.49	-613.00	-881.62	66.74	647.77	57.42	11.41	PASS
6513.00†	6469.82	-620.18	-248.15	6467.35	6357.62	-625.00	-898.30	66.75	659.77	58.41	11.42	PASS
6613.00†	6568.97	-632.28	-252.99	6566.62	6454.74	-637.00	-914.97	66.77	671.78	59.41	11.43	PASS
6713.00†	6668.12	-644.38	-257.83	6665.90	6551.87	-649.00	-931.64	66.79	683.78	60.41	11.44	PASS
6813.00†	6767.27	-656.48	-262.68	6765.18	6649.00	-661.00	-948.32	66.80	695.78	61.42	11.45	PASS
6913.00†	6866.41	-668.57	-267.52	6864.45	6746.13	-673.00	-964.99	66.82	707.79	62.42	11.46	PASS
7013.00†	6965.56	-680.67	-272.36	6963.73	6843.25	-685.00	-981.67	66.83	719.79	63.42	11.47	PASS
7113.00†	7064.71	-692.77	-277.20	7063.01	6940.38	-697.00	-998.34	66.84	731.80	64.42	11.48	PASS
7213.00†	7163.86	-704.87	-282.04	7162.28	7037.51	-709.00	-1015.02	66.86	743.80	65.42	11.48	PASS
7251.04	7201.57	-709.47	-283.88	7200.11	7074.55	-713.30	-1021.38	66.88	748.36	65.80	11.49	PASS
7313.00†	7263.29	-713.63	-286.90	7261.69	7135.17	-715.57	-1031.80	14.74	755.83	71.70	10.64	PASS
7413.00†	7362.77	-706.23	-291.81	7360.67	7232.06	-705.37	-1048.49	-71.67	767.88	67.17	11.54	PASS
7513.00†	7459.45	-681.66	-296.63	7459.22	7325.40	-678.57	-1064.61	-78.82	779.60	74.34	10.58	PASS
7613.00†	7550.39	-640.64	-301.20	7557.47	7412.56	-636.11	-1079.72	-80.30	790.63	67.10	11.90	PASS
7713.00†	7632.84	-584.44	-305.40	7655.49	7491.14	-579.33	-1093.38	-80.47	800.63	65.57	12.33	PASS
7813.00†	7704.29	-514.75	-309.10	7753.37	7558.94	-509.90	-1105.22	-80.25	809.30	63.75	12.83	PASS
7913.00†	7762.57	-433.70	-312.17	7851.18	7614.08	-429.86	-1114.92	-79.92	816.37	61.83	13.34	PASS
8013.00†	7805.90	-343.74	-314.54	7948.94	7655.01	-341.49	-1122.19	-79.61	821.63	60.05	13.83	PASS
8113.00†	7832.97	-247.62	-316.12	8046.70	7680.54	-247.37	-1126.82	-79.41	824.91	58.61	14.24	PASS
8213.00†	7842.95	-148.25	-316.87	8144.45	7689.95	-150.21	-1128.70	-79.33	826.12	57.62	14.50	PASS
8220.45	7843.00	-140.80	-316.89	8151.74	7690.00	-142.92	-1128.72	-79.33	826.13	57.56	14.52	PASS
8313.00†	7843.00	-48.25	-317.13	8244.29	7690.00	-50.37	-1128.97	-79.33	826.13	57.21	14.61	PASS
8413.00†	7843.00	51.75	-317.40	8344.29	7690.00	49.63	-1129.23	-79.33	826.12	57.45	14.55	PASS
8513.00†	7843.00	151.75	-317.66	8444.29	7690.00	149.63	-1129.49	-79.33	826.12	58.37	14.31	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1NCH PWB Offset Wellpath: ACKARD NORTH 2-35-1NCH PWP (REV-A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02) Well: ACKARD NORTH 2-35-1NCH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
8613.00†	7843.00	251.75	-317.92	8544.29	7690.00	249.62	-1129.75	-79.33	826.12	59.92	13.94	PASS
8713.00†	7843.00	351.75	-318.18	8644.29	7690.00	349.62	-1130.01	-79.33	826.12	62.05	13.46	PASS
8813.00†	7843.00	451.74	-318.44	8744.29	7690.00	449.62	-1130.27	-79.33	826.12	64.71	12.90	PASS
8913.00†	7843.00	551.74	-318.70	8844.29	7690.00	549.62	-1130.53	-79.33	826.12	66.17	12.61	PASS
9013.00†	7843.00	651.74	-318.97	8944.29	7690.00	649.62	-1130.79	-79.33	826.12	71.36	11.68	PASS
9113.00†	7843.00	751.74	-319.23	9044.29	7690.00	749.62	-1131.06	-79.33	826.12	75.23	11.08	PASS
9213.00†	7843.00	851.74	-319.49	9144.29	7690.00	849.62	-1131.32	-79.33	826.12	79.39	10.49	PASS
9313.00†	7843.00	951.74	-319.75	9244.29	7690.00	949.62	-1131.58	-79.33	826.12	83.80	9.93	PASS
9413.00†	7843.00	1051.74	-320.01	9344.29	7690.00	1049.62	-1131.84	-79.33	826.12	88.42	9.41	PASS
9513.00†	7843.00	1151.74	-320.28	9444.29	7690.00	1149.62	-1132.10	-79.33	826.12	93.22	8.92	PASS
9613.00†	7843.00	1251.74	-320.54	9544.29	7690.00	1249.62	-1132.36	-79.33	826.12	98.18	8.47	PASS
9713.00†	7843.00	1351.74	-320.80	9644.29	7690.00	1349.62	-1132.62	-79.33	826.12	103.26	8.05	PASS
9813.00†	7843.00	1451.74	-321.06	9744.29	7690.00	1449.62	-1132.88	-79.33	826.12	108.46	7.66	PASS
9913.00†	7843.00	1551.74	-321.32	9844.29	7690.00	1549.62	-1133.15	-79.33	826.12	113.76	7.30	PASS
10013.00†	7843.00	1651.74	-321.58	9944.29	7690.00	1649.62	-1133.41	-79.33	826.12	119.14	6.97	PASS
10113.00†	7843.00	1751.74	-321.85	10044.29	7690.00	1749.62	-1133.67	-79.33	826.12	124.59	6.66	PASS
10213.00†	7843.00	1851.74	-322.11	10144.29	7690.00	1849.62	-1133.93	-79.33	826.12	130.11	6.38	PASS
10313.00†	7843.00	1951.74	-322.37	10244.29	7690.00	1949.62	-1134.19	-79.33	826.12	135.68	6.12	PASS
10413.00†	7843.00	2051.74	-322.63	10344.29	7690.00	2049.62	-1134.45	-79.33	826.11	141.30	5.87	PASS
10513.00†	7843.00	2151.74	-322.89	10444.29	7690.00	2149.62	-1134.71	-79.33	826.11	146.97	5.64	PASS
10613.00†	7843.00	2251.74	-323.15	10544.29	7690.00	2249.62	-1134.97	-79.33	826.11	152.67	5.43	PASS
10713.00†	7843.00	2351.74	-323.42	10644.29	7690.00	2349.62	-1135.23	-79.33	826.11	158.41	5.23	PASS
10813.00†	7843.00	2451.74	-323.68	10744.29	7690.00	2449.62	-1135.50	-79.33	826.11	164.18	5.05	PASS
10913.00†	7843.00	2551.74	-323.94	10844.29	7690.00	2549.62	-1135.76	-79.33	826.11	169.98	4.88	PASS
11013.00†	7843.00	2651.74	-324.20	10944.29	7690.00	2649.62	-1136.02	-79.33	826.11	175.80	4.71	PASS
11113.00†	7843.00	2751.74	-324.46	11044.29	7690.00	2749.62	-1136.28	-79.33	826.11	181.64	4.56	PASS
11213.00†	7843.00	2851.74	-324.72	11144.29	7690.00	2849.62	-1136.54	-79.33	826.11	187.51	4.42	PASS
11313.00†	7843.00	2951.74	-324.99	11244.29	7690.00	2949.62	-1136.80	-79.33	826.11	193.39	4.28	PASS
11413.00†	7843.00	3051.74	-325.25	11344.29	7690.00	3049.62	-1137.06	-79.33	826.11	199.29	4.16	PASS
11513.00†	7843.00	3151.74	-325.51	11444.29	7690.00	3149.62	-1137.32	-79.33	826.11	205.25	4.04	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1NCH PWB Offset Wellpath: ACKARD NORTH 2-35-1NCH PWP (REV-A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02) Well: ACKARD NORTH 2-35-1NCH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11613.00†	7843.00	3251.74	-325.77	11544.29	7690.00	3249.61	-1137.59	-79.33	826.11	211.14	3.92	PASS
11713.00†	7843.00	3351.74	-326.03	11644.29	7690.00	3349.61	-1137.85	-79.33	826.11	217.08	3.81	PASS
11813.00†	7843.00	3451.73	-326.30	11744.29	7690.00	3449.61	-1138.11	-79.33	826.11	223.04	3.71	PASS
11913.00†	7843.00	3551.73	-326.56	11844.29	7690.00	3549.61	-1138.37	-79.33	826.11	229.00	3.62	PASS
12013.00†	7843.00	3651.73	-326.82	11944.29	7690.00	3649.61	-1138.63	-79.33	826.11	234.98	3.52	PASS
12113.00†	7843.00	3751.73	-327.08	12044.29	7690.00	3749.61	-1138.89	-79.33	826.11	240.97	3.44	PASS
12213.00†	7843.00	3851.73	-327.34	12144.29	7690.00	3849.61	-1139.15	-79.33	826.11	246.96	3.35	PASS
12313.00†	7843.00	3951.73	-327.60	12244.29	7690.00	3949.61	-1139.41	-79.33	826.11	252.96	3.27	PASS
12413.00†	7843.00	4051.73	-327.87	12344.29	7690.00	4049.61	-1139.68	-79.33	826.10	258.97	3.20	PASS
12513.00†	7843.00	4151.73	-328.13	12444.29	7690.00	4149.61	-1139.94	-79.33	826.10	264.99	3.12	PASS
12613.00†	7843.00	4251.73	-328.39	12544.29	7690.00	4249.61	-1140.20	-79.33	826.10	271.01	3.05	PASS
12713.00†	7843.00	4351.73	-328.65	12644.29	7690.00	4349.61	-1140.46	-79.33	826.10	277.04	2.99	PASS
12813.00†	7843.00	4451.73	-328.91	12744.29	7690.00	4449.61	-1140.72	-79.33	826.10	283.08	2.92	PASS
12913.00†	7843.00	4551.73	-329.17	12844.29	7690.00	4549.61	-1140.98	-79.33	826.10	289.12	2.86	PASS
13013.00†	7843.00	4651.73	-329.44	12944.29	7690.00	4649.61	-1141.24	-79.33	826.10	295.17	2.80	PASS
13113.00†	7843.00	4751.73	-329.70	13044.29	7690.00	4749.61	-1141.50	-79.33	826.10	301.22	2.75	PASS
13213.00†	7843.00	4851.73	-329.96	13144.29	7690.00	4849.61	-1141.77	-79.33	826.10	307.27	2.69	PASS
13313.00†	7843.00	4951.73	-330.22	13244.29	7690.00	4949.61	-1142.03	-79.33	826.10	313.33	2.64	PASS
13413.00†	7843.00	5051.73	-330.48	13344.29	7690.00	5049.61	-1142.29	-79.33	826.10	319.40	2.59	PASS
13513.00†	7843.00	5151.73	-330.74	13444.29	7690.00	5149.61	-1142.55	-79.33	826.10	325.46	2.54	PASS
13613.00†	7843.00	5251.73	-331.01	13544.29	7690.00	5249.61	-1142.81	-79.33	826.10	331.54	2.49	PASS
13713.00†	7843.00	5351.73	-331.27	13644.29	7690.00	5349.61	-1143.07	-79.33	826.10	337.61	2.45	PASS
13813.00†	7843.00	5451.73	-331.53	13744.29	7690.00	5449.61	-1143.33	-79.33	826.10	343.69	2.41	PASS
13913.00†	7843.00	5551.73	-331.79	13844.29	7690.00	5549.61	-1143.59	-79.33	826.10	349.77	2.36	PASS
14013.00†	7843.00	5651.73	-332.05	13944.29	7690.00	5649.61	-1143.86	-79.33	826.10	355.85	2.32	PASS
14113.00†	7843.00	5751.73	-332.32	14044.29	7690.00	5749.61	-1144.12	-79.33	826.10	361.94	2.28	PASS
14213.00†	7843.00	5851.73	-332.58	14144.29	7690.00	5849.61	-1144.38	-79.33	826.10	368.02	2.25	PASS
14313.00†	7843.00	5951.73	-332.84	14244.29	7690.00	5949.61	-1144.64	-79.33	826.10	374.12	2.21	PASS
14413.00†	7843.00	6051.73	-333.10	14344.29	7690.00	6049.61	-1144.90	-79.33	826.09	380.21	2.17	PASS
14513.00†	7843.00	6151.73	-333.36	14444.29	7690.00	6149.60	-1145.16	-79.33	826.09	386.30	2.14	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1NCH PWB Offset Wellpath: ACKARD NORTH 2-35-1NCH PWP (REV-A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02) Well: ACKARD NORTH 2-35-1NCH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
14613.00†	7843.00	6251.73	-333.62	14544.29	7690.00	6249.60	-1145.42	-79.33	826.09	392.40	2.11	PASS
14713.00†	7843.00	6351.72	-333.89	14644.29	7690.00	6349.60	-1145.68	-79.33	826.09	398.50	2.07	PASS
14813.00†	7843.00	6451.72	-334.15	14744.29	7690.00	6449.60	-1145.95	-79.33	826.09	404.60	2.04	PASS
14913.00†	7843.00	6551.72	-334.41	14844.29	7690.00	6549.60	-1146.21	-79.33	826.09	410.71	2.01	PASS
15013.00†	7843.00	6651.72	-334.67	14944.29	7690.00	6649.60	-1146.47	-79.33	826.09	416.81	1.98	PASS
15113.00†	7843.00	6751.72	-334.93	15044.29	7690.00	6749.60	-1146.73	-79.33	826.09	422.92	1.95	PASS
15213.00†	7843.00	6851.72	-335.19	15144.29	7690.00	6849.60	-1146.99	-79.33	826.09	429.03	1.93	PASS
15313.00†	7843.00	6951.72	-335.46	15244.29	7690.00	6949.60	-1147.25	-79.33	826.09	435.14	1.90	PASS
15413.00†	7843.00	7051.72	-335.72	15344.29	7690.00	7049.60	-1147.51	-79.33	826.09	441.25	1.87	PASS
15513.00†	7843.00	7151.72	-335.98	15444.29	7690.00	7149.60	-1147.77	-79.33	826.09	447.36	1.85	PASS
15613.00†	7843.00	7251.72	-336.24	15544.29	7690.00	7249.60	-1148.03	-79.33	826.09	453.48	1.82	PASS
15713.00†	7843.00	7351.72	-336.50	15644.29	7690.00	7349.60	-1148.30	-79.33	826.09	459.59	1.80	PASS
15813.00†	7843.00	7451.72	-336.76	15744.29	7690.00	7449.60	-1148.56	-79.33	826.09	465.71	1.78	PASS
15913.00†	7843.00	7551.72	-337.03	15844.29	7690.00	7549.60	-1148.82	-79.33	826.09	471.83	1.75	PASS
16013.00†	7843.00	7651.72	-337.29	15944.29	7690.00	7649.60	-1149.08	-79.33	826.09	477.94	1.73	PASS
16113.00†	7843.00	7751.72	-337.55	16044.29	7690.00	7749.60	-1149.34	-79.33	826.09	484.06	1.71	PASS
16213.00†	7843.00	7851.72	-337.81	16144.29	7690.00	7849.60	-1149.60	-79.33	826.09	490.19	1.69	PASS
16313.00†	7843.00	7951.72	-338.07	16244.29	7690.00	7949.60	-1149.86	-79.33	826.09	496.31	1.67	PASS
16413.00†	7843.00	8051.72	-338.33	16344.29	7690.00	8049.60	-1150.12	-79.33	826.08	502.43	1.65	PASS
16513.00†	7843.00	8151.72	-338.60	16444.29	7690.00	8149.60	-1150.39	-79.33	826.08	508.56	1.63	PASS
16613.00†	7843.00	8251.72	-338.86	16544.29	7690.00	8249.60	-1150.65	-79.33	826.08	514.68	1.61	PASS
16713.00†	7843.00	8351.72	-339.12	16644.29	7690.00	8349.60	-1150.91	-79.33	826.08	520.81	1.59	PASS
16813.00†	7843.00	8451.72	-339.38	16744.29	7690.00	8449.60	-1151.17	-79.33	826.08	526.93	1.57	PASS
16913.00†	7843.00	8551.72	-339.64	16844.29	7690.00	8549.60	-1151.43	-79.33	826.08	533.06	1.55	PASS
17013.00†	7843.00	8651.72	-339.91	16944.29	7690.00	8649.60	-1151.69	-79.33	826.08	539.19	1.53	PASS
17113.00†	7843.00	8751.72	-340.17	17044.29	7690.00	8749.60	-1151.95	-79.33	826.08	545.32	1.52	PASS
17213.00†	7843.00	8851.72	-340.43	17144.29	7690.00	8849.60	-1152.21	-79.33	826.08	551.45	1.50	PASS
17313.00†	7843.00	8951.72	-340.69	17244.29	7690.00	8949.60	-1152.48	-79.33	826.08	557.58	1.48	PASS
17413.00†	7843.00	9051.72	-340.95	17344.29	7690.00	9049.59	-1152.74	-79.33	826.08	563.71	1.47	PASS
17513.00†	7843.00	9151.72	-341.21	17444.29	7690.00	9149.59	-1153.00	-79.33	826.08	569.84	1.45	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1NCH PWB Offset Wellpath: ACKARD NORTH 2-35-1NCH PWP (REV-A.0)												
Facility: SEC.02-T03S-R66W		Slot: SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)		Well: ACKARD NORTH 2-35-1NCH		Threshold Value=1.00		† = interpolated/extrapolated station				
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
17613.00†	7843.00	9251.71	-341.48	17544.29	7690.00	9249.59	-1153.26	-79.33	826.08	575.98	1.43	PASS
17713.00†	7843.00	9351.71	-341.74	17644.29	7690.00	9349.59	-1153.52	-79.33	826.08	582.11	1.42	PASS
17813.00†	7843.00	9451.71	-342.00	17744.29	7690.00	9449.59	-1153.78	-79.33	826.08	588.25	1.40	PASS
17913.00†	7843.00	9551.71	-342.26	17844.29	7690.00	9549.59	-1154.04	-79.33	826.08	594.38	1.39	PASS
17937.78	7843.00	9576.50	-342.33	17864.18	7690.00	9569.49	-1154.10	-79.33	826.09	596.01	1.39	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: ACKARD NORTH 2-35-1NCH PWB Offset Wellpath: ACKARD NORTH 2-35-1NCH PWP (REV-A.0)			
Slot Surface Uncertainty @1SD		Horizontal	0.100ft
Facility Surface Uncertainty @1SD		Horizontal	8.200ft
		Vertical	1.000ft
		Vertical	3.000ft

HOLE & CASING SECTIONS - Offset Wellbore: ACKARD NORTH 2-35-1NCH PWB Offset Wellpath: ACKARD NORTH 2-35-1NCH PWP (REV-A.0)									
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]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1791.29	-0.04	-18.27	-18.56	-43.99
8.5in Open Hole	1800.00	17864.18	16064.18	1791.29	7690.00	-18.56	-43.99	2916.76	-360.90

SURVEY PROGRAM - Offset Wellbore: ACKARD NORTH 2-35-1NCH PWB Offset Wellpath: ACKARD NORTH 2-35-1NCH PWP (REV-A.0)			
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Wellbore
13.00	17864.18	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)	ACKARD NORTH 2-35-1NCH PWB



Clearance Report
ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

OFFSET WELLPATH REFERENCE - Offset Wellbore: ACKARD NORTH 2-35-1NCH PWB Offset Wellpath: ACKARD NORTH 2-35-1NCH PWP (REV-A.0)	
MD Reference: RIG (13'KB) (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	13.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NBH Offset Wellpath: ACKARD NORTH 2-35-2NBH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#08 ACKARD NORTH 2-35-2NBH (600'FSL & 2040'FWL, SEC.02) Well: ACKARD NORTH 2-35-2NBH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	13.00	13.00	0.16	45.00	89.79	45.00	1.40	73.67	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.16	45.00	89.79	45.00	1.72	48.22	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.16	45.00	89.79	45.00	2.28	29.83	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.16	45.00	89.79	45.00	2.89	21.22	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.16	45.00	89.79	45.00	3.50	16.39	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.16	45.00	89.79	45.00	4.12	13.33	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.16	45.00	89.79	45.00	4.74	11.22	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.16	45.00	89.79	45.00	5.36	9.69	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.16	45.00	89.79	45.00	5.99	8.52	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.16	45.00	89.79	45.00	6.61	7.60	PASS
1013.00†	1013.00	0.00	0.00	1013.00	1013.00	0.16	45.00	89.79	45.00	7.24	6.86	PASS
1113.00†	1113.00	0.00	0.00	1113.00	1113.00	0.16	45.00	89.79	45.00	7.87	6.26	PASS
1200.00	1200.00	0.00	0.00	1200.00	1200.00	0.16	45.00	89.79	45.00	8.41	5.81	PASS
1213.00†	1213.00	-0.03	-0.01	1213.00	1213.00	0.16	45.00	-112.05	45.01	8.49	5.75	PASS
1313.00†	1312.97	-2.07	-0.83	1312.97	1312.97	0.16	45.00	-114.58	45.89	9.14	5.41	PASS
1413.00†	1412.80	-7.35	-2.94	1412.80	1412.80	0.16	45.00	-120.64	48.53	9.87	5.27	PASS
1513.00†	1512.38	-15.86	-6.35	1512.33	1512.33	0.14	45.02	-128.94	53.80	10.68	5.37	PASS
1574.38	1573.31	-22.68	-9.07	1573.12	1573.11	-0.65	45.46	-133.54	58.82	11.18	5.59	PASS
1613.00†	1611.61	-27.35	-10.94	1611.40	1611.38	-1.72	46.07	-135.75	62.52	11.46	5.79	PASS
1713.00†	1710.75	-39.45	-15.79	1710.70	1710.51	-6.57	48.83	-138.52	72.50	12.14	6.33	PASS
1813.00†	1809.90	-51.55	-20.63	1810.04	1809.44	-14.41	53.29	-138.22	82.72	12.71	6.83	PASS
1913.00†	1909.05	-63.65	-25.47	1909.21	1907.82	-25.20	59.43	-135.86	93.20	13.40	7.29	PASS
2013.00†	2008.20	-75.75	-30.31	2008.33	2005.80	-38.26	66.86	-132.53	104.17	14.15	7.70	PASS
2113.00†	2107.34	-87.84	-35.15	2107.55	2103.84	-51.49	74.38	-129.75	115.46	14.95	8.06	PASS
2213.00†	2206.49	-99.94	-39.99	2206.77	2201.89	-64.72	81.90	-127.47	126.96	15.78	8.38	PASS
2313.00†	2305.64	-112.04	-44.83	2305.99	2299.93	-77.95	89.43	-125.57	138.64	16.64	8.66	PASS
2413.00†	2404.78	-124.14	-49.67	2405.21	2397.98	-91.18	96.95	-123.97	150.44	17.52	8.91	PASS
2513.00†	2503.93	-136.24	-54.51	2504.43	2496.03	-104.41	104.48	-122.60	162.34	18.42	9.13	PASS
2613.00†	2603.08	-148.34	-59.35	2603.65	2594.07	-117.64	112.00	-121.41	174.32	19.32	9.33	PASS
2713.00†	2702.23	-160.44	-64.20	2702.87	2692.12	-130.87	119.53	-120.38	186.36	20.24	9.50	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NBH Offset Wellpath: ACKARD NORTH 2-35-2NBH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#08 ACKARD NORTH 2-35-2NBH (600'FSL & 2040'FWL, SEC.02) Well: ACKARD NORTH 2-35-2NBH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2801.37	-172.53	-69.04	2802.09	2790.16	-144.11	127.05	-119.48	198.45	21.17	9.66	PASS
2913.00†	2900.52	-184.63	-73.88	2901.31	2888.21	-157.34	134.57	-118.68	210.59	22.11	9.81	PASS
3013.00†	2999.67	-196.73	-78.72	3000.53	2986.25	-170.57	142.10	-117.96	222.77	23.05	9.94	PASS
3113.00†	3098.82	-208.83	-83.56	3099.75	3084.30	-183.80	149.62	-117.32	234.97	24.00	10.06	PASS
3213.00†	3197.96	-220.93	-88.40	3198.97	3182.34	-197.03	157.15	-116.75	247.20	24.96	10.17	PASS
3313.00†	3297.11	-233.03	-93.24	3298.19	3280.39	-210.26	164.67	-116.22	259.45	25.91	10.26	PASS
3413.00†	3396.26	-245.13	-98.08	3397.41	3378.44	-223.49	172.20	-115.75	271.73	26.88	10.36	PASS
3513.00†	3495.41	-257.22	-102.92	3496.63	3476.48	-236.72	179.72	-115.31	284.02	27.84	10.44	PASS
3613.00†	3594.55	-269.32	-107.76	3595.85	3574.53	-249.95	187.24	-114.92	296.32	28.81	10.52	PASS
3713.00†	3693.70	-281.42	-112.60	3695.07	3672.57	-263.18	194.77	-114.55	308.64	29.78	10.59	PASS
3813.00†	3792.85	-293.52	-117.45	3794.29	3770.62	-276.41	202.29	-114.21	320.97	30.76	10.66	PASS
3913.00†	3891.99	-305.62	-122.29	3893.51	3868.66	-289.64	209.82	-113.90	333.30	31.73	10.72	PASS
4013.00†	3991.14	-317.72	-127.13	3992.73	3966.71	-302.87	217.34	-113.61	345.65	32.71	10.78	PASS
4113.00†	4090.29	-329.82	-131.97	4091.95	4064.76	-316.10	224.86	-113.34	358.01	33.69	10.83	PASS
4213.00†	4189.44	-341.91	-136.81	4191.17	4162.80	-329.33	232.39	-113.08	370.37	34.67	10.89	PASS
4313.00†	4288.58	-354.01	-141.65	4290.39	4260.85	-342.56	239.91	-112.85	382.74	35.65	10.93	PASS
4413.00†	4387.73	-366.11	-146.49	4389.61	4358.89	-355.79	247.44	-112.63	395.12	36.63	10.98	PASS
4513.00†	4486.88	-378.21	-151.33	4488.83	4456.94	-369.02	254.96	-112.42	407.50	37.62	11.02	PASS
4613.00†	4586.03	-390.31	-156.17	4588.05	4554.98	-382.25	262.49	-112.22	419.89	38.60	11.06	PASS
4713.00†	4685.17	-402.41	-161.01	4687.27	4653.03	-395.48	270.01	-112.04	432.28	39.59	11.10	PASS
4813.00†	4784.32	-414.51	-165.86	4786.49	4751.07	-408.71	277.53	-111.86	444.67	40.58	11.14	PASS
4913.00†	4883.47	-426.60	-170.70	4885.71	4849.12	-421.94	285.06	-111.70	457.07	41.57	11.17	PASS
5013.00†	4982.61	-438.70	-175.54	4984.93	4947.17	-435.18	292.58	-111.54	469.47	42.56	11.20	PASS
5113.00†	5081.76	-450.80	-180.38	5084.15	5045.21	-448.41	300.11	-111.39	481.88	43.55	11.23	PASS
5213.00†	5180.91	-462.90	-185.22	5183.37	5143.26	-461.64	307.63	-111.25	494.29	44.54	11.26	PASS
5313.00†	5280.06	-475.00	-190.06	5282.59	5241.30	-474.87	315.16	-111.12	506.70	45.53	11.29	PASS
5413.00†	5379.20	-487.10	-194.90	5381.81	5339.35	-488.10	322.68	-110.99	519.11	46.52	11.32	PASS
5513.00†	5478.35	-499.19	-199.74	5481.03	5437.39	-501.33	330.20	-110.87	531.53	47.51	11.34	PASS
5613.00†	5577.50	-511.29	-204.58	5580.25	5535.44	-514.56	337.73	-110.75	543.95	48.51	11.37	PASS
5713.00†	5676.65	-523.39	-209.42	5679.47	5633.49	-527.79	345.25	-110.64	556.37	49.50	11.39	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NBH Offset Wellpath: ACKARD NORTH 2-35-2NBH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#08 ACKARD NORTH 2-35-2NBH (600'FSL & 2040'FWL, SEC.02) Well: ACKARD NORTH 2-35-2NBH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5775.79	-535.49	-214.27	5778.69	5731.53	-541.02	352.78	-110.54	568.79	50.50	11.41	PASS
5913.00†	5874.94	-547.59	-219.11	5877.91	5829.58	-554.25	360.30	-110.44	581.22	51.49	11.43	PASS
6013.00†	5974.09	-559.69	-223.95	5977.13	5927.62	-567.48	367.82	-110.34	593.64	52.49	11.45	PASS
6113.00†	6073.24	-571.79	-228.79	6076.35	6025.67	-580.71	375.35	-110.25	606.07	53.48	11.47	PASS
6213.00†	6172.38	-583.88	-233.63	6175.57	6123.71	-593.94	382.87	-110.16	618.50	54.48	11.49	PASS
6313.00†	6271.53	-595.98	-238.47	6274.79	6221.76	-607.17	390.40	-110.07	630.93	55.47	11.51	PASS
6413.00†	6370.68	-608.08	-243.31	6374.01	6319.81	-620.40	397.92	-109.99	643.37	56.47	11.53	PASS
6513.00†	6469.82	-620.18	-248.15	6473.23	6417.85	-633.63	405.45	-109.91	655.80	57.47	11.54	PASS
6613.00†	6568.97	-632.28	-252.99	6572.45	6515.90	-646.86	412.97	-109.83	668.23	58.46	11.56	PASS
6713.00†	6668.12	-644.38	-257.83	6671.67	6613.94	-660.09	420.49	-109.76	680.67	59.46	11.57	PASS
6813.00†	6767.27	-656.48	-262.68	6770.89	6711.99	-673.32	428.02	-109.69	693.11	60.46	11.59	PASS
6913.00†	6866.41	-668.57	-267.52	6870.11	6810.03	-686.55	435.54	-109.62	705.55	61.46	11.60	PASS
7013.00†	6965.56	-680.67	-272.36	6969.33	6908.08	-699.78	443.07	-109.55	717.98	62.46	11.62	PASS
7113.00†	7064.71	-692.77	-277.20	7070.38	7008.16	-711.08	450.74	-109.66	730.36	63.45	11.63	PASS
7213.00†	7163.86	-704.87	-282.04	7170.55	7107.82	-706.97	458.34	-110.95	742.50	64.46	11.64	PASS
7251.04	7201.57	-709.47	-283.88	7206.73	7143.44	-701.20	461.05	-111.73	747.24	64.82	11.64	PASS
7313.00†	7263.29	-713.63	-286.90	7263.73	7198.60	-687.58	465.23	-166.92	755.36	65.10	11.72	PASS
7413.00†	7362.77	-706.23	-291.81	7352.54	7281.13	-655.60	471.45	101.93	769.28	65.38	11.88	PASS
7513.00†	7459.45	-681.66	-296.63	7438.14	7355.10	-613.04	476.99	90.34	783.63	65.87	12.02	PASS
7613.00†	7550.39	-640.64	-301.20	7521.19	7420.06	-561.65	481.82	84.83	797.71	64.51	12.49	PASS
7713.00†	7632.84	-584.44	-305.40	7602.23	7475.67	-502.93	485.91	81.11	810.88	62.78	13.05	PASS
7813.00†	7704.29	-514.75	-309.10	7681.72	7521.66	-438.26	489.25	78.36	822.54	60.94	13.64	PASS
7913.00†	7762.57	-433.70	-312.17	7760.06	7557.84	-368.89	491.84	76.32	832.19	59.13	14.23	PASS
8013.00†	7805.90	-343.74	-314.54	7837.58	7584.02	-296.01	493.64	74.90	839.44	57.52	14.76	PASS
8113.00†	7832.97	-247.62	-316.12	7914.56	7600.09	-220.80	494.68	74.04	844.00	56.21	15.20	PASS
8213.00†	7842.95	-148.25	-316.87	7991.26	7605.97	-144.38	494.92	73.73	845.69	55.34	15.47	PASS
8220.45	7843.00	-140.80	-316.89	7996.98	7606.00	-138.66	494.91	73.72	845.69	55.28	15.48	PASS
8313.00†	7843.00	-48.25	-317.13	8089.51	7606.00	-46.13	494.67	73.72	845.69	54.90	15.59	PASS
8413.00†	7843.00	51.75	-317.40	8189.51	7606.00	53.87	494.41	73.72	845.69	55.08	15.54	PASS
8513.00†	7843.00	151.75	-317.66	8289.51	7606.00	153.87	494.15	73.72	845.69	55.94	15.30	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NBH Offset Wellpath: ACKARD NORTH 2-35-2NBH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#08 ACKARD NORTH 2-35-2NBH (600'FSL & 2040'FWL, SEC.02) Well: ACKARD NORTH 2-35-2NBH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
8613.00†	7843.00	251.75	-317.92	8389.51	7606.00	253.87	493.88	73.72	845.69	57.45	14.89	PASS
8713.00†	7843.00	351.75	-318.18	8489.51	7606.00	353.87	493.62	73.72	845.69	59.53	14.36	PASS
8813.00†	7843.00	451.74	-318.44	8589.51	7606.00	453.87	493.36	73.72	845.69	62.15	13.75	PASS
8913.00†	7843.00	551.74	-318.70	8689.51	7606.00	553.87	493.10	73.72	845.69	65.22	13.10	PASS
9013.00†	7843.00	651.74	-318.97	8789.51	7606.00	653.87	492.84	73.72	845.69	68.69	12.43	PASS
9113.00†	7843.00	751.74	-319.23	8889.51	7606.00	753.87	492.57	73.72	845.69	73.41	11.62	PASS
9213.00†	7843.00	851.74	-319.49	8989.51	7606.00	853.87	492.31	73.72	845.69	76.61	11.13	PASS
9313.00†	7843.00	951.74	-319.75	9089.51	7606.00	953.87	492.05	73.72	845.69	80.96	10.53	PASS
9413.00†	7843.00	1051.74	-320.01	9189.51	7606.00	1053.87	491.79	73.72	845.69	85.52	9.96	PASS
9513.00†	7843.00	1151.74	-320.28	9289.51	7606.00	1153.87	491.53	73.72	845.69	90.26	9.44	PASS
9613.00†	7843.00	1251.74	-320.54	9389.51	7606.00	1253.87	491.27	73.72	845.69	95.14	8.95	PASS
9713.00†	7843.00	1351.74	-320.80	9489.51	7606.00	1353.87	491.00	73.72	845.69	100.15	8.50	PASS
9813.00†	7843.00	1451.74	-321.06	9589.51	7606.00	1453.87	490.74	73.72	845.69	105.27	8.08	PASS
9913.00†	7843.00	1551.74	-321.32	9689.51	7606.00	1553.87	490.48	73.72	845.69	110.49	7.70	PASS
10013.00†	7843.00	1651.74	-321.58	9789.51	7606.00	1653.87	490.22	73.72	845.69	115.78	7.34	PASS
10113.00†	7843.00	1751.74	-321.85	9889.51	7606.00	1753.87	489.96	73.72	845.69	121.15	7.02	PASS
10213.00†	7843.00	1851.74	-322.11	9989.51	7606.00	1853.87	489.69	73.72	845.69	126.52	6.72	PASS
10313.00†	7843.00	1951.74	-322.37	10089.51	7606.00	1953.87	489.43	73.72	845.69	132.05	6.43	PASS
10413.00†	7843.00	2051.74	-322.63	10189.51	7606.00	2053.87	489.17	73.72	845.69	137.58	6.17	PASS
10513.00†	7843.00	2151.74	-322.89	10289.51	7606.00	2153.86	488.91	73.72	845.69	143.15	5.93	PASS
10613.00†	7843.00	2251.74	-323.15	10389.51	7606.00	2253.86	488.65	73.72	845.69	148.76	5.71	PASS
10713.00†	7843.00	2351.74	-323.42	10489.51	7606.00	2353.86	488.39	73.72	845.69	154.39	5.50	PASS
10813.00†	7843.00	2451.74	-323.68	10589.51	7606.00	2453.86	488.12	73.72	845.69	160.06	5.30	PASS
10913.00†	7843.00	2551.74	-323.94	10689.51	7606.00	2553.86	487.86	73.72	845.69	165.76	5.12	PASS
11013.00†	7843.00	2651.74	-324.20	10789.51	7606.00	2653.86	487.60	73.72	845.69	171.48	4.95	PASS
11113.00†	7843.00	2751.74	-324.46	10889.51	7606.00	2753.86	487.34	73.72	845.69	177.22	4.79	PASS
11213.00†	7843.00	2851.74	-324.72	10989.51	7606.00	2853.86	487.08	73.72	845.69	182.98	4.64	PASS
11313.00†	7843.00	2951.74	-324.99	11089.51	7606.00	2953.86	486.81	73.72	845.69	188.76	4.49	PASS
11413.00†	7843.00	3051.74	-325.25	11189.51	7606.00	3053.86	486.55	73.72	845.69	194.55	4.36	PASS
11513.00†	7843.00	3151.74	-325.51	11289.51	7606.00	3153.86	486.29	73.72	845.69	200.36	4.23	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NBH Offset Wellpath: ACKARD NORTH 2-35-2NBH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#08 ACKARD NORTH 2-35-2NBH (600'FSL & 2040'FWL, SEC.02) Well: ACKARD NORTH 2-35-2NBH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11613.00†	7843.00	3251.74	-325.77	11389.51	7606.00	3253.86	486.03	73.72	845.69	206.18	4.11	PASS
11713.00†	7843.00	3351.74	-326.03	11489.51	7606.00	3353.86	485.77	73.72	845.69	212.02	4.00	PASS
11813.00†	7843.00	3451.73	-326.30	11589.51	7606.00	3453.86	485.51	73.72	845.69	217.86	3.89	PASS
11913.00†	7843.00	3551.73	-326.56	11689.51	7606.00	3553.86	485.24	73.72	845.69	223.72	3.79	PASS
12013.00†	7843.00	3651.73	-326.82	11789.51	7606.00	3653.86	484.98	73.72	845.69	229.58	3.69	PASS
12113.00†	7843.00	3751.73	-327.08	11889.51	7606.00	3753.86	484.72	73.72	845.69	235.46	3.60	PASS
12213.00†	7843.00	3851.73	-327.34	11989.51	7606.00	3853.86	484.46	73.72	845.69	241.34	3.51	PASS
12313.00†	7843.00	3951.73	-327.60	12089.51	7606.00	3953.86	484.20	73.72	845.69	247.23	3.43	PASS
12413.00†	7843.00	4051.73	-327.87	12189.51	7606.00	4053.86	483.93	73.72	845.69	253.13	3.35	PASS
12513.00†	7843.00	4151.73	-328.13	12289.51	7606.00	4153.86	483.67	73.72	845.69	259.04	3.27	PASS
12613.00†	7843.00	4251.73	-328.39	12389.51	7606.00	4253.86	483.41	73.72	845.69	264.95	3.20	PASS
12713.00†	7843.00	4351.73	-328.65	12489.51	7606.00	4353.86	483.15	73.72	845.69	270.86	3.13	PASS
12813.00†	7843.00	4451.73	-328.91	12589.51	7606.00	4453.86	482.89	73.72	845.69	276.78	3.06	PASS
12913.00†	7843.00	4551.73	-329.17	12689.51	7606.00	4553.86	482.63	73.72	845.69	282.71	3.00	PASS
13013.00†	7843.00	4651.73	-329.44	12789.51	7606.00	4653.86	482.36	73.72	845.69	288.64	2.93	PASS
13113.00†	7843.00	4751.73	-329.70	12889.51	7606.00	4753.86	482.10	73.72	845.69	294.58	2.88	PASS
13213.00†	7843.00	4851.73	-329.96	12989.51	7606.00	4853.86	481.84	73.72	845.69	300.52	2.82	PASS
13313.00†	7843.00	4951.73	-330.22	13089.51	7606.00	4953.86	481.58	73.72	845.69	306.47	2.76	PASS
13413.00†	7843.00	5051.73	-330.48	13189.51	7606.00	5053.85	481.32	73.72	845.69	312.41	2.71	PASS
13513.00†	7843.00	5151.73	-330.74	13289.51	7606.00	5153.85	481.05	73.72	845.69	318.37	2.66	PASS
13613.00†	7843.00	5251.73	-331.01	13389.51	7606.00	5253.85	480.79	73.72	845.69	324.32	2.61	PASS
13713.00†	7843.00	5351.73	-331.27	13489.51	7606.00	5353.85	480.53	73.72	845.69	330.28	2.56	PASS
13813.00†	7843.00	5451.73	-331.53	13589.51	7606.00	5453.85	480.27	73.72	845.69	336.24	2.52	PASS
13913.00†	7843.00	5551.73	-331.79	13689.51	7606.00	5553.85	480.01	73.72	845.69	342.20	2.47	PASS
14013.00†	7843.00	5651.73	-332.05	13789.51	7606.00	5653.85	479.75	73.72	845.69	348.17	2.43	PASS
14113.00†	7843.00	5751.73	-332.32	13889.51	7606.00	5753.85	479.48	73.72	845.69	354.14	2.39	PASS
14213.00†	7843.00	5851.73	-332.58	13989.51	7606.00	5853.85	479.22	73.72	845.69	360.11	2.35	PASS
14313.00†	7843.00	5951.73	-332.84	14089.51	7606.00	5953.85	478.96	73.72	845.69	366.09	2.31	PASS
14413.00†	7843.00	6051.73	-333.10	14189.51	7606.00	6053.85	478.70	73.72	845.69	372.06	2.28	PASS
14513.00†	7843.00	6151.73	-333.36	14289.51	7606.00	6153.85	478.44	73.72	845.69	378.04	2.24	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NBH Offset Wellpath: ACKARD NORTH 2-35-2NBH PWP (REV. A.0)												
Facility: SEC.02-T03S-R66W Slot: SLOT#08 ACKARD NORTH 2-35-2NBH (600'FSL & 2040'FWL, SEC.02) Well: ACKARD NORTH 2-35-2NBH Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
14613.00†	7843.00	6251.73	-333.62	14389.51	7606.00	6253.85	478.17	73.72	845.69	384.02	2.20	PASS
14713.00†	7843.00	6351.72	-333.89	14489.51	7606.00	6353.85	477.91	73.72	845.69	390.00	2.17	PASS
14813.00†	7843.00	6451.72	-334.15	14589.51	7606.00	6453.85	477.65	73.72	845.69	395.99	2.14	PASS
14913.00†	7843.00	6551.72	-334.41	14689.51	7606.00	6553.85	477.39	73.72	845.69	401.97	2.11	PASS
15013.00†	7843.00	6651.72	-334.67	14789.51	7606.00	6653.85	477.13	73.72	845.69	407.96	2.07	PASS
15113.00†	7843.00	6751.72	-334.93	14889.51	7606.00	6753.85	476.86	73.72	845.69	413.95	2.04	PASS
15213.00†	7843.00	6851.72	-335.19	14989.51	7606.00	6853.85	476.60	73.72	845.69	419.94	2.02	PASS
15313.00†	7843.00	6951.72	-335.46	15089.51	7606.00	6953.85	476.34	73.72	845.69	425.93	1.99	PASS
15413.00†	7843.00	7051.72	-335.72	15189.51	7606.00	7053.85	476.08	73.72	845.69	431.93	1.96	PASS
15513.00†	7843.00	7151.72	-335.98	15289.51	7606.00	7153.85	475.82	73.72	845.69	437.92	1.93	PASS
15613.00†	7843.00	7251.72	-336.24	15389.51	7606.00	7253.85	475.56	73.72	845.69	443.92	1.91	PASS
15713.00†	7843.00	7351.72	-336.50	15489.51	7606.00	7353.85	475.29	73.72	845.69	449.92	1.88	PASS
15813.00†	7843.00	7451.72	-336.76	15589.51	7606.00	7453.85	475.03	73.72	845.69	455.91	1.86	PASS
15913.00†	7843.00	7551.72	-337.03	15689.51	7606.00	7553.85	474.77	73.72	845.69	461.91	1.83	PASS
16013.00†	7843.00	7651.72	-337.29	15789.51	7606.00	7653.85	474.51	73.72	845.69	467.91	1.81	PASS
16113.00†	7843.00	7751.72	-337.55	15889.51	7606.00	7753.85	474.25	73.72	845.69	473.92	1.79	PASS
16213.00†	7843.00	7851.72	-337.81	15989.51	7606.00	7853.85	473.98	73.72	845.69	479.92	1.76	PASS
16313.00†	7843.00	7951.72	-338.07	16089.51	7606.00	7953.84	473.72	73.72	845.69	485.92	1.74	PASS
16413.00†	7843.00	8051.72	-338.33	16189.51	7606.00	8053.84	473.46	73.72	845.69	491.93	1.72	PASS
16513.00†	7843.00	8151.72	-338.60	16289.51	7606.00	8153.84	473.20	73.72	845.69	497.93	1.70	PASS
16613.00†	7843.00	8251.72	-338.86	16389.51	7606.00	8253.84	472.94	73.72	845.69	503.94	1.68	PASS
16713.00†	7843.00	8351.72	-339.12	16489.51	7606.00	8353.84	472.68	73.72	845.69	509.95	1.66	PASS
16813.00†	7843.00	8451.72	-339.38	16589.51	7606.00	8453.84	472.41	73.72	845.69	515.95	1.64	PASS
16913.00†	7843.00	8551.72	-339.64	16689.51	7606.00	8553.84	472.15	73.72	845.69	521.96	1.62	PASS
17013.00†	7843.00	8651.72	-339.91	16789.51	7606.00	8653.84	471.89	73.72	845.69	527.97	1.60	PASS
17113.00†	7843.00	8751.72	-340.17	16889.51	7606.00	8753.84	471.63	73.72	845.69	533.98	1.58	PASS
17213.00†	7843.00	8851.72	-340.43	16989.51	7606.00	8853.84	471.37	73.72	845.69	539.99	1.57	PASS
17313.00†	7843.00	8951.72	-340.69	17089.51	7606.00	8953.84	471.10	73.72	845.69	546.01	1.55	PASS
17413.00†	7843.00	9051.72	-340.95	17189.51	7606.00	9053.84	470.84	73.72	845.69	552.02	1.53	PASS
17513.00†	7843.00	9151.72	-341.21	17289.51	7606.00	9153.84	470.58	73.72	845.69	558.03	1.52	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NBH Offset Wellpath: ACKARD NORTH 2-35-2NBH PWP (REV. A.0)												
Facility: SEC.02-T03S-R66W Slot: SLOT#08 ACKARD NORTH 2-35-2NBH (600'FSL & 2040'FWL, SEC.02) Well: ACKARD NORTH 2-35-2NBH Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
17613.00†	7843.00	9251.71	-341.48	17389.51	7606.00	9253.84	470.32	73.72	845.69	564.05	1.50	PASS
17713.00†	7843.00	9351.71	-341.74	17489.51	7606.00	9353.84	470.06	73.72	845.69	570.06	1.48	PASS
17813.00†	7843.00	9451.71	-342.00	17589.51	7606.00	9453.84	469.80	73.72	845.69	576.07	1.47	PASS
17913.00†	7843.00	9551.71	-342.26	17689.51	7606.00	9553.84	469.53	73.72	845.69	582.09	1.45	PASS
17937.78	7843.00	9576.50	-342.33	17714.29	7606.00	9578.62	469.47	73.72	845.69	583.58	1.45	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: ACKARD NORTH 2-35-2NBH Offset Wellpath: ACKARD NORTH 2-35-2NBH PWP (REV. A.0)			
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical

HOLE & CASING SECTIONS - Offset Wellbore: ACKARD NORTH 2-35-2NBH Offset Wellpath: ACKARD NORTH 2-35-2NBH PWP (REV. A.0)									
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]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1799.45	0.10	27.43	-4.06	29.80
8.5in Open Hole	1800.00	17719.12	15919.12	1799.45	N/A	-4.06	29.80	N/A	N/A

SURVEY PROGRAM - Offset Wellbore: ACKARD NORTH 2-35-2NBH Offset Wellpath: ACKARD NORTH 2-35-2NBH PWP (REV. A.0)			
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Wellbore
13.00	17719.12	Custom BHI NaviTrak (Standard Rotating) (Rockies 0.03Gt model)	ACKARD NORTH 2-35-2NBH



Clearance Report
ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

OFFSET WELLPATH REFERENCE - Offset Wellbore: ACKARD NORTH 2-35-2NBH Offset Wellpath: ACKARD NORTH 2-35-2NBH PWP (REV. A.0)	
MD Reference: RIG (13'KB) (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	13.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-3NCH PWB Offset Wellpath: ACKARD NORTH 2-35-3NCH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#09 ACKARD NORTH 2-35-3NCH (600'FSL & 2055'FWL, SEC.02) Well: ACKARD NORTH 2-35-3NCH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	13.00	13.00	0.18	59.99	89.83	59.99	1.40	98.64	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.18	59.99	89.83	59.99	1.72	64.57	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.18	59.99	89.83	59.99	2.28	39.94	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.18	59.99	89.83	59.99	2.89	28.41	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.18	59.99	89.83	59.99	3.50	21.94	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.18	59.99	89.83	59.99	4.12	17.85	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.18	59.99	89.83	59.99	4.74	15.03	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.18	59.99	89.83	59.99	5.36	12.97	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.18	59.99	89.83	59.99	5.99	11.41	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.18	59.99	89.83	59.99	6.61	10.18	PASS
1013.00†	1013.00	0.00	0.00	1013.00	1013.00	0.18	59.99	89.83	59.99	7.24	9.19	PASS
1113.00†	1113.00	0.00	0.00	1113.00	1113.00	0.18	59.99	89.83	59.99	7.87	8.38	PASS
1200.00	1200.00	0.00	0.00	1200.00	1200.00	0.18	59.99	89.83	59.99	8.41	7.78	PASS
1213.00†	1213.00	-0.03	-0.01	1213.00	1213.00	0.18	59.99	-112.01	60.00	8.49	7.70	PASS
1313.00†	1312.97	-2.07	-0.83	1312.97	1312.97	0.18	59.99	-113.91	60.85	9.14	7.21	PASS
1413.00†	1412.80	-7.35	-2.94	1412.80	1412.80	0.18	59.99	-118.57	63.37	9.85	6.91	PASS
1513.00†	1512.38	-15.86	-6.35	1512.38	1512.38	0.18	59.99	-125.24	68.24	10.64	6.86	PASS
1574.38	1573.31	-22.68	-9.07	1573.31	1573.31	0.18	59.99	-129.88	72.75	11.13	6.96	PASS
1613.00†	1611.61	-27.35	-10.94	1611.49	1611.49	0.17	60.00	-132.76	76.10	11.42	7.09	PASS
1713.00†	1710.75	-39.45	-15.79	1709.84	1709.81	-1.36	61.42	-137.77	86.09	12.13	7.53	PASS
1813.00†	1809.90	-51.55	-20.63	1808.30	1808.12	-5.37	65.13	-139.78	97.42	12.71	8.06	PASS
1913.00†	1909.05	-63.65	-25.47	1906.65	1906.07	-11.84	71.14	-139.64	109.66	13.40	8.59	PASS
2013.00†	2008.20	-75.75	-30.31	2004.66	2003.32	-20.73	79.39	-138.00	122.82	14.11	9.11	PASS
2113.00†	2107.34	-87.84	-35.15	2102.10	2099.54	-31.99	89.84	-135.34	137.12	14.88	9.62	PASS
2213.00†	2206.49	-99.94	-39.99	2200.16	2195.95	-45.10	102.01	-132.30	152.58	15.70	10.13	PASS
2313.00†	2305.64	-112.04	-44.83	2298.65	2292.76	-58.36	114.31	-129.76	168.45	16.55	10.59	PASS
2413.00†	2404.78	-124.14	-49.67	2397.13	2389.57	-71.62	126.62	-127.67	184.58	17.42	11.00	PASS
2513.00†	2503.93	-136.24	-54.51	2495.62	2486.38	-84.88	138.93	-125.91	200.91	18.31	11.37	PASS
2613.00†	2603.08	-148.34	-59.35	2594.10	2583.18	-98.15	151.23	-124.42	217.40	19.24	11.69	PASS
2713.00†	2702.23	-160.44	-64.20	2692.59	2679.99	-111.41	163.54	-123.13	234.01	20.14	12.01	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-3NCH PWB Offset Wellpath: ACKARD NORTH 2-35-3NCH PWP (REV. A.0)												
Facility: SEC.02-T03S-R66W		Slot: SLOT#09 ACKARD NORTH 2-35-3NCH (600'FSL & 2055'FWL, SEC.02)		Well: ACKARD NORTH 2-35-3NCH		Threshold Value=1.00 † = interpolated/extrapolated station						
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2801.37	-172.53	-69.04	2791.07	2776.80	-124.67	175.84	-122.02	250.72	21.06	12.28	PASS
2913.00†	2900.52	-184.63	-73.88	2889.55	2873.61	-137.93	188.15	-121.05	267.51	22.00	12.53	PASS
3013.00†	2999.67	-196.73	-78.72	2988.04	2970.42	-151.19	200.46	-120.19	284.37	22.94	12.76	PASS
3113.00†	3098.82	-208.83	-83.56	3086.52	3067.23	-164.45	212.76	-119.43	301.29	23.89	12.97	PASS
3213.00†	3197.96	-220.93	-88.40	3185.01	3164.03	-177.71	225.07	-118.74	318.25	24.85	13.16	PASS
3313.00†	3297.11	-233.03	-93.24	3283.49	3260.84	-190.97	237.38	-118.13	335.25	25.80	13.33	PASS
3413.00†	3396.26	-245.13	-98.08	3381.98	3357.65	-204.24	249.68	-117.58	352.28	26.77	13.49	PASS
3513.00†	3495.41	-257.22	-102.92	3480.46	3454.46	-217.50	261.99	-117.08	369.34	27.73	13.64	PASS
3613.00†	3594.55	-269.32	-107.76	3578.94	3551.27	-230.76	274.30	-116.62	386.43	28.70	13.78	PASS
3713.00†	3693.70	-281.42	-112.60	3677.43	3648.08	-244.02	286.60	-116.20	403.54	29.68	13.91	PASS
3813.00†	3792.85	-293.52	-117.45	3775.91	3744.88	-257.28	298.91	-115.81	420.67	30.65	14.03	PASS
3913.00†	3891.99	-305.62	-122.29	3874.40	3841.69	-270.54	311.21	-115.46	437.82	31.63	14.14	PASS
4013.00†	3991.14	-317.72	-127.13	3972.88	3938.50	-283.80	323.52	-115.13	454.98	32.61	14.24	PASS
4113.00†	4090.29	-329.82	-131.97	4071.36	4035.31	-297.07	335.83	-114.83	472.15	33.59	14.34	PASS
4213.00†	4189.44	-341.91	-136.81	4169.85	4132.12	-310.33	348.13	-114.54	489.34	34.57	14.43	PASS
4313.00†	4288.58	-354.01	-141.65	4268.33	4228.93	-323.59	360.44	-114.28	506.54	35.56	14.52	PASS
4413.00†	4387.73	-366.11	-146.49	4366.82	4325.73	-336.85	372.75	-114.03	523.74	36.54	14.60	PASS
4513.00†	4486.88	-378.21	-151.33	4465.30	4422.54	-350.11	385.05	-113.80	540.96	37.53	14.67	PASS
4613.00†	4586.03	-390.31	-156.17	4563.79	4519.35	-363.37	397.36	-113.58	558.18	38.52	14.74	PASS
4713.00†	4685.17	-402.41	-161.01	4662.27	4616.16	-376.63	409.66	-113.38	575.41	39.51	14.81	PASS
4813.00†	4784.32	-414.51	-165.86	4760.75	4712.97	-389.90	421.97	-113.19	592.65	40.50	14.88	PASS
4913.00†	4883.47	-426.60	-170.70	4859.24	4809.77	-403.16	434.28	-113.01	609.90	41.49	14.94	PASS
5013.00†	4982.61	-438.70	-175.54	4957.72	4906.58	-416.42	446.58	-112.84	627.15	42.48	15.00	PASS
5113.00†	5081.76	-450.80	-180.38	5056.21	5003.39	-429.68	458.89	-112.68	644.40	43.48	15.05	PASS
5213.00†	5180.91	-462.90	-185.22	5154.69	5100.20	-442.94	471.20	-112.52	661.66	44.47	15.10	PASS
5313.00†	5280.06	-475.00	-190.06	5253.18	5197.01	-456.20	483.50	-112.38	678.92	45.46	15.15	PASS
5413.00†	5379.20	-487.10	-194.90	5351.66	5293.82	-469.46	495.81	-112.24	696.19	46.46	15.20	PASS
5513.00†	5478.35	-499.19	-199.74	5450.14	5390.62	-482.73	508.12	-112.11	713.46	47.46	15.25	PASS
5613.00†	5577.50	-511.29	-204.58	5548.63	5487.43	-495.99	520.42	-111.98	730.74	48.45	15.29	PASS
5713.00†	5676.65	-523.39	-209.42	5647.11	5584.24	-509.25	532.73	-111.86	748.02	49.45	15.33	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-3NCH PWB Offset Wellpath: ACKARD NORTH 2-35-3NCH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#09 ACKARD NORTH 2-35-3NCH (600'FSL & 2055'FWL, SEC.02) Well: ACKARD NORTH 2-35-3NCH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5775.79	-535.49	-214.27	5745.60	5681.05	-522.51	545.03	-111.75	765.30	50.45	15.37	PASS
5913.00†	5874.94	-547.59	-219.11	5844.08	5777.86	-535.77	557.34	-111.64	782.58	51.45	15.41	PASS
6013.00†	5974.09	-559.69	-223.95	5942.57	5874.67	-549.03	569.65	-111.53	799.87	52.45	15.45	PASS
6113.00†	6073.24	-571.79	-228.79	6041.05	5971.47	-562.29	581.95	-111.43	817.16	53.45	15.48	PASS
6213.00†	6172.38	-583.88	-233.63	6139.53	6068.28	-575.55	594.26	-111.34	834.45	54.45	15.51	PASS
6313.00†	6271.53	-595.98	-238.47	6238.02	6165.09	-588.82	606.57	-111.24	851.74	55.45	15.55	PASS
6413.00†	6370.68	-608.08	-243.31	6336.50	6261.90	-602.08	618.87	-111.16	869.04	56.45	15.58	PASS
6513.00†	6469.82	-620.18	-248.15	6434.99	6358.71	-615.34	631.18	-111.07	886.34	57.45	15.61	PASS
6613.00†	6568.97	-632.28	-252.99	6533.47	6455.51	-628.60	643.48	-110.99	903.64	58.45	15.64	PASS
6713.00†	6668.12	-644.38	-257.83	6631.96	6552.32	-641.86	655.79	-110.91	920.94	59.45	15.66	PASS
6813.00†	6767.27	-656.48	-262.68	6730.44	6649.13	-655.12	668.10	-110.84	938.24	60.46	15.69	PASS
6913.00†	6866.41	-668.57	-267.52	6828.92	6745.94	-668.38	680.40	-110.76	955.54	61.46	15.72	PASS
7013.00†	6965.56	-680.67	-272.36	6927.41	6842.75	-681.65	692.71	-110.69	972.85	62.46	15.74	PASS
7113.00†	7064.71	-692.77	-277.20	7025.89	6939.56	-694.91	705.02	-110.62	990.16	63.47	15.77	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: ACKARD NORTH 2-35-3NCH PWB Offset Wellpath: ACKARD NORTH 2-35-3NCH PWP (REV. A.0)

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

HOLE & CASING SECTIONS - Offset Wellbore: ACKARD NORTH 2-35-3NCH PWB Offset Wellpath: ACKARD NORTH 2-35-3NCH PWP (REV. A.0)

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]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1799.84	0.11	36.57	-1.45	38.01
8.5in Open Hole	1800.00	17807.10	16007.10	1799.84	7663.00	-1.45	38.01	2921.90	258.13



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

SURVEY PROGRAM - Offset Wellbore: ACKARD NORTH 2-35-3NCH PWB Offset Wellpath: ACKARD NORTH 2-35-3NCH PWP (REV. A.0)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	17807.10	Custom BHI NaviTrak (Standard Rotating) (Rockies 0.03Gt model)		ACKARD NORTH 2-35-3NCH PWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: ACKARD NORTH 2-35-3NCH PWB Offset Wellpath: ACKARD NORTH 2-35-3NCH PWP (REV. A.0)	
MD Reference: RIG (13'KB) (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	13.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1CDH PWB Offset Wellpath: ACKARD NORTH 2-35-1CDH PWP (REV-A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02) Well: ACKARD NORTH 2-35-1CDH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	13.00	13.00	-0.11	-59.99	-90.11	59.99	1.40	98.64	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	-0.11	-59.99	-90.11	59.99	1.73	64.13	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	-0.11	-59.99	-90.11	59.99	2.30	39.63	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	-0.11	-59.99	-90.11	59.99	2.90	28.22	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	-0.11	-59.99	-90.11	59.99	3.51	21.82	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	-0.11	-59.99	-90.11	59.99	4.13	17.76	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	-0.11	-59.99	-90.11	59.99	4.76	14.97	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	-0.11	-59.99	-90.11	59.99	5.38	12.93	PASS
813.00†	813.00	0.00	0.00	812.76	812.76	-0.12	-60.01	-90.12	60.01	6.00	11.38	PASS
913.00†	913.00	0.00	0.00	910.89	910.87	-1.12	-61.88	-91.04	61.93	6.73	10.31	PASS
1013.00†	1013.00	0.00	0.00	1008.76	1008.58	-3.69	-66.69	-93.17	66.94	7.70	9.59	PASS
1113.00†	1113.00	0.00	0.00	1106.15	1105.56	-7.80	-74.40	-95.99	75.18	8.63	9.51	PASS
1200.00	1200.00	0.00	0.00	1190.30	1189.10	-12.61	-83.41	-98.60	85.06	9.42	9.77	PASS
1213.00†	1213.00	-0.03	-0.01	1202.83	1201.50	-13.42	-84.93	59.20	86.74	9.53	9.85	PASS
1313.00†	1312.97	-2.07	-0.83	1298.85	1296.33	-20.50	-98.21	57.17	100.50	10.37	10.42	PASS
1413.00†	1412.80	-7.35	-2.94	1394.26	1390.00	-29.02	-114.17	56.52	115.59	11.29	10.94	PASS
1513.00†	1512.38	-15.86	-6.35	1488.99	1482.37	-38.92	-132.73	56.78	131.93	12.13	11.58	PASS
1574.38	1573.31	-22.68	-9.07	1549.03	1540.63	-45.75	-145.52	57.33	142.19	12.55	12.03	PASS
1613.00†	1611.61	-27.35	-10.94	1587.11	1577.59	-50.08	-153.64	57.87	148.44	12.79	12.31	PASS
1713.00†	1710.75	-39.45	-15.79	1685.73	1673.28	-61.30	-174.67	59.07	164.69	13.45	12.96	PASS
1813.00†	1809.90	-51.55	-20.63	1784.35	1768.98	-72.52	-195.69	60.06	181.00	14.14	13.47	PASS
1913.00†	1909.05	-63.65	-25.47	1882.97	1864.67	-83.74	-216.72	60.89	197.36	14.80	13.95	PASS
2013.00†	2008.20	-75.75	-30.31	1981.58	1960.36	-94.95	-237.75	61.59	213.75	15.58	14.32	PASS
2113.00†	2107.34	-87.84	-35.15	2080.20	2056.06	-106.17	-258.77	62.19	230.16	16.39	14.63	PASS
2213.00†	2206.49	-99.94	-39.99	2178.82	2151.75	-117.39	-279.80	62.71	246.60	17.23	14.89	PASS
2313.00†	2305.64	-112.04	-44.83	2277.43	2247.44	-128.61	-300.83	63.17	263.05	18.08	15.10	PASS
2413.00†	2404.78	-124.14	-49.67	2376.05	2343.14	-139.83	-321.85	63.57	279.52	18.96	15.28	PASS
2513.00†	2503.93	-136.24	-54.51	2474.67	2438.83	-151.05	-342.88	63.92	296.00	19.85	15.43	PASS
2613.00†	2603.08	-148.34	-59.35	2573.28	2534.53	-162.27	-363.91	64.24	312.48	20.75	15.56	PASS
2713.00†	2702.23	-160.44	-64.20	2671.90	2630.22	-173.49	-384.93	64.53	328.98	21.66	15.66	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1CDH PWB Offset Wellpath: ACKARD NORTH 2-35-1CDH PWP (REV-A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02) Well: ACKARD NORTH 2-35-1CDH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2801.37	-172.53	-69.04	2770.52	2725.91	-184.71	-405.96	64.79	345.49	22.59	15.76	PASS
2913.00†	2900.52	-184.63	-73.88	2869.14	2821.61	-195.92	-426.99	65.03	362.00	23.53	15.83	PASS
3013.00†	2999.67	-196.73	-78.72	2967.75	2917.30	-207.14	-448.02	65.24	378.51	24.47	15.90	PASS
3113.00†	3098.82	-208.83	-83.56	3066.37	3013.00	-218.36	-469.04	65.44	395.04	25.42	15.96	PASS
3213.00†	3197.96	-220.93	-88.40	3164.99	3108.69	-229.58	-490.07	65.62	411.56	26.38	16.01	PASS
3313.00†	3297.11	-233.03	-93.24	3263.60	3204.38	-240.80	-511.10	65.79	428.09	27.34	16.05	PASS
3413.00†	3396.26	-245.13	-98.08	3362.22	3300.08	-252.02	-532.12	65.94	444.62	28.31	16.09	PASS
3513.00†	3495.41	-257.22	-102.92	3460.84	3395.77	-263.24	-553.15	66.09	461.16	29.28	16.12	PASS
3613.00†	3594.55	-269.32	-107.76	3559.45	3491.47	-274.46	-574.18	66.22	477.70	30.25	16.14	PASS
3713.00†	3693.70	-281.42	-112.60	3658.07	3587.16	-285.68	-595.20	66.35	494.24	31.23	16.17	PASS
3813.00†	3792.85	-293.52	-117.45	3756.69	3682.85	-296.90	-616.23	66.46	510.78	32.22	16.19	PASS
3913.00†	3891.99	-305.62	-122.29	3855.31	3778.55	-308.11	-637.26	66.57	527.32	33.20	16.21	PASS
4013.00†	3991.14	-317.72	-127.13	3953.92	3874.24	-319.33	-658.28	66.68	543.87	34.19	16.22	PASS
4113.00†	4090.29	-329.82	-131.97	4052.54	3969.93	-330.55	-679.31	66.77	560.42	35.18	16.24	PASS
4213.00†	4189.44	-341.91	-136.81	4151.16	4065.63	-341.77	-700.34	66.86	576.97	36.18	16.25	PASS
4313.00†	4288.58	-354.01	-141.65	4249.77	4161.32	-352.99	-721.36	66.95	593.52	37.17	16.26	PASS
4413.00†	4387.73	-366.11	-146.49	4348.39	4257.02	-364.21	-742.39	67.03	610.07	38.17	16.27	PASS
4513.00†	4486.88	-378.21	-151.33	4447.01	4352.71	-375.43	-763.42	67.11	626.62	39.17	16.27	PASS
4613.00†	4586.03	-390.31	-156.17	4545.62	4448.40	-386.65	-784.45	67.18	643.18	40.17	16.28	PASS
4713.00†	4685.17	-402.41	-161.01	4644.24	4544.10	-397.87	-805.47	67.25	659.73	41.18	16.29	PASS
4813.00†	4784.32	-414.51	-165.86	4742.86	4639.79	-409.09	-826.50	67.32	676.29	42.18	16.29	PASS
4913.00†	4883.47	-426.60	-170.70	4841.48	4735.49	-420.30	-847.53	67.38	692.85	43.19	16.29	PASS
5013.00†	4982.61	-438.70	-175.54	4940.09	4831.18	-431.52	-868.55	67.44	709.40	44.19	16.30	PASS
5113.00†	5081.76	-450.80	-180.38	5038.71	4926.87	-442.74	-889.58	67.50	725.96	45.20	16.30	PASS
5213.00†	5180.91	-462.90	-185.22	5137.33	5022.57	-453.96	-910.61	67.55	742.52	46.21	16.30	PASS
5313.00†	5280.06	-475.00	-190.06	5235.94	5118.26	-465.18	-931.63	67.61	759.08	47.22	16.30	PASS
5413.00†	5379.20	-487.10	-194.90	5334.56	5213.96	-476.40	-952.66	67.66	775.64	48.23	16.31	PASS
5513.00†	5478.35	-499.19	-199.74	5433.18	5309.65	-487.62	-973.69	67.71	792.20	49.25	16.31	PASS
5613.00†	5577.50	-511.29	-204.58	5531.80	5405.34	-498.84	-994.71	67.75	808.76	50.26	16.31	PASS
5713.00†	5676.65	-523.39	-209.42	5630.41	5501.04	-510.06	-1015.74	67.80	825.33	51.27	16.31	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1CDH PWB Offset Wellpath: ACKARD NORTH 2-35-1CDH PWP (REV-A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02) Well: ACKARD NORTH 2-35-1CDH Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5775.79	-535.49	-214.27	5729.03	5596.73	-521.27	-1036.77	67.84	841.89	52.29	16.31	PASS
5913.00†	5874.94	-547.59	-219.11	5827.65	5692.42	-532.49	-1057.79	67.88	858.45	53.30	16.31	PASS
6013.00†	5974.09	-559.69	-223.95	5926.26	5788.12	-543.71	-1078.82	67.92	875.01	54.32	16.31	PASS
6113.00†	6073.24	-571.79	-228.79	6024.88	5883.81	-554.93	-1099.85	67.96	891.58	55.34	16.31	PASS
6213.00†	6172.38	-583.88	-233.63	6123.50	5979.51	-566.15	-1120.88	67.99	908.14	56.35	16.31	PASS
6313.00†	6271.53	-595.98	-238.47	6222.11	6075.20	-577.37	-1141.90	68.03	924.71	57.37	16.31	PASS
6413.00†	6370.68	-608.08	-243.31	6320.73	6170.89	-588.59	-1162.93	68.06	941.27	58.39	16.31	PASS
6513.00†	6469.82	-620.18	-248.15	6419.35	6266.59	-599.81	-1183.96	68.09	957.84	59.41	16.30	PASS
6613.00†	6568.97	-632.28	-252.99	6517.97	6362.28	-611.03	-1204.98	68.13	974.40	60.43	16.30	PASS
6713.00†	6668.12	-644.38	-257.83	6616.58	6457.98	-622.25	-1226.01	68.16	990.97	61.45	16.30	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: ACKARD NORTH 2-35-1CDH PWB Offset Wellpath: ACKARD NORTH 2-35-1CDH PWP (REV-A.0)

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

HOLE & CASING SECTIONS - Offset Wellbore: ACKARD NORTH 2-35-1CDH PWB Offset Wellpath: ACKARD NORTH 2-35-1CDH PWP (REV-A.0)

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]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1784.16	-0.07	-36.57	-22.68	-78.95
8.5in Open Hole	1800.00	18089.51	16289.51	1784.16	7855.00	-22.68	-78.95	2915.70	-493.76

SURVEY PROGRAM - Offset Wellbore: ACKARD NORTH 2-35-1CDH PWB Offset Wellpath: ACKARD NORTH 2-35-1CDH PWP (REV-A.0)

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	18089.51	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		ACKARD NORTH 2-35-1CDH PWB



Clearance Report
ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

OFFSET WELLPATH REFERENCE - Offset Wellbore: ACKARD NORTH 2-35-1CDH PWB Offset Wellpath: ACKARD NORTH 2-35-1CDH PWP (REV-A.0)	
MD Reference: RIG (13'KB) (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	13.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1NAH PWB Offset Wellpath: ACKARD NORTH 2-35-1NAH PWP (REV-A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#02 ACKARD NORTH 2-35-1NAH (600'FSL & 1950'FWL, SEC.02) Well: ACKARD NORTH 2-35-1NAH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	13.00	13.00	-0.05	-44.98	-90.07	44.98	1.40	73.62	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	-0.05	-44.98	-90.07	44.98	1.72	47.88	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	-0.05	-44.98	-90.07	44.98	2.29	29.59	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	-0.05	-44.98	-90.07	44.98	2.90	21.07	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	-0.05	-44.98	-90.07	44.98	3.51	16.29	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	-0.05	-44.98	-90.07	44.98	4.13	13.26	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	-0.05	-44.98	-90.07	44.98	4.76	11.17	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	-0.05	-44.98	-90.07	44.98	5.38	9.65	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	-0.05	-44.98	-90.07	44.98	6.01	8.49	PASS
913.00†	913.00	0.00	0.00	912.83	912.83	-0.07	-45.00	-90.09	45.00	6.63	7.58	PASS
1013.00†	1013.00	0.00	0.00	1011.44	1011.42	-1.18	-46.83	-91.44	46.87	7.34	7.05	PASS
1113.00†	1113.00	0.00	0.00	1109.80	1109.61	-4.03	-51.55	-94.47	51.82	8.28	6.82	PASS
1200.00	1200.00	0.00	0.00	1194.97	1194.45	-7.90	-57.96	-97.76	58.76	9.08	7.00	PASS
1213.00†	1213.00	-0.03	-0.01	1207.66	1207.07	-8.59	-59.10	59.93	60.00	9.20	7.05	PASS
1313.00†	1312.97	-2.07	-0.83	1305.02	1303.67	-14.84	-69.44	57.42	70.41	10.11	7.48	PASS
1413.00†	1412.80	-7.35	-2.94	1401.90	1399.34	-22.73	-82.51	56.73	82.15	11.01	7.97	PASS
1513.00†	1512.38	-15.86	-6.35	1498.25	1493.91	-32.24	-98.25	57.20	95.16	11.90	8.51	PASS
1574.38	1573.31	-22.68	-9.07	1557.10	1551.35	-38.86	-109.19	57.86	103.77	12.39	8.89	PASS
1613.00†	1611.61	-27.35	-10.94	1594.11	1587.34	-43.33	-116.59	58.36	109.57	12.67	9.17	PASS
1713.00†	1710.75	-39.45	-15.79	1692.88	1683.25	-55.52	-136.78	59.39	125.11	13.33	9.92	PASS
1813.00†	1809.90	-51.55	-20.63	1791.64	1779.16	-67.71	-156.96	60.18	140.69	13.99	10.57	PASS
1913.00†	1909.05	-63.65	-25.47	1890.40	1875.07	-79.91	-177.14	60.82	156.28	14.72	11.10	PASS
2013.00†	2008.20	-75.75	-30.31	1989.17	1970.97	-92.10	-197.32	61.34	171.89	15.47	11.60	PASS
2113.00†	2107.34	-87.84	-35.15	2087.93	2066.88	-104.30	-217.50	61.78	187.51	16.27	12.00	PASS
2213.00†	2206.49	-99.94	-39.99	2186.69	2162.79	-116.49	-237.68	62.15	203.14	17.11	12.34	PASS
2313.00†	2305.64	-112.04	-44.83	2285.46	2258.69	-128.68	-257.86	62.46	218.78	17.96	12.64	PASS
2413.00†	2404.78	-124.14	-49.67	2384.22	2354.60	-140.88	-278.05	62.74	234.42	18.83	12.90	PASS
2513.00†	2503.93	-136.24	-54.51	2482.98	2450.51	-153.07	-298.23	62.98	250.07	19.72	13.12	PASS
2613.00†	2603.08	-148.34	-59.35	2581.75	2546.42	-165.26	-318.41	63.19	265.72	20.62	13.31	PASS
2713.00†	2702.23	-160.44	-64.20	2680.51	2642.32	-177.46	-338.59	63.38	281.37	21.53	13.48	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1NAH PWB Offset Wellpath: ACKARD NORTH 2-35-1NAH PWP (REV-A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#02 ACKARD NORTH 2-35-1NAH (600'FSL & 1950'FWL, SEC.02) Well: ACKARD NORTH 2-35-1NAH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2801.37	-172.53	-69.04	2779.27	2738.23	-189.65	-358.77	63.54	297.03	22.45	13.63	PASS
2913.00†	2900.52	-184.63	-73.88	2878.04	2834.14	-201.84	-378.95	63.69	312.69	23.38	13.76	PASS
3013.00†	2999.67	-196.73	-78.72	2976.80	2930.04	-214.04	-399.13	63.83	328.35	24.31	13.88	PASS
3113.00†	3098.82	-208.83	-83.56	3075.56	3025.95	-226.23	-419.31	63.96	344.01	25.26	13.98	PASS
3213.00†	3197.96	-220.93	-88.40	3174.33	3121.86	-238.42	-439.50	64.07	359.68	26.21	14.08	PASS
3313.00†	3297.11	-233.03	-93.24	3273.09	3217.77	-250.62	-459.68	64.17	375.34	27.16	14.16	PASS
3413.00†	3396.26	-245.13	-98.08	3371.85	3313.67	-262.81	-479.86	64.27	391.01	28.12	14.24	PASS
3513.00†	3495.41	-257.22	-102.92	3470.61	3409.58	-275.01	-500.04	64.36	406.67	29.08	14.31	PASS
3613.00†	3594.55	-269.32	-107.76	3569.38	3505.49	-287.20	-520.22	64.44	422.34	30.05	14.37	PASS
3713.00†	3693.70	-281.42	-112.60	3668.14	3601.40	-299.39	-540.40	64.51	438.01	31.02	14.43	PASS
3813.00†	3792.85	-293.52	-117.45	3766.90	3697.30	-311.59	-560.58	64.58	453.68	32.00	14.48	PASS
3913.00†	3891.99	-305.62	-122.29	3865.67	3793.21	-323.78	-580.77	64.65	469.35	32.97	14.52	PASS
4013.00†	3991.14	-317.72	-127.13	3964.43	3889.12	-335.97	-600.95	64.71	485.02	33.95	14.57	PASS
4113.00†	4090.29	-329.82	-131.97	4063.19	3985.02	-348.17	-621.13	64.77	500.69	34.93	14.61	PASS
4213.00†	4189.44	-341.91	-136.81	4161.96	4080.93	-360.36	-641.31	64.83	516.37	35.92	14.64	PASS
4313.00†	4288.58	-354.01	-141.65	4260.72	4176.84	-372.55	-661.49	64.88	532.04	36.91	14.68	PASS
4413.00†	4387.73	-366.11	-146.49	4359.48	4272.75	-384.75	-681.67	64.92	547.71	37.89	14.71	PASS
4513.00†	4486.88	-378.21	-151.33	4458.25	4368.65	-396.94	-701.85	64.97	563.38	38.88	14.74	PASS
4613.00†	4586.03	-390.31	-156.17	4557.01	4464.56	-409.14	-722.03	65.01	579.06	39.87	14.77	PASS
4713.00†	4685.17	-402.41	-161.01	4655.77	4560.47	-421.33	-742.22	65.05	594.73	40.87	14.79	PASS
4813.00†	4784.32	-414.51	-165.86	4754.54	4656.37	-433.52	-762.40	65.09	610.40	41.86	14.82	PASS
4913.00†	4883.47	-426.60	-170.70	4853.30	4752.28	-445.72	-782.58	65.13	626.08	42.86	14.84	PASS
5013.00†	4982.61	-438.70	-175.54	4952.06	4848.19	-457.91	-802.76	65.16	641.75	43.85	14.86	PASS
5113.00†	5081.76	-450.80	-180.38	5050.83	4944.10	-470.10	-822.94	65.20	657.43	44.85	14.88	PASS
5213.00†	5180.91	-462.90	-185.22	5149.59	5040.00	-482.30	-843.12	65.23	673.10	45.85	14.90	PASS
5313.00†	5280.06	-475.00	-190.06	5248.35	5135.91	-494.49	-863.30	65.26	688.78	46.85	14.91	PASS
5413.00†	5379.20	-487.10	-194.90	5347.12	5231.82	-506.68	-883.49	65.29	704.45	47.85	14.93	PASS
5513.00†	5478.35	-499.19	-199.74	5445.88	5327.73	-518.88	-903.67	65.32	720.13	48.85	14.94	PASS
5613.00†	5577.50	-511.29	-204.58	5544.64	5423.63	-531.07	-923.85	65.34	735.80	49.86	14.96	PASS
5713.00†	5676.65	-523.39	-209.42	5643.40	5519.54	-543.27	-944.03	65.37	751.48	50.86	14.97	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1NAH PWB Offset Wellpath: ACKARD NORTH 2-35-1NAH PWP (REV-A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#02 ACKARD NORTH 2-35-1NAH (600'FSL & 1950'FWL, SEC.02) Well: ACKARD NORTH 2-35-1NAH Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5775.79	-535.49	-214.27	5742.17	5615.45	-555.46	-964.21	65.39	767.16	51.86	14.98	PASS
5913.00†	5874.94	-547.59	-219.11	5840.93	5711.35	-567.65	-984.39	65.42	782.83	52.87	15.00	PASS
6013.00†	5974.09	-559.69	-223.95	5939.69	5807.26	-579.85	-1004.57	65.44	798.51	53.87	15.01	PASS
6113.00†	6073.24	-571.79	-228.79	6038.46	5903.17	-592.04	-1024.75	65.46	814.18	54.88	15.02	PASS
6213.00†	6172.38	-583.88	-233.63	6137.22	5999.08	-604.23	-1044.94	65.48	829.86	55.88	15.03	PASS
6313.00†	6271.53	-595.98	-238.47	6235.98	6094.98	-616.43	-1065.12	65.50	845.54	56.89	15.04	PASS
6413.00†	6370.68	-608.08	-243.31	6334.75	6190.89	-628.62	-1085.30	65.52	861.21	57.90	15.05	PASS
6513.00†	6469.82	-620.18	-248.15	6433.51	6286.80	-640.81	-1105.48	65.54	876.89	58.91	15.06	PASS
6613.00†	6568.97	-632.28	-252.99	6532.27	6382.70	-653.01	-1125.66	65.56	892.57	59.92	15.06	PASS
6713.00†	6668.12	-644.38	-257.83	6631.04	6478.61	-665.20	-1145.84	65.57	908.24	60.92	15.07	PASS
6813.00†	6767.27	-656.48	-262.68	6729.80	6574.52	-677.40	-1166.02	65.59	923.92	61.93	15.08	PASS
6913.00†	6866.41	-668.57	-267.52	6828.56	6670.43	-689.59	-1186.21	65.61	939.60	62.94	15.09	PASS
7013.00†	6965.56	-680.67	-272.36	6927.33	6766.33	-701.78	-1206.39	65.62	955.27	63.95	15.09	PASS
7113.00†	7064.71	-692.77	-277.20	7026.56	6862.75	-713.54	-1226.68	65.67	970.95	64.96	15.10	PASS
7213.00†	7163.86	-704.87	-282.04	7125.44	6959.37	-713.11	-1247.14	66.42	986.56	66.35	15.02	PASS
7251.04	7201.57	-709.47	-283.88	7161.49	6994.35	-708.72	-1254.59	66.94	992.58	77.60	12.90	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: ACKARD NORTH 2-35-1NAH PWB Offset Wellpath: ACKARD NORTH 2-35-1NAH PWP (REV-A.0)

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

HOLE & CASING SECTIONS - Offset Wellbore: ACKARD NORTH 2-35-1NAH PWB Offset Wellpath: ACKARD NORTH 2-35-1NAH PWP (REV-A.0)

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]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1787.28	-0.03	-27.42	-20.97	-62.07
8.5in Open Hole	1800.00	17683.47	15883.47	1787.28	7468.00	-20.97	-62.07	2915.97	-458.72



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

SURVEY PROGRAM - Offset Wellbore: ACKARD NORTH 2-35-1NAH PWB Offset Wellpath: ACKARD NORTH 2-35-1NAH PWP (REV-A.0)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	17683.47	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		ACKARD NORTH 2-35-1NAH PWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: ACKARD NORTH 2-35-1NAH PWB Offset Wellpath: ACKARD NORTH 2-35-1NAH PWP (REV-A.0)	
MD Reference: RIG (13'KB) (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	13.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: CHAMPLIN 117 AMOCO G#5 AWB Offset Wellpath: CHAMPLIN 117 AMOCO G#5 AWP

Facility: SEC.35-T01S-R66W Slot: SLOT#02 EX CHAMPLIN 117 AMOCO G #5 (1980'FNL & 660'FWL, SEC.35,8340,PR) Well: CHAMPLIN 117 AMOCO G#5 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	-13.00	47.00	7903.52	-1363.94	-9.79	8020.42	25.40	325.98	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: CHAMPLIN 117 AMOCO G#5 AWB Offset Wellpath: CHAMPLIN 117 AMOCO G#5 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: CHAMPLIN 117 AMOCO G#5 AWB Offset Wellpath: CHAMPLIN 117 AMOCO G#5 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8340.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8340>	CHAMPLIN 117 AMOCO G#5 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: CHAMPLIN 117 AMOCO G#5 AWB Offset Wellpath: CHAMPLIN 117 AMOCO G#5 AWP

MD Reference: Rig on SLOT#01 EX CHAMPLIN 117 AMOCO G #5 (1980'FNL & 660'FWL, SEC.35,8340,PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: CHAMPLIN 117 G#4 AWB Offset Wellpath: CHAMPLIN 117 G#4 AWP

Facility: SEC.35-T01S-R66W Slot: SLOT#04 EX CHAMPLIN 117 G#4 (660'FSL & 660'FWL, SEC.35,8350, PR) Well: CHAMPLIN 117 G#4 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	-13.00	40.00	5296.73	-1309.36	-13.89	5456.23	25.40	221.75	PASS
113.00†	113.00	0.00	0.00	60.00	113.00	5296.73	-1309.36	-13.89	5456.16	51.41	107.79	PASS
213.00†	213.00	0.00	0.00	160.00	213.00	5296.73	-1309.36	-13.89	5456.16	53.76	103.01	PASS
313.00†	313.00	0.00	0.00	260.00	313.00	5296.73	-1309.36	-13.89	5456.16	56.11	98.64	PASS
413.00†	413.00	0.00	0.00	360.00	413.00	5296.73	-1309.36	-13.89	5456.16	58.47	94.61	PASS
513.00†	513.00	0.00	0.00	460.00	513.00	5296.73	-1309.36	-13.89	5456.16	60.82	90.89	PASS
613.00†	613.00	0.00	0.00	560.00	613.00	5296.73	-1309.36	-13.89	5456.16	63.19	87.45	PASS
713.00†	713.00	0.00	0.00	660.00	713.00	5296.73	-1309.36	-13.89	5456.16	65.55	84.25	PASS
813.00†	813.00	0.00	0.00	760.00	813.00	5296.73	-1309.36	-13.89	5456.16	67.92	81.27	PASS
913.00†	913.00	0.00	0.00	860.00	913.00	5296.73	-1309.36	-13.89	5456.16	70.30	78.50	PASS
1013.00†	1013.00	0.00	0.00	960.00	1013.00	5296.73	-1309.36	-13.89	5456.16	72.68	75.90	PASS
1113.00†	1113.00	0.00	0.00	1060.00	1113.00	5296.73	-1309.36	-13.89	5456.16	75.06	73.46	PASS
1200.00	1200.00	0.00	0.00	1147.00	1200.00	5296.73	-1309.36	-13.89	5456.16	77.14	71.47	PASS
1213.00†	1213.00	-0.03	-0.01	1160.00	1213.00	5296.73	-1309.36	144.31	5456.19	77.45	71.18	PASS
1313.00†	1312.97	-2.07	-0.83	1259.97	1312.97	5296.73	-1309.36	144.30	5457.97	79.85	69.04	PASS
1413.00†	1412.80	-7.35	-2.94	1359.80	1412.80	5296.73	-1309.36	144.28	5462.59	82.28	67.04	PASS
1513.00†	1512.38	-15.86	-6.35	1459.38	1512.38	5296.73	-1309.36	144.25	5470.05	84.71	65.18	PASS
1574.38	1573.31	-22.68	-9.07	1520.31	1573.31	5296.73	-1309.36	144.22	5476.02	86.19	64.12	PASS
1613.00†	1611.61	-27.35	-10.94	1558.61	1611.61	5296.73	-1309.36	144.25	5480.12	87.12	63.48	PASS
1713.00†	1710.75	-39.45	-15.79	1657.75	1710.75	5296.73	-1309.36	144.33	5490.73	89.51	61.89	PASS
1813.00†	1809.90	-51.55	-20.63	1756.90	1809.90	5296.73	-1309.36	144.41	5501.35	91.82	60.38	PASS
1913.00†	1909.05	-63.65	-25.47	1856.05	1909.05	5296.73	-1309.36	144.49	5511.99	94.22	58.94	PASS
2013.00†	2008.20	-75.75	-30.31	1955.20	2008.20	5296.73	-1309.36	144.57	5522.63	96.63	57.57	PASS
2113.00†	2107.34	-87.84	-35.15	2054.34	2107.34	5296.73	-1309.36	144.65	5533.28	99.05	56.26	PASS
2213.00†	2206.49	-99.94	-39.99	2153.49	2206.49	5296.73	-1309.36	144.73	5543.95	101.47	55.01	PASS
2313.00†	2305.64	-112.04	-44.83	2252.64	2305.64	5296.73	-1309.36	144.80	5554.62	103.90	53.82	PASS
2413.00†	2404.78	-124.14	-49.67	2351.78	2404.78	5296.73	-1309.36	144.88	5565.30	106.33	52.68	PASS
2513.00†	2503.93	-136.24	-54.51	2450.93	2503.93	5296.73	-1309.36	144.96	5576.00	108.78	51.59	PASS
2613.00†	2603.08	-148.34	-59.35	2550.08	2603.08	5296.73	-1309.36	145.03	5586.70	111.22	50.55	PASS
2713.00†	2702.23	-160.44	-64.20	2649.23	2702.23	5296.73	-1309.36	145.11	5597.41	113.67	49.54	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: CHAMPLIN 117 G#4 AWB Offset Wellpath: CHAMPLIN 117 G#4 AWP

Facility: SEC.35-T01S-R66W Slot: SLOT#04 EX CHAMPLIN 117 G#4 (660'FSL & 660'FWL, SEC.35,8350, PR) Well: CHAMPLIN 117 G#4 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2801.37	-172.53	-69.04	2748.37	2801.37	5296.73	-1309.36	145.19	5608.14	116.13	48.58	PASS
2913.00†	2900.52	-184.63	-73.88	2847.52	2900.52	5296.73	-1309.36	145.26	5618.87	118.59	47.66	PASS
3013.00†	2999.67	-196.73	-78.72	2946.67	2999.67	5296.73	-1309.36	145.34	5629.61	121.06	46.77	PASS
3113.00†	3098.82	-208.83	-83.56	3045.82	3098.82	5296.73	-1309.36	145.41	5640.37	123.53	45.92	PASS
3213.00†	3197.96	-220.93	-88.40	3144.96	3197.96	5296.73	-1309.36	145.49	5651.13	126.01	45.10	PASS
3313.00†	3297.11	-233.03	-93.24	3244.11	3297.11	5296.73	-1309.36	145.56	5661.90	128.49	44.30	PASS
3413.00†	3396.26	-245.13	-98.08	3343.26	3396.26	5296.73	-1309.36	145.64	5672.68	130.98	43.54	PASS
3513.00†	3495.41	-257.22	-102.92	3442.41	3495.41	5296.73	-1309.36	145.71	5683.47	133.47	42.80	PASS
3613.00†	3594.55	-269.32	-107.76	3541.55	3594.55	5296.73	-1309.36	145.78	5694.27	135.97	42.09	PASS
3713.00†	3693.70	-281.42	-112.60	3640.70	3693.70	5296.73	-1309.36	145.86	5705.08	138.47	41.41	PASS
3813.00†	3792.85	-293.52	-117.45	3739.85	3792.85	5296.73	-1309.36	145.93	5715.90	140.97	40.75	PASS
3913.00†	3891.99	-305.62	-122.29	3838.99	3891.99	5296.73	-1309.36	146.00	5726.73	143.48	40.11	PASS
4013.00†	3991.14	-317.72	-127.13	3938.14	3991.14	5296.73	-1309.36	146.07	5737.56	145.99	39.49	PASS
4113.00†	4090.29	-329.82	-131.97	4037.29	4090.29	5296.73	-1309.36	146.15	5748.41	148.51	38.89	PASS
4213.00†	4189.44	-341.91	-136.81	4136.44	4189.44	5296.73	-1309.36	146.22	5759.27	151.03	38.31	PASS
4313.00†	4288.58	-354.01	-141.65	4235.58	4288.58	5296.73	-1309.36	146.29	5770.13	153.56	37.75	PASS
4413.00†	4387.73	-366.11	-146.49	4334.73	4387.73	5296.73	-1309.36	146.36	5781.00	156.09	37.20	PASS
4513.00†	4486.88	-378.21	-151.33	4433.88	4486.88	5296.73	-1309.36	146.43	5791.88	158.62	36.67	PASS
4613.00†	4586.03	-390.31	-156.17	4533.03	4586.03	5296.73	-1309.36	146.50	5802.77	161.16	36.16	PASS
4713.00†	4685.17	-402.41	-161.01	4632.17	4685.17	5296.73	-1309.36	146.57	5813.67	163.70	35.67	PASS
4813.00†	4784.32	-414.51	-165.86	4731.32	4784.32	5296.73	-1309.36	146.65	5824.58	166.24	35.18	PASS
4913.00†	4883.47	-426.60	-170.70	4830.47	4883.47	5296.73	-1309.36	146.72	5835.50	168.79	34.71	PASS
5013.00†	4982.61	-438.70	-175.54	4929.61	4982.61	5296.73	-1309.36	146.79	5846.43	171.34	34.26	PASS
5113.00†	5081.76	-450.80	-180.38	5028.76	5081.76	5296.73	-1309.36	146.85	5857.36	173.89	33.82	PASS
5213.00†	5180.91	-462.90	-185.22	5127.91	5180.91	5296.73	-1309.36	146.92	5868.30	176.44	33.39	PASS
5313.00†	5280.06	-475.00	-190.06	5227.06	5280.06	5296.73	-1309.36	146.99	5879.25	179.00	32.97	PASS
5413.00†	5379.20	-487.10	-194.90	5326.20	5379.20	5296.73	-1309.36	147.06	5890.21	181.57	32.56	PASS
5513.00†	5478.35	-499.19	-199.74	5425.35	5478.35	5296.73	-1309.36	147.13	5901.18	184.13	32.17	PASS
5613.00†	5577.50	-511.29	-204.58	5524.50	5577.50	5296.73	-1309.36	147.20	5912.16	186.70	31.78	PASS
5713.00†	5676.65	-523.39	-209.42	5623.65	5676.65	5296.73	-1309.36	147.27	5923.14	189.27	31.41	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: CHAMPLIN 117 G#4 AWB Offset Wellpath: CHAMPLIN 117 G#4 AWP

Facility: SEC.35-T01S-R66W Slot: SLOT#04 EX CHAMPLIN 117 G#4 (660'FSL & 660'FWL, SEC.35,8350, PR) Well: CHAMPLIN 117 G#4 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5775.79	-535.49	-214.27	5722.79	5775.79	5296.73	-1309.36	147.34	5934.14	191.84	31.04	PASS
5913.00†	5874.94	-547.59	-219.11	5821.94	5874.94	5296.73	-1309.36	147.40	5945.14	194.42	30.69	PASS
6013.00†	5974.09	-559.69	-223.95	5921.09	5974.09	5296.73	-1309.36	147.47	5956.15	196.99	30.34	PASS
6113.00†	6073.24	-571.79	-228.79	6020.24	6073.24	5296.73	-1309.36	147.54	5967.17	199.57	30.00	PASS
6213.00†	6172.38	-583.88	-233.63	6119.38	6172.38	5296.73	-1309.36	147.60	5978.19	202.16	29.67	PASS
6313.00†	6271.53	-595.98	-238.47	6218.53	6271.53	5296.73	-1309.36	147.67	5989.23	204.74	29.35	PASS
6413.00†	6370.68	-608.08	-243.31	6317.68	6370.68	5296.73	-1309.36	147.74	6000.27	207.33	29.04	PASS
6513.00†	6469.82	-620.18	-248.15	6416.82	6469.82	5296.73	-1309.36	147.80	6011.32	209.92	28.73	PASS
6613.00†	6568.97	-632.28	-252.99	6515.97	6568.97	5296.73	-1309.36	147.87	6022.38	212.51	28.43	PASS
6713.00†	6668.12	-644.38	-257.83	6615.12	6668.12	5296.73	-1309.36	147.94	6033.44	215.10	28.14	PASS
6813.00†	6767.27	-656.48	-262.68	6714.27	6767.27	5296.73	-1309.36	148.00	6044.52	217.70	27.85	PASS
6913.00†	6866.41	-668.57	-267.52	6813.41	6866.41	5296.73	-1309.36	148.07	6055.60	220.30	27.57	PASS
7013.00†	6965.56	-680.67	-272.36	6912.56	6965.56	5296.73	-1309.36	148.13	6066.69	222.89	27.30	PASS
7113.00†	7064.71	-692.77	-277.20	7011.71	7064.71	5296.73	-1309.36	148.20	6077.78	225.50	27.03	PASS
7213.00†	7163.86	-704.87	-282.04	7110.86	7163.86	5296.73	-1309.36	148.26	6088.89	228.10	26.77	PASS
7251.04	7201.57	-709.47	-283.88	7148.57	7201.57	5296.73	-1309.36	148.28	6093.11	229.09	26.68	PASS
7313.00†	7263.29	-713.63	-286.90	7210.29	7263.29	5296.73	-1309.36	95.34	6096.71	230.71	26.50	PASS
7413.00†	7362.77	-706.23	-291.81	7309.77	7362.77	5296.73	-1309.36	7.40	6088.59	233.49	26.15	PASS
7513.00†	7459.45	-681.66	-296.63	7406.45	7459.45	5296.73	-1309.36	-1.55	6063.55	236.65	25.70	PASS
7613.00†	7550.39	-640.64	-301.20	7497.39	7550.39	5296.73	-1309.36	-5.14	6022.35	239.66	25.20	PASS
7713.00†	7632.84	-584.44	-305.40	7579.84	7632.84	5296.73	-1309.36	-7.87	5966.24	242.27	24.70	PASS
7813.00†	7704.29	-514.75	-309.10	7651.29	7704.29	5296.73	-1309.36	-10.96	5896.93	244.41	24.19	PASS
7913.00†	7762.57	-433.70	-312.17	7709.57	7762.57	5296.73	-1309.36	-15.48	5816.54	246.03	23.71	PASS
8013.00†	7805.90	-343.74	-314.54	7752.90	7805.90	5296.73	-1309.36	-23.60	5727.53	247.13	23.24	PASS
8113.00†	7832.97	-247.62	-316.12	7779.97	7832.97	5296.73	-1309.36	-41.86	5632.61	247.72	22.80	PASS
8213.00†	7842.95	-148.25	-316.87	7789.95	7842.95	5296.73	-1309.36	-85.85	5534.69	247.82	22.39	PASS
8220.45	7843.00	-140.80	-316.89	7790.00	7843.00	5296.73	-1309.36	-90.00	5527.36	247.82	22.37	PASS
8313.00†	7843.00	-48.25	-317.13	7790.00	7843.00	5296.73	-1309.36	-90.00	5436.30	247.67	22.01	PASS
8413.00†	7843.00	51.75	-317.40	7790.00	7843.00	5296.73	-1309.36	-90.00	5337.96	247.52	21.62	PASS
8513.00†	7843.00	151.75	-317.66	7790.00	7843.00	5296.73	-1309.36	-90.00	5239.68	247.38	21.24	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: CHAMPLIN 117 G#4 AWB Offset Wellpath: CHAMPLIN 117 G#4 AWP												
Facility: SEC.35-T01S-R66W Slot: SLOT#04 EX CHAMPLIN 117 G#4 (660'FSL & 660'FWL, SEC.35,8350, PR) Well: CHAMPLIN 117 G#4 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASH [ft]	Sep Ratio	ACR Status
8613.00†	7843.00	251.75	-317.92	7790.00	7843.00	5296.73	-1309.36	-90.00	5141.48	247.24	20.85	PASS
8713.00†	7843.00	351.75	-318.18	7790.00	7843.00	5296.73	-1309.36	-90.00	5043.34	247.10	20.47	PASS
8813.00†	7843.00	451.74	-318.44	7790.00	7843.00	5296.73	-1309.36	-90.00	4945.28	246.97	20.08	PASS
8913.00†	7843.00	551.74	-318.70	7790.00	7843.00	5296.73	-1309.36	-90.00	4847.29	246.85	19.69	PASS
9013.00†	7843.00	651.74	-318.97	7790.00	7843.00	5296.73	-1309.36	-90.00	4749.39	246.74	19.30	PASS
9113.00†	7843.00	751.74	-319.23	7790.00	7843.00	5296.73	-1309.36	-90.00	4651.58	246.64	18.91	PASS
9213.00†	7843.00	851.74	-319.49	7790.00	7843.00	5296.73	-1309.36	-90.00	4553.87	246.55	18.52	PASS
9313.00†	7843.00	951.74	-319.75	7790.00	7843.00	5296.73	-1309.36	-90.00	4456.25	246.47	18.13	PASS
9413.00†	7843.00	1051.74	-320.01	7790.00	7843.00	5296.73	-1309.36	-90.00	4358.75	246.41	17.74	PASS
9513.00†	7843.00	1151.74	-320.28	7790.00	7843.00	5296.73	-1309.36	-90.00	4261.36	246.37	17.34	PASS
9613.00†	7843.00	1251.74	-320.54	7790.00	7843.00	5296.73	-1309.36	-90.00	4164.09	246.35	16.95	PASS
9713.00†	7843.00	1351.74	-320.80	7790.00	7843.00	5296.73	-1309.36	-90.00	4066.96	246.35	16.55	PASS
9813.00†	7843.00	1451.74	-321.06	7790.00	7843.00	5296.73	-1309.36	-90.00	3969.97	246.38	16.16	PASS
9913.00†	7843.00	1551.74	-321.32	7790.00	7843.00	5296.73	-1309.36	-90.00	3873.13	246.44	15.76	PASS
10013.00†	7843.00	1651.74	-321.58	7790.00	7843.00	5296.73	-1309.36	-90.00	3776.46	246.54	15.36	PASS
10113.00†	7843.00	1751.74	-321.85	7790.00	7843.00	5296.73	-1309.36	-90.00	3679.96	246.68	14.96	PASS
10213.00†	7843.00	1851.74	-322.11	7790.00	7843.00	5296.73	-1309.36	-90.00	3583.66	246.86	14.56	PASS
10313.00†	7843.00	1951.74	-322.37	7790.00	7843.00	5296.73	-1309.36	-90.00	3487.56	247.10	14.15	PASS
10413.00†	7843.00	2051.74	-322.63	7790.00	7843.00	5296.73	-1309.36	-90.00	3391.69	247.40	13.75	PASS
10513.00†	7843.00	2151.74	-322.89	7790.00	7843.00	5296.73	-1309.36	-90.00	3296.07	247.77	13.34	PASS
10613.00†	7843.00	2251.74	-323.15	7790.00	7843.00	5296.73	-1309.36	-90.00	3200.71	248.21	12.93	PASS
10713.00†	7843.00	2351.74	-323.42	7790.00	7843.00	5296.73	-1309.36	-90.00	3105.65	248.74	12.52	PASS
10813.00†	7843.00	2451.74	-323.68	7790.00	7843.00	5296.73	-1309.36	-90.00	3010.90	249.37	12.11	PASS
10913.00†	7843.00	2551.74	-323.94	7790.00	7843.00	5296.73	-1309.36	-90.00	2916.51	250.11	11.69	PASS
11013.00†	7843.00	2651.74	-324.20	7790.00	7843.00	5296.73	-1309.36	-90.00	2822.50	250.98	11.28	PASS
11113.00†	7843.00	2751.74	-324.46	7790.00	7843.00	5296.73	-1309.36	-90.00	2728.92	251.98	10.86	PASS
11213.00†	7843.00	2851.74	-324.72	7790.00	7843.00	5296.73	-1309.36	-90.00	2635.81	253.14	10.44	PASS
11313.00†	7843.00	2951.74	-324.99	7790.00	7843.00	5296.73	-1309.36	-90.00	2543.22	254.47	10.02	PASS
11413.00†	7843.00	3051.74	-325.25	7790.00	7843.00	5296.73	-1309.36	-90.00	2451.21	256.00	9.60	PASS
11513.00†	7843.00	3151.74	-325.51	7790.00	7843.00	5296.73	-1309.36	-90.00	2359.86	257.75	9.18	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: CHAMPLIN 117 G#4 AWB Offset Wellpath: CHAMPLIN 117 G#4 AWP

Facility: SEC.35-T01S-R66W Slot: SLOT#04 EX CHAMPLIN 117 G#4 (660'FSL & 660'FWL, SEC.35,8350, PR) Well: CHAMPLIN 117 G#4 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11613.00†	7843.00	3251.74	-325.77	7790.00	7843.00	5296.73	-1309.36	-90.00	2269.24	259.73	8.76	PASS
11713.00†	7843.00	3351.74	-326.03	7790.00	7843.00	5296.73	-1309.36	-90.00	2179.43	261.98	8.34	PASS
11813.00†	7843.00	3451.73	-326.30	7790.00	7843.00	5296.73	-1309.36	-90.00	2090.55	264.53	7.92	PASS
11913.00†	7843.00	3551.73	-326.56	7790.00	7843.00	5296.73	-1309.36	-90.00	2002.72	267.39	7.51	PASS
12013.00†	7843.00	3651.73	-326.82	7790.00	7843.00	5296.73	-1309.36	-90.00	1916.09	270.62	7.10	PASS
12113.00†	7843.00	3751.73	-327.08	7790.00	7843.00	5296.73	-1309.36	-90.00	1830.81	274.24	6.69	PASS
12213.00†	7843.00	3851.73	-327.34	7790.00	7843.00	5296.73	-1309.36	-90.00	1747.10	278.29	6.29	PASS
12313.00†	7843.00	3951.73	-327.60	7790.00	7843.00	5296.73	-1309.36	-90.00	1665.19	282.80	5.90	PASS
12413.00†	7843.00	4051.73	-327.87	7790.00	7843.00	5296.73	-1309.36	-90.00	1585.35	287.82	5.52	PASS
12513.00†	7843.00	4151.73	-328.13	7790.00	7843.00	5296.73	-1309.36	-90.00	1507.92	293.38	5.15	PASS
12613.00†	7843.00	4251.73	-328.39	7790.00	7843.00	5296.73	-1309.36	-90.00	1433.29	299.51	4.79	PASS
12713.00†	7843.00	4351.73	-328.65	7790.00	7843.00	5296.73	-1309.36	-90.00	1361.91	306.22	4.46	PASS
12813.00†	7843.00	4451.73	-328.91	7790.00	7843.00	5296.73	-1309.36	-90.00	1294.33	313.50	4.14	PASS
12913.00†	7843.00	4551.73	-329.17	7790.00	7843.00	5296.73	-1309.36	-90.00	1231.17	321.33	3.84	PASS
13013.00†	7843.00	4651.73	-329.44	7790.00	7843.00	5296.73	-1309.36	-90.00	1173.14	329.60	3.56	PASS
13113.00†	7843.00	4751.73	-329.70	7790.00	7843.00	5296.73	-1309.36	-90.00	1121.05	338.18	3.32	PASS
13213.00†	7843.00	4851.73	-329.96	7790.00	7843.00	5296.73	-1309.36	-90.00	1075.75	346.85	3.11	PASS
13313.00†	7843.00	4951.73	-330.22	7790.00	7843.00	5296.73	-1309.36	-90.00	1038.14	355.31	2.93	PASS
13413.00†	7843.00	5051.73	-330.48	7790.00	7843.00	5296.73	-1309.36	-90.00	1009.07	363.22	2.78	PASS
13513.00†	7843.00	5151.73	-330.74	7790.00	7843.00	5296.73	-1309.36	-90.00	989.30	370.17	2.68	PASS
13613.00†	7843.00	5251.73	-331.01	7790.00	7843.00	5296.73	-1309.36	-90.00	979.38	375.82	2.61	PASS
13658.98†	7843.00	5297.71	-331.13	7788.17	7841.17	5296.73	-1309.36	-89.89	978.23	377.86	2.59	PASS
13713.00†	7843.00	5351.73	-331.27	7790.00	7843.00	5296.73	-1309.36	-90.00	979.63	379.89	2.58	PASS
13733.30†	7843.00	5372.03	-331.32	7790.00	7843.00	5296.73	-1309.36	-90.00	980.93	380.51	2.58	PASS
13813.00†	7843.00	5451.73	-331.53	7790.00	7843.00	5296.73	-1309.36	-90.00	990.04	382.25	2.59	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

POSITIONAL UNCERTAINTY - Offset Wellbore: CHAMPLIN 117 G#4 AWB Offset Wellpath: CHAMPLIN 117 G#4 AWP			
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical 1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical 3.000ft

WELLPATH COMPOSITION - Offset Wellbore: CHAMPLIN 117 G#4 AWB Offset Wellpath: CHAMPLIN 117 G#4 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8350.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8350>	CHAMPLIN 117 G#4 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: CHAMPLIN 117 G#4 AWB Offset Wellpath: CHAMPLIN 117 G#4 AWP	
MD Reference: Rig on SLOT#04 EX CHAMPLIN 117 G#4 (660'FSL & 660'FWL, SEC.35,8350, PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-3NBH PWB Offset Wellpath: ACKARD NORTH 2-35-3NBH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#10 ACKARD NORTH 2-35-3NBH (600'FSL & 2070'FWL, SEC.02) Well: ACKARD NORTH 2-35-3NBH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	13.00	13.00	0.20	75.00	89.85	75.00	1.40	123.66	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.20	75.00	89.85	75.00	1.72	80.95	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.20	75.00	89.85	75.00	2.28	50.08	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.20	75.00	89.85	75.00	2.89	35.61	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.20	75.00	89.85	75.00	3.50	27.51	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.20	75.00	89.85	75.00	4.12	22.37	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.20	75.00	89.85	75.00	4.74	18.84	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.20	75.00	89.85	75.00	5.36	16.26	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.20	75.00	89.85	75.00	5.99	14.30	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.20	75.00	89.85	75.00	6.61	12.76	PASS
1013.00†	1013.00	0.00	0.00	1013.00	1013.00	0.20	75.00	89.85	75.00	7.24	11.52	PASS
1113.00†	1113.00	0.00	0.00	1113.00	1113.00	0.20	75.00	89.85	75.00	7.87	10.50	PASS
1200.00	1200.00	0.00	0.00	1200.00	1200.00	0.20	75.00	89.85	75.00	8.41	9.75	PASS
1213.00†	1213.00	-0.03	-0.01	1213.00	1213.00	0.20	75.00	-111.98	75.01	8.49	9.65	PASS
1313.00†	1312.97	-2.07	-0.83	1312.97	1312.97	0.20	75.00	-113.51	75.86	9.13	9.01	PASS
1413.00†	1412.80	-7.35	-2.94	1412.80	1412.80	0.20	75.00	-117.28	78.30	9.84	8.57	PASS
1513.00†	1512.38	-15.86	-6.35	1512.13	1512.13	0.19	75.02	-122.79	82.93	10.61	8.38	PASS
1574.38	1573.31	-22.68	-9.07	1571.90	1571.89	-0.32	75.73	-126.25	87.72	11.10	8.44	PASS
1613.00†	1611.61	-27.35	-10.94	1609.47	1609.44	-1.00	76.71	-128.16	91.55	11.39	8.57	PASS
1713.00†	1710.75	-39.45	-15.79	1706.67	1706.49	-4.08	81.09	-131.39	103.22	12.16	9.02	PASS
1813.00†	1809.90	-51.55	-20.63	1803.60	1803.03	-9.04	88.15	-132.58	116.99	12.80	9.62	PASS
1913.00†	1909.05	-63.65	-25.47	1900.03	1898.74	-15.83	97.81	-132.33	132.63	13.56	10.27	PASS
2013.00†	2008.20	-75.75	-30.31	1995.76	1993.29	-24.40	110.00	-131.10	150.15	14.34	10.96	PASS
2113.00†	2107.34	-87.84	-35.15	2090.57	2086.40	-34.68	124.62	-129.25	169.68	15.16	11.69	PASS
2213.00†	2206.49	-99.94	-39.99	2184.73	2178.23	-46.62	141.61	-127.04	191.37	16.01	12.46	PASS
2313.00†	2305.64	-112.04	-44.83	2281.84	2272.67	-59.63	160.13	-124.96	214.11	16.87	13.20	PASS
2413.00†	2404.78	-124.14	-49.67	2378.96	2367.12	-72.64	178.64	-123.28	237.06	17.75	13.87	PASS
2513.00†	2503.93	-136.24	-54.51	2476.07	2461.56	-85.66	197.16	-121.90	260.18	18.70	14.42	PASS
2613.00†	2603.08	-148.34	-59.35	2573.19	2556.00	-98.67	215.68	-120.74	283.42	19.54	15.01	PASS
2713.00†	2702.23	-160.44	-64.20	2670.31	2650.44	-111.68	234.20	-119.76	306.75	20.45	15.50	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-3NBH PWB Offset Wellpath: ACKARD NORTH 2-35-3NBH PWP (REV. A.0)												
Facility: SEC.02-T03S-R66W Slot: SLOT#10 ACKARD NORTH 2-35-3NBH (600'FSL & 2070'FWL, SEC.02) Well: ACKARD NORTH 2-35-3NBH Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2801.37	-172.53	-69.04	2767.42	2744.88	-124.70	252.71	-118.91	330.15	21.38	15.94	PASS
2913.00†	2900.52	-184.63	-73.88	2864.54	2839.32	-137.71	271.23	-118.18	353.62	22.31	16.34	PASS
3013.00†	2999.67	-196.73	-78.72	2961.65	2933.76	-150.73	289.75	-117.54	377.13	23.25	16.70	PASS
3113.00†	3098.82	-208.83	-83.56	3058.77	3028.21	-163.74	308.26	-116.97	400.68	24.20	17.03	PASS
3213.00†	3197.96	-220.93	-88.40	3155.88	3122.65	-176.75	326.78	-116.47	424.26	25.15	17.33	PASS
3313.00†	3297.11	-233.03	-93.24	3253.00	3217.09	-189.77	345.30	-116.02	447.87	26.11	17.61	PASS
3413.00†	3396.26	-245.13	-98.08	3350.12	3311.53	-202.78	363.81	-115.62	471.51	27.07	17.86	PASS
3513.00†	3495.41	-257.22	-102.92	3447.23	3405.97	-215.79	382.33	-115.25	495.16	28.04	18.09	PASS
3613.00†	3594.55	-269.32	-107.76	3544.35	3500.41	-228.81	400.85	-114.92	518.83	29.01	18.31	PASS
3713.00†	3693.70	-281.42	-112.60	3641.46	3594.86	-241.82	419.36	-114.61	542.52	29.98	18.51	PASS
3813.00†	3792.85	-293.52	-117.45	3738.58	3689.30	-254.83	437.88	-114.33	566.22	30.96	18.70	PASS
3913.00†	3891.99	-305.62	-122.29	3835.69	3783.74	-267.85	456.40	-114.08	589.93	31.94	18.87	PASS
4013.00†	3991.14	-317.72	-127.13	3932.81	3878.18	-280.86	474.91	-113.84	613.66	32.92	19.03	PASS
4113.00†	4090.29	-329.82	-131.97	4029.92	3972.62	-293.88	493.43	-113.62	637.39	33.90	19.18	PASS
4213.00†	4189.44	-341.91	-136.81	4127.04	4067.06	-306.89	511.95	-113.42	661.13	34.89	19.32	PASS
4313.00†	4288.58	-354.01	-141.65	4224.16	4161.50	-319.90	530.46	-113.23	684.87	35.88	19.45	PASS
4413.00†	4387.73	-366.11	-146.49	4321.27	4255.95	-332.92	548.98	-113.05	708.63	36.87	19.58	PASS
4513.00†	4486.88	-378.21	-151.33	4418.39	4350.39	-345.93	567.50	-112.89	732.39	37.86	19.69	PASS
4613.00†	4586.03	-390.31	-156.17	4515.50	4444.83	-358.94	586.01	-112.73	756.15	38.85	19.80	PASS
4713.00†	4685.17	-402.41	-161.01	4612.62	4539.27	-371.96	604.53	-112.59	779.92	39.85	19.91	PASS
4813.00†	4784.32	-414.51	-165.86	4709.73	4633.71	-384.97	623.05	-112.45	803.69	40.85	20.01	PASS
4913.00†	4883.47	-426.60	-170.70	4806.85	4728.15	-397.98	641.57	-112.32	827.47	41.84	20.10	PASS
5013.00†	4982.61	-438.70	-175.54	4903.96	4822.60	-411.00	660.08	-112.20	851.25	42.84	20.19	PASS
5113.00†	5081.76	-450.80	-180.38	5001.08	4917.04	-424.01	678.60	-112.09	875.04	43.84	20.27	PASS
5213.00†	5180.91	-462.90	-185.22	5098.20	5011.48	-437.03	697.12	-111.98	898.83	44.84	20.35	PASS
5313.00†	5280.06	-475.00	-190.06	5195.31	5105.92	-450.04	715.63	-111.88	922.62	45.85	20.42	PASS
5413.00†	5379.20	-487.10	-194.90	5292.43	5200.36	-463.05	734.15	-111.78	946.41	46.85	20.50	PASS
5513.00†	5478.35	-499.19	-199.74	5389.54	5294.80	-476.07	752.67	-111.68	970.21	47.85	20.56	PASS
5613.00†	5577.50	-511.29	-204.58	5486.66	5389.24	-489.08	771.18	-111.59	994.01	48.86	20.63	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

POSITIONAL UNCERTAINTY - Offset Wellbore: ACKARD NORTH 2-35-3NBH PWB Offset Wellpath: ACKARD NORTH 2-35-3NBH PWP (REV. A.0)			
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical 1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical 3.000ft

HOLE & CASING SECTIONS - Offset Wellbore: ACKARD NORTH 2-35-3NBH PWB Offset Wellpath: ACKARD NORTH 2-35-3NBH PWP (REV. A.0)									
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]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1799.45	0.12	45.72	-2.63	49.63
8.5in Open Hole	1800.00	17798.06	15998.06	1799.45	7591.00	-2.63	49.63	2922.87	386.42

SURVEY PROGRAM - Offset Wellbore: ACKARD NORTH 2-35-3NBH PWB Offset Wellpath: ACKARD NORTH 2-35-3NBH PWP (REV. A.0)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	17798.06	Custom BHI NaviTrak (Standard Rotating) (Rockies 0.03Gt model)		ACKARD NORTH 2-35-3NBH PWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: ACKARD NORTH 2-35-3NBH PWB Offset Wellpath: ACKARD NORTH 2-35-3NBH PWP (REV. A.0)	
MD Reference: RIG (13'KB) (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	13.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-3NAH PWB Offset Wellpath: ACKARD NORTH 2-35-3NAH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#11 ACKARD NORTH 2-35-3NAH (600'FSL & 2085'FWL, SEC.02) Well: ACKARD NORTH 2-35-3NAH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	13.00	13.00	0.26	89.95	89.84	89.95	1.40	148.58	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.26	89.95	89.84	89.95	1.72	97.26	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.26	89.95	89.84	89.95	2.28	60.17	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.26	89.95	89.84	89.95	2.89	42.79	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.26	89.95	89.84	89.95	3.50	33.05	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.26	89.95	89.84	89.95	4.12	26.88	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.26	89.95	89.84	89.95	4.74	22.64	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.26	89.95	89.84	89.95	5.36	19.54	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.26	89.95	89.84	89.95	5.99	17.19	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.26	89.95	89.84	89.95	6.61	15.34	PASS
1013.00†	1013.00	0.00	0.00	1013.00	1013.00	0.26	89.95	89.84	89.95	7.24	13.85	PASS
1113.00†	1113.00	0.00	0.00	1113.00	1113.00	0.26	89.95	89.84	89.95	7.87	12.62	PASS
1200.00	1200.00	0.00	0.00	1200.00	1200.00	0.26	89.95	89.84	89.95	8.41	11.71	PASS
1213.00†	1213.00	-0.03	-0.01	1213.00	1213.00	0.26	89.95	-111.99	89.96	8.49	11.59	PASS
1313.00†	1312.97	-2.07	-0.83	1312.97	1312.97	0.26	89.95	-113.26	90.81	9.13	10.80	PASS
1413.00†	1412.80	-7.35	-2.94	1412.47	1412.47	0.24	89.97	-116.40	93.22	9.84	10.23	PASS
1513.00†	1512.38	-15.86	-6.35	1509.47	1509.44	-0.81	91.75	-120.22	99.29	10.62	10.03	PASS
1574.38	1573.31	-22.68	-9.07	1568.78	1568.68	-2.28	94.23	-122.48	105.40	11.18	10.07	PASS
1613.00†	1611.61	-27.35	-10.94	1606.01	1605.83	-3.52	96.32	-123.78	110.03	11.50	10.21	PASS
1713.00†	1710.75	-39.45	-15.79	1702.14	1701.58	-7.86	103.65	-125.94	123.88	12.27	10.73	PASS
1813.00†	1809.90	-51.55	-20.63	1797.72	1796.45	-13.79	113.66	-126.70	140.15	13.01	11.37	PASS
1913.00†	1909.05	-63.65	-25.47	1892.55	1890.13	-21.27	126.29	-126.45	158.69	13.76	12.11	PASS
2013.00†	2008.20	-75.75	-30.31	1986.43	1982.34	-30.23	141.41	-125.53	179.52	14.59	12.88	PASS
2113.00†	2107.34	-87.84	-35.15	2079.17	2072.83	-40.59	158.89	-124.19	202.67	15.42	13.73	PASS
2213.00†	2206.49	-99.94	-39.99	2170.78	2161.52	-52.28	178.62	-122.61	228.22	16.27	14.62	PASS
2313.00†	2305.64	-112.04	-44.83	2266.92	2254.23	-65.25	200.52	-121.06	255.01	17.13	15.49	PASS
2413.00†	2404.78	-124.14	-49.67	2363.06	2346.93	-78.23	222.42	-119.81	281.94	18.08	16.19	PASS
2513.00†	2503.93	-136.24	-54.51	2459.20	2439.64	-91.20	244.32	-118.77	308.97	18.88	16.96	PASS
2613.00†	2603.08	-148.34	-59.35	2555.34	2532.35	-104.17	266.22	-117.90	336.09	19.78	17.59	PASS
2713.00†	2702.23	-160.44	-64.20	2651.48	2625.06	-117.15	288.12	-117.16	363.26	20.69	18.14	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-3NAH PWB Offset Wellpath: ACKARD NORTH 2-35-3NAH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#11 ACKARD NORTH 2-35-3NAH (600'FSL & 2085'FWL, SEC.02) Well: ACKARD NORTH 2-35-3NAH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2801.37	-172.53	-69.04	2747.62	2717.77	-130.12	310.02	-116.52	390.48	21.61	18.65	PASS
2913.00†	2900.52	-184.63	-73.88	2843.76	2810.47	-143.10	331.92	-115.97	417.74	22.54	19.10	PASS
3013.00†	2999.67	-196.73	-78.72	2939.89	2903.18	-156.07	353.82	-115.48	445.03	23.48	19.51	PASS
3113.00†	3098.82	-208.83	-83.56	3036.03	2995.89	-169.05	375.72	-115.05	472.35	24.43	19.88	PASS
3213.00†	3197.96	-220.93	-88.40	3132.17	3088.60	-182.02	397.62	-114.67	499.69	25.38	20.22	PASS
3313.00†	3297.11	-233.03	-93.24	3228.31	3181.30	-195.00	419.52	-114.32	527.05	26.34	20.53	PASS
3413.00†	3396.26	-245.13	-98.08	3324.45	3274.01	-207.97	441.42	-114.01	554.43	27.31	20.82	PASS
3513.00†	3495.41	-257.22	-102.92	3420.59	3366.72	-220.94	463.32	-113.73	581.82	28.28	21.08	PASS
3613.00†	3594.55	-269.32	-107.76	3516.73	3459.43	-233.92	485.22	-113.48	609.22	29.25	21.32	PASS
3713.00†	3693.70	-281.42	-112.60	3612.87	3552.14	-246.89	507.12	-113.24	636.63	30.23	21.54	PASS
3813.00†	3792.85	-293.52	-117.45	3709.01	3644.84	-259.87	529.02	-113.03	664.05	31.21	21.75	PASS
3913.00†	3891.99	-305.62	-122.29	3805.14	3737.55	-272.84	550.92	-112.83	691.48	32.19	21.94	PASS
4013.00†	3991.14	-317.72	-127.13	3901.28	3830.26	-285.82	572.82	-112.65	718.91	33.18	22.12	PASS
4113.00†	4090.29	-329.82	-131.97	3997.42	3922.97	-298.79	594.72	-112.48	746.35	34.17	22.28	PASS
4213.00†	4189.44	-341.91	-136.81	4093.56	4015.67	-311.76	616.62	-112.32	773.80	35.16	22.44	PASS
4313.00†	4288.58	-354.01	-141.65	4189.70	4108.38	-324.74	638.52	-112.18	801.25	36.16	22.58	PASS
4413.00†	4387.73	-366.11	-146.49	4285.84	4201.09	-337.71	660.43	-112.04	828.71	37.15	22.72	PASS
4513.00†	4486.88	-378.21	-151.33	4381.98	4293.80	-350.69	682.33	-111.91	856.17	38.15	22.85	PASS
4613.00†	4586.03	-390.31	-156.17	4478.12	4386.51	-363.66	704.23	-111.79	883.63	39.15	22.97	PASS
4713.00†	4685.17	-402.41	-161.01	4574.26	4479.21	-376.64	726.13	-111.68	911.10	40.16	23.08	PASS
4813.00†	4784.32	-414.51	-165.86	4670.39	4571.92	-389.61	748.03	-111.58	938.57	41.16	23.18	PASS
4913.00†	4883.47	-426.60	-170.70	4766.53	4664.63	-402.59	769.93	-111.48	966.04	42.16	23.29	PASS
5013.00†	4982.61	-438.70	-175.54	4862.67	4757.34	-415.56	791.83	-111.38	993.52	43.17	23.38	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: ACKARD NORTH 2-35-3NAH PWB Offset Wellpath: ACKARD NORTH 2-35-3NAH PWP (REV. A.0)

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

HOLE & CASING SECTIONS - Offset Wellbore: ACKARD NORTH 2-35-3NAH PWB Offset Wellpath: ACKARD NORTH 2-35-3NAH PWP (REV. A.0)									
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]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1798.70	0.16	54.83	-4.18	62.14
8.5in Open Hole	1800.00	17693.67	15893.67	1798.70	7440.00	-4.18	62.14	2923.59	484.22

SURVEY PROGRAM - Offset Wellbore: ACKARD NORTH 2-35-3NAH PWB Offset Wellpath: ACKARD NORTH 2-35-3NAH PWP (REV. A.0)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	17693.71	Custom BHI NaviTrak (Standard Rotating) (Rockies 0.03Gt model)		ACKARD NORTH 2-35-3NAH PWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: ACKARD NORTH 2-35-3NAH PWB Offset Wellpath: ACKARD NORTH 2-35-3NAH PWP (REV. A.0)	
MD Reference: RIG (13'KB) (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	13.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-3CDH PWB Offset Wellpath: ACKARD NORTH 2-35-3CDH PWP (REV. A.0)												
Facility: SEC.02-T03S-R66W				Slot: SLOT#12 ACKARD NORTH 2-35-3CDH (600'FSL & 2100'FWL, SEC.02)				Well: ACKARD NORTH 2-35-3CDH		Threshold Value=1.00 † = interpolated/extrapolated station		
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	13.00	13.00	0.31	104.96	89.83	104.96	1.40	173.60	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.31	104.96	89.83	104.96	1.72	113.64	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.31	104.96	89.83	104.96	2.28	70.30	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.31	104.96	89.83	104.96	2.89	50.00	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.31	104.96	89.83	104.96	3.50	38.62	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.31	104.96	89.83	104.96	4.12	31.41	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.31	104.96	89.83	104.96	4.74	26.45	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.31	104.96	89.83	104.96	5.36	22.83	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.31	104.96	89.83	104.96	5.99	20.08	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.31	104.96	89.83	104.96	6.61	17.92	PASS
1013.00†	1013.00	0.00	0.00	1013.00	1013.00	0.31	104.96	89.83	104.96	7.24	16.18	PASS
1113.00†	1113.00	0.00	0.00	1113.00	1113.00	0.31	104.96	89.83	104.96	7.87	14.74	PASS
1200.00	1200.00	0.00	0.00	1200.00	1200.00	0.31	104.96	89.83	104.96	8.41	13.69	PASS
1213.00†	1213.00	-0.03	-0.01	1213.00	1213.00	0.31	104.96	-111.99	104.97	8.49	13.54	PASS
1313.00†	1312.97	-2.07	-0.83	1312.56	1312.56	0.30	104.99	-113.07	105.84	9.13	12.61	PASS
1413.00†	1412.80	-7.35	-2.94	1409.24	1409.21	-0.65	106.81	-115.11	110.01	9.88	12.03	PASS
1513.00†	1512.38	-15.86	-6.35	1505.47	1505.30	-3.10	111.49	-117.52	118.74	10.79	11.80	PASS
1574.38	1573.31	-22.68	-9.07	1564.19	1563.82	-5.32	115.75	-119.02	126.39	11.29	11.97	PASS
1613.00†	1611.61	-27.35	-10.94	1601.01	1600.45	-7.00	118.97	-119.95	131.97	11.65	12.10	PASS
1713.00†	1710.75	-39.45	-15.79	1695.88	1694.62	-12.32	129.17	-121.49	148.36	12.47	12.65	PASS
1813.00†	1809.90	-51.55	-20.63	1789.98	1787.59	-19.02	142.02	-122.04	167.36	13.21	13.38	PASS
1913.00†	1909.05	-63.65	-25.47	1883.10	1879.08	-27.04	157.39	-121.88	188.88	14.00	14.16	PASS
2013.00†	2008.20	-75.75	-30.31	1975.07	1968.84	-36.31	175.15	-121.25	212.88	14.81	15.05	PASS
2113.00†	2107.34	-87.84	-35.15	2065.72	2056.63	-46.74	195.15	-120.31	239.37	15.64	15.99	PASS
2213.00†	2206.49	-99.94	-39.99	2161.20	2148.67	-58.49	217.69	-119.28	267.32	16.46	16.92	PASS
2313.00†	2305.64	-112.04	-44.83	2257.12	2241.12	-70.31	240.33	-118.45	295.33	17.38	17.67	PASS
2413.00†	2404.78	-124.14	-49.67	2353.03	2333.57	-82.12	262.98	-117.76	323.40	18.15	18.50	PASS
2513.00†	2503.93	-136.24	-54.51	2448.95	2426.03	-93.93	285.62	-117.18	351.50	19.02	19.16	PASS
2613.00†	2603.08	-148.34	-59.35	2544.86	2518.48	-105.75	308.27	-116.68	379.63	19.90	19.74	PASS
2713.00†	2702.23	-160.44	-64.20	2640.77	2610.93	-117.56	330.91	-116.26	407.78	20.80	20.26	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-3CDH PWB Offset Wellpath: ACKARD NORTH 2-35-3CDH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#12 ACKARD NORTH 2-35-3CDH (600'FSL & 2100'FWL, SEC.02) Well: ACKARD NORTH 2-35-3CDH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2801.37	-172.53	-69.04	2736.69	2703.38	-129.37	353.56	-115.89	435.95	21.71	20.72	PASS
2913.00†	2900.52	-184.63	-73.88	2832.60	2795.83	-141.18	376.20	-115.56	464.13	22.63	21.14	PASS
3013.00†	2999.67	-196.73	-78.72	2928.52	2888.28	-153.00	398.85	-115.27	492.33	23.56	21.51	PASS
3113.00†	3098.82	-208.83	-83.56	3024.43	2980.74	-164.81	421.49	-115.01	520.53	24.50	21.85	PASS
3213.00†	3197.96	-220.93	-88.40	3120.35	3073.19	-176.62	444.14	-114.78	548.75	25.44	22.16	PASS
3313.00†	3297.11	-233.03	-93.24	3216.26	3165.64	-188.44	466.78	-114.57	576.97	26.39	22.44	PASS
3413.00†	3396.26	-245.13	-98.08	3312.18	3258.09	-200.25	489.43	-114.39	605.20	27.34	22.70	PASS
3513.00†	3495.41	-257.22	-102.92	3408.09	3350.54	-212.06	512.07	-114.21	633.44	28.30	22.93	PASS
3613.00†	3594.55	-269.32	-107.76	3504.01	3442.99	-223.87	534.71	-114.06	661.68	29.27	23.15	PASS
3713.00†	3693.70	-281.42	-112.60	3599.92	3535.44	-235.69	557.36	-113.91	689.92	30.23	23.34	PASS
3813.00†	3792.85	-293.52	-117.45	3695.84	3627.90	-247.50	580.00	-113.78	718.17	31.21	23.53	PASS
3913.00†	3891.99	-305.62	-122.29	3791.75	3720.35	-259.31	602.65	-113.65	746.42	32.18	23.69	PASS
4013.00†	3991.14	-317.72	-127.13	3887.67	3812.80	-271.13	625.29	-113.54	774.67	33.16	23.85	PASS
4113.00†	4090.29	-329.82	-131.97	3983.58	3905.25	-282.94	647.94	-113.43	802.93	34.14	24.00	PASS
4213.00†	4189.44	-341.91	-136.81	4079.49	3997.70	-294.75	670.58	-113.34	831.19	35.12	24.13	PASS
4313.00†	4288.58	-354.01	-141.65	4175.41	4090.15	-306.56	693.23	-113.24	859.45	36.11	24.26	PASS
4413.00†	4387.73	-366.11	-146.49	4271.32	4182.61	-318.38	715.87	-113.16	887.71	37.10	24.38	PASS
4513.00†	4486.88	-378.21	-151.33	4367.24	4275.06	-330.19	738.52	-113.07	915.97	38.09	24.49	PASS
4613.00†	4586.03	-390.31	-156.17	4463.15	4367.51	-342.00	761.16	-113.00	944.24	39.08	24.59	PASS
4713.00†	4685.17	-402.41	-161.01	4559.07	4459.96	-353.82	783.81	-112.93	972.51	40.07	24.69	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: ACKARD NORTH 2-35-3CDH PWB Offset Wellpath: ACKARD NORTH 2-35-3CDH PWP (REV. A.0)

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

HOLE & CASING SECTIONS - Offset Wellbore: ACKARD NORTH 2-35-3CDH PWB Offset Wellpath: ACKARD NORTH 2-35-3CDH PWP (REV. A.0)									
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]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1797.47	0.19	63.98	-5.95	75.75
8.5in Open Hole	1800.00	18103.54	16303.54	1797.47	7828.00	-5.95	75.75	2923.87	519.26

SURVEY PROGRAM - Offset Wellbore: ACKARD NORTH 2-35-3CDH PWB Offset Wellpath: ACKARD NORTH 2-35-3CDH PWP (REV. A.0)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	18103.54	Custom BHI NaviTrak (Standard Rotating) (Rockies 0.03Gt model)		ACKARD NORTH 2-35-3CDH PWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: ACKARD NORTH 2-35-3CDH PWB Offset Wellpath: ACKARD NORTH 2-35-3CDH PWP (REV. A.0)	
MD Reference: RIG (13'KB) (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	13.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: HSR ACKARD #5-2 AWB Offset Wellpath: HSR ACKARD #5-2 AWP

Facility: SEC.02-T02S-R66W Slot: SLOT#02 EX HSR ACKARD #5-2 (1980'FNL & 656'FWL, SEC.02,8400, PR) Well: HSR ACKARD #5-2 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	4.00	13.00	2689.75	-1319.85	-26.14	2996.12	50.10	60.76	PASS
113.00†	113.00	0.00	0.00	104.00	113.00	2689.75	-1319.85	-26.14	2996.12	52.44	58.00	PASS
213.00†	213.00	0.00	0.00	204.00	213.00	2689.75	-1319.85	-26.14	2996.12	54.79	55.48	PASS
313.00†	313.00	0.00	0.00	304.00	313.00	2689.75	-1319.85	-26.14	2996.12	57.14	53.16	PASS
413.00†	413.00	0.00	0.00	404.00	413.00	2689.75	-1319.85	-26.14	2996.12	59.50	51.03	PASS
513.00†	513.00	0.00	0.00	504.00	513.00	2689.75	-1319.85	-26.14	2996.12	61.86	49.06	PASS
613.00†	613.00	0.00	0.00	604.00	613.00	2689.75	-1319.85	-26.14	2996.12	64.23	47.23	PASS
713.00†	713.00	0.00	0.00	704.00	713.00	2689.75	-1319.85	-26.14	2996.12	66.59	45.53	PASS
813.00†	813.00	0.00	0.00	804.00	813.00	2689.75	-1319.85	-26.14	2996.12	68.97	43.94	PASS
913.00†	913.00	0.00	0.00	904.00	913.00	2689.75	-1319.85	-26.14	2996.12	71.34	42.46	PASS
1013.00†	1013.00	0.00	0.00	1004.00	1013.00	2689.75	-1319.85	-26.14	2996.12	73.72	41.08	PASS
1113.00†	1113.00	0.00	0.00	1104.00	1113.00	2689.75	-1319.85	-26.14	2996.12	76.11	39.78	PASS
1200.00	1200.00	0.00	0.00	1191.00	1200.00	2689.75	-1319.85	-26.14	2996.12	78.18	38.71	PASS
1213.00†	1213.00	-0.03	-0.01	1204.00	1213.00	2689.75	-1319.85	132.06	2996.14	78.49	38.55	PASS
1313.00†	1312.97	-2.07	-0.83	1303.97	1312.97	2689.75	-1319.85	132.07	2997.62	80.89	37.42	PASS
1413.00†	1412.80	-7.35	-2.94	1403.80	1412.80	2689.75	-1319.85	132.09	3001.43	83.31	36.37	PASS
1513.00†	1512.38	-15.86	-6.35	1503.38	1512.38	2689.75	-1319.85	132.13	3007.59	85.73	35.40	PASS
1574.38	1573.31	-22.68	-9.07	1564.31	1573.31	2689.75	-1319.85	132.16	3012.54	87.21	34.85	PASS
1613.00†	1611.61	-27.35	-10.94	1602.61	1611.61	2689.75	-1319.85	132.23	3015.94	88.14	34.52	PASS
1713.00†	1710.75	-39.45	-15.79	1701.75	1710.75	2689.75	-1319.85	132.41	3024.75	90.54	33.70	PASS
1813.00†	1809.90	-51.55	-20.63	1800.90	1809.90	2689.75	-1319.85	132.59	3033.60	92.85	32.92	PASS
1913.00†	1909.05	-63.65	-25.47	1900.05	1909.05	2689.75	-1319.85	132.77	3042.47	95.26	32.17	PASS
2013.00†	2008.20	-75.75	-30.31	1999.20	2008.20	2689.75	-1319.85	132.95	3051.37	97.68	31.46	PASS
2113.00†	2107.34	-87.84	-35.15	2098.34	2107.34	2689.75	-1319.85	133.13	3060.31	100.11	30.78	PASS
2213.00†	2206.49	-99.94	-39.99	2197.49	2206.49	2689.75	-1319.85	133.30	3069.27	102.54	30.13	PASS
2313.00†	2305.64	-112.04	-44.83	2296.64	2305.64	2689.75	-1319.85	133.48	3078.26	104.98	29.51	PASS
2413.00†	2404.78	-124.14	-49.67	2395.78	2404.78	2689.75	-1319.85	133.65	3087.29	107.43	28.92	PASS
2513.00†	2503.93	-136.24	-54.51	2494.93	2503.93	2689.75	-1319.85	133.83	3096.33	109.88	28.36	PASS
2613.00†	2603.08	-148.34	-59.35	2594.08	2603.08	2689.75	-1319.85	134.00	3105.41	112.34	27.81	PASS
2713.00†	2702.23	-160.44	-64.20	2693.23	2702.23	2689.75	-1319.85	134.17	3114.52	114.80	27.29	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: HSR ACKARD #5-2 AWB Offset Wellpath: HSR ACKARD #5-2 AWP

Facility: SEC.02-T02S-R66W Slot: SLOT#02 EX HSR ACKARD #5-2 (1980'FNL & 656'FWL, SEC.02,8400, PR) Well: HSR ACKARD #5-2 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2801.37	-172.53	-69.04	2792.37	2801.37	2689.75	-1319.85	134.34	3123.65	117.28	26.79	PASS
2913.00†	2900.52	-184.63	-73.88	2891.52	2900.52	2689.75	-1319.85	134.51	3132.81	119.75	26.31	PASS
3013.00†	2999.67	-196.73	-78.72	2990.67	2999.67	2689.75	-1319.85	134.68	3142.00	122.24	25.85	PASS
3113.00†	3098.82	-208.83	-83.56	3089.82	3098.82	2689.75	-1319.85	134.85	3151.22	124.72	25.40	PASS
3213.00†	3197.96	-220.93	-88.40	3188.96	3197.96	2689.75	-1319.85	135.01	3160.46	127.22	24.98	PASS
3313.00†	3297.11	-233.03	-93.24	3288.11	3297.11	2689.75	-1319.85	135.18	3169.73	129.72	24.56	PASS
3413.00†	3396.26	-245.13	-98.08	3387.26	3396.26	2689.75	-1319.85	135.35	3179.03	132.22	24.17	PASS
3513.00†	3495.41	-257.22	-102.92	3486.41	3495.41	2689.75	-1319.85	135.51	3188.35	134.73	23.78	PASS
3613.00†	3594.55	-269.32	-107.76	3585.55	3594.55	2689.75	-1319.85	135.67	3197.70	137.25	23.41	PASS
3713.00†	3693.70	-281.42	-112.60	3684.70	3693.70	2689.75	-1319.85	135.83	3207.07	139.76	23.06	PASS
3813.00†	3792.85	-293.52	-117.45	3783.85	3792.85	2689.75	-1319.85	136.00	3216.47	142.29	22.71	PASS
3913.00†	3891.99	-305.62	-122.29	3882.99	3891.99	2689.75	-1319.85	136.16	3225.89	144.82	22.38	PASS
4013.00†	3991.14	-317.72	-127.13	3982.14	3991.14	2689.75	-1319.85	136.32	3235.34	147.35	22.06	PASS
4113.00†	4090.29	-329.82	-131.97	4081.29	4090.29	2689.75	-1319.85	136.47	3244.82	149.88	21.75	PASS
4213.00†	4189.44	-341.91	-136.81	4180.44	4189.44	2689.75	-1319.85	136.63	3254.32	152.43	21.45	PASS
4313.00†	4288.58	-354.01	-141.65	4279.58	4288.58	2689.75	-1319.85	136.79	3263.84	154.97	21.15	PASS
4413.00†	4387.73	-366.11	-146.49	4378.73	4387.73	2689.75	-1319.85	136.94	3273.39	157.52	20.87	PASS
4513.00†	4486.88	-378.21	-151.33	4477.88	4486.88	2689.75	-1319.85	137.10	3282.96	160.07	20.60	PASS
4613.00†	4586.03	-390.31	-156.17	4577.03	4586.03	2689.75	-1319.85	137.25	3292.55	162.63	20.33	PASS
4713.00†	4685.17	-402.41	-161.01	4676.17	4685.17	2689.75	-1319.85	137.40	3302.17	165.18	20.07	PASS
4813.00†	4784.32	-414.51	-165.86	4775.32	4784.32	2689.75	-1319.85	137.56	3311.81	167.75	19.82	PASS
4913.00†	4883.47	-426.60	-170.70	4874.47	4883.47	2689.75	-1319.85	137.71	3321.48	170.31	19.58	PASS
5013.00†	4982.61	-438.70	-175.54	4973.61	4982.61	2689.75	-1319.85	137.86	3331.17	172.88	19.34	PASS
5113.00†	5081.76	-450.80	-180.38	5072.76	5081.76	2689.75	-1319.85	138.01	3340.88	175.45	19.11	PASS
5213.00†	5180.91	-462.90	-185.22	5171.91	5180.91	2689.75	-1319.85	138.16	3350.61	178.03	18.89	PASS
5313.00†	5280.06	-475.00	-190.06	5271.06	5280.06	2689.75	-1319.85	138.30	3360.36	180.61	18.68	PASS
5413.00†	5379.20	-487.10	-194.90	5370.20	5379.20	2689.75	-1319.85	138.45	3370.14	183.19	18.46	PASS
5513.00†	5478.35	-499.19	-199.74	5469.35	5478.35	2689.75	-1319.85	138.60	3379.94	185.77	18.26	PASS
5613.00†	5577.50	-511.29	-204.58	5568.50	5577.50	2689.75	-1319.85	138.74	3389.76	188.35	18.06	PASS
5713.00†	5676.65	-523.39	-209.42	5667.65	5676.65	2689.75	-1319.85	138.89	3399.61	190.94	17.87	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: HSR ACKARD #5-2 AWB Offset Wellpath: HSR ACKARD #5-2 AWP

Facility: SEC.02-T02S-R66W Slot: SLOT#02 EX HSR ACKARD #5-2 (1980'FNL & 656'FWL, SEC.02,8400, PR) Well: HSR ACKARD #5-2 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5775.79	-535.49	-214.27	5766.79	5775.79	2689.75	-1319.85	139.03	3409.47	193.53	17.68	PASS
5913.00†	5874.94	-547.59	-219.11	5865.94	5874.94	2689.75	-1319.85	139.17	3419.36	196.13	17.49	PASS
6013.00†	5974.09	-559.69	-223.95	5965.09	5974.09	2689.75	-1319.85	139.31	3429.26	198.72	17.31	PASS
6113.00†	6073.24	-571.79	-228.79	6064.24	6073.24	2689.75	-1319.85	139.45	3439.19	201.32	17.14	PASS
6213.00†	6172.38	-583.88	-233.63	6163.38	6172.38	2689.75	-1319.85	139.59	3449.14	203.92	16.97	PASS
6313.00†	6271.53	-595.98	-238.47	6262.53	6271.53	2689.75	-1319.85	139.73	3459.11	206.52	16.80	PASS
6413.00†	6370.68	-608.08	-243.31	6361.68	6370.68	2689.75	-1319.85	139.87	3469.10	209.12	16.64	PASS
6513.00†	6469.82	-620.18	-248.15	6460.82	6469.82	2689.75	-1319.85	140.01	3479.11	211.73	16.48	PASS
6613.00†	6568.97	-632.28	-252.99	6559.97	6568.97	2689.75	-1319.85	140.15	3489.13	214.34	16.33	PASS
6713.00†	6668.12	-644.38	-257.83	6659.12	6668.12	2689.75	-1319.85	140.28	3499.18	216.95	16.18	PASS
6813.00†	6767.27	-656.48	-262.68	6758.27	6767.27	2689.75	-1319.85	140.42	3509.25	219.56	16.03	PASS
6913.00†	6866.41	-668.57	-267.52	6857.41	6866.41	2689.75	-1319.85	140.55	3519.34	222.17	15.89	PASS
7013.00†	6965.56	-680.67	-272.36	6956.56	6965.56	2689.75	-1319.85	140.69	3529.45	224.78	15.75	PASS
7113.00†	7064.71	-692.77	-277.20	7055.71	7064.71	2689.75	-1319.85	140.82	3539.57	227.40	15.61	PASS
7213.00†	7163.86	-704.87	-282.04	7154.86	7163.86	2689.75	-1319.85	140.95	3549.72	230.02	15.48	PASS
7251.04	7201.57	-709.47	-283.88	7192.57	7201.57	2689.75	-1319.85	141.00	3553.58	231.01	15.43	PASS
7313.00†	7263.29	-713.63	-286.90	7254.29	7263.29	2689.75	-1319.85	88.12	3556.68	232.63	15.33	PASS
7413.00†	7362.77	-706.23	-291.81	7353.77	7362.77	2689.75	-1319.85	0.07	3548.18	235.31	15.12	PASS
7513.00†	7459.45	-681.66	-296.63	7450.45	7459.45	2689.75	-1319.85	-9.25	3523.26	238.21	14.83	PASS
7613.00†	7550.39	-640.64	-301.20	7541.39	7550.39	2689.75	-1319.85	-13.54	3482.69	241.08	14.49	PASS
7713.00†	7632.84	-584.44	-305.40	7623.84	7632.84	2689.75	-1319.85	-17.40	3427.74	243.56	14.11	PASS
7813.00†	7704.29	-514.75	-309.10	7695.29	7704.29	2689.75	-1319.85	-22.25	3360.12	245.56	13.72	PASS
7913.00†	7762.57	-433.70	-312.17	7753.57	7762.57	2689.75	-1319.85	-29.41	3281.97	247.04	13.32	PASS
8013.00†	7805.90	-343.74	-314.54	7796.90	7805.90	2689.75	-1319.85	-41.04	3195.74	247.98	12.92	PASS
8113.00†	7832.97	-247.62	-316.12	7823.97	7832.97	2689.75	-1319.85	-60.45	3104.13	248.40	12.53	PASS
8213.00†	7842.95	-148.25	-316.87	7833.95	7842.95	2689.75	-1319.85	-87.87	3010.02	248.34	12.15	PASS
8220.45	7843.00	-140.80	-316.89	7834.00	7843.00	2689.75	-1319.85	-90.00	3002.99	248.32	12.13	PASS
8313.00†	7843.00	-48.25	-317.13	7834.00	7843.00	2689.75	-1319.85	-90.00	2915.84	248.02	11.79	PASS
8413.00†	7843.00	51.75	-317.40	7834.00	7843.00	2689.75	-1319.85	-90.00	2822.05	247.71	11.42	PASS
8513.00†	7843.00	151.75	-317.66	7834.00	7843.00	2689.75	-1319.85	-90.00	2728.71	247.41	11.06	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: HSR ACKARD #5-2 AWB Offset Wellpath: HSR ACKARD #5-2 AWP

Facility: SEC.02-T02S-R66W Slot: SLOT#02 EX HSR ACKARD #5-2 (1980'FNL & 656'FWL, SEC.02,8400, PR) Well: HSR ACKARD #5-2 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
8613.00†	7843.00	251.75	-317.92	7834.00	7843.00	2689.75	-1319.85	-90.00	2635.85	247.13	10.69	PASS
8713.00†	7843.00	351.75	-318.18	7834.00	7843.00	2689.75	-1319.85	-90.00	2543.54	246.88	10.33	PASS
8813.00†	7843.00	451.74	-318.44	7834.00	7843.00	2689.75	-1319.85	-90.00	2451.83	246.67	9.97	PASS
8913.00†	7843.00	551.74	-318.70	7834.00	7843.00	2689.75	-1319.85	-90.00	2360.80	246.50	9.60	PASS
9013.00†	7843.00	651.74	-318.97	7834.00	7843.00	2689.75	-1319.85	-90.00	2270.51	246.41	9.24	PASS
9113.00†	7843.00	751.74	-319.23	7834.00	7843.00	2689.75	-1319.85	-90.00	2181.08	246.39	8.87	PASS
9213.00†	7843.00	851.74	-319.49	7834.00	7843.00	2689.75	-1319.85	-90.00	2092.60	246.49	8.51	PASS
9313.00†	7843.00	951.74	-319.75	7834.00	7843.00	2689.75	-1319.85	-90.00	2005.21	246.72	8.15	PASS
9413.00†	7843.00	1051.74	-320.01	7834.00	7843.00	2689.75	-1319.85	-90.00	1919.05	247.12	7.79	PASS
9513.00†	7843.00	1151.74	-320.28	7834.00	7843.00	2689.75	-1319.85	-90.00	1834.29	247.72	7.42	PASS
9613.00†	7843.00	1251.74	-320.54	7834.00	7843.00	2689.75	-1319.85	-90.00	1751.14	248.57	7.06	PASS
9713.00†	7843.00	1351.74	-320.80	7834.00	7843.00	2689.75	-1319.85	-90.00	1669.84	249.72	6.70	PASS
9813.00†	7843.00	1451.74	-321.06	7834.00	7843.00	2689.75	-1319.85	-90.00	1590.67	251.21	6.35	PASS
9913.00†	7843.00	1551.74	-321.32	7834.00	7843.00	2689.75	-1319.85	-90.00	1513.97	253.10	6.00	PASS
10013.00†	7843.00	1651.74	-321.58	7834.00	7843.00	2689.75	-1319.85	-90.00	1440.14	255.43	5.65	PASS
10113.00†	7843.00	1751.74	-321.85	7834.00	7843.00	2689.75	-1319.85	-90.00	1369.62	258.24	5.32	PASS
10213.00†	7843.00	1851.74	-322.11	7834.00	7843.00	2689.75	-1319.85	-90.00	1302.98	261.56	4.99	PASS
10313.00†	7843.00	1951.74	-322.37	7834.00	7843.00	2689.75	-1319.85	-90.00	1240.82	265.38	4.69	PASS
10413.00†	7843.00	2051.74	-322.63	7834.00	7843.00	2689.75	-1319.85	-90.00	1183.85	269.70	4.40	PASS
10513.00†	7843.00	2151.74	-322.89	7834.00	7843.00	2689.75	-1319.85	-90.00	1132.86	274.46	4.14	PASS
10613.00†	7843.00	2251.74	-323.15	7834.00	7843.00	2689.75	-1319.85	-90.00	1088.69	279.54	3.90	PASS
10713.00†	7843.00	2351.74	-323.42	7834.00	7843.00	2689.75	-1319.85	-90.00	1052.20	284.80	3.70	PASS
10813.00†	7843.00	2451.74	-323.68	7834.00	7843.00	2689.75	-1319.85	-90.00	1024.21	290.04	3.54	PASS
10913.00†	7843.00	2551.74	-323.94	7834.00	7843.00	2689.75	-1319.85	-90.00	1005.43	295.03	3.41	PASS
11013.00†	7843.00	2651.74	-324.20	7834.00	7843.00	2689.75	-1319.85	-90.00	996.37	299.55	3.33	PASS
11054.17†	7843.00	2692.91	-324.31	7834.29	7843.29	2689.75	-1319.85	-90.02	995.54	301.23	3.31	PASS
11113.00†	7843.00	2751.74	-324.46	7834.00	7843.00	2689.75	-1319.85	-90.00	997.31	303.40	3.29	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

POSITIONAL UNCERTAINTY - Offset Wellbore: HSR ACKARD #5-2 AWB Offset Wellpath: HSR ACKARD #5-2 AWP				
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: HSR ACKARD #5-2 AWB Offset Wellpath: HSR ACKARD #5-2 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8400.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8400>	HSR ACKARD #5-2 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: HSR ACKARD #5-2 AWB Offset Wellpath: HSR ACKARD #5-2 AWP	
MD Reference: Rig on SLOT#02 EX HSE ACKARD #5-2 (1980'FNL & 656'FWL, SEC.02,8400, PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: LEECH #24-26 AWB Offset Wellpath: LEECH #24-26 AWP

Facility: SEC.26-T01S-R66W Slot: SLOT#03 EX LEECH #24-26 (659'FSL & 2026'FWL, SEC.26,8296, PR) Well: LEECH #24-26 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	-13.00	64.00	10591.88	-5.71	-0.03	10592.00	25.40	430.51	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: LEECH #24-26 AWB Offset Wellpath: LEECH #24-26 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: LEECH #24-26 AWB Offset Wellpath: LEECH #24-26 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8296.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8296>	LEECH #24-26 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: LEECH #24-26 AWB Offset Wellpath: LEECH #24-26 AWP

MD Reference: Rig on SLOT#03 ES LEECH #24-26 (659'FSL & 2026'FWL, SEC.26,8296, PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: LEECH #14-26 AWB Offset Wellpath: LEECH #14-26 AWP

Facility: SEC.26-T01S-R66W Slot: SLOT#04 EX LEECH #14-26 (663'FSL & 673'FWL, SEC.26,8313, PR) Well: LEECH #14-26 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	-13.00	79.00	10587.72	-1354.67	-7.29	10674.23	25.40	433.85	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: LEECH #14-26 AWB Offset Wellpath: LEECH #14-26 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: LEECH #14-26 AWB Offset Wellpath: LEECH #14-26 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8313.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8313>	LEECH #14-26 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: LEECH #14-26 AWB Offset Wellpath: LEECH #14-26 AWP

MD Reference: Rig on SLOT\$04 EX LEECH #14-26 (663'FSL & 673'FWL, SEC.26,8313, PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: BOX ELDER FARMS 32-35#4 AWB Offset Wellpath: BOX ELDER FARMS 32-35#4 AWP

Facility: SEC.35-T01S-R66W Slot: SLOT#03 EX BOX ELDER FARMS 32-35#4 (1980'FNL & 1980'FEL, SEC.35, 8312 PR) Well: BOX ELDER FARMS 32-35#4 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	-13.00	23.00	7976.17	1308.19	9.31	8082.74	25.40	328.51	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: BOX ELDER FARMS 32-35#4 AWB Offset Wellpath: BOX ELDER FARMS 32-35#4 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: BOX ELDER FARMS 32-35#4 AWB Offset Wellpath: BOX ELDER FARMS 32-35#4 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8312.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8312>	BOX ELDER FARMS 32-35#4 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: BOX ELDER FARMS 32-35#4 AWB Offset Wellpath: BOX ELDER FARMS 32-35#4 AWP

MD Reference: Rig on SLOT#03 EX BOX ELDER FARMS 32-35#4 (1980'FNL & 1980'FEL, SEC.35, 8312 PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-4NCH PWB Offset Wellpath: ACKARD NORTH 2-35-4NCH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#13 ACKARD NORTH 2-35-4NCH (600'FSL & 2115'FWL, SEC.02) Well: ACKARD NORTH 2-35-4NCH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	13.00	13.00	0.33	120.00	89.84	120.00	1.40	198.66	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.33	120.00	89.84	120.00	1.72	130.04	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.33	120.00	89.84	120.00	2.28	80.45	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.33	120.00	89.84	120.00	2.89	57.22	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.33	120.00	89.84	120.00	3.50	44.20	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.33	120.00	89.84	120.00	4.12	35.94	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.33	120.00	89.84	120.00	4.74	30.27	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.33	120.00	89.84	120.00	5.36	26.13	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.33	120.00	89.84	120.00	5.99	22.98	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.33	120.00	89.84	120.00	6.61	20.51	PASS
1013.00†	1013.00	0.00	0.00	1013.00	1013.00	0.33	120.00	89.84	120.00	7.24	18.51	PASS
1113.00†	1113.00	0.00	0.00	1113.00	1113.00	0.33	120.00	89.84	120.00	7.87	16.87	PASS
1200.00	1200.00	0.00	0.00	1200.00	1200.00	0.33	120.00	89.84	120.00	8.41	15.66	PASS
1213.00†	1213.00	-0.03	-0.01	1212.52	1212.52	0.32	120.02	-111.97	120.04	8.49	15.51	PASS
1313.00†	1312.97	-2.07	-0.83	1308.71	1308.69	-0.46	121.91	-112.47	122.82	9.19	14.54	PASS
1413.00†	1412.80	-7.35	-2.94	1404.54	1404.37	-2.46	126.74	-113.65	130.05	10.12	13.87	PASS
1513.00†	1512.38	-15.86	-6.35	1499.67	1499.13	-5.66	134.47	-115.29	141.80	11.03	13.78	PASS
1574.38	1573.31	-22.68	-9.07	1557.58	1556.66	-8.19	140.59	-116.40	151.29	11.55	14.00	PASS
1613.00†	1611.61	-27.35	-10.94	1593.83	1592.59	-10.00	144.97	-117.15	158.03	11.88	14.20	PASS
1713.00†	1710.75	-39.45	-15.79	1687.08	1684.73	-15.46	158.17	-118.47	177.52	12.70	14.85	PASS
1813.00†	1809.90	-51.55	-20.63	1779.30	1775.36	-21.99	173.94	-119.09	199.80	13.48	15.64	PASS
1913.00†	1909.05	-63.65	-25.47	1870.33	1864.23	-29.52	192.14	-119.18	224.78	14.22	16.59	PASS
2013.00†	2008.20	-75.75	-30.31	1960.02	1951.13	-37.99	212.61	-118.91	252.37	15.04	17.56	PASS
2113.00†	2107.34	-87.84	-35.15	2048.21	2035.87	-47.33	235.18	-118.40	282.54	15.88	18.58	PASS
2213.00†	2206.49	-99.94	-39.99	2134.78	2118.28	-57.46	259.68	-117.73	315.25	16.70	19.67	PASS
2313.00†	2305.64	-112.04	-44.83	2227.52	2206.02	-68.95	287.45	-117.01	349.56	17.53	20.74	PASS
2413.00†	2404.78	-124.14	-49.67	2321.36	2294.78	-80.59	315.57	-116.40	383.93	18.36	21.71	PASS
2513.00†	2503.93	-136.24	-54.51	2415.20	2383.55	-92.23	343.69	-115.89	418.33	19.22	22.56	PASS
2613.00†	2603.08	-148.34	-59.35	2509.04	2472.31	-103.86	371.81	-115.46	452.75	20.10	23.31	PASS
2713.00†	2702.23	-160.44	-64.20	2602.87	2561.08	-115.50	399.93	-115.09	487.19	21.00	23.98	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-4NCH PWB Offset Wellpath: ACKARD NORTH 2-35-4NCH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#13 ACKARD NORTH 2-35-4NCH (600'FSL & 2115'FWL, SEC.02) Well: ACKARD NORTH 2-35-4NCH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2801.37	-172.53	-69.04	2696.71	2649.85	-127.13	428.06	-114.77	521.65	21.91	24.57	PASS
2913.00†	2900.52	-184.63	-73.88	2790.55	2738.61	-138.77	456.18	-114.49	556.13	22.83	25.11	PASS
3013.00†	2999.67	-196.73	-78.72	2884.39	2827.38	-150.40	484.30	-114.24	590.61	23.76	25.59	PASS
3113.00†	3098.82	-208.83	-83.56	2978.22	2916.14	-162.04	512.42	-114.02	625.10	24.70	26.03	PASS
3213.00†	3197.96	-220.93	-88.40	3072.06	3004.91	-173.67	540.54	-113.82	659.60	25.65	26.42	PASS
3313.00†	3297.11	-233.03	-93.24	3165.90	3093.67	-185.31	568.66	-113.64	694.10	26.60	26.78	PASS
3413.00†	3396.26	-245.13	-98.08	3259.74	3182.44	-196.94	596.78	-113.48	728.61	27.56	27.10	PASS
3513.00†	3495.41	-257.22	-102.92	3353.58	3271.20	-208.58	624.90	-113.33	763.13	28.53	27.40	PASS
3613.00†	3594.55	-269.32	-107.76	3447.41	3359.97	-220.21	653.02	-113.20	797.65	29.50	27.67	PASS
3713.00†	3693.70	-281.42	-112.60	3541.25	3448.74	-231.85	681.15	-113.07	832.17	30.48	27.93	PASS
3813.00†	3792.85	-293.52	-117.45	3635.09	3537.50	-243.48	709.27	-112.96	866.69	31.46	28.16	PASS
3913.00†	3891.99	-305.62	-122.29	3728.93	3626.27	-255.12	737.39	-112.85	901.22	32.45	28.37	PASS
4013.00†	3991.14	-317.72	-127.13	3822.76	3715.03	-266.75	765.51	-112.76	935.75	33.44	28.57	PASS
4113.00†	4090.29	-329.82	-131.97	3916.60	3803.80	-278.39	793.63	-112.67	970.29	34.43	28.75	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: ACKARD NORTH 2-35-4NCH PWB Offset Wellpath: ACKARD NORTH 2-35-4NCH PWP (REV. A.0)

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

HOLE & CASING SECTIONS - Offset Wellbore: ACKARD NORTH 2-35-4NCH PWB Offset Wellpath: ACKARD NORTH 2-35-4NCH PWP (REV. A.0)

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]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1795.62	0.20	73.15	-7.09	90.78
8.5in Open Hole	1800.00	18043.25	16243.25	1795.62	7658.00	-7.09	90.78	2924.85	647.58



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

SURVEY PROGRAM - Offset Wellbore: ACKARD NORTH 2-35-4NCH PWB Offset Wellpath: ACKARD NORTH 2-35-4NCH PWP (REV. A.0)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	18043.28	Custom BHI NaviTrak (Standard Rotating) (Rockies 0.03Gt model)		ACKARD NORTH 2-35-4NCH PWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: ACKARD NORTH 2-35-4NCH PWB Offset Wellpath: ACKARD NORTH 2-35-4NCH PWP (REV. A.0)	
MD Reference: RIG (13'KB) (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	13.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: CHAMPLIN 117 AMOCO G#2 AWB Offset Wellpath: CHAMPLIN 117 AMOCO G#2 AWP												
Facility: SEC.35-T01S-R66W Slot: SLOT#01 EX CHAMPLIN 117 AMOCO G#2 (660'FSL & 1980'FEL, SEC.35, PA, 8360) Well: CHAMPLIN 117 AMOCO G#2 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	16.00	13.00	5342.70	1309.71	13.77	5500.89	50.38	110.94	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: CHAMPLIN 117 AMOCO G#2 AWB Offset Wellpath: CHAMPLIN 117 AMOCO G#2 AWP				
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: CHAMPLIN 117 AMOCO G#2 AWB Offset Wellpath: CHAMPLIN 117 AMOCO G#2 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8360.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8360>	CHAMPLIN 117 AMOCO G#2 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: CHAMPLIN 117 AMOCO G#2 AWB Offset Wellpath: CHAMPLIN 117 AMOCO G#2 AWP	
MD Reference: Rig on SLOT#01 EX CHAMPLIN 117 AMOCO G#2 (660'FSL & 1980'FEL, SEC.35, PA, 8360) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-4NBH Offset Wellpath: ACKARD NORTH 2-35-4NBH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#14 ACKARD NORTH 2-35-4NBH (600'FSL & 2130'FWL, SEC.02) Well: ACKARD NORTH 2-35-4NBH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	13.00	13.00	0.42	134.95	89.82	134.95	1.40	223.59	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.42	134.95	89.82	134.95	1.72	146.36	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.42	134.95	89.82	134.95	2.28	90.54	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.42	134.95	89.82	134.95	2.89	64.40	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.42	134.95	89.82	134.95	3.50	49.74	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.42	134.95	89.82	134.95	4.12	40.45	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.42	134.95	89.82	134.95	4.74	34.06	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.42	134.95	89.82	134.95	5.36	29.40	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.42	134.95	89.82	134.95	5.99	25.86	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.42	134.95	89.82	134.95	6.61	23.08	PASS
1013.00†	1013.00	0.00	0.00	1013.00	1013.00	0.42	134.95	89.82	134.95	7.24	20.83	PASS
1113.00†	1113.00	0.00	0.00	1112.45	1112.45	0.41	134.98	89.83	134.98	7.87	19.00	PASS
1200.00	1200.00	0.00	0.00	1195.70	1195.68	-0.10	136.47	90.04	136.53	8.47	17.69	PASS
1213.00†	1213.00	-0.03	-0.01	1208.13	1208.11	-0.24	136.88	-111.71	136.98	8.56	17.55	PASS
1313.00†	1312.97	-2.07	-0.83	1303.54	1303.37	-1.92	141.79	-111.71	142.94	9.47	16.39	PASS
1413.00†	1412.80	-7.35	-2.94	1398.35	1397.81	-4.60	149.64	-112.40	153.34	10.41	15.88	PASS
1513.00†	1512.38	-15.86	-6.35	1492.22	1490.99	-8.26	160.32	-113.56	168.20	11.25	16.02	PASS
1574.38	1573.31	-22.68	-9.07	1549.23	1547.39	-10.96	168.21	-114.41	179.55	11.79	16.27	PASS
1613.00†	1611.61	-27.35	-10.94	1584.87	1582.56	-12.83	173.68	-115.05	187.46	12.11	16.51	PASS
1713.00†	1710.75	-39.45	-15.79	1676.39	1672.51	-18.28	189.63	-116.25	210.02	12.92	17.27	PASS
1813.00†	1809.90	-51.55	-20.63	1766.69	1760.69	-24.57	208.02	-116.91	235.44	13.67	18.17	PASS
1913.00†	1909.05	-63.65	-25.47	1855.63	1846.90	-31.65	228.70	-117.16	263.60	14.43	19.16	PASS
2013.00†	2008.20	-75.75	-30.31	1943.06	1930.95	-39.44	251.48	-117.13	294.43	15.24	20.21	PASS
2113.00†	2107.34	-87.84	-35.15	2028.87	2012.68	-47.89	276.19	-116.90	327.86	16.08	21.28	PASS
2213.00†	2206.49	-99.94	-39.99	2112.95	2091.97	-56.94	302.64	-116.54	363.81	16.87	22.46	PASS
2313.00†	2305.64	-112.04	-44.83	2195.20	2168.72	-66.51	330.63	-116.08	402.23	17.72	23.60	PASS
2413.00†	2404.78	-124.14	-49.67	2284.97	2251.86	-77.47	362.67	-115.57	442.26	18.52	24.79	PASS
2513.00†	2503.93	-136.24	-54.51	2376.53	2336.64	-88.66	395.38	-115.14	482.34	19.37	25.81	PASS
2613.00†	2603.08	-148.34	-59.35	2468.09	2421.42	-99.85	428.09	-114.77	522.45	20.24	26.72	PASS
2713.00†	2702.23	-160.44	-64.20	2559.65	2506.20	-111.03	460.80	-114.45	562.57	21.12	27.52	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-4NBH Offset Wellpath: ACKARD NORTH 2-35-4NBH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#14 ACKARD NORTH 2-35-4NBH (600'FSL & 2130'FWL, SEC.02) Well: ACKARD NORTH 2-35-4NBH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2801.37	-172.53	-69.04	2651.20	2590.98	-122.22	493.51	-114.18	602.71	22.03	28.24	PASS
2913.00†	2900.52	-184.63	-73.88	2742.76	2675.76	-133.41	526.22	-113.94	642.85	22.94	28.88	PASS
3013.00†	2999.67	-196.73	-78.72	2834.32	2760.54	-144.60	558.93	-113.73	683.00	23.87	29.46	PASS
3113.00†	3098.82	-208.83	-83.56	2925.87	2845.32	-155.79	591.64	-113.54	723.16	24.81	29.98	PASS
3213.00†	3197.96	-220.93	-88.40	3017.43	2930.10	-166.97	624.34	-113.37	763.33	25.76	30.44	PASS
3313.00†	3297.11	-233.03	-93.24	3108.99	3014.88	-178.16	657.05	-113.22	803.50	26.72	30.87	PASS
3413.00†	3396.26	-245.13	-98.08	3200.55	3099.66	-189.35	689.76	-113.08	843.67	27.68	31.25	PASS
3513.00†	3495.41	-257.22	-102.92	3292.10	3184.44	-200.54	722.47	-112.96	883.85	28.65	31.60	PASS
3613.00†	3594.55	-269.32	-107.76	3383.66	3269.22	-211.73	755.18	-112.84	924.03	29.63	31.92	PASS
3713.00†	3693.70	-281.42	-112.60	3475.22	3354.00	-222.92	787.89	-112.74	964.21	30.61	32.22	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: ACKARD NORTH 2-35-4NBH Offset Wellpath: ACKARD NORTH 2-35-4NBH PWP (REV. A.0)

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

HOLE & CASING SECTIONS - Offset Wellbore: ACKARD NORTH 2-35-4NBH Offset Wellpath: ACKARD NORTH 2-35-4NBH PWP (REV. A.0)

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]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1793.06	0.26	82.27	-8.14	106.81
8.5in Open Hole	1800.00	18099.99	16299.99	1793.06	7586.00	-8.14	106.81	2925.85	775.85

SURVEY PROGRAM - Offset Wellbore: ACKARD NORTH 2-35-4NBH Offset Wellpath: ACKARD NORTH 2-35-4NBH PWP (REV. A.0)

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	18099.99	Custom BHI NaviTrak (Standard Rotating) (Rockies 0.03Gt model)		ACKARD NORTH 2-35-4NBH



Clearance Report
ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

OFFSET WELLPATH REFERENCE - Offset Wellbore: ACKARD NORTH 2-35-4NBH Offset Wellpath: ACKARD NORTH 2-35-4NBH PWP (REV. A.0)	
MD Reference: RIG (13'KB) (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	13.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: HSR-VAN SCHAACK #4-11 AWB Offset Wellpath: HSR-VAN SCHAACK #4-11 AWP

Facility: SEC.11-T02S-R66W Slot: SLOT#01 EX HSR-VAN SCHAACK #4-11 (623'FNL & 696'FWL, SEC.11, 8374, PR) Well: HSR-VAN SCHAACK #4-11 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	-13.00	47.00	-1206.90	-1296.15	-132.96	1771.38	25.40	71.98	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: HSR-VAN SCHAACK #4-11 AWB Offset Wellpath: HSR-VAN SCHAACK #4-11 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: HSR-VAN SCHAACK #4-11 AWB Offset Wellpath: HSR-VAN SCHAACK #4-11 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8374.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8374>	HSR-VAN SCHAACK #4-11 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: HSR-VAN SCHAACK #4-11 AWB Offset Wellpath: HSR-VAN SCHAACK #4-11 AWP

MD Reference: Rig on SLOT#01 EX HSR-VAN SCHAACK #4-11 (623'FNL & 696'FWL, SEC.11, 8374, PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: MAUL #2 AWB Offset Wellpath: MAUL #2 AWP

Facility: SEC.26-T01S-R66W Slot: SLOT#02 EX MAUL #2 (859'FSL & 1800'FEL, SEC.26,8280, PR) Well: MAUL #2 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	-13.00	69.00	10830.52	1489.88	7.83	10932.66	25.40	444.36	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: MAUL #2 AWB Offset Wellpath: MAUL #2 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: MAUL #2 AWB Offset Wellpath: MAUL #2 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8280.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8280>	MAUL #2 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: MAUL #2 AWB Offset Wellpath: MAUL #2 AWP

MD Reference: Rig on SLOT#02 EX MAUL #2 (859'FSL & 1800'FEL, SEC.26,8280, PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-4NAH PWB Offset Wellpath: ACKARD NORTH 2-35-4NAH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#15 ACKARD NORTH 2-35-4NAH (600'FSL & 2145'FWL, SEC.02) Well: ACKARD NORTH 2-35-4NAH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	13.00	13.00	0.44	149.96	89.83	149.96	1.40	248.60	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.44	149.96	89.83	149.96	1.72	162.74	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.44	149.96	89.83	149.96	2.28	100.67	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.44	149.96	89.83	149.96	2.89	71.60	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.44	149.96	89.83	149.96	3.50	55.31	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.44	149.96	89.83	149.96	4.12	44.98	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.44	149.96	89.83	149.96	4.74	37.87	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.44	149.96	89.83	149.96	5.36	32.69	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.44	149.96	89.83	149.96	5.99	28.76	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.44	149.96	89.83	149.96	6.61	25.66	PASS
1013.00†	1013.00	0.00	0.00	1012.38	1012.38	0.43	149.99	89.84	149.99	7.24	23.18	PASS
1113.00†	1113.00	0.00	0.00	1107.60	1107.57	-0.19	151.89	90.07	151.98	7.94	21.17	PASS
1200.00	1200.00	0.00	0.00	1190.24	1190.10	-1.51	155.97	90.56	156.29	8.74	19.58	PASS
1213.00†	1213.00	-0.03	-0.01	1202.57	1202.40	-1.77	156.77	-111.15	157.15	8.86	19.39	PASS
1313.00†	1312.97	-2.07	-0.83	1297.06	1296.53	-4.31	164.60	-110.81	166.26	9.75	18.49	PASS
1413.00†	1412.80	-7.35	-2.94	1390.73	1389.52	-7.78	175.27	-111.10	179.72	10.62	18.22	PASS
1513.00†	1512.38	-15.86	-6.35	1483.28	1480.99	-12.12	188.64	-111.85	197.53	11.48	18.42	PASS
1574.38	1573.31	-22.68	-9.07	1539.39	1536.21	-15.20	198.12	-112.46	210.62	12.02	18.71	PASS
1613.00†	1611.61	-27.35	-10.94	1574.42	1570.58	-17.29	204.55	-112.99	219.60	12.33	18.98	PASS
1713.00†	1710.75	-39.45	-15.79	1664.27	1658.34	-23.25	222.88	-114.00	244.89	13.11	19.83	PASS
1813.00†	1809.90	-51.55	-20.63	1752.76	1744.13	-29.94	243.49	-114.60	273.04	13.86	20.77	PASS
1913.00†	1909.05	-63.65	-25.47	1839.76	1827.78	-37.31	266.19	-114.89	303.91	14.62	21.80	PASS
2013.00†	2008.20	-75.75	-30.31	1925.13	1909.14	-45.31	290.81	-114.94	337.42	15.44	22.86	PASS
2113.00†	2107.34	-87.84	-35.15	2008.80	1988.08	-53.86	317.16	-114.83	373.49	16.23	24.02	PASS
2213.00†	2206.49	-99.94	-39.99	2090.65	2064.50	-62.92	345.05	-114.60	412.05	17.08	25.12	PASS
2313.00†	2305.64	-112.04	-44.83	2171.77	2139.37	-72.56	374.71	-114.29	453.01	17.82	26.43	PASS
2413.00†	2404.78	-124.14	-49.67	2262.51	2222.74	-83.63	408.79	-113.96	494.95	18.65	27.54	PASS
2513.00†	2503.93	-136.24	-54.51	2353.26	2306.12	-94.70	442.88	-113.67	536.89	19.50	28.53	PASS
2613.00†	2603.08	-148.34	-59.35	2444.01	2389.49	-105.77	476.96	-113.43	578.85	20.38	29.40	PASS
2713.00†	2702.23	-160.44	-64.20	2534.76	2472.86	-116.84	511.04	-113.22	620.81	21.27	30.17	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-4NAH PWB Offset Wellpath: ACKARD NORTH 2-35-4NAH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#15 ACKARD NORTH 2-35-4NAH (600'FSL & 2145'FWL, SEC.02) Well: ACKARD NORTH 2-35-4NAH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2801.37	-172.53	-69.04	2625.50	2556.23	-127.91	545.12	-113.03	662.78	22.17	30.85	PASS
2913.00†	2900.52	-184.63	-73.88	2716.25	2639.61	-138.98	579.21	-112.87	704.75	23.09	31.46	PASS
3013.00†	2999.67	-196.73	-78.72	2807.00	2722.98	-150.05	613.29	-112.72	746.73	24.02	32.00	PASS
3113.00†	3098.82	-208.83	-83.56	2897.75	2806.35	-161.12	647.37	-112.60	788.71	24.96	32.49	PASS
3213.00†	3197.96	-220.93	-88.40	2988.49	2889.72	-172.19	681.45	-112.48	830.70	25.92	32.93	PASS
3313.00†	3297.11	-233.03	-93.24	3079.24	2973.09	-183.26	715.53	-112.37	872.69	26.88	33.32	PASS
3413.00†	3396.26	-245.13	-98.08	3169.99	3056.47	-194.33	749.62	-112.28	914.68	27.85	33.68	PASS
3513.00†	3495.41	-257.22	-102.92	3260.74	3139.84	-205.40	783.70	-112.19	956.67	28.82	34.00	PASS
3613.00†	3594.55	-269.32	-107.76	3351.48	3223.21	-216.47	817.78	-112.11	998.66	29.80	34.30	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: ACKARD NORTH 2-35-4NAH PWB Offset Wellpath: ACKARD NORTH 2-35-4NAH PWP (REV. A.0)

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

HOLE & CASING SECTIONS - Offset Wellbore: ACKARD NORTH 2-35-4NAH PWB Offset Wellpath: ACKARD NORTH 2-35-4NAH PWP (REV. A.0)

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]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1789.64	0.27	91.42	-10.18	123.59
8.5in Open Hole	1800.00	17994.78	16194.78	1789.64	7436.00	-10.18	123.59	2926.56	873.66

SURVEY PROGRAM - Offset Wellbore: ACKARD NORTH 2-35-4NAH PWB Offset Wellpath: ACKARD NORTH 2-35-4NAH PWP (REV. A.0)

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	17994.78	Custom BHI NaviTrak (Standard Rotating) (Rockies 0.03Gt model)		ACKARD NORTH 2-35-4NAH PWB



Clearance Report
ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

OFFSET WELLPATH REFERENCE - Offset Wellbore: ACKARD NORTH 2-35-4NAH PWB Offset Wellpath: ACKARD NORTH 2-35-4NAH PWP (REV. A.0)	
MD Reference: RIG (13'KB) (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	13.00ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-4CDH PWB Offset Wellpath: ACKARD NORTH 2-35-4CDH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#16 ACKARD NORTH 2-35-4CDH (600'FSL & 2160'FWL, SEC.02) Well: ACKARD NORTH 2-35-4CDH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	13.00	13.00	0.49	164.97	89.83	164.97	1.40	273.62	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.49	164.97	89.83	164.97	1.72	179.11	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.49	164.97	89.83	164.97	2.28	110.81	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.49	164.97	89.83	164.97	2.89	78.81	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.49	164.97	89.83	164.97	3.50	60.87	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.49	164.97	89.83	164.97	4.12	49.50	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.49	164.97	89.83	164.97	4.74	41.68	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.49	164.97	89.83	164.97	5.36	35.99	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.49	164.97	89.83	164.97	5.99	31.65	PASS
913.00†	913.00	0.00	0.00	912.32	912.32	0.49	165.00	89.83	165.00	6.61	28.26	PASS
1013.00†	1013.00	0.00	0.00	1007.03	1007.01	-0.06	166.89	90.02	167.00	7.33	25.47	PASS
1113.00†	1113.00	0.00	0.00	1101.52	1101.35	-1.49	171.78	90.50	172.18	8.27	22.95	PASS
1200.00	1200.00	0.00	0.00	1183.37	1182.90	-3.42	178.42	91.10	179.27	9.05	21.63	PASS
1213.00†	1213.00	-0.03	-0.01	1195.56	1195.04	-3.76	179.60	-110.59	180.55	9.17	21.49	PASS
1313.00†	1312.97	-2.07	-0.83	1288.91	1287.72	-6.87	190.28	-110.07	192.83	10.05	20.76	PASS
1413.00†	1412.80	-7.35	-2.94	1381.25	1378.99	-10.77	203.70	-110.15	209.41	10.87	20.71	PASS
1513.00†	1512.38	-15.86	-6.35	1472.26	1468.46	-15.42	219.67	-110.66	230.25	11.74	20.97	PASS
1574.38	1573.31	-22.68	-9.07	1527.34	1522.34	-18.62	230.66	-111.12	245.13	12.22	21.40	PASS
1613.00†	1611.61	-27.35	-10.94	1561.69	1555.82	-20.76	238.02	-111.59	255.23	12.53	21.69	PASS
1713.00†	1710.75	-39.45	-15.79	1649.66	1641.14	-26.75	258.62	-112.52	283.38	13.31	22.59	PASS
1813.00†	1809.90	-51.55	-20.63	1736.14	1724.32	-33.35	281.31	-113.12	314.36	14.05	23.58	PASS
1913.00†	1909.05	-63.65	-25.47	1821.01	1805.23	-40.51	305.91	-113.47	348.03	14.81	24.63	PASS
2013.00†	2008.20	-75.75	-30.31	1904.17	1883.73	-48.16	332.24	-113.62	384.31	15.59	25.78	PASS
2113.00†	2107.34	-87.84	-35.15	1985.53	1959.74	-56.27	360.10	-113.63	423.09	16.44	26.85	PASS
2213.00†	2206.49	-99.94	-39.99	2065.03	2033.19	-64.77	389.32	-113.54	464.31	17.16	28.18	PASS
2313.00†	2305.64	-112.04	-44.83	2152.48	2113.30	-74.56	422.98	-113.38	507.20	17.96	29.35	PASS
2413.00†	2404.78	-124.14	-49.67	2242.78	2196.00	-84.69	457.79	-113.24	550.16	18.79	30.39	PASS
2513.00†	2503.93	-136.24	-54.51	2333.07	2278.69	-94.82	492.61	-113.12	593.12	19.64	31.29	PASS
2613.00†	2603.08	-148.34	-59.35	2423.37	2361.39	-104.94	527.42	-113.02	636.08	20.51	32.09	PASS
2713.00†	2702.23	-160.44	-64.20	2513.66	2444.09	-115.07	562.23	-112.93	679.04	21.40	32.79	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-4CDH PWB Offset Wellpath: ACKARD NORTH 2-35-4CDH PWP (REV. A.0)

Facility: SEC.02-T03S-R66W Slot: SLOT#16 ACKARD NORTH 2-35-4CDH (600'FSL & 2160'FWL, SEC.02) Well: ACKARD NORTH 2-35-4CDH Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2801.37	-172.53	-69.04	2603.96	2526.78	-125.20	597.04	-112.85	722.01	22.30	33.41	PASS
2913.00†	2900.52	-184.63	-73.88	2694.25	2609.48	-135.33	631.85	-112.78	764.98	23.22	33.95	PASS
3013.00†	2999.67	-196.73	-78.72	2784.54	2692.18	-145.45	666.66	-112.71	807.94	24.15	34.44	PASS
3113.00†	3098.82	-208.83	-83.56	2874.84	2774.87	-155.58	701.48	-112.66	850.91	25.09	34.88	PASS
3213.00†	3197.96	-220.93	-88.40	2965.13	2857.57	-165.71	736.29	-112.60	893.88	26.04	35.27	PASS
3313.00†	3297.11	-233.03	-93.24	3055.43	2940.27	-175.83	771.10	-112.56	936.85	26.99	35.62	PASS
3413.00†	3396.26	-245.13	-98.08	3145.72	3022.96	-185.96	805.91	-112.51	979.82	27.96	35.93	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: ACKARD NORTH 2-35-4CDH PWB Offset Wellpath: ACKARD NORTH 2-35-4CDH PWP (REV. A.0)

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

HOLE & CASING SECTIONS - Offset Wellbore: ACKARD NORTH 2-35-4CDH PWB Offset Wellpath: ACKARD NORTH 2-35-4CDH PWP (REV. A.0)

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]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1785.27	0.30	100.57	-11.64	141.60
8.5in Open Hole	1800.00	18444.07	16644.07	1785.27	7823.00	-11.64	141.60	2926.81	908.71

SURVEY PROGRAM - Offset Wellbore: ACKARD NORTH 2-35-4CDH PWB Offset Wellpath: ACKARD NORTH 2-35-4CDH PWP (REV. A.0)

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	18444.07	Custom BHI NaviTrak (Standard Rotating) (Rockies 0.03Gt model)		ACKARD NORTH 2-35-4CDH PWB



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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

OFFSET WELLPATH REFERENCE - Offset Wellbore: ACKARD NORTH 2-35-4CDH PWB Offset Wellpath: ACKARD NORTH 2-35-4CDH PWP (REV. A.0)	
MD Reference: RIG (13'KB) (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	13.00ft



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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: MAUL #44-26 AWB Offset Wellpath: MAUL #44-26 AWP

Facility: SEC.26-T01S-R66W Slot: SLOT#01 EX MAUL #44-26 (660'FSL & 652'FEL, SEC.26,8289, PR) Well: MAUL #44-26 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	-13.00	57.00	10621.65	2619.10	13.85	10939.88	25.40	444.65	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: MAUL #44-26 AWB Offset Wellpath: MAUL #44-26 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: MAUL #44-26 AWB Offset Wellpath: MAUL #44-26 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8289.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8289>	MAUL #44-26 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: MAUL #44-26 AWB Offset Wellpath: MAUL #44-26 AWP

MD Reference: Rig on SLOT#01 MAUL #44-26 (660'FSL & 652'FEL, SEC.26,8289, PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: SLOT#01 EX CHAMPLIN 117 AMOCO G#1 AWB Offset Wellpath: SLOT#01 EX CHAMPLIN 117 AMOCO G#1 AWP

Facility: SEC.35-T01S-R66W Slot: SLOT#02 EX CHAMPLIN 117 AMOCO G#1 (1980'FSL & 660'FEL, SEC.35, PA,8360) Well: SLOT#01 EX CHAMPLIN 117 AMOCO G#1 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	3.00	13.00	6610.68	2609.63	21.54	7107.13	50.08	144.22	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: SLOT#01 EX CHAMPLIN 117 AMOCO G#1 AWB Offset Wellpath: SLOT#01 EX CHAMPLIN 117 AMOCO G#1 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: SLOT#01 EX CHAMPLIN 117 AMOCO G#1 AWB Offset Wellpath: SLOT#01 EX CHAMPLIN 117 AMOCO G#1 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8360.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8360>	SLOT#01 EX CHAMPLIN 117 AMOCO G#1 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: SLOT#01 EX CHAMPLIN 117 AMOCO G#1 AWB Offset Wellpath: SLOT#01 EX CHAMPLIN 117 AMOCO G#1 AWP

MD Reference: Rig on SLOT#02 EX CHAMPLIN 117 AMOCO G#1 (1980'FSL & 660'FEL, SEC.35, PA,8360) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: HSR-VAN SCHAACK #2-11 AWB Offset Wellpath: HSR-VAN SCHAACK #2-11 AWP												
Facility: SEC.11-T02S-R66W Slot: SLOT#01 EX HSR-VAN SCHAACK #2-11 (608'FNL & 1956'FEL, SEC.11,8384, PR) Well: HSR-VAN SCHAACK #2-11 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	-13.00	15.00	-1196.78	1348.31	131.59	1802.84	25.40	73.25	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: HSR-VAN SCHAACK #2-11 AWB Offset Wellpath: HSR-VAN SCHAACK #2-11 AWP			
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical 1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical 3.000ft

WELLPATH COMPOSITION - Offset Wellbore: HSR-VAN SCHAACK #2-11 AWB Offset Wellpath: HSR-VAN SCHAACK #2-11 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8384.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8384>	HSR-VAN SCHAACK #2-11 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: HSR-VAN SCHAACK #2-11 AWB Offset Wellpath: HSR-VAN SCHAACK #2-11 AWP	
MD Reference: Rig on SLOT#01 EX HSR-VAN SCHAACK #2-11 (608'FNL & 1956'FEL, SEC.11,8384, PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



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ACKARD NORTH 2-35-2CDH PWP (REV. A.0)
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: HSR LAWSON #8-3 AWB Offset Wellpath: HSR LAWSON #8-3 AWP												
Facility: SEC.03-T02S-R66W Slot: SLOT#01 EX HSR LAWSON #8-3 (2080'FNL & 660'FEL, SEC.03,8598, PR) Well: HSR LAWSON #8-3 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	-13.00	40.00	2427.60	-2643.22	-47.44	3588.95	25.40	145.85	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: HSR LAWSON #8-3 AWB Offset Wellpath: HSR LAWSON #8-3 AWP			
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical 1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical 3.000ft

WELLPATH COMPOSITION - Offset Wellbore: HSR LAWSON #8-3 AWB Offset Wellpath: HSR LAWSON #8-3 AWP			
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment Wellbore
0.00	8598.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8598> HSR LAWSON #8-3 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: HSR LAWSON #8-3 AWB Offset Wellpath: HSR LAWSON #8-3 AWP	
MD Reference: Rig on SLOT#01 EX HSE LAWSON #8-3 (2080'FNL & 660'FEL, SEC.03,8598, PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: CARLSON #1 AWB Offset Wellpath: CARLSON #1 AWP												
Facility: SEC.02-T02S-R66W Slot: SLOT#01 EX CARLSON #1 (660'FNL & 660'FEL, SEC.02,8400, PR) Well: CARLSON #1 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	40.00	13.00	4031.73	2639.43	33.21	4818.86	50.94	96.09	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: CARLSON #1 AWB Offset Wellpath: CARLSON #1 AWP			
Slot Surface Uncertainty @1SD		Horizontal	0.100ft
Facility Surface Uncertainty @1SD		Horizontal	8.200ft

WELLPATH COMPOSITION - Offset Wellbore: CARLSON #1 AWB Offset Wellpath: CARLSON #1 AWP			
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Wellbore
0.00	8400.00	Drift Indicator - Inclination Only (Actual Survey)	CARLSON #1 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: CARLSON #1 AWB Offset Wellpath: CARLSON #1 AWP	
MD Reference: Rig on SLOT#01 EX CARLSON #1 (660'FNL & 660'FEL, SEC.02,8400, PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: HSR-TR RANCH #16-3 AWB Offset Wellpath: HSR-TR RANCH #16-3 AWP

Facility: SEC.03-T02S-R66W Slot: SLOT#02 EX HSR-TR RANCH #16-3 (660'FSL & 660'FEL, SEC.03,8362, PR) Well: HSR-TR RANCH #16-3 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	-13.00	53.00	56.66	-2656.68	-88.78	2657.59	25.40	108.00	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: HSR-TR RANCH #16-3 AWB Offset Wellpath: HSR-TR RANCH #16-3 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: HSR-TR RANCH #16-3 AWB Offset Wellpath: HSR-TR RANCH #16-3 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8362.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8362>	HSR-TR RANCH #16-3 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: HSR-TR RANCH #16-3 AWB Offset Wellpath: HSR-TR RANCH #16-3 AWP

MD Reference: Rig on SLOT#02 EX HSR-TR RANCH #16-3 (660'FSL & 660'FEL, SEC.03,8362, PR) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-2CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-2CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: CHAMPLIN 117 AMOCO C#4 AWB Offset Wellpath: CHAMPLIN 117 AMOCO C#4 AWP

Facility: SEC.01-T02S-R66W Slot: SLOT#01 EX CHAMPLIN 117 AMOCO C#4 (1980'FNL & 660'FWL, SEC.01, PR, 8410) Well: CHAMPLIN 117 AMOCO C#4 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	39.00	13.00	2694.90	3919.01	55.49	4756.17	50.92	94.89	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: CHAMPLIN 117 AMOCO C#4 AWB Offset Wellpath: CHAMPLIN 117 AMOCO C#4 AWP

Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: CHAMPLIN 117 AMOCO C#4 AWB Offset Wellpath: CHAMPLIN 117 AMOCO C#4 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8410.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8410>	CHAMPLIN 117 AMOCO C#4 AWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: CHAMPLIN 117 AMOCO C#4 AWB Offset Wellpath: CHAMPLIN 117 AMOCO C#4 AWP

MD Reference: Rig on SLOT#01 EX CHAMPLINE 117 AMOCO C#4 (1980'FNL & 660'FWL, SEC.01, PR, 8410) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft