

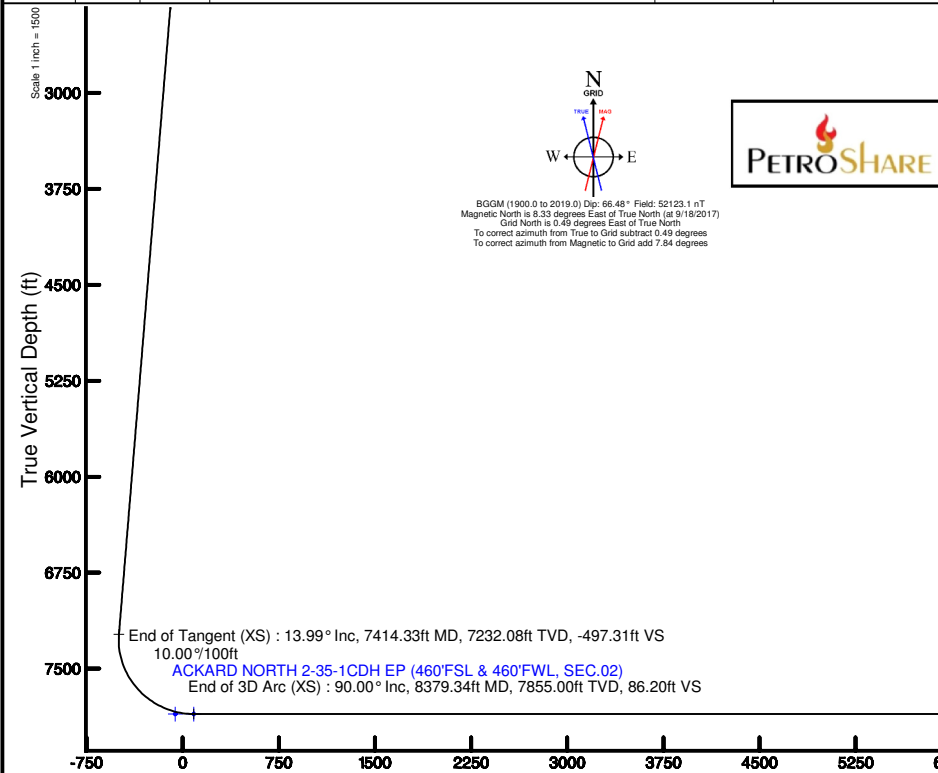
Location:	COLORADO	Slot:	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Field:	ADAMS COUNTY (NAD83/ GRID NORTH)	Well:	ACKARD NORTH 2-35-1CDH
Facility:	SEC.02-T03S-R66W	Wellbore:	ACKARD NORTH 2-35-1CDH PWB

Plot reference wellpath is ACKARD NORTH 2-35-1CDH PW P (REV-A.0)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (13'KB) (RKB)	* - Wellpath was transformed from a different geodetic datum
Measured depths are referenced to RIG (13'KB) (RKB)	North Reference: Grid north
RIG (13'KB) (RKB) to Mean Sea Level: 5213 feet	Scale: True distance
Mean Sea Level to Ground level (At Slot: SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02): 0 feet	Depths are in feet
Coordinates are in feet referenced to Siot	Created by: cantriat on 2017-10-24
	Database: WellArchitectDB

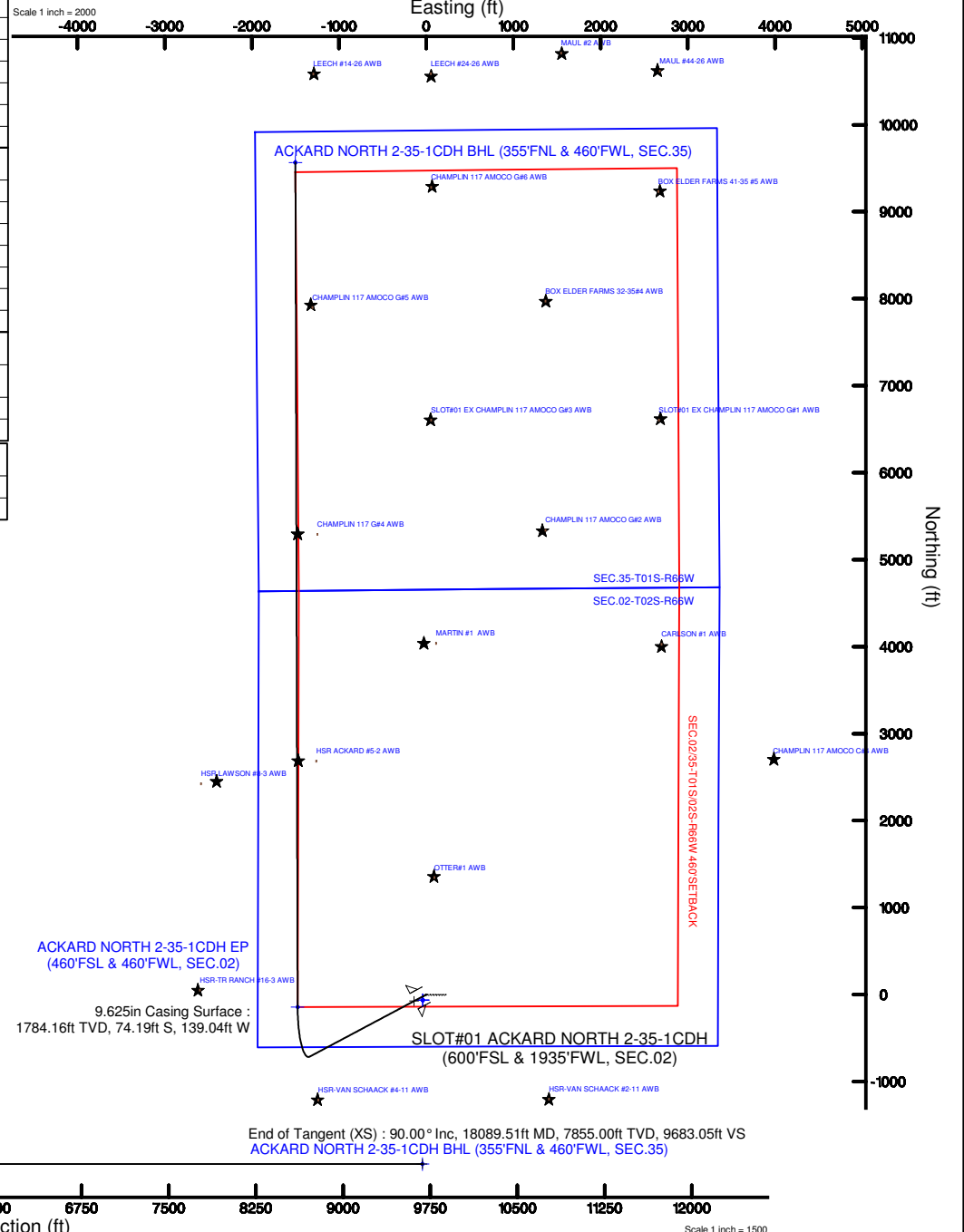
Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.02-T03S-R66W			3211634.960	1207893.832	39°54'05.673"N	104°44'44.357"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#01 ACKARD NORTH 2-35-1CDH (600FSL & 1935FWL, SEC.02)	0.00	0.00	3211634.962	1207893.836	39°54'05.673"N	104°44'44.357"W
RIG (13X6) (R#0) to Ground level (A Slot: SLOT#01 ACKARD NORTH 2-35-1CDH (600FSL & 1935FWL, SEC.02))					5213N	
Mean Sea Level to Ground level (A Slot: SLOT#01 ACKARD NORTH 2-35-1CDH (600FSL & 1935FWL, SEC.02))					0ft	
RIG (13X6) (R#0) to Mean Sea Level					5213N	

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	1784.16	0.00	0.00	-74.19	-139.04	ACKARD NORTH 2-35-1CDH PWB
8.5in Open Hole	1800.00	18089.51	16289.51	1784.16	7855.00	-74.19	-139.04	9566.17	-1499.98	ACKARD NORTH 2-35-1CDH PWB

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



Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	13.00	0.00	241.918	13.00	0.00	0.00	0.00	0.00
End of Tangent	800.00	0.00	241.918	800.00	0.00	0.00	0.00	0.00
End of Build (XS)	1499.25	13.985	241.918	1492.33	-39.97	-74.92	2.00	-27.89
End of Tangent (XS)	7414.33	13.985	241.918	7232.08	-712.89	-1336.12	0.00	-497.31
End of 3D Arc (XS)	8379.34	90.000	359.851	7855.00	-143.97	-1474.67	10.00	86.20
End of Tangent (XS)	18089.51	90.000	359.851	7855.00	9566.17	-1499.98	0.00	9683.05





# Planned Wellpath Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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 9:25:16 AM
Convergence at slot	0.49° East	Database/Source file	WellArchitectDB/ACKARD_NORTH_2-35-1CDH_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	0.00	0.00	3211634.96	1207893.84	39°54'05.673"N	104°44'44.357"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#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'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	351.09°



# Planned Wellpath Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH DATA (197 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	241.918	0.00	0.00	0.00	0.00	39°54'05.673"N	104°44'44.357"W	0.00	
13.00	0.000	241.918	13.00	0.00	0.00	0.00	39°54'05.673"N	104°44'44.357"W	0.00	Tie On
113.00†	0.000	241.918	113.00	0.00	0.00	0.00	39°54'05.673"N	104°44'44.357"W	0.00	
213.00†	0.000	241.918	213.00	0.00	0.00	0.00	39°54'05.673"N	104°44'44.357"W	0.00	
313.00†	0.000	241.918	313.00	0.00	0.00	0.00	39°54'05.673"N	104°44'44.357"W	0.00	
413.00†	0.000	241.918	413.00	0.00	0.00	0.00	39°54'05.673"N	104°44'44.357"W	0.00	
513.00†	0.000	241.918	513.00	0.00	0.00	0.00	39°54'05.673"N	104°44'44.357"W	0.00	
613.00†	0.000	241.918	613.00	0.00	0.00	0.00	39°54'05.673"N	104°44'44.357"W	0.00	
713.00†	0.000	241.918	713.00	0.00	0.00	0.00	39°54'05.673"N	104°44'44.357"W	0.00	
800.00	0.000	241.918	800.00	0.00	0.00	0.00	39°54'05.673"N	104°44'44.357"W	0.00	End of Tangent
813.00†	0.260	241.918	813.00	-0.01	-0.01	-0.03	39°54'05.673"N	104°44'44.358"W	2.00	
913.00†	2.260	241.918	912.97	-0.73	-1.05	-1.97	39°54'05.663"N	104°44'44.383"W	2.00	
1013.00†	4.260	241.918	1012.80	-2.60	-3.73	-6.98	39°54'05.637"N	104°44'44.447"W	2.00	
1113.00†	6.260	241.918	1112.38	-5.61	-8.04	-15.07	39°54'05.595"N	104°44'44.552"W	2.00	
1213.00†	8.260	241.918	1211.57	-9.76	-13.99	-26.22	39°54'05.537"N	104°44'44.695"W	2.00	
1313.00†	10.260	241.918	1310.26	-15.04	-21.56	-40.42	39°54'05.464"N	104°44'44.878"W	2.00	
1413.00†	12.260	241.918	1408.33	-21.45	-30.76	-57.64	39°54'05.374"N	104°44'45.100"W	2.00	
1499.25	13.985	241.918	1492.33	-27.89	-39.97	-74.92	39°54'05.285"N	104°44'45.323"W	2.00	End of Build (XS)
1513.00†	13.985	241.918	1505.67	-28.98	-41.54	-77.85	39°54'05.269"N	104°44'45.361"W	0.00	
1613.00†	13.985	241.918	1602.71	-36.91	-52.91	-99.17	39°54'05.159"N	104°44'45.636"W	0.00	
1661.74†	13.985	241.918	1650.00	-40.78	-58.46	-109.56	39°54'05.105"N	104°44'45.769"W	0.00	Fox Hills
1713.00†	13.985	241.918	1699.74	-44.85	-64.29	-120.49	39°54'05.048"N	104°44'45.910"W	0.00	
1813.00†	13.985	241.918	1796.78	-52.78	-75.67	-141.82	39°54'04.937"N	104°44'46.185"W	0.00	
1913.00†	13.985	241.918	1893.81	-60.72	-87.04	-163.14	39°54'04.827"N	104°44'46.460"W	0.00	
2013.00†	13.985	241.918	1990.85	-68.66	-98.42	-184.46	39°54'04.716"N	104°44'46.735"W	0.00	
2113.00†	13.985	241.918	2087.89	-76.59	-109.79	-205.78	39°54'04.606"N	104°44'47.010"W	0.00	
2213.00†	13.985	241.918	2184.92	-84.53	-121.17	-227.10	39°54'04.495"N	104°44'47.284"W	0.00	
2313.00†	13.985	241.918	2281.96	-92.46	-132.55	-248.42	39°54'04.384"N	104°44'47.559"W	0.00	
2413.00†	13.985	241.918	2378.99	-100.40	-143.92	-269.75	39°54'04.274"N	104°44'47.834"W	0.00	
2513.00†	13.985	241.918	2476.03	-108.34	-155.30	-291.07	39°54'04.163"N	104°44'48.109"W	0.00	



# Planned Wellpath Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)

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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

## WELLPATH DATA (197 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2613.00†	13.985	241.918	2573.06	-116.27	-166.68	-312.39	39°54'04.052"N	104°44'48.384"W	0.00	
2713.00†	13.985	241.918	2670.10	-124.21	-178.05	-333.71	39°54'03.942"N	104°44'48.658"W	0.00	
2813.00†	13.985	241.918	2767.14	-132.15	-189.43	-355.03	39°54'03.831"N	104°44'48.933"W	0.00	
2913.00†	13.985	241.918	2864.17	-140.08	-200.81	-376.35	39°54'03.720"N	104°44'49.208"W	0.00	
3013.00†	13.985	241.918	2961.21	-148.02	-212.18	-397.68	39°54'03.610"N	104°44'49.483"W	0.00	
3113.00†	13.985	241.918	3058.24	-155.95	-223.56	-419.00	39°54'03.499"N	104°44'49.758"W	0.00	
3213.00†	13.985	241.918	3155.28	-163.89	-234.93	-440.32	39°54'03.389"N	104°44'50.033"W	0.00	
3313.00†	13.985	241.918	3252.32	-171.83	-246.31	-461.64	39°54'03.278"N	104°44'50.307"W	0.00	
3413.00†	13.985	241.918	3349.35	-179.76	-257.69	-482.96	39°54'03.167"N	104°44'50.582"W	0.00	
3513.00†	13.985	241.918	3446.39	-187.70	-269.06	-504.29	39°54'03.057"N	104°44'50.857"W	0.00	
3613.00†	13.985	241.918	3543.42	-195.63	-280.44	-525.61	39°54'02.946"N	104°44'51.132"W	0.00	
3713.00†	13.985	241.918	3640.46	-203.57	-291.82	-546.93	39°54'02.835"N	104°44'51.407"W	0.00	
3813.00†	13.985	241.918	3737.50	-211.51	-303.19	-568.25	39°54'02.725"N	104°44'51.681"W	0.00	
3913.00†	13.985	241.918	3834.53	-219.44	-314.57	-589.57	39°54'02.614"N	104°44'51.956"W	0.00	
4013.00†	13.985	241.918	3931.57	-227.38	-325.94	-610.89	39°54'02.503"N	104°44'52.231"W	0.00	
4113.00†	13.985	241.918	4028.60	-235.31	-337.32	-632.22	39°54'02.393"N	104°44'52.506"W	0.00	
4213.00†	13.985	241.918	4125.64	-243.25	-348.70	-653.54	39°54'02.282"N	104°44'52.781"W	0.00	
4313.00†	13.985	241.918	4222.67	-251.19	-360.07	-674.86	39°54'02.172"N	104°44'53.055"W	0.00	
4413.00†	13.985	241.918	4319.71	-259.12	-371.45	-696.18	39°54'02.061"N	104°44'53.330"W	0.00	
4513.00†	13.985	241.918	4416.75	-267.06	-382.83	-717.50	39°54'01.950"N	104°44'53.605"W	0.00	
4613.00†	13.985	241.918	4513.78	-274.99	-394.20	-738.82	39°54'01.840"N	104°44'53.880"W	0.00	
4713.00†	13.985	241.918	4610.82	-282.93	-405.58	-760.15	39°54'01.729"N	104°44'54.155"W	0.00	
4813.00†	13.985	241.918	4707.85	-290.87	-416.95	-781.47	39°54'01.618"N	104°44'54.429"W	0.00	
4913.00†	13.985	241.918	4804.89	-298.80	-428.33	-802.79	39°54'01.508"N	104°44'54.704"W	0.00	
5013.00†	13.985	241.918	4901.93	-306.74	-439.71	-824.11	39°54'01.397"N	104°44'54.979"W	0.00	
5113.00†	13.985	241.918	4998.96	-314.67	-451.08	-845.43	39°54'01.287"N	104°44'55.254"W	0.00	
5213.00†	13.985	241.918	5096.00	-322.61	-462.46	-866.76	39°54'01.176"N	104°44'55.529"W	0.00	
5217.12†	13.985	241.918	5100.00	-322.94	-462.93	-867.63	39°54'01.171"N	104°44'55.540"W	0.00	Sussex / Shannon
5313.00†	13.985	241.918	5193.03	-330.55	-473.84	-888.08	39°54'01.065"N	104°44'55.803"W	0.00	
5413.00†	13.985	241.918	5290.07	-338.48	-485.21	-909.40	39°54'00.955"N	104°44'56.078"W	0.00	





# Planned Wellpath Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

## WELLPATH DATA (197 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5513.00†	13.985	241.918	5387.11	-346.42	-496.59	-930.72	39°54'00.844"N	104°44'56.353"W	0.00	
5613.00†	13.985	241.918	5484.14	-354.35	-507.97	-952.04	39°54'00.733"N	104°44'56.628"W	0.00	
5713.00†	13.985	241.918	5581.18	-362.29	-519.34	-973.36	39°54'00.623"N	104°44'56.903"W	0.00	
5813.00†	13.985	241.918	5678.21	-370.23	-530.72	-994.69	39°54'00.512"N	104°44'57.178"W	0.00	
5913.00†	13.985	241.918	5775.25	-378.16	-542.09	-1016.01	39°54'00.401"N	104°44'57.452"W	0.00	
6013.00†	13.985	241.918	5872.28	-386.10	-553.47	-1037.33	39°54'00.291"N	104°44'57.727"W	0.00	
6113.00†	13.985	241.918	5969.32	-394.04	-564.85	-1058.65	39°54'00.180"N	104°44'58.002"W	0.00	
6213.00†	13.985	241.918	6066.36	-401.97	-576.22	-1079.97	39°54'00.069"N	104°44'58.277"W	0.00	
6313.00†	13.985	241.918	6163.39	-409.91	-587.60	-1101.29	39°53'59.959"N	104°44'58.552"W	0.00	
6413.00†	13.985	241.918	6260.43	-417.84	-598.98	-1122.62	39°53'59.848"N	104°44'58.826"W	0.00	
6513.00†	13.985	241.918	6357.46	-425.78	-610.35	-1143.94	39°53'59.738"N	104°44'59.101"W	0.00	
6613.00†	13.985	241.918	6454.50	-433.72	-621.73	-1165.26	39°53'59.627"N	104°44'59.376"W	0.00	
6713.00†	13.985	241.918	6551.54	-441.65	-633.10	-1186.58	39°53'59.516"N	104°44'59.651"W	0.00	
6813.00†	13.985	241.918	6648.57	-449.59	-644.48	-1207.90	39°53'59.406"N	104°44'59.926"W	0.00	
6913.00†	13.985	241.918	6745.61	-457.52	-655.86	-1229.23	39°53'59.295"N	104°45'00.200"W	0.00	
7013.00†	13.985	241.918	6842.64	-465.46	-667.23	-1250.55	39°53'59.184"N	104°45'00.475"W	0.00	
7113.00†	13.985	241.918	6939.68	-473.40	-678.61	-1271.87	39°53'59.074"N	104°45'00.750"W	0.00	
7213.00†	13.985	241.918	7036.72	-481.33	-689.99	-1293.19	39°53'58.963"N	104°45'01.025"W	0.00	
7313.00†	13.985	241.918	7133.75	-489.27	-701.36	-1314.51	39°53'58.852"N	104°45'01.300"W	0.00	
7413.00†	13.985	241.918	7230.79	-497.20	-712.74	-1335.83	39°53'58.742"N	104°45'01.574"W	0.00	
7414.33	13.985	241.918	7232.08	-497.31	-712.89	-1336.12	39°53'58.740"N	104°45'01.578"W	0.00	End of Tangent (XS)
7513.00†	12.851	285.159	7328.29	-496.75	-715.64	-1357.28	39°53'58.715"N	104°45'01.850"W	10.00	
7613.00†	18.162	317.725	7424.79	-479.15	-701.16	-1378.55	39°53'58.860"N	104°45'02.121"W	10.00	
7657.89†	21.628	326.143	7467.00	-465.80	-689.11	-1387.87	39°53'58.980"N	104°45'02.239"W	10.00	Niobrara A Chalk
7680.63†	23.511	329.468	7488.00	-457.78	-681.72	-1392.51	39°53'59.053"N	104°45'02.298"W	10.00	Niobrara A Marl
7713.00†	26.293	333.405	7517.36	-444.95	-669.75	-1399.00	39°53'59.172"N	104°45'02.380"W	10.00	
7813.00†	35.348	341.778	7603.19	-395.17	-622.35	-1418.01	39°53'59.642"N	104°45'02.619"W	10.00	
7833.87†	37.292	343.057	7620.00	-382.96	-610.56	-1421.74	39°53'59.759"N	104°45'02.666"W	10.00	Niobrara B Chalk
7863.33†	40.058	344.680	7643.00	-364.69	-592.88	-1426.85	39°53'59.934"N	104°45'02.729"W	10.00	Niobrara B Marl
7913.00†	44.766	347.033	7679.66	-331.34	-560.40	-1435.00	39°54'00.256"N	104°45'02.830"W	10.00	



# Planned Wellpath Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)

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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

## WELLPATH DATA (197 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7929.18†	46.309	347.716	7691.00	-319.82	-549.13	-1437.52	39°54'00.367"N	104°45'02.861"W	10.00	Niobrara C Chalk
7972.87†	50.493	349.398	7720.00	-287.19	-517.11	-1443.99	39°54'00.684"N	104°45'02.941"W	10.00	Niobrara C Marl
8013.00†	54.355	350.772	7744.47	-255.40	-485.79	-1449.45	39°54'00.994"N	104°45'03.008"W	10.00	
8113.00†	64.036	353.700	7795.62	-169.64	-400.79	-1460.93	39°54'01.835"N	104°45'03.146"W	10.00	
8203.99†	72.888	355.966	7829.00	-85.28	-316.58	-1468.50	39°54'02.668"N	104°45'03.234"W	10.00	Fort Hays
8213.00†	73.766	356.177	7831.58	-76.68	-307.97	-1469.09	39°54'02.753"N	104°45'03.240"W	10.00	
8313.00†	83.522	358.419	7851.25	20.66	-210.16	-1473.67	39°54'03.720"N	104°45'03.288"W	10.00	
8379.34	90.000	359.851	7855.00†	86.20	-143.97	-1474.67	39°54'04.374"N	104°45'03.294"W	10.00	End of 3D Arc (XS)
8413.00†	90.000	359.851	7855.00	119.47	-110.31	-1474.75	39°54'04.707"N	104°45'03.291"W	0.00	
8513.00†	90.000	359.851	7855.00	218.30	-10.31	-1475.01	39°54'05.695"N	104°45'03.284"W	0.00	
8613.00†	90.000	359.851	7855.00	317.14	89.69	-1475.28	39°54'06.683"N	104°45'03.276"W	0.00	
8713.00†	90.000	359.851	7855.00	415.97	189.69	-1475.54	39°54'07.671"N	104°45'03.269"W	0.00	
8813.00†	90.000	359.851	7855.00	514.80	289.69	-1475.80	39°54'08.660"N	104°45'03.261"W	0.00	
8913.00†	90.000	359.851	7855.00	613.64	389.69	-1476.06	39°54'09.648"N	104°45'03.254"W	0.00	
9013.00†	90.000	359.851	7855.00	712.47	489.69	-1476.32	39°54'10.636"N	104°45'03.247"W	0.00	
9113.00†	90.000	359.851	7855.00	811.30	589.69	-1476.58	39°54'11.624"N	104°45'03.239"W	0.00	
9213.00†	90.000	359.851	7855.00	910.14	689.69	-1476.84	39°54'12.613"N	104°45'03.232"W	0.00	
9313.00†	90.000	359.851	7855.00	1008.97	789.69	-1477.10	39°54'13.601"N	104°45'03.224"W	0.00	
9413.00†	90.000	359.851	7855.00	1107.80	889.69	-1477.36	39°54'14.589"N	104°45'03.217"W	0.00	
9513.00†	90.000	359.851	7855.00	1206.63	989.69	-1477.62	39°54'15.577"N	104°45'03.209"W	0.00	
9613.00†	90.000	359.851	7855.00	1305.47	1089.69	-1477.88	39°54'16.565"N	104°45'03.202"W	0.00	
9713.00†	90.000	359.851	7855.00	1404.30	1189.68	-1478.14	39°54'17.554"N	104°45'03.194"W	0.00	
9813.00†	90.000	359.851	7855.00	1503.13	1289.68	-1478.40	39°54'18.542"N	104°45'03.187"W	0.00	
9913.00†	90.000	359.851	7855.00	1601.97	1389.68	-1478.66	39°54'19.530"N	104°45'03.179"W	0.00	
10013.00†	90.000	359.851	7855.00	1700.80	1489.68	-1478.93	39°54'20.518"N	104°45'03.172"W	0.00	
10113.00†	90.000	359.851	7855.00	1799.63	1589.68	-1479.19	39°54'21.507"N	104°45'03.164"W	0.00	
10213.00†	90.000	359.851	7855.00	1898.46	1689.68	-1479.45	39°54'22.495"N	104°45'03.157"W	0.00	
10313.00†	90.000	359.851	7855.00	1997.30	1789.68	-1479.71	39°54'23.483"N	104°45'03.149"W	0.00	
10413.00†	90.000	359.851	7855.00	2096.13	1889.68	-1479.97	39°54'24.471"N	104°45'03.142"W	0.00	
10513.00†	90.000	359.851	7855.00	2194.96	1989.68	-1480.23	39°54'25.460"N	104°45'03.134"W	0.00	



# Planned Wellpath Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

## WELLPATH DATA (197 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	359.851	7855.00	2293.80	2089.68	-1480.49	39°54'26.448"N	104°45'03.127"W	0.00	
10713.00†	90.000	359.851	7855.00	2392.63	2189.68	-1480.75	39°54'27.436"N	104°45'03.119"W	0.00	
10813.00†	90.000	359.851	7855.00	2491.46	2289.68	-1481.01	39°54'28.424"N	104°45'03.112"W	0.00	
10913.00†	90.000	359.851	7855.00	2590.30	2389.68	-1481.27	39°54'29.412"N	104°45'03.104"W	0.00	
11013.00†	90.000	359.851	7855.00	2689.13	2489.68	-1481.53	39°54'30.401"N	104°45'03.097"W	0.00	
11113.00†	90.000	359.851	7855.00	2787.96	2589.68	-1481.79	39°54'31.389"N	104°45'03.089"W	0.00	
11213.00†	90.000	359.851	7855.00	2886.79	2689.68	-1482.05	39°54'32.377"N	104°45'03.082"W	0.00	
11313.00†	90.000	359.851	7855.00	2985.63	2789.68	-1482.31	39°54'33.365"N	104°45'03.074"W	0.00	
11413.00†	90.000	359.851	7855.00	3084.46	2889.68	-1482.57	39°54'34.354"N	104°45'03.067"W	0.00	
11513.00†	90.000	359.851	7855.00	3183.29	2989.68	-1482.84	39°54'35.342"N	104°45'03.059"W	0.00	
11613.00†	90.000	359.851	7855.00	3282.13	3089.68	-1483.10	39°54'36.330"N	104°45'03.052"W	0.00	
11713.00†	90.000	359.851	7855.00	3380.96	3189.68	-1483.36	39°54'37.318"N	104°45'03.044"W	0.00	
11813.00†	90.000	359.851	7855.00	3479.79	3289.68	-1483.62	39°54'38.307"N	104°45'03.037"W	0.00	
11913.00†	90.000	359.851	7855.00	3578.62	3389.68	-1483.88	39°54'39.295"N	104°45'03.029"W	0.00	
12013.00†	90.000	359.851	7855.00	3677.46	3489.68	-1484.14	39°54'40.283"N	104°45'03.022"W	0.00	
12113.00†	90.000	359.851	7855.00	3776.29	3589.68	-1484.40	39°54'41.271"N	104°45'03.014"W	0.00	
12213.00†	90.000	359.851	7855.00	3875.12	3689.68	-1484.66	39°54'42.259"N	104°45'03.007"W	0.00	
12313.00†	90.000	359.851	7855.00	3973.96	3789.68	-1484.92	39°54'43.248"N	104°45'02.999"W	0.00	
12413.00†	90.000	359.851	7855.00	4072.79	3889.68	-1485.18	39°54'44.236"N	104°45'02.992"W	0.00	
12513.00†	90.000	359.851	7855.00	4171.62	3989.68	-1485.44	39°54'45.224"N	104°45'02.984"W	0.00	
12613.00†	90.000	359.851	7855.00	4270.46	4089.68	-1485.70	39°54'46.212"N	104°45'02.977"W	0.00	
12713.00†	90.000	359.851	7855.00	4369.29	4189.67	-1485.96	39°54'47.201"N	104°45'02.969"W	0.00	
12813.00†	90.000	359.851	7855.00	4468.12	4289.67	-1486.22	39°54'48.189"N	104°45'02.962"W	0.00	
12913.00†	90.000	359.851	7855.00	4566.95	4389.67	-1486.48	39°54'49.177"N	104°45'02.954"W	0.00	
13013.00†	90.000	359.851	7855.00	4665.79	4489.67	-1486.75	39°54'50.165"N	104°45'02.947"W	0.00	
13113.00†	90.000	359.851	7855.00	4764.62	4589.67	-1487.01	39°54'51.154"N	104°45'02.939"W	0.00	
13213.00†	90.000	359.851	7855.00	4863.45	4689.67	-1487.27	39°54'52.142"N	104°45'02.932"W	0.00	
13313.00†	90.000	359.851	7855.00	4962.29	4789.67	-1487.53	39°54'53.130"N	104°45'02.924"W	0.00	
13413.00†	90.000	359.851	7855.00	5061.12	4889.67	-1487.79	39°54'54.118"N	104°45'02.917"W	0.00	
13513.00†	90.000	359.851	7855.00	5159.95	4989.67	-1488.05	39°54'55.107"N	104°45'02.909"W	0.00	



# Planned Wellpath Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

## WELLPATH DATA (197 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	359.851	7855.00	5258.78	5089.67	-1488.31	39°54'56.095"N	104°45'02.902"W	0.00	
13713.00†	90.000	359.851	7855.00	5357.62	5189.67	-1488.57	39°54'57.083"N	104°45'02.894"W	0.00	
13813.00†	90.000	359.851	7855.00	5456.45	5289.67	-1488.83	39°54'58.071"N	104°45'02.887"W	0.00	
13913.00†	90.000	359.851	7855.00	5555.28	5389.67	-1489.09	39°54'59.059"N	104°45'02.879"W	0.00	
14013.00†	90.000	359.851	7855.00	5654.12	5489.67	-1489.35	39°55'00.048"N	104°45'02.872"W	0.00	
14113.00†	90.000	359.851	7855.00	5752.95	5589.67	-1489.61	39°55'01.036"N	104°45'02.864"W	0.00	
14213.00†	90.000	359.851	7855.00	5851.78	5689.67	-1489.87	39°55'02.024"N	104°45'02.857"W	0.00	
14313.00†	90.000	359.851	7855.00	5950.62	5789.67	-1490.13	39°55'03.012"N	104°45'02.849"W	0.00	
14413.00†	90.000	359.851	7855.00	6049.45	5889.67	-1490.39	39°55'04.001"N	104°45'02.842"W	0.00	
14513.00†	90.000	359.851	7855.00	6148.28	5989.67	-1490.66	39°55'04.989"N	104°45'02.834"W	0.00	
14613.00†	90.000	359.851	7855.00	6247.11	6089.67	-1490.92	39°55'05.977"N	104°45'02.827"W	0.00	
14713.00†	90.000	359.851	7855.00	6345.95	6189.67	-1491.18	39°55'06.965"N	104°45'02.819"W	0.00	
14813.00†	90.000	359.851	7855.00	6444.78	6289.67	-1491.44	39°55'07.954"N	104°45'02.812"W	0.00	
14913.00†	90.000	359.851	7855.00	6543.61	6389.67	-1491.70	39°55'08.942"N	104°45'02.804"W	0.00	
15013.00†	90.000	359.851	7855.00	6642.45	6489.67	-1491.96	39°55'09.930"N	104°45'02.797"W	0.00	
15113.00†	90.000	359.851	7855.00	6741.28	6589.67	-1492.22	39°55'10.918"N	104°45'02.789"W	0.00	
15213.00†	90.000	359.851	7855.00	6840.11	6689.67	-1492.48	39°55'11.906"N	104°45'02.782"W	0.00	
15313.00†	90.000	359.851	7855.00	6938.94	6789.67	-1492.74	39°55'12.895"N	104°45'02.774"W	0.00	
15413.00†	90.000	359.851	7855.00	7037.78	6889.67	-1493.00	39°55'13.883"N	104°45'02.767"W	0.00	
15513.00†	90.000	359.851	7855.00	7136.61	6989.67	-1493.26	39°55'14.871"N	104°45'02.759"W	0.00	
15613.00†	90.000	359.851	7855.00	7235.44	7089.66	-1493.52	39°55'15.859"N	104°45'02.752"W	0.00	
15713.00†	90.000	359.851	7855.00	7334.28	7189.66	-1493.78	39°55'16.848"N	104°45'02.744"W	0.00	
15813.00†	90.000	359.851	7855.00	7433.11	7289.66	-1494.04	39°55'17.836"N	104°45'02.737"W	0.00	
15913.00†	90.000	359.851	7855.00	7531.94	7389.66	-1494.30	39°55'18.824"N	104°45'02.729"W	0.00	
16013.00†	90.000	359.851	7855.00	7630.78	7489.66	-1494.57	39°55'19.812"N	104°45'02.722"W	0.00	
16113.00†	90.000	359.851	7855.00	7729.61	7589.66	-1494.83	39°55'20.801"N	104°45'02.714"W	0.00	
16213.00†	90.000	359.851	7855.00	7828.44	7689.66	-1495.09	39°55'21.789"N	104°45'02.707"W	0.00	
16313.00†	90.000	359.851	7855.00	7927.27	7789.66	-1495.35	39°55'22.777"N	104°45'02.699"W	0.00	
16413.00†	90.000	359.851	7855.00	8026.11	7889.66	-1495.61	39°55'23.765"N	104°45'02.692"W	0.00	
16513.00†	90.000	359.851	7855.00	8124.94	7989.66	-1495.87	39°55'24.753"N	104°45'02.684"W	0.00	



# Planned Wellpath Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)

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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

## WELLPATH DATA (197 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	359.851	7855.00	8223.77	8089.66	-1496.13	39°55'25.742"N	104°45'02.677"W	0.00	
16713.00†	90.000	359.851	7855.00	8322.61	8189.66	-1496.39	39°55'26.730"N	104°45'02.669"W	0.00	
16813.00†	90.000	359.851	7855.00	8421.44	8289.66	-1496.65	39°55'27.718"N	104°45'02.662"W	0.00	
16913.00†	90.000	359.851	7855.00	8520.27	8389.66	-1496.91	39°55'28.706"N	104°45'02.654"W	0.00	
17013.00†	90.000	359.851	7855.00	8619.10	8489.66	-1497.17	39°55'29.695"N	104°45'02.647"W	0.00	
17113.00†	90.000	359.851	7855.00	8717.94	8589.66	-1497.43	39°55'30.683"N	104°45'02.639"W	0.00	
17213.00†	90.000	359.851	7855.00	8816.77	8689.66	-1497.69	39°55'31.671"N	104°45'02.632"W	0.00	
17313.00†	90.000	359.851	7855.00	8915.60	8789.66	-1497.95	39°55'32.659"N	104°45'02.624"W	0.00	
17413.00†	90.000	359.851	7855.00	9014.44	8889.66	-1498.22	39°55'33.648"N	104°45'02.617"W	0.00	
17513.00†	90.000	359.851	7855.00	9113.27	8989.66	-1498.48	39°55'34.636"N	104°45'02.609"W	0.00	
17613.00†	90.000	359.851	7855.00	9212.10	9089.66	-1498.74	39°55'35.624"N	104°45'02.602"W	0.00	
17713.00†	90.000	359.851	7855.00	9310.94	9189.66	-1499.00	39°55'36.612"N	104°45'02.594"W	0.00	
17813.00†	90.000	359.851	7855.00	9409.77	9289.66	-1499.26	39°55'37.600"N	104°45'02.587"W	0.00	
17913.00†	90.000	359.851	7855.00	9508.60	9389.66	-1499.52	39°55'38.589"N	104°45'02.579"W	0.00	
18013.00†	90.000	359.851	7855.00	9607.43	9489.66	-1499.78	39°55'39.577"N	104°45'02.572"W	0.00	
18089.46†	90.000	359.851	7855.00	9683.00	9566.12	-1499.98	39°55'40.332"N	104°45'02.566"W	0.00	Codell
18089.51	90.000	359.851	7855.00 <sup>2</sup>	9683.05	9566.17	-1499.98	39°55'40.333"N	104°45'02.566"W	0.00	End of Tangent (XS)

## HOLE & CASING SECTIONS

- Ref Wellbore: ACKARD NORTH 2-35-1CDH PWB Ref 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	0.00	0.00	-74.19	-139.04
8.5in Open Hole	1800.00	18089.51	16289.51	1784.16	7855.00	-74.19	-139.04	9566.17	-1499.98



# Planned Wellpath Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	-64.42	-40.19	3211594.77	1207829.42	39°54'05.040"N	104°44'44.880"W	polygon
SEC.35-T01S-R66W		0.00	-64.42	-40.19	3211594.77	1207829.42	39°54'05.040"N	104°44'44.880"W	polygon
2) ACKARD NORTH 2-35-1CDH BHL (355'FNL & 460'FWL, SEC.35)	18089.51	7855.00	9566.17	-1499.98	3210135.02	1217459.75	39°55'40.333"N	104°45'02.566"W	point
1) ACKARD NORTH 2-35-1CDH EP (460'FSL & 460'FWL, SEC.02)	8379.34	7855.00	-143.97	-1474.67	3210160.33	1207749.87	39°54'04.374"N	104°45'03.294"W	point
SEC.02/35-T01S/02S-R66W 460'SETBACK		7855.00	-64.42	-40.19	3211594.77	1207829.42	39°54'05.040"N	104°44'44.880"W	polygon

## SURVEY PROGRAM -

Ref Wellbore: ACKARD NORTH 2-35-1CDH PWB      Ref 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



# Planned Wellpath Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1661.74	13.985	241.918	1650.00	Fox Hills
5217.12	13.985	241.918	5100.00	Sussex / Shannon
7657.89	21.628	326.143	7467.00	Niobrara A Chalk
7680.63	23.511	329.468	7488.00	Niobrara A Marl
7833.87	37.292	343.057	7620.00	Niobrara B Chalk
7863.33	40.058	344.680	7643.00	Niobrara B Marl
7929.18	46.309	347.716	7691.00	Niobrara C Chalk
7972.87	50.493	349.398	7720.00	Niobrara C Marl
8203.99	72.888	355.966	7829.00	Fort Hays
18089.46	90.000	359.851	7855.00	Codell





# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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 7:56:29 AM
Convergence at slot	0.49° East	Database/Source file	Denver/ACKARD_NORTH_2-35-1CDH_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	0.00	0.00	3211634.96	1207893.84	39°54'05.673"N	104°44'44.357"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#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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 2-35-1CDH PWB Ref 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	0.00	0.00	-74.19	-139.04
8.5in Open Hole	1800.00	18089.51	16289.51	1784.16	7855.00	-74.19	-139.04	9566.17	-1499.98

SURVEY PROGRAM - Ref Wellbore: ACKARD NORTH 2-35-1CDH PWB Ref 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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

## CALCULATION RANGE & CUTOFF

From: 13.00ft MD	To: 18089.51ft 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	17750.50	4162.93	17750.50	17813.00	0.39	17813.00	FAIL
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	16426.27	191.69	16426.27	16413.00	0.42	16413.00	FAIL
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	13819.31	239.48	13819.31	13802.94	0.63	13802.94	FAIL
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	11213.00	222.19	11213.00	11191.46	0.73	11191.46	FAIL
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	30.02	18089.51	18089.51	0.78	18089.51	FAIL
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	15.01	18089.51	7252.42	1.08	18089.51	PASS
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	44.98	18089.51	18089.51	1.46	18089.51	PASS
SEC.11-T02S-R66W	SLOT#01 EX HSR-VAN SCHAAK #4-11 (623'FNL & 696'FWL, SEC.11, 8374, PR)	HSR-VAN SCHAAK #4-11	HSR-VAN SCHAAK #4-11 AWB	HSR-VAN SCHAAK #4-11 AWP	7452.60	502.59	7452.60	7490.47	2.00	7490.47	PASS
SEC.02-T03S-R66W	SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02)	ACKARD NORTH 2-35-2CDH	ACKARD NORTH 2-35-2CDH PWB	ACKARD NORTH 2-35-2CDH PWP (REV. A.0)	13.00	59.99	18089.51	18089.51	2.02	18089.51	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	74.97	18089.51	18089.51	2.38	18089.51	PASS
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	90.01	18089.51	18089.51	2.72	18089.51	PASS
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	17800.50	1555.12	17800.50	17813.00	3.11	17813.00	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	18089.51	1042.08	18089.51	18089.51	3.25	18089.51	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	104.99	18089.51	18089.51	3.41	18089.51	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	10953.07	1101.86	10953.07	11168.56	3.65	11168.56	PASS
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	15125.50	1550.43	15125.50	15135.77	3.70	15135.77	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	18089.51	1862.26	18089.51	18089.51	3.83	18089.51	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	119.97	800.00	18089.51	3.92	18089.51	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	8581.76	1121.50	8581.76	8964.08	4.38	8964.08	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	134.98	800.00	18089.51	4.60	18089.51	PASS
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	12563.00	1598.41	12563.00	12573.43	4.67	12573.43	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	149.94	800.00	18089.51	5.16	18089.51	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	164.95	800.00	18089.51	5.23	18089.51	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	13.00	1352.74	9870.54	9870.54	5.89	9870.54	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	179.99	800.00	18089.51	5.92	18089.51	PASS



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

CALCULATION RANGE & CUTOFF		
From: 13.00ft MD	To: 18089.51ft MD	C-C Cutoff: 1000.00 ft

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-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	16490.84	2864.00	16490.84	16666.88	6.20	16666.88	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	18089.51	3301.57	18089.51	18089.51	6.55	18089.51	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	194.94	800.00	18089.51	6.60	18089.51	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	209.95	800.00	18089.51	7.16	18089.51	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	224.96	800.00	18089.51	7.24	18089.51	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	13863.00	2858.66	13863.00	14079.62	7.47	14079.62	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	18089.51	4310.32	18089.51	18089.51	8.43	18089.51	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	15125.50	4161.88	15125.50	15667.98	9.80	15667.98	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	13.00	1848.06	800.00	7662.18	10.98	7662.18	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	12550.50	4184.96	12550.50	13256.66	12.00	13256.66	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	13.00	4805.78	11213.00	12862.87	16.93	12862.87	PASS



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	9237.31	2663.81	16.09	9613.73	25.40	390.74	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
Facility Surface Uncertainty @1SD		Horizontal	8.200ft
		Vertical	1.000ft
		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
0.00	8315.00	BHI Drift Indicator - Estimated Azimuth (Standard)	ASSUMED VERTICAL TO TD <8315>
		Wellbore	
		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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	7903.63	-1303.96	-9.37	8010.54	25.40	325.58	PASS
113.00†	113.00	0.00	0.00	53.00	113.00	7903.63	-1303.96	-9.37	8010.47	51.25	158.78	PASS
213.00†	213.00	0.00	0.00	153.00	213.00	7903.63	-1303.96	-9.37	8010.47	53.59	151.72	PASS
313.00†	313.00	0.00	0.00	253.00	313.00	7903.63	-1303.96	-9.37	8010.47	55.95	145.25	PASS
413.00†	413.00	0.00	0.00	353.00	413.00	7903.63	-1303.96	-9.37	8010.47	58.30	139.30	PASS
513.00†	513.00	0.00	0.00	453.00	513.00	7903.63	-1303.96	-9.37	8010.47	60.66	133.82	PASS
613.00†	613.00	0.00	0.00	553.00	613.00	7903.63	-1303.96	-9.37	8010.47	63.02	128.73	PASS
713.00†	713.00	0.00	0.00	653.00	713.00	7903.63	-1303.96	-9.37	8010.47	65.39	124.02	PASS
800.00	800.00	0.00	0.00	740.00	800.00	7903.63	-1303.96	-9.37	8010.47	67.45	120.18	PASS
813.00†	813.00	-0.01	-0.03	753.00	813.00	7903.63	-1303.96	108.71	8010.48	67.76	119.63	PASS
913.00†	912.97	-1.05	-1.97	852.97	912.97	7903.63	-1303.96	108.72	8011.19	70.13	115.54	PASS
1013.00†	1012.80	-3.73	-6.98	952.80	1012.80	7903.63	-1303.96	108.72	8013.01	72.51	111.73	PASS
1113.00†	1112.38	-8.04	-15.07	1052.38	1112.38	7903.63	-1303.96	108.73	8015.97	74.90	108.17	PASS
1213.00†	1211.57	-13.99	-26.22	1151.57	1211.57	7903.63	-1303.96	108.73	8020.05	77.28	104.86	PASS
1313.00†	1310.26	-21.56	-40.42	1250.26	1310.26	7903.63	-1303.96	108.74	8025.29	79.67	101.75	PASS
1413.00†	1408.33	-30.76	-57.64	1348.33	1408.33	7903.63	-1303.96	108.75	8031.67	82.06	98.83	PASS
1499.25	1492.33	-39.97	-74.92	1432.33	1492.33	7903.63	-1303.96	108.76	8038.12	84.13	96.45	PASS
1513.00†	1505.67	-41.54	-77.85	1445.67	1505.67	7903.63	-1303.96	108.78	8039.22	84.47	96.08	PASS
1613.00†	1602.71	-52.91	-99.17	1542.71	1602.71	7903.63	-1303.96	108.94	8047.24	86.88	93.48	PASS
1713.00†	1699.74	-64.29	-120.49	1639.74	1699.74	7903.63	-1303.96	109.10	8055.33	89.32	90.99	PASS
1813.00†	1796.78	-75.67	-141.82	1736.78	1796.78	7903.63	-1303.96	109.25	8063.48	91.69	88.62	PASS
1913.00†	1893.81	-87.04	-163.14	1833.81	1893.81	7903.63	-1303.96	109.41	8071.70	94.17	86.35	PASS
2013.00†	1990.85	-98.42	-184.46	1930.85	1990.85	7903.63	-1303.96	109.57	8079.98	96.68	84.19	PASS
2113.00†	2087.89	-109.79	-205.78	2027.89	2087.89	7903.63	-1303.96	109.73	8088.32	99.20	82.11	PASS
2213.00†	2184.92	-121.17	-227.10	2124.92	2184.92	7903.63	-1303.96	109.88	8096.73	101.75	80.13	PASS
2313.00†	2281.96	-132.55	-248.42	2221.96	2281.96	7903.63	-1303.96	110.04	8105.20	104.31	78.23	PASS
2413.00†	2378.99	-143.92	-269.75	2318.99	2378.99	7903.63	-1303.96	110.19	8113.73	106.89	76.41	PASS
2513.00†	2476.03	-155.30	-291.07	2416.03	2476.03	7903.63	-1303.96	110.35	8122.33	109.49	74.66	PASS
2613.00†	2573.06	-166.68	-312.39	2513.06	2573.06	7903.63	-1303.96	110.51	8130.99	112.11	72.98	PASS
2713.00†	2670.10	-178.05	-333.71	2610.10	2670.10	7903.63	-1303.96	110.66	8139.71	114.74	71.38	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

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

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
2813.00†	2767.14	-189.43	-355.03	2707.14	2767.14	7903.63	-1303.96	110.82	8148.50	117.39	69.83	PASS
2913.00†	2864.17	-200.81	-376.35	2804.17	2864.17	7903.63	-1303.96	110.97	8157.35	120.05	68.35	PASS
3013.00†	2961.21	-212.18	-397.68	2901.21	2961.21	7903.63	-1303.96	111.13	8166.25	122.72	66.92	PASS
3113.00†	3058.24	-223.56	-419.00	2998.24	3058.24	7903.63	-1303.96	111.28	8175.22	125.41	65.55	PASS
3213.00†	3155.28	-234.93	-440.32	3095.28	3155.28	7903.63	-1303.96	111.43	8184.26	128.12	64.23	PASS
3313.00†	3252.32	-246.31	-461.64	3192.32	3252.32	7903.63	-1303.96	111.59	8193.35	130.83	62.96	PASS
3413.00†	3349.35	-257.69	-482.96	3289.35	3349.35	7903.63	-1303.96	111.74	8202.51	133.55	61.74	PASS
3513.00†	3446.39	-269.06	-504.29	3386.39	3446.39	7903.63	-1303.96	111.89	8211.72	136.29	60.56	PASS
3613.00†	3543.42	-280.44	-525.61	3483.42	3543.42	7903.63	-1303.96	112.04	8221.00	139.04	59.43	PASS
3713.00†	3640.46	-291.82	-546.93	3580.46	3640.46	7903.63	-1303.96	112.20	8230.33	141.79	58.33	PASS
3813.00†	3737.50	-303.19	-568.25	3677.50	3737.50	7903.63	-1303.96	112.35	8239.73	144.56	57.27	PASS
3913.00†	3834.53	-314.57	-589.57	3774.53	3834.53	7903.63	-1303.96	112.50	8249.19	147.33	56.26	PASS
4013.00†	3931.57	-325.94	-610.89	3871.57	3931.57	7903.63	-1303.96	112.65	8258.70	150.12	55.27	PASS
4113.00†	4028.60	-337.32	-632.22	3968.60	4028.60	7903.63	-1303.96	112.80	8268.28	152.91	54.32	PASS
4213.00†	4125.64	-348.70	-653.54	4065.64	4125.64	7903.63	-1303.96	112.95	8277.92	155.70	53.40	PASS
4313.00†	4222.67	-360.07	-674.86	4162.67	4222.67	7903.63	-1303.96	113.10	8287.61	158.51	52.52	PASS
4413.00†	4319.71	-371.45	-696.18	4259.71	4319.71	7903.63	-1303.96	113.25	8297.37	161.32	51.66	PASS
4513.00†	4416.75	-382.83	-717.50	4356.75	4416.75	7903.63	-1303.96	113.40	8307.18	164.14	50.83	PASS
4613.00†	4513.78	-394.20	-738.82	4453.78	4513.78	7903.63	-1303.96	113.55	8317.05	166.96	50.02	PASS
4713.00†	4610.82	-405.58	-760.15	4550.82	4610.82	7903.63	-1303.96	113.70	8326.98	169.79	49.25	PASS
4813.00†	4707.85	-416.95	-781.47	4647.85	4707.85	7903.63	-1303.96	113.85	8336.97	172.62	48.49	PASS
4913.00†	4804.89	-428.33	-802.79	4744.89	4804.89	7903.63	-1303.96	113.99	8347.02	175.46	47.76	PASS
5013.00†	4901.93	-439.71	-824.11	4841.93	4901.93	7903.63	-1303.96	114.14	8357.12	178.30	47.05	PASS
5113.00†	4998.96	-451.08	-845.43	4938.96	4998.96	7903.63	-1303.96	114.29	8367.28	181.15	46.37	PASS
5213.00†	5096.00	-462.46	-866.76	5036.00	5096.00	7903.63	-1303.96	114.44	8377.50	184.00	45.70	PASS
5313.00†	5193.03	-473.84	-888.08	5133.03	5193.03	7903.63	-1303.96	114.58	8387.78	186.85	45.06	PASS
5413.00†	5290.07	-485.21	-909.40	5230.07	5290.07	7903.63	-1303.96	114.73	8398.11	189.71	44.43	PASS
5513.00†	5387.11	-496.59	-930.72	5327.11	5387.11	7903.63	-1303.96	114.87	8408.50	192.57	43.82	PASS
5613.00†	5484.14	-507.97	-952.04	5424.14	5484.14	7903.63	-1303.96	115.02	8418.95	195.44	43.23	PASS
5713.00†	5581.18	-519.34	-973.36	5521.18	5581.18	7903.63	-1303.96	115.17	8429.45	198.31	42.66	PASS

C-C Clearance Distance Cutoff: 1000.00 ft





# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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
5813.00†	5678.21	-530.72	-994.69	5618.21	5678.21	7903.63	-1303.96	115.31	8440.01	201.18	42.10	PASS
5913.00†	5775.25	-542.09	-1016.01	5715.25	5775.25	7903.63	-1303.96	115.45	8450.63	204.05	41.56	PASS
6013.00†	5872.28	-553.47	-1037.33	5812.28	5872.28	7903.63	-1303.96	115.60	8461.30	206.93	41.03	PASS
6113.00†	5969.32	-564.85	-1058.65	5909.32	5969.32	7903.63	-1303.96	115.74	8472.03	209.80	40.51	PASS
6213.00†	6066.36	-576.22	-1079.97	6006.36	6066.36	7903.63	-1303.96	115.89	8482.81	212.68	40.01	PASS
6313.00†	6163.39	-587.60	-1101.29	6103.39	6163.39	7903.63	-1303.96	116.03	8493.65	215.56	39.53	PASS
6413.00†	6260.43	-598.98	-1122.62	6200.43	6260.43	7903.63	-1303.96	116.17	8504.54	218.45	39.06	PASS
6513.00†	6357.46	-610.35	-1143.94	6297.46	6357.46	7903.63	-1303.96	116.31	8515.48	221.33	38.59	PASS
6613.00†	6454.50	-621.73	-1165.26	6394.50	6454.50	7903.63	-1303.96	116.46	8526.48	224.22	38.15	PASS
6713.00†	6551.54	-633.10	-1186.58	6491.54	6551.54	7903.63	-1303.96	116.60	8537.54	227.11	37.71	PASS
6813.00†	6648.57	-644.48	-1207.90	6588.57	6648.57	7903.63	-1303.96	116.74	8548.65	229.99	37.28	PASS
6913.00†	6745.61	-655.86	-1229.23	6685.61	6745.61	7903.63	-1303.96	116.88	8559.81	232.88	36.86	PASS
7013.00†	6842.64	-667.23	-1250.55	6782.64	6842.64	7903.63	-1303.96	117.02	8571.03	235.78	36.46	PASS
7113.00†	6939.68	-678.61	-1271.87	6879.68	6939.68	7903.63	-1303.96	117.16	8582.30	238.67	36.06	PASS
7213.00†	7036.72	-689.99	-1293.19	6976.72	7036.72	7903.63	-1303.96	117.30	8593.62	241.56	35.68	PASS
7313.00†	7133.75	-701.36	-1314.51	7073.75	7133.75	7903.63	-1303.96	117.44	8605.00	244.45	35.30	PASS
7413.00†	7230.79	-712.74	-1335.83	7170.79	7230.79	7903.63	-1303.96	117.58	8616.43	247.35	34.93	PASS
7414.33	7232.08	-712.89	-1336.12	7172.08	7232.08	7903.63	-1303.96	117.58	8616.58	247.39	34.93	PASS
7513.00†	7328.29	-715.64	-1357.28	7268.29	7328.29	7903.63	-1303.96	75.55	8619.43	250.38	34.52	PASS
7613.00†	7424.79	-701.16	-1378.55	7364.79	7424.79	7903.63	-1303.96	44.23	8605.11	253.84	33.99	PASS
7713.00†	7517.36	-669.75	-1399.00	7457.36	7517.36	7903.63	-1303.96	29.86	8573.90	257.27	33.42	PASS
7813.00†	7603.19	-622.35	-1418.01	7543.19	7603.19	7903.63	-1303.96	22.87	8526.74	260.35	32.84	PASS
7913.00†	7679.66	-560.40	-1435.00	7619.66	7679.66	7903.63	-1303.96	19.16	8465.04	263.01	32.27	PASS
8013.00†	7744.47	-485.79	-1449.45	7684.47	7744.47	7903.63	-1303.96	17.19	8390.68	265.22	31.72	PASS
8113.00†	7795.62	-400.79	-1460.93	7735.62	7795.62	7903.63	-1303.96	16.49	8305.90	266.91	31.20	PASS
8213.00†	7831.58	-307.97	-1469.09	7771.58	7831.58	7903.63	-1303.96	17.29	8213.26	268.09	30.71	PASS
8313.00†	7851.25	-210.16	-1473.67	7791.25	7851.25	7903.63	-1303.96	23.28	8115.56	268.74	30.28	PASS
8379.34	7855.00	-143.97	-1474.67	7795.00	7855.00	7903.63	-1303.96	90.00	8049.41	268.89	30.01	PASS
8413.00†	7855.00	-110.31	-1474.75	7795.00	7855.00	7903.63	-1303.96	90.00	8015.76	268.90	29.88	PASS
8513.00†	7855.00	-10.31	-1475.01	7795.00	7855.00	7903.63	-1303.96	90.00	7915.79	268.96	29.51	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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
8613.00†	7855.00	89.69	-1475.28	7795.00	7855.00	7903.63	-1303.96	90.00	7815.82	269.02	29.13	PASS
8713.00†	7855.00	189.69	-1475.54	7795.00	7855.00	7903.63	-1303.96	90.00	7715.85	269.08	28.75	PASS
8813.00†	7855.00	289.69	-1475.80	7795.00	7855.00	7903.63	-1303.96	90.00	7615.88	269.15	28.37	PASS
8913.00†	7855.00	389.69	-1476.06	7795.00	7855.00	7903.63	-1303.96	90.00	7515.91	269.21	27.99	PASS
9013.00†	7855.00	489.69	-1476.32	7795.00	7855.00	7903.63	-1303.96	90.00	7415.94	269.28	27.61	PASS
9113.00†	7855.00	589.69	-1476.58	7795.00	7855.00	7903.63	-1303.96	90.00	7315.98	269.35	27.23	PASS
9213.00†	7855.00	689.69	-1476.84	7795.00	7855.00	7903.63	-1303.96	90.00	7216.01	269.43	26.85	PASS
9313.00†	7855.00	789.69	-1477.10	7795.00	7855.00	7903.63	-1303.96	90.00	7116.05	269.51	26.47	PASS
9413.00†	7855.00	889.69	-1477.36	7795.00	7855.00	7903.63	-1303.96	90.00	7016.09	269.59	26.09	PASS
9513.00†	7855.00	989.69	-1477.62	7795.00	7855.00	7903.63	-1303.96	90.00	6916.12	269.67	25.71	PASS
9613.00†	7855.00	1089.69	-1477.88	7795.00	7855.00	7903.63	-1303.96	90.00	6816.16	269.76	25.33	PASS
9713.00†	7855.00	1189.68	-1478.14	7795.00	7855.00	7903.63	-1303.96	90.00	6716.20	269.85	24.95	PASS
9813.00†	7855.00	1289.68	-1478.40	7795.00	7855.00	7903.63	-1303.96	90.00	6616.24	269.94	24.57	PASS
9913.00†	7855.00	1389.68	-1478.66	7795.00	7855.00	7903.63	-1303.96	90.00	6516.29	270.04	24.19	PASS
10013.00†	7855.00	1489.68	-1478.93	7795.00	7855.00	7903.63	-1303.96	90.00	6416.33	270.14	23.81	PASS
10113.00†	7855.00	1589.68	-1479.19	7795.00	7855.00	7903.63	-1303.96	90.00	6316.38	270.24	23.43	PASS
10213.00†	7855.00	1689.68	-1479.45	7795.00	7855.00	7903.63	-1303.96	90.00	6216.42	270.35	23.05	PASS
10313.00†	7855.00	1789.68	-1479.71	7795.00	7855.00	7903.63	-1303.96	90.00	6116.47	270.46	22.67	PASS
10413.00†	7855.00	1889.68	-1479.97	7795.00	7855.00	7903.63	-1303.96	90.00	6016.52	270.58	22.29	PASS
10513.00†	7855.00	1989.68	-1480.23	7795.00	7855.00	7903.63	-1303.96	90.00	5916.57	270.70	21.91	PASS
10613.00†	7855.00	2089.68	-1480.49	7795.00	7855.00	7903.63	-1303.96	90.00	5816.63	270.83	21.53	PASS
10713.00†	7855.00	2189.68	-1480.75	7795.00	7855.00	7903.63	-1303.96	90.00	5716.68	270.96	21.15	PASS
10813.00†	7855.00	2289.68	-1481.01	7795.00	7855.00	7903.63	-1303.96	90.00	5616.74	271.09	20.77	PASS
10913.00†	7855.00	2389.68	-1481.27	7795.00	7855.00	7903.63	-1303.96	90.00	5516.80	271.23	20.39	PASS
11013.00†	7855.00	2489.68	-1481.53	7795.00	7855.00	7903.63	-1303.96	90.00	5416.86	271.37	20.01	PASS
11113.00†	7855.00	2589.68	-1481.79	7795.00	7855.00	7903.63	-1303.96	90.00	5316.92	271.52	19.63	PASS
11213.00†	7855.00	2689.68	-1482.05	7795.00	7855.00	7903.63	-1303.96	90.00	5216.99	271.68	19.25	PASS
11313.00†	7855.00	2789.68	-1482.31	7795.00	7855.00	7903.63	-1303.96	90.00	5117.06	271.84	18.87	PASS
11413.00†	7855.00	2889.68	-1482.57	7795.00	7855.00	7903.63	-1303.96	90.00	5017.13	272.01	18.49	PASS
11513.00†	7855.00	2989.68	-1482.84	7795.00	7855.00	7903.63	-1303.96	90.00	4917.20	272.19	18.11	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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
11613.00†	7855.00	3089.68	-1483.10	7795.00	7855.00	7903.63	-1303.96	90.00	4817.28	272.37	17.73	PASS
11713.00†	7855.00	3189.68	-1483.36	7795.00	7855.00	7903.63	-1303.96	90.00	4717.36	272.56	17.35	PASS
11813.00†	7855.00	3289.68	-1483.62	7795.00	7855.00	7903.63	-1303.96	90.00	4617.45	272.76	16.97	PASS
11913.00†	7855.00	3389.68	-1483.88	7795.00	7855.00	7903.63	-1303.96	90.00	4517.53	272.96	16.59	PASS
12013.00†	7855.00	3489.68	-1484.14	7795.00	7855.00	7903.63	-1303.96	90.00	4417.63	273.18	16.21	PASS
12113.00†	7855.00	3589.68	-1484.40	7795.00	7855.00	7903.63	-1303.96	90.00	4317.72	273.40	15.83	PASS
12213.00†	7855.00	3689.68	-1484.66	7795.00	7855.00	7903.63	-1303.96	90.00	4217.82	273.64	15.45	PASS
12313.00†	7855.00	3789.68	-1484.92	7795.00	7855.00	7903.63	-1303.96	90.00	4117.93	273.88	15.07	PASS
12413.00†	7855.00	3889.68	-1485.18	7795.00	7855.00	7903.63	-1303.96	90.00	4018.04	274.14	14.69	PASS
12513.00†	7855.00	3989.68	-1485.44	7795.00	7855.00	7903.63	-1303.96	90.00	3918.16	274.41	14.31	PASS
12613.00†	7855.00	4089.68	-1485.70	7795.00	7855.00	7903.63	-1303.96	90.00	3818.28	274.69	13.93	PASS
12713.00†	7855.00	4189.67	-1485.96	7795.00	7855.00	7903.63	-1303.96	90.00	3718.41	274.99	13.55	PASS
12813.00†	7855.00	4289.67	-1486.22	7795.00	7855.00	7903.63	-1303.96	90.00	3618.55	275.30	13.18	PASS
12913.00†	7855.00	4389.67	-1486.48	7795.00	7855.00	7903.63	-1303.96	90.00	3518.69	275.63	12.80	PASS
13013.00†	7855.00	4489.67	-1486.75	7795.00	7855.00	7903.63	-1303.96	90.00	3418.84	275.98	12.42	PASS
13113.00†	7855.00	4589.67	-1487.01	7795.00	7855.00	7903.63	-1303.96	90.00	3319.01	276.35	12.04	PASS
13213.00†	7855.00	4689.67	-1487.27	7795.00	7855.00	7903.63	-1303.96	90.00	3219.18	276.73	11.66	PASS
13313.00†	7855.00	4789.67	-1487.53	7795.00	7855.00	7903.63	-1303.96	90.00	3119.36	277.15	11.28	PASS
13413.00†	7855.00	4889.67	-1487.79	7795.00	7855.00	7903.63	-1303.96	90.00	3019.56	277.58	10.90	PASS
13513.00†	7855.00	4989.67	-1488.05	7795.00	7855.00	7903.63	-1303.96	90.00	2919.77	278.05	10.53	PASS
13613.00†	7855.00	5089.67	-1488.31	7795.00	7855.00	7903.63	-1303.96	90.00	2819.99	278.55	10.15	PASS
13713.00†	7855.00	5189.67	-1488.57	7795.00	7855.00	7903.63	-1303.96	90.00	2720.23	279.08	9.77	PASS
13813.00†	7855.00	5289.67	-1488.83	7795.00	7855.00	7903.63	-1303.96	90.00	2620.49	279.66	9.39	PASS
13913.00†	7855.00	5389.67	-1489.09	7795.00	7855.00	7903.63	-1303.96	90.00	2520.77	280.27	9.01	PASS
14013.00†	7855.00	5489.67	-1489.35	7795.00	7855.00	7903.63	-1303.96	90.00	2421.07	280.94	8.64	PASS
14113.00†	7855.00	5589.67	-1489.61	7795.00	7855.00	7903.63	-1303.96	90.00	2321.39	281.66	8.26	PASS
14213.00†	7855.00	5689.67	-1489.87	7795.00	7855.00	7903.63	-1303.96	90.00	2221.75	282.44	7.88	PASS
14313.00†	7855.00	5789.67	-1490.13	7795.00	7855.00	7903.63	-1303.96	90.00	2122.14	283.30	7.51	PASS
14413.00†	7855.00	5889.67	-1490.39	7795.00	7855.00	7903.63	-1303.96	90.00	2022.57	284.24	7.13	PASS
14513.00†	7855.00	5989.67	-1490.66	7795.00	7855.00	7903.63	-1303.96	90.00	1923.04	285.27	6.76	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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
14613.00†	7855.00	6089.67	-1490.92	7795.00	7855.00	7903.63	-1303.96	90.00	1823.57	286.42	6.38	PASS
14713.00†	7855.00	6189.67	-1491.18	7795.00	7855.00	7903.63	-1303.96	90.00	1724.15	287.70	6.01	PASS
14813.00†	7855.00	6289.67	-1491.44	7795.00	7855.00	7903.63	-1303.96	90.00	1624.81	289.14	5.63	PASS
14913.00†	7855.00	6389.67	-1491.70	7795.00	7855.00	7903.63	-1303.96	90.00	1525.56	290.77	5.26	PASS
15013.00†	7855.00	6489.67	-1491.96	7795.00	7855.00	7903.63	-1303.96	90.00	1426.40	292.62	4.88	PASS
15113.00†	7855.00	6589.67	-1492.22	7795.00	7855.00	7903.63	-1303.96	90.00	1327.38	294.75	4.51	PASS
15213.00†	7855.00	6689.67	-1492.48	7795.00	7855.00	7903.63	-1303.96	90.00	1228.51	297.23	4.14	PASS
15313.00†	7855.00	6789.67	-1492.74	7795.00	7855.00	7903.63	-1303.96	90.00	1129.85	300.15	3.77	PASS
15413.00†	7855.00	6889.67	-1493.00	7795.00	7855.00	7903.63	-1303.96	90.00	1031.43	303.63	3.40	PASS
15513.00†	7855.00	6989.67	-1493.26	7795.00	7855.00	7903.63	-1303.96	90.00	933.36	307.84	3.04	PASS
15613.00†	7855.00	7089.66	-1493.52	7795.00	7855.00	7903.63	-1303.96	90.00	835.75	313.04	2.67	PASS
15713.00†	7855.00	7189.66	-1493.78	7795.00	7855.00	7903.63	-1303.96	90.00	738.77	319.60	2.31	PASS
15813.00†	7855.00	7289.66	-1494.04	7795.00	7855.00	7903.63	-1303.96	90.00	642.72	328.07	1.96	PASS
15913.00†	7855.00	7389.66	-1494.30	7795.00	7855.00	7903.63	-1303.96	90.00	548.08	339.35	1.62	PASS
16013.00†	7855.00	7489.66	-1494.57	7795.00	7855.00	7903.63	-1303.96	90.00	455.74	354.85	1.28	PASS
16113.00†	7855.00	7589.66	-1494.83	7795.00	7855.00	7903.63	-1303.96	90.00	367.43	376.76	0.98	FAIL
16213.00†	7855.00	7689.66	-1495.09	7795.00	7855.00	7903.63	-1303.96	90.00	286.90	407.64	0.70	FAIL
16313.00†	7855.00	7789.66	-1495.35	7795.00	7855.00	7903.63	-1303.96	90.00	222.75	444.98	0.50	FAIL
16413.00†	7855.00	7889.66	-1495.61	7795.00	7855.00	7903.63	-1303.96	90.00	192.16	460.98	0.42	FAIL
16426.27†	7855.00	7902.93	-1495.64	7795.20	7855.20	7903.63	-1303.96	90.06	191.69	458.87	0.42	FAIL
16513.00†	7855.00	7989.66	-1495.87	7795.00	7855.00	7903.63	-1303.96	90.00	210.31	421.21	0.50	FAIL
16613.00†	7855.00	8089.66	-1496.13	7795.00	7855.00	7903.63	-1303.96	90.00	267.47	363.52	0.74	FAIL
16713.00†	7855.00	8189.66	-1496.39	7795.00	7855.00	7903.63	-1303.96	90.00	344.74	321.22	1.07	PASS
16813.00†	7855.00	8289.66	-1496.65	7795.00	7855.00	7903.63	-1303.96	90.00	431.45	294.43	1.47	PASS
16913.00†	7855.00	8389.66	-1496.91	7795.00	7855.00	7903.63	-1303.96	90.00	522.93	277.80	1.88	PASS
17013.00†	7855.00	8489.66	-1497.17	7795.00	7855.00	7903.63	-1303.96	90.00	617.06	267.53	2.31	PASS
17113.00†	7855.00	8589.66	-1497.43	7795.00	7855.00	7903.63	-1303.96	90.00	712.79	261.28	2.73	PASS
17213.00†	7855.00	8689.66	-1497.69	7795.00	7855.00	7903.63	-1303.96	90.00	809.56	257.59	3.15	PASS
17313.00†	7855.00	8789.66	-1497.95	7795.00	7855.00	7903.63	-1303.96	90.00	907.02	255.52	3.56	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	5296.84	-1249.37	-13.27	5442.25	25.40	221.18	PASS
113.00†	113.00	0.00	0.00	60.00	113.00	5296.84	-1249.37	-13.27	5442.19	51.41	107.52	PASS
213.00†	213.00	0.00	0.00	160.00	213.00	5296.84	-1249.37	-13.27	5442.19	53.76	102.75	PASS
313.00†	313.00	0.00	0.00	260.00	313.00	5296.84	-1249.37	-13.27	5442.19	56.11	98.38	PASS
413.00†	413.00	0.00	0.00	360.00	413.00	5296.84	-1249.37	-13.27	5442.19	58.46	94.37	PASS
513.00†	513.00	0.00	0.00	460.00	513.00	5296.84	-1249.37	-13.27	5442.19	60.82	90.66	PASS
613.00†	613.00	0.00	0.00	560.00	613.00	5296.84	-1249.37	-13.27	5442.19	63.19	87.22	PASS
713.00†	713.00	0.00	0.00	660.00	713.00	5296.84	-1249.37	-13.27	5442.19	65.55	84.04	PASS
800.00	800.00	0.00	0.00	747.00	800.00	5296.84	-1249.37	-13.27	5442.19	67.61	81.44	PASS
813.00†	813.00	-0.01	-0.03	760.00	813.00	5296.84	-1249.37	104.81	5442.20	67.92	81.07	PASS
913.00†	912.97	-1.05	-1.97	859.97	912.97	5296.84	-1249.37	104.82	5442.76	70.30	78.31	PASS
1013.00†	1012.80	-3.73	-6.98	959.80	1012.80	5296.84	-1249.37	104.85	5444.22	72.68	75.73	PASS
1113.00†	1112.38	-8.04	-15.07	1059.38	1112.38	5296.84	-1249.37	104.90	5446.58	75.06	73.34	PASS
1213.00†	1211.57	-13.99	-26.22	1158.57	1211.57	5296.84	-1249.37	104.96	5449.86	77.44	71.10	PASS
1313.00†	1310.26	-21.56	-40.42	1257.26	1310.26	5296.84	-1249.37	105.04	5454.08	79.83	69.01	PASS
1413.00†	1408.33	-30.76	-57.64	1355.33	1408.33	5296.84	-1249.37	105.14	5459.25	82.22	67.04	PASS
1499.25	1492.33	-39.97	-74.92	1439.33	1492.33	5296.84	-1249.37	105.23	5464.51	84.29	65.44	PASS
1513.00†	1505.67	-41.54	-77.85	1452.67	1505.67	5296.84	-1249.37	105.26	5465.41	84.63	65.19	PASS
1613.00†	1602.71	-52.91	-99.17	1549.71	1602.71	5296.84	-1249.37	105.50	5472.00	87.04	63.44	PASS
1713.00†	1699.74	-64.29	-120.49	1646.74	1699.74	5296.84	-1249.37	105.74	5478.69	89.49	61.77	PASS
1813.00†	1796.78	-75.67	-141.82	1743.78	1796.78	5296.84	-1249.37	105.97	5485.48	91.86	60.17	PASS
1913.00†	1893.81	-87.04	-163.14	1840.81	1893.81	5296.84	-1249.37	106.21	5492.36	94.35	58.65	PASS
2013.00†	1990.85	-98.42	-184.46	1937.85	1990.85	5296.84	-1249.37	106.44	5499.35	96.86	57.19	PASS
2113.00†	2087.89	-109.79	-205.78	2034.89	2087.89	5296.84	-1249.37	106.68	5506.43	99.39	55.79	PASS
2213.00†	2184.92	-121.17	-227.10	2131.92	2184.92	5296.84	-1249.37	106.91	5513.61	101.94	54.46	PASS
2313.00†	2281.96	-132.55	-248.42	2228.96	2281.96	5296.84	-1249.37	107.15	5520.88	104.51	53.18	PASS
2413.00†	2378.99	-143.92	-269.75	2325.99	2378.99	5296.84	-1249.37	107.38	5528.25	107.10	51.96	PASS
2513.00†	2476.03	-155.30	-291.07	2423.03	2476.03	5296.84	-1249.37	107.61	5535.71	109.71	50.78	PASS
2613.00†	2573.06	-166.68	-312.39	2520.06	2573.06	5296.84	-1249.37	107.84	5543.28	112.33	49.66	PASS
2713.00†	2670.10	-178.05	-333.71	2617.10	2670.10	5296.84	-1249.37	108.07	5550.93	114.97	48.58	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

## CLEARANCE DATA - Offset Wellbore: CHAMPLIN 117 G#4 AWP 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†	2767.14	-189.43	-355.03	2714.14	2767.14	5296.84	-1249.37	108.30	5558.68	117.62	47.54	PASS
2913.00†	2864.17	-200.81	-376.35	2811.17	2864.17	5296.84	-1249.37	108.53	5566.53	120.29	46.54	PASS
3013.00†	2961.21	-212.18	-397.68	2908.21	2961.21	5296.84	-1249.37	108.76	5574.47	122.97	45.59	PASS
3113.00†	3058.24	-223.56	-419.00	3005.24	3058.24	5296.84	-1249.37	108.99	5582.50	125.67	44.67	PASS
3213.00†	3155.28	-234.93	-440.32	3102.28	3155.28	5296.84	-1249.37	109.22	5590.62	128.38	43.78	PASS
3313.00†	3252.32	-246.31	-461.64	3199.32	3252.32	5296.84	-1249.37	109.45	5598.84	131.10	42.93	PASS
3413.00†	3349.35	-257.69	-482.96	3296.35	3349.35	5296.84	-1249.37	109.67	5607.15	133.83	42.12	PASS
3513.00†	3446.39	-269.06	-504.29	3393.39	3446.39	5296.84	-1249.37	109.90	5615.55	136.57	41.33	PASS
3613.00†	3543.42	-280.44	-525.61	3490.42	3543.42	5296.84	-1249.37	110.13	5624.04	139.32	40.57	PASS
3713.00†	3640.46	-291.82	-546.93	3587.46	3640.46	5296.84	-1249.37	110.35	5632.62	142.08	39.84	PASS
3813.00†	3737.50	-303.19	-568.25	3684.50	3737.50	5296.84	-1249.37	110.57	5641.30	144.85	39.13	PASS
3913.00†	3834.53	-314.57	-589.57	3781.53	3834.53	5296.84	-1249.37	110.80	5650.06	147.63	38.45	PASS
4013.00†	3931.57	-325.94	-610.89	3878.57	3931.57	5296.84	-1249.37	111.02	5658.91	150.41	37.80	PASS
4113.00†	4028.60	-337.32	-632.22	3975.60	4028.60	5296.84	-1249.37	111.24	5667.86	153.21	37.16	PASS
4213.00†	4125.64	-348.70	-653.54	4072.64	4125.64	5296.84	-1249.37	111.46	5676.89	156.01	36.55	PASS
4313.00†	4222.67	-360.07	-674.86	4169.67	4222.67	5296.84	-1249.37	111.69	5686.01	158.81	35.96	PASS
4413.00†	4319.71	-371.45	-696.18	4266.71	4319.71	5296.84	-1249.37	111.91	5695.22	161.62	35.39	PASS
4513.00†	4416.75	-382.83	-717.50	4363.75	4416.75	5296.84	-1249.37	112.13	5704.51	164.44	34.84	PASS
4613.00†	4513.78	-394.20	-738.82	4460.78	4513.78	5296.84	-1249.37	112.34	5713.89	167.26	34.30	PASS
4713.00†	4610.82	-405.58	-760.15	4557.82	4610.82	5296.84	-1249.37	112.56	5723.36	170.09	33.79	PASS
4813.00†	4707.85	-416.95	-781.47	4654.85	4707.85	5296.84	-1249.37	112.78	5732.92	172.92	33.29	PASS
4913.00†	4804.89	-428.33	-802.79	4751.89	4804.89	5296.84	-1249.37	113.00	5742.56	175.76	32.80	PASS
5013.00†	4901.93	-439.71	-824.11	4848.93	4901.93	5296.84	-1249.37	113.21	5752.28	178.60	32.33	PASS
5113.00†	4998.96	-451.08	-845.43	4945.96	4998.96	5296.84	-1249.37	113.43	5762.10	181.44	31.88	PASS
5213.00†	5096.00	-462.46	-866.76	5043.00	5096.00	5296.84	-1249.37	113.64	5771.99	184.29	31.44	PASS
5313.00†	5193.03	-473.84	-888.08	5140.03	5193.03	5296.84	-1249.37	113.86	5781.97	187.14	31.01	PASS
5413.00†	5290.07	-485.21	-909.40	5237.07	5290.07	5296.84	-1249.37	114.07	5792.04	189.99	30.60	PASS
5513.00†	5387.11	-496.59	-930.72	5334.11	5387.11	5296.84	-1249.37	114.28	5802.18	192.85	30.19	PASS
5613.00†	5484.14	-507.97	-952.04	5431.14	5484.14	5296.84	-1249.37	114.49	5812.41	195.70	29.80	PASS
5713.00†	5581.18	-519.34	-973.36	5528.18	5581.18	5296.84	-1249.37	114.70	5822.72	198.56	29.43	PASS

C-C Clearance Distance Cutoff: 1000.00 ft





# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	5678.21	-530.72	-994.69	5625.21	5678.21	5296.84	-1249.37	114.92	5833.12	201.43	29.06	PASS
5913.00†	5775.25	-542.09	-1016.01	5722.25	5775.25	5296.84	-1249.37	115.12	5843.59	204.29	28.70	PASS
6013.00†	5872.28	-553.47	-1037.33	5819.28	5872.28	5296.84	-1249.37	115.33	5854.15	207.16	28.35	PASS
6113.00†	5969.32	-564.85	-1058.65	5916.32	5969.32	5296.84	-1249.37	115.54	5864.79	210.02	28.02	PASS
6213.00†	6066.36	-576.22	-1079.97	6013.36	6066.36	5296.84	-1249.37	115.75	5875.50	212.89	27.69	PASS
6313.00†	6163.39	-587.60	-1101.29	6110.39	6163.39	5296.84	-1249.37	115.96	5886.30	215.76	27.37	PASS
6413.00†	6260.43	-598.98	-1122.62	6207.43	6260.43	5296.84	-1249.37	116.16	5897.17	218.63	27.06	PASS
6513.00†	6357.46	-610.35	-1143.94	6304.46	6357.46	5296.84	-1249.37	116.37	5908.13	221.50	26.76	PASS
6613.00†	6454.50	-621.73	-1165.26	6401.50	6454.50	5296.84	-1249.37	116.57	5919.16	224.38	26.46	PASS
6713.00†	6551.54	-633.10	-1186.58	6498.54	6551.54	5296.84	-1249.37	116.78	5930.27	227.25	26.17	PASS
6813.00†	6648.57	-644.48	-1207.90	6595.57	6648.57	5296.84	-1249.37	116.98	5941.46	230.12	25.90	PASS
6913.00†	6745.61	-655.86	-1229.23	6692.61	6745.61	5296.84	-1249.37	117.18	5952.73	233.00	25.62	PASS
7013.00†	6842.64	-667.23	-1250.55	6789.64	6842.64	5296.84	-1249.37	117.38	5964.07	235.87	25.36	PASS
7113.00†	6939.68	-678.61	-1271.87	6886.68	6939.68	5296.84	-1249.37	117.58	5975.49	238.75	25.10	PASS
7213.00†	7036.72	-689.99	-1293.19	6983.72	7036.72	5296.84	-1249.37	117.79	5986.98	241.62	24.85	PASS
7313.00†	7133.75	-701.36	-1314.51	7080.75	7133.75	5296.84	-1249.37	117.98	5998.55	244.49	24.60	PASS
7413.00†	7230.79	-712.74	-1335.83	7177.79	7230.79	5296.84	-1249.37	118.18	6010.20	247.37	24.36	PASS
7414.33	7232.08	-712.89	-1336.12	7179.08	7232.08	5296.84	-1249.37	118.19	6010.35	247.41	24.36	PASS
7513.00†	7328.29	-715.64	-1357.28	7275.29	7328.29	5296.84	-1249.37	76.21	6013.44	250.38	24.08	PASS
7613.00†	7424.79	-701.16	-1378.55	7371.79	7424.79	5296.84	-1249.37	44.97	5999.39	253.83	23.70	PASS
7713.00†	7517.36	-669.75	-1399.00	7464.36	7517.36	5296.84	-1249.37	30.70	5968.46	257.27	23.26	PASS
7813.00†	7603.19	-622.35	-1418.01	7550.19	7603.19	5296.84	-1249.37	23.88	5921.58	260.35	22.80	PASS
7913.00†	7679.66	-560.40	-1435.00	7626.66	7679.66	5296.84	-1249.37	20.39	5860.18	263.03	22.34	PASS
8013.00†	7744.47	-485.79	-1449.45	7691.47	7744.47	5296.84	-1249.37	18.78	5786.09	265.24	21.87	PASS
8113.00†	7795.62	-400.79	-1460.93	7742.62	7795.62	5296.84	-1249.37	18.70	5701.55	266.97	21.41	PASS
8213.00†	7831.58	-307.97	-1469.09	7778.58	7831.58	5296.84	-1249.37	20.82	5609.11	268.18	20.97	PASS
8313.00†	7851.25	-210.16	-1473.67	7798.25	7851.25	5296.84	-1249.37	31.23	5511.56	268.87	20.55	PASS
8379.34	7855.00	-143.97	-1474.67	7802.00	7855.00	5296.84	-1249.37	90.00	5445.47	269.04	20.29	PASS
8413.00†	7855.00	-110.31	-1474.75	7802.00	7855.00	5296.84	-1249.37	90.00	5411.84	269.08	20.16	PASS
8513.00†	7855.00	-10.31	-1475.01	7802.00	7855.00	5296.84	-1249.37	90.00	5311.94	269.18	19.78	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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
8613.00†	7855.00	89.69	-1475.28	7802.00	7855.00	5296.84	-1249.37	90.00	5212.05	269.29	19.40	PASS
8713.00†	7855.00	189.69	-1475.54	7802.00	7855.00	5296.84	-1249.37	90.00	5112.15	269.40	19.02	PASS
8813.00†	7855.00	289.69	-1475.80	7802.00	7855.00	5296.84	-1249.37	90.00	5012.27	269.52	18.64	PASS
8913.00†	7855.00	389.69	-1476.06	7802.00	7855.00	5296.84	-1249.37	90.00	4912.38	269.65	18.26	PASS
9013.00†	7855.00	489.69	-1476.32	7802.00	7855.00	5296.84	-1249.37	90.00	4812.50	269.78	17.88	PASS
9113.00†	7855.00	589.69	-1476.58	7802.00	7855.00	5296.84	-1249.37	90.00	4712.63	269.92	17.50	PASS
9213.00†	7855.00	689.69	-1476.84	7802.00	7855.00	5296.84	-1249.37	90.00	4612.76	270.06	17.12	PASS
9313.00†	7855.00	789.69	-1477.10	7802.00	7855.00	5296.84	-1249.37	90.00	4512.90	270.21	16.74	PASS
9413.00†	7855.00	889.69	-1477.36	7802.00	7855.00	5296.84	-1249.37	90.00	4413.04	270.37	16.36	PASS
9513.00†	7855.00	989.69	-1477.62	7802.00	7855.00	5296.84	-1249.37	90.00	4313.19	270.54	15.98	PASS
9613.00†	7855.00	1089.69	-1477.88	7802.00	7855.00	5296.84	-1249.37	90.00	4213.35	270.72	15.60	PASS
9713.00†	7855.00	1189.68	-1478.14	7802.00	7855.00	5296.84	-1249.37	90.00	4113.52	270.90	15.22	PASS
9813.00†	7855.00	1289.68	-1478.40	7802.00	7855.00	5296.84	-1249.37	90.00	4013.69	271.10	14.84	PASS
9913.00†	7855.00	1389.68	-1478.66	7802.00	7855.00	5296.84	-1249.37	90.00	3913.87	271.30	14.46	PASS
10013.00†	7855.00	1489.68	-1478.93	7802.00	7855.00	5296.84	-1249.37	90.00	3814.07	271.52	14.08	PASS
10113.00†	7855.00	1589.68	-1479.19	7802.00	7855.00	5296.84	-1249.37	90.00	3714.27	271.75	13.70	PASS
10213.00†	7855.00	1689.68	-1479.45	7802.00	7855.00	5296.84	-1249.37	90.00	3614.48	271.99	13.32	PASS
10313.00†	7855.00	1789.68	-1479.71	7802.00	7855.00	5296.84	-1249.37	90.00	3514.71	272.25	12.94	PASS
10413.00†	7855.00	1889.68	-1479.97	7802.00	7855.00	5296.84	-1249.37	90.00	3414.95	272.52	12.56	PASS
10513.00†	7855.00	1989.68	-1480.23	7802.00	7855.00	5296.84	-1249.37	90.00	3315.20	272.81	12.18	PASS
10613.00†	7855.00	2089.68	-1480.49	7802.00	7855.00	5296.84	-1249.37	90.00	3215.47	273.11	11.80	PASS
10713.00†	7855.00	2189.68	-1480.75	7802.00	7855.00	5296.84	-1249.37	90.00	3115.76	273.44	11.42	PASS
10813.00†	7855.00	2289.68	-1481.01	7802.00	7855.00	5296.84	-1249.37	90.00	3016.06	273.78	11.04	PASS
10913.00†	7855.00	2389.68	-1481.27	7802.00	7855.00	5296.84	-1249.37	90.00	2916.39	274.16	10.66	PASS
11013.00†	7855.00	2489.68	-1481.53	7802.00	7855.00	5296.84	-1249.37	90.00	2816.74	274.55	10.28	PASS
11113.00†	7855.00	2589.68	-1481.79	7802.00	7855.00	5296.84	-1249.37	90.00	2717.12	274.98	9.90	PASS
11213.00†	7855.00	2689.68	-1482.05	7802.00	7855.00	5296.84	-1249.37	90.00	2617.52	275.44	9.53	PASS
11313.00†	7855.00	2789.68	-1482.31	7802.00	7855.00	5296.84	-1249.37	90.00	2517.96	275.93	9.15	PASS
11413.00†	7855.00	2889.68	-1482.57	7802.00	7855.00	5296.84	-1249.37	90.00	2418.43	276.46	8.77	PASS
11513.00†	7855.00	2989.68	-1482.84	7802.00	7855.00	5296.84	-1249.37	90.00	2318.94	277.04	8.39	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	7855.00	3089.68	-1483.10	7802.00	7855.00	5296.84	-1249.37	90.00	2219.50	277.68	8.01	PASS
11713.00†	7855.00	3189.68	-1483.36	7802.00	7855.00	5296.84	-1249.37	90.00	2120.11	278.37	7.63	PASS
11813.00†	7855.00	3289.68	-1483.62	7802.00	7855.00	5296.84	-1249.37	90.00	2020.78	279.13	7.26	PASS
11913.00†	7855.00	3389.68	-1483.88	7802.00	7855.00	5296.84	-1249.37	90.00	1921.52	279.96	6.88	PASS
12013.00†	7855.00	3489.68	-1484.14	7802.00	7855.00	5296.84	-1249.37	90.00	1822.34	280.89	6.50	PASS
12113.00†	7855.00	3589.68	-1484.40	7802.00	7855.00	5296.84	-1249.37	90.00	1723.26	281.92	6.13	PASS
12213.00†	7855.00	3689.68	-1484.66	7802.00	7855.00	5296.84	-1249.37	90.00	1624.29	283.09	5.75	PASS
12313.00†	7855.00	3789.68	-1484.92	7802.00	7855.00	5296.84	-1249.37	90.00	1525.46	284.40	5.37	PASS
12413.00†	7855.00	3889.68	-1485.18	7802.00	7855.00	5296.84	-1249.37	90.00	1426.78	285.89	5.00	PASS
12513.00†	7855.00	3989.68	-1485.44	7802.00	7855.00	5296.84	-1249.37	90.00	1328.31	287.60	4.63	PASS
12613.00†	7855.00	4089.68	-1485.70	7802.00	7855.00	5296.84	-1249.37	90.00	1230.08	289.59	4.26	PASS
12713.00†	7855.00	4189.67	-1485.96	7802.00	7855.00	5296.84	-1249.37	90.00	1132.16	291.92	3.89	PASS
12813.00†	7855.00	4289.67	-1486.22	7802.00	7855.00	5296.84	-1249.37	90.00	1034.64	294.68	3.52	PASS
12913.00†	7855.00	4389.67	-1486.48	7802.00	7855.00	5296.84	-1249.37	90.00	937.64	298.01	3.15	PASS
13013.00†	7855.00	4489.67	-1486.75	7802.00	7855.00	5296.84	-1249.37	90.00	841.34	302.07	2.79	PASS
13113.00†	7855.00	4589.67	-1487.01	7802.00	7855.00	5296.84	-1249.37	90.00	746.02	307.13	2.43	PASS
13213.00†	7855.00	4689.67	-1487.27	7802.00	7855.00	5296.84	-1249.37	90.00	652.11	313.56	2.08	PASS
13313.00†	7855.00	4789.67	-1487.53	7802.00	7855.00	5296.84	-1249.37	90.00	560.30	321.86	1.74	PASS
13413.00†	7855.00	4889.67	-1487.79	7802.00	7855.00	5296.84	-1249.37	90.00	471.83	332.78	1.42	PASS
13513.00†	7855.00	4989.67	-1488.05	7802.00	7855.00	5296.84	-1249.37	90.00	389.00	347.07	1.12	PASS
13613.00†	7855.00	5089.67	-1488.31	7802.00	7855.00	5296.84	-1249.37	90.00	316.24	364.56	0.87	FAIL
13713.00†	7855.00	5189.67	-1488.57	7802.00	7855.00	5296.84	-1249.37	90.00	262.11	380.37	0.69	FAIL
13802.94†	7855.00	5279.61	-1488.80	7802.00	7855.00	5296.84	-1249.37	90.00	240.05	381.17	0.63	FAIL
13813.00†	7855.00	5289.67	-1488.83	7802.00	7855.00	5296.84	-1249.37	90.00	239.57	379.92	0.63	FAIL
13819.31†	7855.00	5295.98	-1488.85	7802.32	7855.32	5296.84	-1249.37	90.08	239.48	379.00	0.63	FAIL
13913.00†	7855.00	5389.67	-1489.09	7802.00	7855.00	5296.84	-1249.37	90.00	257.07	354.42	0.72	FAIL
14013.00†	7855.00	5489.67	-1489.35	7802.00	7855.00	5296.84	-1249.37	90.00	307.86	320.69	0.96	FAIL
14113.00†	7855.00	5589.67	-1489.61	7802.00	7855.00	5296.84	-1249.37	90.00	378.77	293.83	1.29	PASS
14213.00†	7855.00	5689.67	-1489.87	7802.00	7855.00	5296.84	-1249.37	90.00	460.61	275.88	1.67	PASS
14313.00†	7855.00	5789.67	-1490.13	7802.00	7855.00	5296.84	-1249.37	90.00	548.50	264.66	2.08	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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
14413.00†	7855.00	5889.67	-1490.39	7802.00	7855.00	5296.84	-1249.37	90.00	639.96	257.95	2.48	PASS
14513.00†	7855.00	5989.67	-1490.66	7802.00	7855.00	5296.84	-1249.37	90.00	733.64	254.15	2.89	PASS
14613.00†	7855.00	6089.67	-1490.92	7802.00	7855.00	5296.84	-1249.37	90.00	828.81	252.17	3.29	PASS
14713.00†	7855.00	6189.67	-1491.18	7802.00	7855.00	5296.84	-1249.37	90.00	925.00	251.28	3.69	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## 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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	2689.86	-1259.86	-25.10	2970.29	50.10	60.24	PASS
113.00†	113.00	0.00	0.00	104.00	113.00	2689.86	-1259.86	-25.10	2970.29	52.44	57.50	PASS
213.00†	213.00	0.00	0.00	204.00	213.00	2689.86	-1259.86	-25.10	2970.29	54.79	55.00	PASS
313.00†	313.00	0.00	0.00	304.00	313.00	2689.86	-1259.86	-25.10	2970.29	57.14	52.70	PASS
413.00†	413.00	0.00	0.00	404.00	413.00	2689.86	-1259.86	-25.10	2970.29	59.50	50.59	PASS
513.00†	513.00	0.00	0.00	504.00	513.00	2689.86	-1259.86	-25.10	2970.29	61.86	48.63	PASS
613.00†	613.00	0.00	0.00	604.00	613.00	2689.86	-1259.86	-25.10	2970.29	64.22	46.82	PASS
713.00†	713.00	0.00	0.00	704.00	713.00	2689.86	-1259.86	-25.10	2970.29	66.59	45.14	PASS
800.00	800.00	0.00	0.00	791.00	800.00	2689.86	-1259.86	-25.10	2970.29	68.66	43.76	PASS
813.00†	813.00	-0.01	-0.03	804.00	813.00	2689.86	-1259.86	-25.10	2970.29	68.97	43.56	PASS
913.00†	912.97	-1.05	-1.97	903.97	912.97	2689.86	-1259.86	93.03	2970.40	71.34	42.10	PASS
1013.00†	1012.80	-3.73	-6.98	1003.80	1012.80	2689.86	-1259.86	93.13	2970.71	73.72	40.73	PASS
1113.00†	1112.38	-8.04	-15.07	1103.38	1112.38	2689.86	-1259.86	93.29	2971.22	76.10	39.45	PASS
1213.00†	1211.57	-13.99	-26.22	1202.57	1211.57	2689.86	-1259.86	93.52	2971.98	78.48	38.25	PASS
1313.00†	1310.26	-21.56	-40.42	1301.26	1310.26	2689.86	-1259.86	93.81	2973.02	80.86	37.12	PASS
1413.00†	1408.33	-30.76	-57.64	1399.33	1408.33	2689.86	-1259.86	94.15	2974.40	83.26	36.06	PASS
1499.25	1492.33	-39.97	-74.92	1483.33	1492.33	2689.86	-1259.86	94.48	2975.92	85.33	35.20	PASS
1513.00†	1505.67	-41.54	-77.85	1496.67	1505.67	2689.86	-1259.86	94.54	2976.19	85.66	35.06	PASS
1613.00†	1602.71	-52.91	-99.17	1593.71	1602.71	2689.86	-1259.86	94.99	2978.26	88.09	34.11	PASS
1713.00†	1699.74	-64.29	-120.49	1690.74	1699.74	2689.86	-1259.86	95.44	2980.52	90.54	33.20	PASS
1813.00†	1796.78	-75.67	-141.82	1787.78	1796.78	2689.86	-1259.86	95.89	2982.98	92.93	32.34	PASS
1913.00†	1893.81	-87.04	-163.14	1884.81	1893.81	2689.86	-1259.86	96.34	2985.63	95.43	31.51	PASS
2013.00†	1990.85	-98.42	-184.46	1981.85	1990.85	2689.86	-1259.86	96.79	2988.48	97.95	30.73	PASS
2113.00†	2087.89	-109.79	-205.78	2078.89	2087.89	2689.86	-1259.86	97.23	2991.51	100.49	29.97	PASS
2213.00†	2184.92	-121.17	-227.10	2175.92	2184.92	2689.86	-1259.86	97.68	2994.74	103.06	29.25	PASS
2313.00†	2281.96	-132.55	-248.42	2272.96	2281.96	2689.86	-1259.86	98.12	2998.16	105.65	28.56	PASS
2413.00†	2378.99	-143.92	-269.75	2369.99	2378.99	2689.86	-1259.86	98.57	3001.78	108.25	27.91	PASS
2513.00†	2476.03	-155.30	-291.07	2467.03	2476.03	2689.86	-1259.86	99.01	3005.58	110.88	27.28	PASS
2613.00†	2573.06	-166.68	-312.39	2564.06	2573.06	2689.86	-1259.86	99.45	3009.57	113.52	26.67	PASS
2713.00†	2670.10	-178.05	-333.71	2661.10	2670.10	2689.86	-1259.86	99.89	3013.75	116.18	26.09	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	2767.14	-189.43	-355.03	2758.14	2767.14	2689.86	-1259.86	100.33	3018.12	118.85	25.54	PASS
2913.00†	2864.17	-200.81	-376.35	2855.17	2864.17	2689.86	-1259.86	100.77	3022.67	121.54	25.01	PASS
3013.00†	2961.21	-212.18	-397.68	2952.21	2961.21	2689.86	-1259.86	101.20	3027.41	124.24	24.50	PASS
3113.00†	3058.24	-223.56	-419.00	3049.24	3058.24	2689.86	-1259.86	101.64	3032.34	126.96	24.01	PASS
3213.00†	3155.28	-234.93	-440.32	3146.28	3155.28	2689.86	-1259.86	102.07	3037.44	129.68	23.54	PASS
3313.00†	3252.32	-246.31	-461.64	3243.32	3252.32	2689.86	-1259.86	102.50	3042.74	132.42	23.10	PASS
3413.00†	3349.35	-257.69	-482.96	3340.35	3349.35	2689.86	-1259.86	102.94	3048.21	135.17	22.66	PASS
3513.00†	3446.39	-269.06	-504.29	3437.39	3446.39	2689.86	-1259.86	103.37	3053.87	137.93	22.25	PASS
3613.00†	3543.42	-280.44	-525.61	3534.42	3543.42	2689.86	-1259.86	103.79	3059.71	140.70	21.85	PASS
3713.00†	3640.46	-291.82	-546.93	3631.46	3640.46	2689.86	-1259.86	104.22	3065.72	143.48	21.47	PASS
3813.00†	3737.50	-303.19	-568.25	3728.50	3737.50	2689.86	-1259.86	104.64	3071.92	146.27	21.10	PASS
3913.00†	3834.53	-314.57	-589.57	3825.53	3834.53	2689.86	-1259.86	105.07	3078.29	149.06	20.74	PASS
4013.00†	3931.57	-325.94	-610.89	3922.57	3931.57	2689.86	-1259.86	105.49	3084.84	151.86	20.40	PASS
4113.00†	4028.60	-337.32	-632.22	4019.60	4028.60	2689.86	-1259.86	105.91	3091.56	154.67	20.08	PASS
4213.00†	4125.64	-348.70	-653.54	4116.64	4125.64	2689.86	-1259.86	106.33	3098.46	157.48	19.76	PASS
4313.00†	4222.67	-360.07	-674.86	4213.67	4222.67	2689.86	-1259.86	106.74	3105.53	160.30	19.46	PASS
4413.00†	4319.71	-371.45	-696.18	4310.71	4319.71	2689.86	-1259.86	107.16	3112.77	163.12	19.16	PASS
4513.00†	4416.75	-382.83	-717.50	4407.75	4416.75	2689.86	-1259.86	107.57	3120.18	165.95	18.88	PASS
4613.00†	4513.78	-394.20	-738.82	4504.78	4513.78	2689.86	-1259.86	107.98	3127.77	168.78	18.61	PASS
4713.00†	4610.82	-405.58	-760.15	4601.82	4610.82	2689.86	-1259.86	108.39	3135.52	171.61	18.34	PASS
4813.00†	4707.85	-416.95	-781.47	4698.85	4707.85	2689.86	-1259.86	108.80	3143.43	174.45	18.09	PASS
4913.00†	4804.89	-428.33	-802.79	4795.89	4804.89	2689.86	-1259.86	109.20	3151.51	177.29	17.84	PASS
5013.00†	4901.93	-439.71	-824.11	4892.93	4901.93	2689.86	-1259.86	109.60	3159.76	180.13	17.61	PASS
5113.00†	4998.96	-451.08	-845.43	4989.96	4998.96	2689.86	-1259.86	110.01	3168.17	182.97	17.38	PASS
5213.00†	5096.00	-462.46	-866.76	5087.00	5096.00	2689.86	-1259.86	110.40	3176.74	185.81	17.16	PASS
5313.00†	5193.03	-473.84	-888.08	5184.03	5193.03	2689.86	-1259.86	110.80	3185.47	188.66	16.94	PASS
5413.00†	5290.07	-485.21	-909.40	5281.07	5290.07	2689.86	-1259.86	111.20	3194.36	191.51	16.74	PASS
5513.00†	5387.11	-496.59	-930.72	5378.11	5387.11	2689.86	-1259.86	111.59	3203.40	194.36	16.54	PASS
5613.00†	5484.14	-507.97	-952.04	5475.14	5484.14	2689.86	-1259.86	111.98	3212.61	197.21	16.35	PASS
5713.00†	5581.18	-519.34	-973.36	5572.18	5581.18	2689.86	-1259.86	112.37	3221.96	200.05	16.16	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	5678.21	-530.72	-994.69	5669.21	5678.21	2689.86	-1259.86	112.75	3231.48	202.90	15.98	PASS
5913.00†	5775.25	-542.09	-1016.01	5766.25	5775.25	2689.86	-1259.86	113.14	3241.14	205.75	15.80	PASS
6013.00†	5872.28	-553.47	-1037.33	5863.28	5872.28	2689.86	-1259.86	113.52	3250.96	208.60	15.63	PASS
6113.00†	5969.32	-564.85	-1058.65	5960.32	5969.32	2689.86	-1259.86	113.90	3260.92	211.45	15.47	PASS
6213.00†	6066.36	-576.22	-1079.97	6057.36	6066.36	2689.86	-1259.86	114.28	3271.03	214.30	15.31	PASS
6313.00†	6163.39	-587.60	-1101.29	6154.39	6163.39	2689.86	-1259.86	114.65	3281.29	217.15	15.16	PASS
6413.00†	6260.43	-598.98	-1122.62	6251.43	6260.43	2689.86	-1259.86	115.03	3291.70	219.99	15.01	PASS
6513.00†	6357.46	-610.35	-1143.94	6348.46	6357.46	2689.86	-1259.86	115.40	3302.25	222.84	14.86	PASS
6613.00†	6454.50	-621.73	-1165.26	6445.50	6454.50	2689.86	-1259.86	115.77	3312.94	225.68	14.72	PASS
6713.00†	6551.54	-633.10	-1186.58	6542.54	6551.54	2689.86	-1259.86	116.13	3323.77	228.53	14.59	PASS
6813.00†	6648.57	-644.48	-1207.90	6639.57	6648.57	2689.86	-1259.86	116.50	3334.75	231.37	14.45	PASS
6913.00†	6745.61	-655.86	-1229.23	6736.61	6745.61	2689.86	-1259.86	116.86	3345.86	234.21	14.33	PASS
7013.00†	6842.64	-667.23	-1250.55	6833.64	6842.64	2689.86	-1259.86	117.22	3357.11	237.05	14.20	PASS
7113.00†	6939.68	-678.61	-1271.87	6930.68	6939.68	2689.86	-1259.86	117.57	3368.49	239.89	14.08	PASS
7213.00†	7036.72	-689.99	-1293.19	7027.72	7036.72	2689.86	-1259.86	117.93	3380.01	242.72	13.96	PASS
7313.00†	7133.75	-701.36	-1314.51	7124.75	7133.75	2689.86	-1259.86	118.28	3391.66	245.55	13.85	PASS
7413.00†	7230.79	-712.74	-1335.83	7221.79	7230.79	2689.86	-1259.86	118.63	3403.45	248.39	13.74	PASS
7414.33	7232.08	-712.89	-1336.12	7223.08	7232.08	2689.86	-1259.86	118.64	3403.60	248.42	13.74	PASS
7513.00†	7328.29	-715.64	-1357.28	7319.29	7328.29	2689.86	-1259.86	76.81	3406.89	251.36	13.59	PASS
7613.00†	7424.79	-701.16	-1378.55	7415.79	7424.79	2689.86	-1259.86	45.74	3393.10	254.77	13.35	PASS
7713.00†	7517.36	-669.75	-1399.00	7508.36	7517.36	2689.86	-1259.86	31.69	3362.49	258.18	13.06	PASS
7813.00†	7603.19	-622.35	-1418.01	7594.19	7603.19	2689.86	-1259.86	25.15	3315.98	261.25	12.72	PASS
7913.00†	7679.66	-560.40	-1435.00	7670.66	7679.66	2689.86	-1259.86	22.06	3254.98	263.92	12.36	PASS
8013.00†	7744.47	-485.79	-1449.45	7735.47	7744.47	2689.86	-1259.86	21.06	3181.31	266.15	11.98	PASS
8113.00†	7795.62	-400.79	-1460.93	7786.62	7795.62	2689.86	-1259.86	21.98	3097.18	267.90	11.59	PASS
8213.00†	7831.58	-307.97	-1469.09	7822.58	7831.58	2689.86	-1259.86	26.15	3005.12	269.14	11.19	PASS
8313.00†	7851.25	-210.16	-1473.67	7842.25	7851.25	2689.86	-1259.86	41.99	2907.89	269.89	10.80	PASS
8379.34	7855.00	-143.97	-1474.67	7846.00	7855.00	2689.86	-1259.86	90.00	2841.96	270.11	10.55	PASS
8413.00†	7855.00	-110.31	-1474.75	7846.00	7855.00	2689.86	-1259.86	90.00	2808.40	270.17	10.42	PASS
8513.00†	7855.00	-10.31	-1475.01	7846.00	7855.00	2689.86	-1259.86	90.00	2708.73	270.35	10.04	PASS

C-C Clearance Distance Cutoff: 1000.00 ft





# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	7855.00	89.69	-1475.28	7846.00	7855.00	2689.86	-1259.86	90.00	2609.08	270.55	9.67	PASS
8713.00†	7855.00	189.69	-1475.54	7846.00	7855.00	2689.86	-1259.86	90.00	2509.46	270.76	9.29	PASS
8813.00†	7855.00	289.69	-1475.80	7846.00	7855.00	2689.86	-1259.86	90.00	2409.87	270.99	8.91	PASS
8913.00†	7855.00	389.69	-1476.06	7846.00	7855.00	2689.86	-1259.86	90.00	2310.31	271.25	8.54	PASS
9013.00†	7855.00	489.69	-1476.32	7846.00	7855.00	2689.86	-1259.86	90.00	2210.79	271.52	8.16	PASS
9113.00†	7855.00	589.69	-1476.58	7846.00	7855.00	2689.86	-1259.86	90.00	2111.33	271.83	7.78	PASS
9213.00†	7855.00	689.69	-1476.84	7846.00	7855.00	2689.86	-1259.86	90.00	2011.91	272.16	7.41	PASS
9313.00†	7855.00	789.69	-1477.10	7846.00	7855.00	2689.86	-1259.86	90.00	1912.55	272.53	7.03	PASS
9413.00†	7855.00	889.69	-1477.36	7846.00	7855.00	2689.86	-1259.86	90.00	1813.27	272.94	6.66	PASS
9513.00†	7855.00	989.69	-1477.62	7846.00	7855.00	2689.86	-1259.86	90.00	1714.06	273.39	6.28	PASS
9613.00†	7855.00	1089.69	-1477.88	7846.00	7855.00	2689.86	-1259.86	90.00	1614.96	273.90	5.91	PASS
9713.00†	7855.00	1189.68	-1478.14	7846.00	7855.00	2689.86	-1259.86	90.00	1515.97	274.48	5.53	PASS
9813.00†	7855.00	1289.68	-1478.40	7846.00	7855.00	2689.86	-1259.86	90.00	1417.13	275.13	5.16	PASS
9913.00†	7855.00	1389.68	-1478.66	7846.00	7855.00	2689.86	-1259.86	90.00	1318.46	275.88	4.79	PASS
10013.00†	7855.00	1489.68	-1478.93	7846.00	7855.00	2689.86	-1259.86	90.00	1220.00	276.75	4.42	PASS
10113.00†	7855.00	1589.68	-1479.19	7846.00	7855.00	2689.86	-1259.86	90.00	1121.83	277.76	4.05	PASS
10213.00†	7855.00	1689.68	-1479.45	7846.00	7855.00	2689.86	-1259.86	90.00	1024.00	278.96	3.68	PASS
10313.00†	7855.00	1789.68	-1479.71	7846.00	7855.00	2689.86	-1259.86	90.00	926.63	280.39	3.31	PASS
10413.00†	7855.00	1889.68	-1479.97	7846.00	7855.00	2689.86	-1259.86	90.00	829.90	282.14	2.95	PASS
10513.00†	7855.00	1989.68	-1480.23	7846.00	7855.00	2689.86	-1259.86	90.00	734.04	284.31	2.59	PASS
10613.00†	7855.00	2089.68	-1480.49	7846.00	7855.00	2689.86	-1259.86	90.00	639.45	287.04	2.23	PASS
10713.00†	7855.00	2189.68	-1480.75	7846.00	7855.00	2689.86	-1259.86	90.00	546.78	290.54	1.88	PASS
10813.00†	7855.00	2289.68	-1481.01	7846.00	7855.00	2689.86	-1259.86	90.00	457.22	295.08	1.55	PASS
10913.00†	7855.00	2389.68	-1481.27	7846.00	7855.00	2689.86	-1259.86	90.00	373.00	300.86	1.24	PASS
11013.00†	7855.00	2489.68	-1481.53	7846.00	7855.00	2689.86	-1259.86	90.00	298.68	307.35	0.97	FAIL
11113.00†	7855.00	2589.68	-1481.79	7846.00	7855.00	2689.86	-1259.86	90.00	243.49	310.90	0.78	FAIL
11191.46†	7855.00	2668.14	-1482.00	7846.00	7855.00	2689.86	-1259.86	90.00	223.19	305.78	0.73	FAIL
11213.00†	7855.00	2689.68	-1482.05	7846.00	7855.00	2689.86	-1259.86	90.00	222.19	302.60	0.73	FAIL
11313.00†	7855.00	2789.68	-1482.31	7846.00	7855.00	2689.86	-1259.86	90.00	243.82	281.66	0.87	FAIL
11413.00†	7855.00	2889.68	-1482.57	7846.00	7855.00	2689.86	-1259.86	90.00	299.21	262.85	1.14	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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
11513.00†	7855.00	2989.68	-1482.84	7846.00	7855.00	2689.86	-1259.86	90.00	373.64	253.00	1.48	PASS
11613.00†	7855.00	3089.68	-1483.10	7846.00	7855.00	2689.86	-1259.86	90.00	457.92	249.61	1.84	PASS
11713.00†	7855.00	3189.68	-1483.36	7846.00	7855.00	2689.86	-1259.86	90.00	547.51	249.30	2.20	PASS
11813.00†	7855.00	3289.68	-1483.62	7846.00	7855.00	2689.86	-1259.86	90.00	640.19	250.13	2.56	PASS
11913.00†	7855.00	3389.68	-1483.88	7846.00	7855.00	2689.86	-1259.86	90.00	734.80	251.29	2.93	PASS
12013.00†	7855.00	3489.68	-1484.14	7846.00	7855.00	2689.86	-1259.86	90.00	830.67	252.47	3.30	PASS
12113.00†	7855.00	3589.68	-1484.40	7846.00	7855.00	2689.86	-1259.86	90.00	927.41	253.58	3.66	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

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	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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	0.04	30.02	89.93	30.02	1.40	48.70	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.04	30.02	89.93	30.02	1.73	31.52	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.04	30.02	89.93	30.02	2.30	19.46	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.04	30.02	89.93	30.02	2.91	13.87	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.04	30.02	89.93	30.02	3.52	10.73	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.04	30.02	89.93	30.02	4.14	8.74	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.04	30.02	89.93	30.02	4.77	7.37	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.04	30.02	89.93	30.02	5.39	6.37	PASS
800.00	800.00	0.00	0.00	800.00	800.00	0.04	30.02	89.93	30.02	5.94	5.69	PASS
813.00†	813.00	-0.01	-0.03	813.00	813.00	0.04	30.02	-152.01	30.05	6.02	5.61	PASS
913.00†	912.97	-1.05	-1.97	912.97	912.97	0.04	30.02	-153.84	32.01	6.75	5.25	PASS
1013.00†	1012.80	-3.73	-6.98	1012.95	1012.95	0.02	30.00	-157.65	37.17	7.75	5.24	PASS
1113.00†	1112.38	-8.04	-15.07	1113.96	1113.93	-1.29	28.18	-160.76	43.80	8.78	5.39	PASS
1213.00†	1211.57	-13.99	-26.22	1215.22	1215.02	-4.68	23.46	-162.53	50.66	9.99	5.43	PASS
1313.00†	1310.26	-21.56	-40.42	1316.71	1316.07	-10.18	15.83	-163.41	57.68	11.10	5.53	PASS
1413.00†	1408.33	-30.76	-57.64	1418.44	1416.96	-17.78	5.26	-163.68	64.80	12.16	5.64	PASS
1499.25	1492.33	-39.97	-74.92	1506.38	1503.75	-26.04	-6.21	-163.56	71.03	13.02	5.75	PASS
1513.00†	1505.67	-41.54	-77.85	1520.41	1517.55	-27.50	-8.24	-163.52	72.00	13.14	5.77	PASS
1613.00†	1602.71	-52.91	-99.17	1622.07	1617.22	-39.20	-24.50	-162.63	77.30	13.86	5.86	PASS
1713.00†	1699.74	-64.29	-120.49	1721.97	1714.95	-51.27	-41.27	-161.57	81.71	14.49	5.91	PASS
1813.00†	1796.78	-75.67	-141.82	1821.86	1812.68	-63.35	-58.05	-160.62	86.14	15.08	5.95	PASS
1913.00†	1893.81	-87.04	-163.14	1921.75	1910.41	-75.42	-74.83	-159.76	90.60	15.82	5.95	PASS
2013.00†	1990.85	-98.42	-184.46	2021.64	2008.14	-87.50	-91.61	-158.98	95.08	16.57	5.95	PASS
2113.00†	2087.89	-109.79	-205.78	2121.53	2105.87	-99.57	-108.39	-158.27	99.57	17.37	5.93	PASS
2213.00†	2184.92	-121.17	-227.10	2221.43	2203.60	-111.65	-125.16	-157.62	104.07	18.21	5.91	PASS
2313.00†	2281.96	-132.55	-248.42	2321.32	2301.33	-123.72	-141.94	-157.03	108.59	19.08	5.87	PASS
2413.00†	2378.99	-143.92	-269.75	2421.21	2399.06	-135.80	-158.72	-156.48	113.12	19.97	5.84	PASS
2513.00†	2476.03	-155.30	-291.07	2521.10	2496.79	-147.87	-175.50	-155.98	117.65	20.89	5.80	PASS
2613.00†	2573.06	-166.68	-312.39	2620.99	2594.52	-159.95	-192.28	-155.51	122.20	21.82	5.75	PASS
2713.00†	2670.10	-178.05	-333.71	2720.88	2692.25	-172.02	-209.05	-155.08	126.75	22.78	5.71	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	2767.14	-189.43	-355.03	2820.78	2789.98	-184.10	-225.83	-154.67	131.31	23.75	5.67	PASS
2913.00†	2864.17	-200.81	-376.35	2920.67	2887.71	-196.17	-242.61	-154.30	135.88	24.73	5.63	PASS
3013.00†	2961.21	-212.18	-397.68	3020.56	2985.44	-208.25	-259.39	-153.95	140.45	25.73	5.58	PASS
3113.00†	3058.24	-223.56	-419.00	3120.45	3083.17	-220.32	-276.16	-153.62	145.03	26.74	5.54	PASS
3213.00†	3155.28	-234.93	-440.32	3220.34	3180.89	-232.40	-292.94	-153.31	149.61	27.77	5.50	PASS
3313.00†	3252.32	-246.31	-461.64	3320.24	3278.62	-244.47	-309.72	-153.02	154.19	28.80	5.46	PASS
3413.00†	3349.35	-257.69	-482.96	3420.13	3376.35	-256.54	-326.50	-152.74	158.78	29.84	5.43	PASS
3513.00†	3446.39	-269.06	-504.29	3520.02	3474.08	-268.62	-343.28	-152.48	163.37	30.89	5.39	PASS
3613.00†	3543.42	-280.44	-525.61	3619.91	3571.81	-280.69	-360.05	-152.24	167.97	31.94	5.36	PASS
3713.00†	3640.46	-291.82	-546.93	3719.80	3669.54	-292.77	-376.83	-152.01	172.57	33.00	5.32	PASS
3813.00†	3737.50	-303.19	-568.25	3819.70	3767.27	-304.84	-393.61	-151.79	177.17	34.07	5.29	PASS
3913.00†	3834.53	-314.57	-589.57	3919.59	3865.00	-316.92	-410.39	-151.58	181.77	35.15	5.26	PASS
4013.00†	3931.57	-325.94	-610.89	4019.48	3962.73	-328.99	-427.17	-151.38	186.38	36.22	5.23	PASS
4113.00†	4028.60	-337.32	-632.22	4119.37	4060.46	-341.07	-443.94	-151.19	190.99	37.31	5.20	PASS
4213.00†	4125.64	-348.70	-653.54	4219.26	4158.19	-353.14	-460.72	-151.01	195.60	38.40	5.17	PASS
4313.00†	4222.67	-360.07	-674.86	4319.15	4255.92	-365.22	-477.50	-150.84	200.21	39.49	5.14	PASS
4413.00†	4319.71	-371.45	-696.18	4419.05	4353.65	-377.29	-494.28	-150.68	204.82	40.58	5.12	PASS
4513.00†	4416.75	-382.83	-717.50	4518.94	4451.38	-389.37	-511.05	-150.52	209.44	41.68	5.09	PASS
4613.00†	4513.78	-394.20	-738.82	4618.83	4549.11	-401.44	-527.83	-150.37	214.05	42.78	5.07	PASS
4713.00†	4610.82	-405.58	-760.15	4718.72	4646.84	-413.52	-544.61	-150.23	218.67	43.89	5.05	PASS
4813.00†	4707.85	-416.95	-781.47	4818.61	4744.57	-425.59	-561.39	-150.09	223.29	45.00	5.03	PASS
4913.00†	4804.89	-428.33	-802.79	4918.51	4842.30	-437.67	-578.17	-149.96	227.91	46.11	5.00	PASS
5013.00†	4901.93	-439.71	-824.11	5018.40	4940.03	-449.74	-594.94	-149.83	232.53	47.22	4.98	PASS
5113.00†	4998.96	-451.08	-845.43	5118.29	5037.76	-461.82	-611.72	-149.71	237.15	48.33	4.96	PASS
5213.00†	5096.00	-462.46	-866.76	5218.18	5135.49	-473.89	-628.50	-149.59	241.78	49.45	4.95	PASS
5313.00†	5193.03	-473.84	-888.08	5318.07	5233.22	-485.97	-645.28	-149.48	246.40	50.57	4.93	PASS
5413.00†	5290.07	-485.21	-909.40	5417.97	5330.95	-498.04	-662.06	-149.37	251.03	51.69	4.91	PASS
5513.00†	5387.11	-496.59	-930.72	5517.86	5428.68	-510.11	-678.83	-149.27	255.65	52.81	4.89	PASS
5613.00†	5484.14	-507.97	-952.04	5617.75	5526.41	-522.19	-695.61	-149.17	260.28	53.94	4.88	PASS
5713.00†	5581.18	-519.34	-973.36	5717.64	5624.14	-534.26	-712.39	-149.07	264.91	55.06	4.86	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	5678.21	-530.72	-994.69	5817.53	5721.87	-546.34	-729.17	-148.98	269.54	56.19	4.85	PASS
5913.00†	5775.25	-542.09	-1016.01	5917.42	5819.60	-558.41	-745.94	-148.89	274.17	57.32	4.83	PASS
6013.00†	5872.28	-553.47	-1037.33	6017.32	5917.33	-570.49	-762.72	-148.80	278.80	58.45	4.82	PASS
6113.00†	5969.32	-564.85	-1058.65	6117.21	6015.06	-582.56	-779.50	-148.71	283.43	59.58	4.80	PASS
6213.00†	6066.36	-576.22	-1079.97	6217.10	6112.78	-594.64	-796.28	-148.63	288.06	60.71	4.79	PASS
6313.00†	6163.39	-587.60	-1101.29	6316.99	6210.51	-606.71	-813.06	-148.55	292.69	61.84	4.78	PASS
6413.00†	6260.43	-598.98	-1122.62	6416.88	6308.24	-618.79	-829.83	-148.47	297.32	62.98	4.76	PASS
6513.00†	6357.46	-610.35	-1143.94	6516.78	6405.97	-630.86	-846.61	-148.40	301.96	64.11	4.75	PASS
6613.00†	6454.50	-621.73	-1165.26	6616.67	6503.70	-642.94	-863.39	-148.33	306.59	65.25	4.74	PASS
6713.00†	6551.54	-633.10	-1186.58	6716.56	6601.43	-655.01	-880.17	-148.26	311.22	66.38	4.73	PASS
6813.00†	6648.57	-644.48	-1207.90	6816.45	6699.16	-667.09	-896.95	-148.19	315.86	67.52	4.72	PASS
6913.00†	6745.61	-655.86	-1229.23	6916.34	6796.89	-679.16	-913.72	-148.12	320.49	68.66	4.71	PASS
7013.00†	6842.64	-667.23	-1250.55	7016.23	6894.62	-691.24	-930.50	-148.06	325.13	69.80	4.70	PASS
7113.00†	6939.68	-678.61	-1271.87	7116.13	6992.35	-703.31	-947.28	-147.99	329.76	70.94	4.69	PASS
7213.00†	7036.72	-689.99	-1293.19	7217.60	7091.73	-714.51	-964.34	-148.12	334.32	71.96	4.68	PASS
7313.00†	7133.75	-701.36	-1314.51	7319.86	7192.33	-711.52	-981.65	-150.64	338.13	70.97	4.80	PASS
7413.00†	7230.79	-712.74	-1335.83	7414.22	7283.35	-692.72	-997.36	-155.55	343.12	68.28	5.07	PASS
7414.33	7232.08	-712.89	-1336.12	7415.41	7284.47	-692.39	-997.55	-155.63	343.21	68.26	5.07	PASS
7513.00†	7328.29	-715.64	-1357.28	7500.80	7363.16	-662.35	-1011.16	156.07	351.93	65.13	5.45	PASS
7613.00†	7424.79	-701.16	-1378.55	7583.37	7434.24	-622.34	-1023.49	118.92	363.82	63.55	5.78	PASS
7713.00†	7517.36	-669.75	-1399.00	7662.80	7496.59	-574.45	-1034.34	99.36	377.48	62.53	6.09	PASS
7813.00†	7603.19	-622.35	-1418.01	7739.78	7550.24	-520.13	-1043.71	87.88	391.60	61.78	6.40	PASS
7913.00†	7679.66	-560.40	-1435.00	7814.87	7595.20	-460.57	-1051.60	80.33	405.09	61.11	6.69	PASS
8013.00†	7744.47	-485.79	-1449.45	7888.52	7631.47	-396.84	-1058.01	75.13	417.03	60.42	6.97	PASS
8113.00†	7795.62	-400.79	-1460.93	7961.12	7659.04	-329.92	-1062.92	71.56	426.72	59.74	7.22	PASS
8213.00†	7831.58	-307.97	-1469.09	8032.98	7677.92	-260.72	-1066.35	69.28	433.64	59.12	7.41	PASS
8313.00†	7851.25	-210.16	-1473.67	8104.39	7688.08	-190.10	-1068.28	68.10	437.46	58.60	7.54	PASS
8379.34	7855.00	-143.97	-1474.67	8151.66	7690.00	-142.89	-1068.74	67.88	438.18	58.19	7.61	PASS
8413.00†	7855.00	-110.31	-1474.75	8185.30	7690.00	-109.25	-1068.83	67.88	438.18	57.92	7.65	PASS
8513.00†	7855.00	-10.31	-1475.01	8285.30	7690.00	-9.25	-1069.09	67.88	438.18	57.42	7.71	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	7855.00	89.69	-1475.28	8385.30	7690.00	90.75	-1069.35	67.88	438.18	57.54	7.70	PASS
8713.00†	7855.00	189.69	-1475.54	8485.30	7690.00	190.75	-1069.61	67.88	438.18	58.25	7.60	PASS
8813.00†	7855.00	289.69	-1475.80	8585.30	7690.00	290.75	-1069.87	67.88	438.18	59.54	7.44	PASS
8913.00†	7855.00	389.69	-1476.06	8685.30	7690.00	390.75	-1070.13	67.88	438.18	61.37	7.21	PASS
9013.00†	7855.00	489.69	-1476.32	8785.30	7690.00	490.75	-1070.39	67.88	438.18	63.70	6.94	PASS
9113.00†	7855.00	589.69	-1476.58	8885.30	7690.00	590.75	-1070.65	67.88	438.18	67.80	6.52	PASS
9213.00†	7855.00	689.69	-1476.84	8985.30	7690.00	690.75	-1070.91	67.88	438.18	69.62	6.35	PASS
9313.00†	7855.00	789.69	-1477.10	9085.30	7690.00	790.75	-1071.18	67.88	438.18	73.11	6.04	PASS
9413.00†	7855.00	889.69	-1477.36	9185.30	7690.00	890.75	-1071.44	67.88	438.18	76.89	5.74	PASS
9513.00†	7855.00	989.69	-1477.62	9285.30	7690.00	990.75	-1071.70	67.88	438.18	80.92	5.45	PASS
9613.00†	7855.00	1089.69	-1477.88	9385.30	7690.00	1090.75	-1071.96	67.88	438.18	85.17	5.18	PASS
9713.00†	7855.00	1189.68	-1478.14	9485.30	7690.00	1190.75	-1072.22	67.88	438.18	89.60	4.92	PASS
9813.00†	7855.00	1289.68	-1478.40	9585.30	7690.00	1290.74	-1072.48	67.88	438.18	94.18	4.68	PASS
9913.00†	7855.00	1389.68	-1478.66	9685.30	7690.00	1390.74	-1072.74	67.88	438.18	98.90	4.46	PASS
10013.00†	7855.00	1489.68	-1478.93	9785.30	7690.00	1490.74	-1073.00	67.88	438.18	103.74	4.25	PASS
10113.00†	7855.00	1589.68	-1479.19	9885.30	7690.00	1590.74	-1073.27	67.88	438.17	108.68	4.05	PASS
10213.00†	7855.00	1689.68	-1479.45	9985.30	7690.00	1690.74	-1073.53	67.88	438.17	113.71	3.87	PASS
10313.00†	7855.00	1789.68	-1479.71	10085.30	7690.00	1790.74	-1073.79	67.88	438.17	118.81	3.70	PASS
10413.00†	7855.00	1889.68	-1479.97	10185.30	7690.00	1890.74	-1074.05	67.88	438.17	123.98	3.55	PASS
10513.00†	7855.00	1989.68	-1480.23	10285.30	7690.00	1990.74	-1074.31	67.88	438.17	129.21	3.40	PASS
10613.00†	7855.00	2089.68	-1480.49	10385.30	7690.00	2090.74	-1074.57	67.88	438.17	134.49	3.27	PASS
10713.00†	7855.00	2189.68	-1480.75	10485.30	7690.00	2190.74	-1074.83	67.88	438.17	139.82	3.14	PASS
10813.00†	7855.00	2289.68	-1481.01	10585.30	7690.00	2290.74	-1075.09	67.88	438.17	145.18	3.03	PASS
10913.00†	7855.00	2389.68	-1481.27	10685.30	7690.00	2390.74	-1075.36	67.88	438.17	150.59	2.92	PASS
11013.00†	7855.00	2489.68	-1481.53	10785.30	7690.00	2490.74	-1075.62	67.88	438.17	156.03	2.82	PASS
11113.00†	7855.00	2589.68	-1481.79	10885.30	7690.00	2590.74	-1075.88	67.88	438.17	161.49	2.72	PASS
11213.00†	7855.00	2689.68	-1482.05	10985.30	7690.00	2690.74	-1076.14	67.88	438.17	166.99	2.63	PASS
11313.00†	7855.00	2789.68	-1482.31	11085.30	7690.00	2790.74	-1076.40	67.88	438.17	172.51	2.55	PASS
11413.00†	7855.00	2889.68	-1482.57	11185.30	7690.00	2890.74	-1076.66	67.88	438.17	178.04	2.47	PASS
11513.00†	7855.00	2989.68	-1482.84	11285.30	7690.00	2990.74	-1076.92	67.88	438.17	183.60	2.39	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	7855.00	3089.68	-1483.10	11385.30	7690.00	3090.74	-1077.18	67.88	438.17	189.18	2.32	PASS
11713.00†	7855.00	3189.68	-1483.36	11485.30	7690.00	3190.74	-1077.45	67.88	438.17	194.76	2.25	PASS
11813.00†	7855.00	3289.68	-1483.62	11585.30	7690.00	3290.74	-1077.71	67.88	438.17	200.38	2.19	PASS
11913.00†	7855.00	3389.68	-1483.88	11685.30	7690.00	3390.74	-1077.97	67.88	438.17	206.01	2.13	PASS
12013.00†	7855.00	3489.68	-1484.14	11785.30	7690.00	3490.74	-1078.23	67.88	438.16	211.64	2.07	PASS
12113.00†	7855.00	3589.68	-1484.40	11885.30	7690.00	3590.74	-1078.49	67.88	438.16	217.29	2.02	PASS
12213.00†	7855.00	3689.68	-1484.66	11985.30	7690.00	3690.74	-1078.75	67.88	438.16	222.95	1.97	PASS
12313.00†	7855.00	3789.68	-1484.92	12085.30	7690.00	3790.74	-1079.01	67.88	438.16	228.61	1.92	PASS
12413.00†	7855.00	3889.68	-1485.18	12185.30	7690.00	3890.74	-1079.27	67.88	438.16	234.29	1.87	PASS
12513.00†	7855.00	3989.68	-1485.44	12285.30	7690.00	3990.74	-1079.54	67.88	438.16	239.98	1.83	PASS
12613.00†	7855.00	4089.68	-1485.70	12385.30	7690.00	4090.74	-1079.80	67.88	438.16	245.67	1.79	PASS
12713.00†	7855.00	4189.67	-1485.96	12485.30	7690.00	4190.74	-1080.06	67.88	438.16	251.37	1.75	PASS
12813.00†	7855.00	4289.67	-1486.22	12585.30	7690.00	4290.73	-1080.32	67.88	438.16	257.08	1.71	PASS
12913.00†	7855.00	4389.67	-1486.48	12685.30	7690.00	4390.73	-1080.58	67.88	438.16	262.80	1.67	PASS
13013.00†	7855.00	4489.67	-1486.75	12785.30	7690.00	4490.73	-1080.84	67.88	438.16	268.52	1.63	PASS
13113.00†	7855.00	4589.67	-1487.01	12885.30	7690.00	4590.73	-1081.10	67.88	438.16	274.25	1.60	PASS
13213.00†	7855.00	4689.67	-1487.27	12985.30	7690.00	4690.73	-1081.36	67.88	438.16	279.98	1.57	PASS
13313.00†	7855.00	4789.67	-1487.53	13085.30	7690.00	4790.73	-1081.63	67.88	438.16	285.72	1.53	PASS
13413.00†	7855.00	4889.67	-1487.79	13185.30	7690.00	4890.73	-1081.89	67.88	438.16	291.46	1.50	PASS
13513.00†	7855.00	4989.67	-1488.05	13285.30	7690.00	4990.73	-1082.15	67.88	438.16	297.20	1.48	PASS
13613.00†	7855.00	5089.67	-1488.31	13385.30	7690.00	5090.73	-1082.41	67.88	438.16	302.96	1.45	PASS
13713.00†	7855.00	5189.67	-1488.57	13485.30	7690.00	5190.73	-1082.67	67.88	438.16	308.71	1.42	PASS
13813.00†	7855.00	5289.67	-1488.83	13585.30	7690.00	5290.73	-1082.93	67.88	438.16	314.47	1.39	PASS
13913.00†	7855.00	5389.67	-1489.09	13685.30	7690.00	5390.73	-1083.19	67.88	438.16	320.23	1.37	PASS
14013.00†	7855.00	5489.67	-1489.35	13785.30	7690.00	5490.73	-1083.45	67.88	438.15	326.00	1.34	PASS
14113.00†	7855.00	5589.67	-1489.61	13885.30	7690.00	5590.73	-1083.72	67.88	438.15	331.77	1.32	PASS
14213.00†	7855.00	5689.67	-1489.87	13985.30	7690.00	5690.73	-1083.98	67.88	438.15	337.54	1.30	PASS
14313.00†	7855.00	5789.67	-1490.13	14085.30	7690.00	5790.73	-1084.24	67.88	438.15	343.31	1.28	PASS
14413.00†	7855.00	5889.67	-1490.39	14185.30	7690.00	5890.73	-1084.50	67.88	438.15	349.09	1.26	PASS
14513.00†	7855.00	5989.67	-1490.66	14285.30	7690.00	5990.73	-1084.76	67.88	438.15	354.87	1.24	PASS

C-C Clearance Distance Cutoff: 1000.00 ft





# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	7855.00	6089.67	-1490.92	14385.30	7690.00	6090.73	-1085.02	67.88	438.15	360.65	1.22	PASS
14713.00†	7855.00	6189.67	-1491.18	14485.30	7690.00	6190.73	-1085.28	67.88	438.15	366.44	1.20	PASS
14813.00†	7855.00	6289.67	-1491.44	14585.30	7690.00	6290.73	-1085.54	67.88	438.15	372.23	1.18	PASS
14913.00†	7855.00	6389.67	-1491.70	14685.30	7690.00	6390.73	-1085.80	67.88	438.15	378.01	1.16	PASS
15013.00†	7855.00	6489.67	-1491.96	14785.30	7690.00	6490.73	-1086.07	67.88	438.15	383.81	1.14	PASS
15113.00†	7855.00	6589.67	-1492.22	14885.30	7690.00	6590.73	-1086.33	67.88	438.15	389.60	1.12	PASS
15213.00†	7855.00	6689.67	-1492.48	14985.30	7690.00	6690.73	-1086.59	67.88	438.15	395.39	1.11	PASS
15313.00†	7855.00	6789.67	-1492.74	15085.30	7690.00	6790.73	-1086.85	67.88	438.15	401.19	1.09	PASS
15413.00†	7855.00	6889.67	-1493.00	15185.30	7690.00	6890.73	-1087.11	67.88	438.15	406.99	1.08	PASS
15513.00†	7855.00	6989.67	-1493.26	15285.30	7690.00	6990.73	-1087.37	67.88	438.15	412.79	1.06	PASS
15613.00†	7855.00	7089.66	-1493.52	15385.30	7690.00	7090.73	-1087.63	67.88	438.15	418.59	1.05	PASS
15713.00†	7855.00	7189.66	-1493.78	15485.30	7690.00	7190.72	-1087.89	67.88	438.15	424.40	1.03	PASS
15813.00†	7855.00	7289.66	-1494.04	15585.30	7690.00	7290.72	-1088.16	67.88	438.15	430.20	1.02	PASS
15913.00†	7855.00	7389.66	-1494.30	15685.30	7690.00	7390.72	-1088.42	67.88	438.15	436.01	1.00	PASS
16013.00†	7855.00	7489.66	-1494.57	15785.30	7690.00	7490.72	-1088.68	67.88	438.14	441.82	0.99	FAIL
16113.00†	7855.00	7589.66	-1494.83	15885.30	7690.00	7590.72	-1088.94	67.88	438.14	447.62	0.98	FAIL
16213.00†	7855.00	7689.66	-1495.09	15985.30	7690.00	7690.72	-1089.20	67.88	438.14	453.43	0.97	FAIL
16313.00†	7855.00	7789.66	-1495.35	16085.30	7690.00	7790.72	-1089.46	67.88	438.14	459.25	0.95	FAIL
16413.00†	7855.00	7889.66	-1495.61	16185.30	7690.00	7890.72	-1089.72	67.88	438.14	465.06	0.94	FAIL
16513.00†	7855.00	7989.66	-1495.87	16285.30	7690.00	7990.72	-1089.98	67.88	438.14	470.87	0.93	FAIL
16613.00†	7855.00	8089.66	-1496.13	16385.30	7690.00	8090.72	-1090.25	67.88	438.14	476.69	0.92	FAIL
16713.00†	7855.00	8189.66	-1496.39	16485.30	7690.00	8190.72	-1090.51	67.88	438.14	482.50	0.91	FAIL
16813.00†	7855.00	8289.66	-1496.65	16585.30	7690.00	8290.72	-1090.77	67.88	438.14	488.32	0.90	FAIL
16913.00†	7855.00	8389.66	-1496.91	16685.30	7690.00	8390.72	-1091.03	67.88	438.14	494.14	0.89	FAIL
17013.00†	7855.00	8489.66	-1497.17	16785.30	7690.00	8490.72	-1091.29	67.88	438.14	499.96	0.88	FAIL
17113.00†	7855.00	8589.66	-1497.43	16885.30	7690.00	8590.72	-1091.55	67.88	438.14	505.77	0.87	FAIL
17213.00†	7855.00	8689.66	-1497.69	16985.30	7690.00	8690.72	-1091.81	67.88	438.14	511.60	0.86	FAIL
17313.00†	7855.00	8789.66	-1497.95	17085.30	7690.00	8790.72	-1092.07	67.88	438.14	517.42	0.85	FAIL
17413.00†	7855.00	8889.66	-1498.22	17185.30	7690.00	8890.72	-1092.34	67.88	438.14	523.24	0.84	FAIL
17513.00†	7855.00	8989.66	-1498.48	17285.30	7690.00	8990.72	-1092.60	67.88	438.14	529.06	0.83	FAIL

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	7855.00	9089.66	-1498.74	17385.30	7690.00	9090.72	-1092.86	67.88	438.14	534.88	0.82	FAIL
17713.00†	7855.00	9189.66	-1499.00	17485.30	7690.00	9190.72	-1093.12	67.88	438.14	540.71	0.81	FAIL
17813.00†	7855.00	9289.66	-1499.26	17585.30	7690.00	9290.72	-1093.38	67.88	438.14	546.53	0.80	FAIL
17913.00†	7855.00	9389.66	-1499.52	17685.30	7690.00	9390.72	-1093.64	67.88	438.13	552.36	0.79	FAIL
18013.00†	7855.00	9489.66	-1499.78	17785.30	7690.00	9490.72	-1093.90	67.88	438.13	558.19	0.78	FAIL
18089.51	7855.00	9566.17	-1499.98	17861.81	7690.00	9567.23	-1094.10	67.88	438.13	562.64	0.78	FAIL

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	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	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	0.02	18.30	-18.49	-7.42
8.5in Open Hole	1800.00	17864.18	16064.18	1791.29	7690.00	-18.49	-7.42	2916.82	-324.33

## 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	Log Name/Comment	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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	15.01	89.79	15.01	1.40	23.68	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.05	15.01	89.79	15.01	1.73	15.31	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.05	15.01	89.79	15.01	2.30	9.46	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.05	15.01	89.79	15.01	2.91	6.74	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.05	15.01	89.79	15.01	3.53	5.22	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.05	15.01	89.79	15.01	4.15	4.25	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.05	15.01	89.79	15.01	4.77	3.58	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.05	15.01	89.79	15.01	5.39	3.09	PASS
800.00	800.00	0.00	0.00	800.00	800.00	0.05	15.01	89.79	15.01	5.94	2.77	PASS
813.00†	813.00	-0.01	-0.03	813.00	813.00	0.05	15.01	-152.18	15.04	6.02	2.73	PASS
913.00†	912.97	-1.05	-1.97	913.04	913.04	0.04	14.98	-155.58	16.99	6.75	2.72	PASS
1013.00†	1012.80	-3.73	-6.98	1013.57	1013.54	-1.11	13.08	-159.35	20.25	7.86	2.76	PASS
1113.00†	1112.38	-8.04	-15.07	1114.22	1114.02	-4.09	8.16	-161.62	23.62	9.15	2.73	PASS
1213.00†	1211.57	-13.99	-26.22	1214.99	1214.36	-8.89	0.20	-162.92	27.05	10.32	2.76	PASS
1313.00†	1310.26	-21.56	-40.42	1315.89	1314.43	-15.53	-10.78	-163.58	30.53	11.42	2.80	PASS
1413.00†	1408.33	-30.76	-57.64	1416.90	1414.10	-24.00	-24.79	-163.78	34.03	12.46	2.85	PASS
1499.25	1492.33	-39.97	-74.92	1504.12	1499.65	-32.76	-39.31	-163.69	37.06	13.31	2.90	PASS
1513.00†	1505.67	-41.54	-77.85	1518.03	1513.25	-34.29	-41.83	-163.64	37.52	13.42	2.91	PASS
1613.00†	1602.71	-52.91	-99.17	1618.93	1611.44	-46.28	-61.68	-162.42	39.06	14.12	2.87	PASS
1713.00†	1699.74	-64.29	-120.49	1718.92	1708.54	-58.63	-82.11	-160.82	39.78	14.75	2.79	PASS
1813.00†	1796.78	-75.67	-141.82	1818.91	1805.64	-70.97	-102.54	-159.27	40.53	15.37	2.72	PASS
1913.00†	1893.81	-87.04	-163.14	1918.90	1902.74	-83.32	-122.98	-157.78	41.31	16.12	2.64	PASS
2013.00†	1990.85	-98.42	-184.46	2018.89	1999.84	-95.66	-143.41	-156.35	42.11	16.94	2.55	PASS
2113.00†	2087.89	-109.79	-205.78	2118.88	2096.94	-108.01	-163.84	-154.97	42.94	17.82	2.47	PASS
2213.00†	2184.92	-121.17	-227.10	2218.87	2194.04	-120.35	-184.27	-153.65	43.80	18.75	2.39	PASS
2313.00†	2281.96	-132.55	-248.42	2318.87	2291.14	-132.70	-204.70	-152.38	44.67	19.74	2.31	PASS
2413.00†	2378.99	-143.92	-269.75	2418.86	2388.24	-145.04	-225.14	-151.15	45.57	20.78	2.24	PASS
2513.00†	2476.03	-155.30	-291.07	2518.85	2485.34	-157.39	-245.57	-149.98	46.49	21.86	2.16	PASS
2613.00†	2573.06	-166.68	-312.39	2618.84	2582.44	-169.73	-266.00	-148.85	47.42	22.99	2.10	PASS
2713.00†	2670.10	-178.05	-333.71	2718.83	2679.54	-182.08	-286.43	-147.76	48.38	24.15	2.03	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	2767.14	-189.43	-355.03	2818.82	2776.64	-194.42	-306.87	-146.72	49.35	25.36	1.97	PASS
2913.00†	2864.17	-200.81	-376.35	2918.81	2873.74	-206.77	-327.30	-145.71	50.33	26.59	1.92	PASS
3013.00†	2961.21	-212.18	-397.68	3018.81	2970.84	-219.11	-347.73	-144.75	51.34	27.86	1.86	PASS
3113.00†	3058.24	-223.56	-419.00	3118.80	3067.94	-231.46	-368.16	-143.82	52.35	29.16	1.82	PASS
3213.00†	3155.28	-234.93	-440.32	3218.79	3165.04	-243.80	-388.60	-142.93	53.38	30.48	1.77	PASS
3313.00†	3252.32	-246.31	-461.64	3318.78	3262.14	-256.15	-409.03	-142.07	54.42	31.82	1.73	PASS
3413.00†	3349.35	-257.69	-482.96	3418.77	3359.24	-268.50	-429.46	-141.25	55.47	33.19	1.69	PASS
3513.00†	3446.39	-269.06	-504.29	3518.76	3456.34	-280.84	-449.89	-140.45	56.54	34.58	1.65	PASS
3613.00†	3543.42	-280.44	-525.61	3618.75	3553.44	-293.19	-470.32	-139.69	57.61	35.98	1.61	PASS
3713.00†	3640.46	-291.82	-546.93	3718.74	3650.54	-305.53	-490.76	-138.95	58.69	37.40	1.58	PASS
3813.00†	3737.50	-303.19	-568.25	3818.74	3747.64	-317.88	-511.19	-138.24	59.79	38.84	1.55	PASS
3913.00†	3834.53	-314.57	-589.57	3918.73	3844.74	-330.22	-531.62	-137.56	60.89	40.29	1.52	PASS
4013.00†	3931.57	-325.94	-610.89	4018.72	3941.84	-342.57	-552.05	-136.90	62.00	41.75	1.49	PASS
4113.00†	4028.60	-337.32	-632.22	4118.71	4038.93	-354.91	-572.49	-136.26	63.12	43.22	1.47	PASS
4213.00†	4125.64	-348.70	-653.54	4218.70	4136.03	-367.26	-592.92	-135.64	64.24	44.71	1.44	PASS
4313.00†	4222.67	-360.07	-674.86	4318.69	4233.13	-379.60	-613.35	-135.05	65.38	46.20	1.42	PASS
4413.00†	4319.71	-371.45	-696.18	4418.68	4330.23	-391.95	-633.78	-134.48	66.52	47.70	1.40	PASS
4513.00†	4416.75	-382.83	-717.50	4518.68	4427.33	-404.29	-654.22	-133.92	67.66	49.21	1.38	PASS
4613.00†	4513.78	-394.20	-738.82	4618.67	4524.43	-416.64	-674.65	-133.39	68.82	50.73	1.36	PASS
4713.00†	4610.82	-405.58	-760.15	4718.66	4621.53	-428.98	-695.08	-132.87	69.97	52.26	1.34	PASS
4813.00†	4707.85	-416.95	-781.47	4818.65	4718.63	-441.33	-715.51	-132.37	71.14	53.79	1.33	PASS
4913.00†	4804.89	-428.33	-802.79	4918.64	4815.73	-453.67	-735.94	-131.89	72.31	55.32	1.31	PASS
5013.00†	4901.93	-439.71	-824.11	5018.63	4912.83	-466.02	-756.38	-131.42	73.48	56.87	1.30	PASS
5113.00†	4998.96	-451.08	-845.43	5118.62	5009.93	-478.36	-776.81	-130.96	74.66	58.41	1.28	PASS
5213.00†	5096.00	-462.46	-866.76	5218.61	5107.03	-490.71	-797.24	-130.52	75.84	59.96	1.27	PASS
5313.00†	5193.03	-473.84	-888.08	5318.61	5204.13	-503.06	-817.67	-130.10	77.03	61.52	1.26	PASS
5413.00†	5290.07	-485.21	-909.40	5418.60	5301.23	-515.40	-838.11	-129.68	78.22	63.08	1.24	PASS
5513.00†	5387.11	-496.59	-930.72	5518.59	5398.33	-527.75	-858.54	-129.28	79.42	64.64	1.23	PASS
5613.00†	5484.14	-507.97	-952.04	5618.58	5495.43	-540.09	-878.97	-128.89	80.62	66.21	1.22	PASS
5713.00†	5581.18	-519.34	-973.36	5718.57	5592.53	-552.44	-899.40	-128.52	81.82	67.78	1.21	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	5678.21	-530.72	-994.69	5818.56	5689.63	-564.78	-919.84	-128.15	83.03	69.35	1.20	PASS
5913.00†	5775.25	-542.09	-1016.01	5918.55	5786.73	-577.13	-940.27	-127.79	84.24	70.92	1.19	PASS
6013.00†	5872.28	-553.47	-1037.33	6018.55	5883.83	-589.47	-960.70	-127.45	85.45	72.50	1.18	PASS
6113.00†	5969.32	-564.85	-1058.65	6118.54	5980.93	-601.82	-981.13	-127.11	86.67	74.08	1.17	PASS
6213.00†	6066.36	-576.22	-1079.97	6218.53	6078.03	-614.16	-1001.56	-126.78	87.88	75.66	1.16	PASS
6313.00†	6163.39	-587.60	-1101.29	6318.52	6175.13	-626.51	-1022.00	-126.46	89.11	77.24	1.15	PASS
6413.00†	6260.43	-598.98	-1122.62	6418.51	6272.23	-638.85	-1042.43	-126.15	90.33	78.83	1.15	PASS
6513.00†	6357.46	-610.35	-1143.94	6518.50	6369.33	-651.20	-1062.86	-125.85	91.56	80.41	1.14	PASS
6613.00†	6454.50	-621.73	-1165.26	6618.49	6466.43	-663.54	-1083.29	-125.56	92.79	82.00	1.13	PASS
6713.00†	6551.54	-633.10	-1186.58	6718.48	6563.53	-675.89	-1103.73	-125.27	94.02	83.59	1.13	PASS
6813.00†	6648.57	-644.48	-1207.90	6818.48	6660.63	-688.23	-1124.16	-125.00	95.25	85.18	1.12	PASS
6913.00†	6745.61	-655.86	-1229.23	6918.47	6757.73	-700.58	-1144.59	-124.73	96.49	86.77	1.11	PASS
7013.00†	6842.64	-667.23	-1250.55	7019.87	6856.23	-712.84	-1165.32	-124.59	97.61	88.27	1.11	PASS
7113.00†	6939.68	-678.61	-1271.87	7127.02	6960.91	-712.86	-1187.48	-131.43	93.51	84.95	1.10	PASS
7213.00†	7036.72	-689.99	-1293.19	7226.45	7056.44	-695.07	-1207.89	-149.40	87.70	72.31	1.21	PASS
7252.42†	7074.96	-694.47	-1301.60	7262.45	7090.09	-684.49	-1215.12	-158.80	88.35	81.95	1.08	PASS
7313.00†	7133.75	-701.36	-1314.51	7313.83	7136.81	-665.70	-1225.21	-173.55	96.21	59.04	1.64	PASS
7413.00†	7230.79	-712.74	-1335.83	7387.95	7200.88	-631.23	-1239.13	166.83	129.97	60.54	2.16	PASS
7414.33	7232.08	-712.89	-1336.12	7388.85	7201.62	-630.76	-1239.29	166.62	130.57	60.61	2.17	PASS
7513.00†	7328.29	-715.64	-1357.28	7454.05	7253.90	-593.58	-1250.74	109.85	178.28	63.81	2.81	PASS
7613.00†	7424.79	-701.16	-1378.55	7517.80	7300.69	-551.57	-1261.07	69.87	227.11	64.49	3.55	PASS
7713.00†	7517.36	-669.75	-1399.00	7579.85	7341.56	-505.83	-1270.19	50.11	272.70	63.46	4.33	PASS
7813.00†	7603.19	-622.35	-1418.01	7640.63	7376.67	-456.89	-1278.13	39.55	313.45	61.37	5.16	PASS
7913.00†	7679.66	-560.40	-1435.00	7700.47	7406.08	-405.25	-1284.89	33.26	348.50	58.93	5.97	PASS
8013.00†	7744.47	-485.79	-1449.45	7759.61	7429.82	-351.39	-1290.46	29.29	377.29	56.60	6.74	PASS
8113.00†	7795.62	-400.79	-1460.93	7818.26	7447.86	-295.79	-1294.85	26.75	399.43	54.80	7.37	PASS
8213.00†	7831.58	-307.97	-1469.09	7876.56	7460.19	-238.92	-1298.04	25.19	414.68	53.76	7.80	PASS
8313.00†	7851.25	-210.16	-1473.67	7934.66	7466.79	-181.26	-1300.03	24.38	422.85	53.69	7.97	PASS
8379.34	7855.00	-143.97	-1474.67	7973.76	7468.00	-142.19	-1300.69	24.21	424.31	53.91	7.96	PASS
8413.00†	7855.00	-110.31	-1474.75	8007.42	7468.00	-108.53	-1301.03	24.18	424.21	54.08	7.93	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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
8513.00†	7855.00	-10.31	-1475.01	8107.42	7468.00	-8.54	-1302.05	24.08	423.90	54.29	7.90	PASS
8613.00†	7855.00	89.69	-1475.28	8207.42	7468.00	91.45	-1303.08	23.99	423.59	54.69	7.83	PASS
8713.00†	7855.00	189.69	-1475.54	8307.41	7468.00	191.44	-1304.10	23.89	423.28	55.29	7.74	PASS
8813.00†	7855.00	289.69	-1475.80	8407.41	7468.00	291.43	-1305.12	23.80	422.97	56.08	7.63	PASS
8913.00†	7855.00	389.69	-1476.06	8507.41	7468.00	391.43	-1306.15	23.70	422.66	57.04	7.49	PASS
9013.00†	7855.00	489.69	-1476.32	8607.40	7468.00	491.42	-1307.17	23.61	422.35	58.16	7.34	PASS
9113.00†	7855.00	589.69	-1476.58	8707.40	7468.00	591.41	-1308.19	23.52	422.05	59.48	7.17	PASS
9213.00†	7855.00	689.69	-1476.84	8807.40	7468.00	691.40	-1309.22	23.42	421.75	60.86	7.00	PASS
9313.00†	7855.00	789.69	-1477.10	8907.39	7468.00	791.39	-1310.24	23.33	421.44	62.41	6.82	PASS
9413.00†	7855.00	889.69	-1477.36	9007.39	7468.00	891.39	-1311.26	23.23	421.14	64.08	6.63	PASS
9513.00†	7855.00	989.69	-1477.62	9107.39	7468.00	991.38	-1312.29	23.13	420.84	65.85	6.45	PASS
9613.00†	7855.00	1089.69	-1477.88	9207.39	7468.00	1091.37	-1313.31	23.04	420.54	67.73	6.26	PASS
9713.00†	7855.00	1189.68	-1478.14	9307.38	7468.00	1191.36	-1314.33	22.94	420.25	69.69	6.08	PASS
9813.00†	7855.00	1289.68	-1478.40	9407.38	7468.00	1291.35	-1315.35	22.85	419.95	71.73	5.90	PASS
9913.00†	7855.00	1389.68	-1478.66	9507.38	7468.00	1391.34	-1316.38	22.75	419.65	73.84	5.73	PASS
10013.00†	7855.00	1489.68	-1478.93	9607.37	7468.00	1491.34	-1317.40	22.66	419.36	76.01	5.56	PASS
10113.00†	7855.00	1589.68	-1479.19	9707.37	7468.00	1591.33	-1318.42	22.56	419.07	78.24	5.40	PASS
10213.00†	7855.00	1689.68	-1479.45	9807.37	7468.00	1691.32	-1319.45	22.46	418.77	80.51	5.24	PASS
10313.00†	7855.00	1789.68	-1479.71	9907.37	7468.00	1791.31	-1320.47	22.37	418.48	82.84	5.09	PASS
10413.00†	7855.00	1889.68	-1479.97	10007.36	7468.00	1891.30	-1321.49	22.27	418.19	85.20	4.94	PASS
10513.00†	7855.00	1989.68	-1480.23	10107.36	7468.00	1991.30	-1322.52	22.17	417.91	87.59	4.80	PASS
10613.00†	7855.00	2089.68	-1480.49	10207.36	7468.00	2091.29	-1323.54	22.08	417.62	90.02	4.67	PASS
10713.00†	7855.00	2189.68	-1480.75	10307.35	7468.00	2191.28	-1324.56	21.98	417.33	92.47	4.54	PASS
10813.00†	7855.00	2289.68	-1481.01	10407.35	7468.00	2291.27	-1325.59	21.88	417.05	94.95	4.42	PASS
10913.00†	7855.00	2389.68	-1481.27	10507.35	7468.00	2391.26	-1326.61	21.78	416.76	97.45	4.30	PASS
11013.00†	7855.00	2489.68	-1481.53	10607.35	7468.00	2491.26	-1327.63	21.69	416.48	99.97	4.19	PASS
11113.00†	7855.00	2589.68	-1481.79	10707.34	7468.00	2591.25	-1328.65	21.59	416.20	102.50	4.08	PASS
11213.00†	7855.00	2689.68	-1482.05	10807.34	7468.00	2691.24	-1329.68	21.49	415.92	105.04	3.98	PASS
11313.00†	7855.00	2789.68	-1482.31	10907.34	7468.00	2791.23	-1330.70	21.39	415.64	107.60	3.88	PASS
11413.00†	7855.00	2889.68	-1482.57	11007.33	7468.00	2891.22	-1331.72	21.30	415.36	110.17	3.79	PASS

C-C Clearance Distance Cutoff: 1000.00 ft





# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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
11513.00†	7855.00	2989.68	-1482.84	11107.33	7468.00	2991.21	-1332.75	21.20	415.09	112.74	3.70	PASS
11613.00†	7855.00	3089.68	-1483.10	11207.33	7468.00	3091.21	-1333.77	21.10	414.81	115.32	3.61	PASS
11713.00†	7855.00	3189.68	-1483.36	11307.33	7468.00	3191.20	-1334.79	21.00	414.54	117.91	3.53	PASS
11813.00†	7855.00	3289.68	-1483.62	11407.32	7468.00	3291.19	-1335.82	20.90	414.27	120.49	3.45	PASS
11913.00†	7855.00	3389.68	-1483.88	11507.32	7468.00	3391.18	-1336.84	20.80	413.99	123.09	3.38	PASS
12013.00†	7855.00	3489.68	-1484.14	11607.32	7468.00	3491.17	-1337.86	20.71	413.72	125.68	3.30	PASS
12113.00†	7855.00	3589.68	-1484.40	11707.31	7468.00	3591.17	-1338.89	20.61	413.46	128.27	3.24	PASS
12213.00†	7855.00	3689.68	-1484.66	11807.31	7468.00	3691.16	-1339.91	20.51	413.19	130.87	3.17	PASS
12313.00†	7855.00	3789.68	-1484.92	11907.31	7468.00	3791.15	-1340.93	20.41	412.92	133.46	3.11	PASS
12413.00†	7855.00	3889.68	-1485.18	12007.30	7468.00	3891.14	-1341.96	20.31	412.66	136.05	3.04	PASS
12513.00†	7855.00	3989.68	-1485.44	12107.30	7468.00	3991.13	-1342.98	20.21	412.39	138.64	2.98	PASS
12613.00†	7855.00	4089.68	-1485.70	12207.30	7468.00	4091.12	-1344.00	20.11	412.13	141.23	2.93	PASS
12713.00†	7855.00	4189.67	-1485.96	12307.30	7468.00	4191.12	-1345.02	20.01	411.87	143.81	2.87	PASS
12813.00†	7855.00	4289.67	-1486.22	12407.29	7468.00	4291.11	-1346.05	19.91	411.61	146.39	2.82	PASS
12913.00†	7855.00	4389.67	-1486.48	12507.29	7468.00	4391.10	-1347.07	19.81	411.35	148.97	2.77	PASS
13013.00†	7855.00	4489.67	-1486.75	12607.29	7468.00	4491.09	-1348.09	19.71	411.09	151.54	2.72	PASS
13113.00†	7855.00	4589.67	-1487.01	12707.28	7468.00	4591.08	-1349.12	19.61	410.83	154.10	2.67	PASS
13213.00†	7855.00	4689.67	-1487.27	12807.28	7468.00	4691.08	-1350.14	19.51	410.58	156.66	2.63	PASS
13313.00†	7855.00	4789.67	-1487.53	12907.28	7468.00	4791.07	-1351.16	19.41	410.32	159.22	2.58	PASS
13413.00†	7855.00	4889.67	-1487.79	13007.28	7468.00	4891.06	-1352.19	19.31	410.07	161.77	2.54	PASS
13513.00†	7855.00	4989.67	-1488.05	13107.27	7468.00	4991.05	-1353.21	19.21	409.82	164.31	2.50	PASS
13613.00†	7855.00	5089.67	-1488.31	13207.27	7468.00	5091.04	-1354.23	19.11	409.57	166.84	2.46	PASS
13713.00†	7855.00	5189.67	-1488.57	13307.27	7468.00	5191.04	-1355.26	19.01	409.32	169.37	2.42	PASS
13813.00†	7855.00	5289.67	-1488.83	13407.26	7468.00	5291.03	-1356.28	18.91	409.07	171.89	2.39	PASS
13913.00†	7855.00	5389.67	-1489.09	13507.26	7468.00	5391.02	-1357.30	18.81	408.83	174.40	2.35	PASS
14013.00†	7855.00	5489.67	-1489.35	13607.26	7468.00	5491.01	-1358.32	18.71	408.58	176.91	2.31	PASS
14113.00†	7855.00	5589.67	-1489.61	13707.26	7468.00	5591.00	-1359.35	18.60	408.34	179.41	2.28	PASS
14213.00†	7855.00	5689.67	-1489.87	13807.25	7468.00	5690.99	-1360.37	18.50	408.10	181.90	2.25	PASS
14313.00†	7855.00	5789.67	-1490.13	13907.25	7468.00	5790.99	-1361.39	18.40	407.85	184.38	2.22	PASS
14413.00†	7855.00	5889.67	-1490.39	14007.25	7468.00	5890.98	-1362.42	18.30	407.61	186.85	2.19	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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
14513.00†	7855.00	5989.67	-1490.66	14107.24	7468.00	5990.97	-1363.44	18.20	407.37	189.32	2.16	PASS
14613.00†	7855.00	6089.67	-1490.92	14207.24	7468.00	6090.96	-1364.46	18.10	407.14	191.78	2.13	PASS
14713.00†	7855.00	6189.67	-1491.18	14307.24	7468.00	6190.95	-1365.49	17.99	406.90	194.22	2.10	PASS
14813.00†	7855.00	6289.67	-1491.44	14407.24	7468.00	6290.95	-1366.51	17.89	406.67	196.66	2.07	PASS
14913.00†	7855.00	6389.67	-1491.70	14507.23	7468.00	6390.94	-1367.53	17.79	406.43	199.10	2.05	PASS
15013.00†	7855.00	6489.67	-1491.96	14607.23	7468.00	6490.93	-1368.56	17.69	406.20	201.52	2.02	PASS
15113.00†	7855.00	6589.67	-1492.22	14707.23	7468.00	6590.92	-1369.58	17.58	405.97	203.93	1.99	PASS
15213.00†	7855.00	6689.67	-1492.48	14807.22	7468.00	6690.91	-1370.60	17.48	405.74	206.34	1.97	PASS
15313.00†	7855.00	6789.67	-1492.74	14907.22	7468.00	6790.91	-1371.63	17.38	405.51	208.73	1.95	PASS
15413.00†	7855.00	6889.67	-1493.00	15007.22	7468.00	6890.90	-1372.65	17.28	405.28	211.12	1.92	PASS
15513.00†	7855.00	6989.67	-1493.26	15107.21	7468.00	6990.89	-1373.67	17.17	405.06	213.50	1.90	PASS
15613.00†	7855.00	7089.66	-1493.52	15207.21	7468.00	7090.88	-1374.69	17.07	404.83	215.87	1.88	PASS
15713.00†	7855.00	7189.66	-1493.78	15307.21	7468.00	7190.87	-1375.72	16.97	404.61	218.23	1.86	PASS
15813.00†	7855.00	7289.66	-1494.04	15407.21	7468.00	7290.86	-1376.74	16.86	404.39	220.58	1.84	PASS
15913.00†	7855.00	7389.66	-1494.30	15507.20	7468.00	7390.86	-1377.76	16.76	404.17	222.92	1.82	PASS
16013.00†	7855.00	7489.66	-1494.57	15607.20	7468.00	7490.85	-1378.79	16.66	403.95	225.25	1.80	PASS
16113.00†	7855.00	7589.66	-1494.83	15707.20	7468.00	7590.84	-1379.81	16.55	403.73	227.58	1.78	PASS
16213.00†	7855.00	7689.66	-1495.09	15807.19	7468.00	7690.83	-1380.83	16.45	403.51	229.89	1.76	PASS
16313.00†	7855.00	7789.66	-1495.35	15907.19	7468.00	7790.82	-1381.86	16.35	403.30	232.20	1.74	PASS
16413.00†	7855.00	7889.66	-1495.61	16007.19	7468.00	7890.82	-1382.88	16.24	403.09	234.49	1.72	PASS
16513.00†	7855.00	7989.66	-1495.87	16107.19	7468.00	7990.81	-1383.90	16.14	402.87	236.78	1.70	PASS
16613.00†	7855.00	8089.66	-1496.13	16207.18	7468.00	8090.80	-1384.93	16.03	402.66	239.06	1.69	PASS
16713.00†	7855.00	8189.66	-1496.39	16307.18	7468.00	8190.79	-1385.95	15.93	402.45	241.33	1.67	PASS
16813.00†	7855.00	8289.66	-1496.65	16407.18	7468.00	8290.78	-1386.97	15.82	402.24	243.59	1.65	PASS
16913.00†	7855.00	8389.66	-1496.91	16507.17	7468.00	8390.77	-1388.00	15.72	402.04	245.84	1.64	PASS
17013.00†	7855.00	8489.66	-1497.17	16607.17	7468.00	8490.77	-1389.02	15.61	401.83	248.08	1.62	PASS
17113.00†	7855.00	8589.66	-1497.43	16707.17	7468.00	8590.76	-1390.04	15.51	401.63	250.31	1.61	PASS
17213.00†	7855.00	8689.66	-1497.69	16807.17	7468.00	8690.75	-1391.06	15.41	401.42	252.54	1.59	PASS
17313.00†	7855.00	8789.66	-1497.95	16907.16	7468.00	8790.74	-1392.09	15.30	401.22	254.75	1.58	PASS
17413.00†	7855.00	8889.66	-1498.22	17007.16	7468.00	8890.73	-1393.11	15.20	401.02	256.96	1.56	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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
17513.00†	7855.00	8989.66	-1498.48	17107.16	7468.00	8990.73	-1394.13	15.09	400.82	259.16	1.55	PASS
17613.00†	7855.00	9089.66	-1498.74	17207.15	7468.00	9090.72	-1395.16	14.98	400.62	261.35	1.53	PASS
17713.00†	7855.00	9189.66	-1499.00	17307.15	7468.00	9190.71	-1396.18	14.88	400.43	263.53	1.52	PASS
17813.00†	7855.00	9289.66	-1499.26	17407.15	7468.00	9290.70	-1397.20	14.77	400.23	265.70	1.51	PASS
17913.00†	7855.00	9389.66	-1499.52	17507.14	7468.00	9390.69	-1398.23	14.67	400.04	267.86	1.49	PASS
18013.00†	7855.00	9489.66	-1499.78	17607.14	7468.00	9490.69	-1399.25	14.56	399.85	270.02	1.48	PASS
18089.51	7855.00	9566.17	-1499.98	17683.47	7468.00	9567.01	-1400.03	14.48	399.70	271.64	1.47	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	9.15	-20.90	-25.50
8.5in Open Hole	1800.00	17683.47	15883.47	1787.28	7468.00	-20.90	-25.50	2916.04	-422.15

## 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



**Clearance Report**  
**ACKARD NORTH 2-35-1CDH PWP (REV-A.0)**  
**Closest Approach**  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	0.09	44.98	89.88	44.98	1.40	73.62	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.09	44.98	89.88	44.98	1.72	47.92	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.09	44.98	89.88	44.98	2.29	29.62	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.09	44.98	89.88	44.98	2.90	21.09	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.09	44.98	89.88	44.98	3.51	16.30	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.09	44.98	89.88	44.98	4.13	13.27	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.09	44.98	89.88	44.98	4.75	11.18	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.09	44.98	89.88	44.98	5.38	9.65	PASS
800.00	800.00	0.00	0.00	800.00	800.00	0.09	44.98	89.88	44.98	5.92	8.63	PASS
813.00†	813.00	-0.01	-0.03	813.00	813.00	0.09	44.98	-152.05	45.00	6.00	8.50	PASS
913.00†	912.97	-1.05	-1.97	912.97	912.97	0.09	44.98	-153.29	46.96	6.73	7.79	PASS
1013.00†	1012.80	-3.73	-6.98	1012.80	1012.80	0.09	44.98	-156.06	52.10	7.72	7.41	PASS
1113.00†	1112.38	-8.04	-15.07	1112.58	1112.58	0.07	44.96	-159.51	60.57	8.66	7.60	PASS
1213.00†	1211.57	-13.99	-26.22	1213.81	1213.78	-1.59	43.47	-161.91	70.82	9.63	7.93	PASS
1313.00†	1310.26	-21.56	-40.42	1315.36	1315.15	-5.94	39.59	-162.89	81.66	10.72	8.15	PASS
1413.00†	1408.33	-30.76	-57.64	1417.19	1416.54	-12.99	33.29	-162.92	93.02	11.75	8.43	PASS
1499.25	1492.33	-39.97	-74.92	1505.23	1503.88	-21.25	25.92	-162.42	103.21	12.58	8.69	PASS
1513.00†	1505.67	-41.54	-77.85	1519.29	1517.79	-22.76	24.58	-162.31	104.84	12.70	8.74	PASS
1613.00†	1602.71	-52.91	-99.17	1620.49	1617.68	-34.86	13.77	-161.07	115.35	13.38	9.11	PASS
1713.00†	1699.74	-64.29	-120.49	1719.95	1715.75	-47.22	2.74	-159.87	125.43	14.03	9.42	PASS
1813.00†	1796.78	-75.67	-141.82	1819.41	1813.82	-59.57	-8.29	-158.85	135.56	14.65	9.67	PASS
1913.00†	1893.81	-87.04	-163.14	1918.87	1911.89	-71.93	-19.33	-157.98	145.73	15.40	9.87	PASS
2013.00†	1990.85	-98.42	-184.46	2018.33	2009.96	-84.28	-30.36	-157.22	155.93	16.20	10.02	PASS
2113.00†	2087.89	-109.79	-205.78	2117.78	2108.03	-96.63	-41.39	-156.55	166.15	17.02	10.14	PASS
2213.00†	2184.92	-121.17	-227.10	2217.24	2206.10	-108.99	-52.42	-155.96	176.39	17.87	10.23	PASS
2313.00†	2281.96	-132.55	-248.42	2316.70	2304.17	-121.34	-63.45	-155.43	186.64	18.75	10.30	PASS
2413.00†	2378.99	-143.92	-269.75	2416.16	2402.24	-133.69	-74.48	-154.96	196.92	19.66	10.35	PASS
2513.00†	2476.03	-155.30	-291.07	2515.62	2500.31	-146.05	-85.51	-154.54	207.20	20.58	10.39	PASS
2613.00†	2573.06	-166.68	-312.39	2615.08	2598.38	-158.40	-96.54	-154.16	217.49	21.52	10.42	PASS
2713.00†	2670.10	-178.05	-333.71	2714.54	2696.45	-170.76	-107.57	-153.81	227.79	22.47	10.43	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	2767.14	-189.43	-355.03	2814.00	2794.52	-183.11	-118.60	-153.49	238.10	23.44	10.44	PASS
2913.00†	2864.17	-200.81	-376.35	2913.45	2892.60	-195.46	-129.63	-153.19	248.42	24.42	10.45	PASS
3013.00†	2961.21	-212.18	-397.68	3012.91	2990.67	-207.82	-140.66	-152.93	258.74	25.40	10.45	PASS
3113.00†	3058.24	-223.56	-419.00	3112.37	3088.74	-220.17	-151.69	-152.68	269.07	26.40	10.45	PASS
3213.00†	3155.28	-234.93	-440.32	3211.83	3186.81	-232.52	-162.72	-152.45	279.40	27.40	10.44	PASS
3313.00†	3252.32	-246.31	-461.64	3311.29	3284.88	-244.88	-173.75	-152.23	289.73	28.42	10.43	PASS
3413.00†	3349.35	-257.69	-482.96	3410.75	3382.95	-257.23	-184.78	-152.03	300.07	29.43	10.42	PASS
3513.00†	3446.39	-269.06	-504.29	3510.21	3481.02	-269.59	-195.81	-151.85	310.41	30.46	10.41	PASS
3613.00†	3543.42	-280.44	-525.61	3609.67	3579.09	-281.94	-206.84	-151.67	320.76	31.49	10.40	PASS
3713.00†	3640.46	-291.82	-546.93	3709.13	3677.16	-294.29	-217.87	-151.51	331.11	32.52	10.39	PASS
3813.00†	3737.50	-303.19	-568.25	3808.58	3775.23	-306.65	-228.90	-151.36	341.46	33.56	10.37	PASS
3913.00†	3834.53	-314.57	-589.57	3908.04	3873.30	-319.00	-239.93	-151.21	351.81	34.60	10.36	PASS
4013.00†	3931.57	-325.94	-610.89	4007.50	3971.37	-331.35	-250.96	-151.08	362.17	35.64	10.35	PASS
4113.00†	4028.60	-337.32	-632.22	4106.96	4069.44	-343.71	-261.99	-150.95	372.53	36.69	10.33	PASS
4213.00†	4125.64	-348.70	-653.54	4206.42	4167.51	-356.06	-273.02	-150.83	382.89	37.74	10.32	PASS
4313.00†	4222.67	-360.07	-674.86	4305.88	4265.58	-368.42	-284.05	-150.71	393.25	38.79	10.31	PASS
4413.00†	4319.71	-371.45	-696.18	4405.34	4363.65	-380.77	-295.08	-150.61	403.61	39.85	10.29	PASS
4513.00†	4416.75	-382.83	-717.50	4504.80	4461.72	-393.12	-306.11	-150.50	413.97	40.91	10.28	PASS
4613.00†	4513.78	-394.20	-738.82	4604.25	4559.79	-405.48	-317.14	-150.40	424.34	41.97	10.27	PASS
4713.00†	4610.82	-405.58	-760.15	4703.71	4657.86	-417.83	-328.17	-150.31	434.70	43.03	10.25	PASS
4813.00†	4707.85	-416.95	-781.47	4803.17	4755.93	-430.18	-339.20	-150.22	445.07	44.09	10.24	PASS
4913.00†	4804.89	-428.33	-802.79	4902.63	4854.00	-442.54	-350.23	-150.13	455.44	45.16	10.23	PASS
5013.00†	4901.93	-439.71	-824.11	5002.09	4952.07	-454.89	-361.26	-150.05	465.81	46.23	10.22	PASS
5113.00†	4998.96	-451.08	-845.43	5101.55	5050.14	-467.25	-372.29	-149.98	476.18	47.30	10.21	PASS
5213.00†	5096.00	-462.46	-866.76	5201.01	5148.21	-479.60	-383.32	-149.90	486.55	48.37	10.19	PASS
5313.00†	5193.03	-473.84	-888.08	5300.47	5246.28	-491.95	-394.35	-149.83	496.92	49.44	10.18	PASS
5413.00†	5290.07	-485.21	-909.40	5399.93	5344.35	-504.31	-405.38	-149.76	507.29	50.51	10.17	PASS
5513.00†	5387.11	-496.59	-930.72	5499.38	5442.42	-516.66	-416.41	-149.69	517.66	51.58	10.16	PASS
5613.00†	5484.14	-507.97	-952.04	5598.84	5540.49	-529.02	-427.44	-149.63	528.04	52.66	10.15	PASS
5713.00†	5581.18	-519.34	-973.36	5698.30	5638.56	-541.37	-438.47	-149.57	538.41	53.73	10.14	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	5678.21	-530.72	-994.69	5797.76	5736.63	-553.72	-449.50	-149.51	548.79	54.81	10.13	PASS
5913.00†	5775.25	-542.09	-1016.01	5897.22	5834.70	-566.08	-460.53	-149.46	559.16	55.89	10.12	PASS
6013.00†	5872.28	-553.47	-1037.33	5996.68	5932.77	-578.43	-471.56	-149.40	569.54	56.97	10.11	PASS
6113.00†	5969.32	-564.85	-1058.65	6096.14	6030.84	-590.78	-482.59	-149.35	579.91	57.91	10.10	PASS
6213.00†	6066.36	-576.22	-1079.97	6195.60	6128.91	-603.14	-493.62	-149.30	590.29	59.12	10.09	PASS
6313.00†	6163.39	-587.60	-1101.29	6295.05	6226.98	-615.49	-504.65	-149.25	600.67	60.21	10.08	PASS
6413.00†	6260.43	-598.98	-1122.62	6394.51	6325.05	-627.85	-515.68	-149.20	611.05	61.29	10.08	PASS
6513.00†	6357.46	-610.35	-1143.94	6493.97	6423.12	-640.20	-526.71	-149.16	621.42	62.37	10.07	PASS
6613.00†	6454.50	-621.73	-1165.26	6593.43	6521.20	-652.55	-537.75	-149.11	631.80	63.45	10.06	PASS
6713.00†	6551.54	-633.10	-1186.58	6692.89	6619.27	-664.91	-548.78	-149.07	642.18	64.53	10.05	PASS
6813.00†	6648.57	-644.48	-1207.90	6792.35	6717.34	-677.26	-559.81	-149.03	652.56	65.62	10.04	PASS
6913.00†	6745.61	-655.86	-1229.23	6891.81	6815.41	-689.61	-570.84	-148.99	662.94	66.70	10.03	PASS
7013.00†	6842.64	-667.23	-1250.55	6991.27	6913.48	-701.97	-581.87	-148.95	673.32	67.79	10.03	PASS
7113.00†	6939.68	-678.61	-1271.87	7093.07	7013.98	-713.47	-593.17	-149.01	683.64	68.80	10.03	PASS
7213.00†	7036.72	-689.99	-1293.19	7197.00	7117.07	-710.41	-604.81	-150.29	693.36	68.81	10.17	PASS
7313.00†	7133.75	-701.36	-1314.51	7292.72	7210.10	-691.07	-615.35	-152.76	703.39	68.21	10.41	PASS
7413.00†	7230.79	-712.74	-1335.83	7376.63	7288.05	-661.51	-624.22	-155.86	715.75	65.25	11.08	PASS
7414.33	7232.08	-712.89	-1336.12	7377.67	7288.98	-661.07	-624.33	-155.90	715.94	65.34	11.07	PASS
7513.00†	7328.29	-715.64	-1357.28	7452.02	7353.75	-625.43	-631.73	157.41	731.58	65.18	11.34	PASS
7613.00†	7424.79	-701.16	-1378.55	7524.07	7411.63	-583.12	-638.37	121.62	749.65	64.01	11.83	PASS
7713.00†	7517.36	-669.75	-1399.00	7593.64	7462.09	-535.63	-644.19	103.09	768.63	63.02	12.32	PASS
7813.00†	7603.19	-622.35	-1418.01	7661.39	7505.38	-483.82	-649.21	92.38	787.29	62.05	12.82	PASS
7913.00†	7679.66	-560.40	-1435.00	7727.75	7541.60	-428.42	-653.44	85.37	804.56	61.14	13.30	PASS
8013.00†	7744.47	-485.79	-1449.45	7793.10	7570.82	-370.11	-656.89	80.53	819.57	60.25	13.75	PASS
8113.00†	7795.62	-400.79	-1460.93	7857.72	7593.04	-309.52	-659.55	77.19	831.61	59.43	14.15	PASS
8213.00†	7831.58	-307.97	-1469.09	7921.84	7608.26	-247.30	-661.43	75.05	840.16	58.68	14.48	PASS
8313.00†	7851.25	-210.16	-1473.67	7985.67	7616.45	-184.04	-662.52	73.93	844.86	57.96	14.75	PASS
8379.34	7855.00	-143.97	-1474.67	8027.93	7618.00	-141.82	-662.80	73.73	845.75	57.58	14.86	PASS
8413.00†	7855.00	-110.31	-1474.75	8061.56	7618.00	-108.19	-662.89	73.73	845.75	57.31	14.93	PASS
8513.00†	7855.00	-10.31	-1475.01	8161.56	7618.00	-8.19	-663.15	73.73	845.75	56.84	15.05	PASS

C-C Clearance Distance Cutoff: 1000.00 ft





# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	7855.00	89.69	-1475.28	8261.56	7618.00	91.81	-663.42	73.73	845.75	57.04	15.00	PASS
8713.00†	7855.00	189.69	-1475.54	8361.56	7618.00	191.81	-663.68	73.73	845.75	57.88	14.78	PASS
8813.00†	7855.00	289.69	-1475.80	8461.56	7618.00	291.81	-663.94	73.73	845.75	59.34	14.41	PASS
8913.00†	7855.00	389.69	-1476.06	8561.56	7618.00	391.81	-664.20	73.73	845.74	61.37	13.93	PASS
9013.00†	7855.00	489.69	-1476.32	8661.56	7618.00	491.81	-664.46	73.73	845.74	63.91	13.37	PASS
9113.00†	7855.00	589.69	-1476.58	8761.56	7618.00	591.81	-664.73	73.73	845.74	66.91	12.76	PASS
9213.00†	7855.00	689.69	-1476.84	8861.56	7618.00	691.81	-664.99	73.73	845.74	58.37	14.65	PASS
9313.00†	7855.00	789.69	-1477.10	8961.56	7618.00	791.81	-665.25	73.73	845.74	74.04	11.52	PASS
9413.00†	7855.00	889.69	-1477.36	9061.56	7618.00	891.81	-665.51	73.73	845.74	78.06	10.92	PASS
9513.00†	7855.00	989.69	-1477.62	9161.56	7618.00	991.81	-665.77	73.73	845.74	82.34	10.35	PASS
9613.00†	7855.00	1089.69	-1477.88	9261.56	7618.00	1091.81	-666.03	73.73	845.74	86.82	9.81	PASS
9713.00†	7855.00	1189.68	-1478.14	9361.56	7618.00	1191.81	-666.30	73.73	845.74	91.49	9.31	PASS
9813.00†	7855.00	1289.68	-1478.40	9461.56	7618.00	1291.81	-666.56	73.73	845.73	96.31	8.84	PASS
9913.00†	7855.00	1389.68	-1478.66	9561.56	7618.00	1391.81	-666.82	73.73	845.73	101.27	8.40	PASS
10013.00†	7855.00	1489.68	-1478.93	9661.56	7618.00	1491.81	-667.08	73.73	845.73	106.33	8.00	PASS
10113.00†	7855.00	1589.68	-1479.19	9761.56	7618.00	1591.81	-667.34	73.73	845.73	111.50	7.63	PASS
10213.00†	7855.00	1689.68	-1479.45	9861.56	7618.00	1691.81	-667.61	73.73	845.73	116.74	7.28	PASS
10313.00†	7855.00	1789.68	-1479.71	9961.56	7618.00	1791.81	-667.87	73.73	845.73	122.07	6.96	PASS
10413.00†	7855.00	1889.68	-1479.97	10061.56	7618.00	1891.81	-668.13	73.73	845.73	127.45	6.67	PASS
10513.00†	7855.00	1989.68	-1480.23	10161.56	7618.00	1991.81	-668.39	73.73	845.73	132.90	6.39	PASS
10613.00†	7855.00	2089.68	-1480.49	10261.56	7618.00	2091.81	-668.65	73.73	845.73	138.39	6.14	PASS
10713.00†	7855.00	2189.68	-1480.75	10361.56	7618.00	2191.81	-668.91	73.73	845.72	144.92	5.86	PASS
10813.00†	7855.00	2289.68	-1481.01	10461.56	7618.00	2291.81	-669.18	73.73	845.72	149.50	5.68	PASS
10913.00†	7855.00	2389.68	-1481.27	10561.56	7618.00	2391.81	-669.44	73.73	845.72	155.12	5.47	PASS
11013.00†	7855.00	2489.68	-1481.53	10661.56	7618.00	2491.81	-669.70	73.73	845.72	160.76	5.28	PASS
11113.00†	7855.00	2589.68	-1481.79	10761.56	7618.00	2591.81	-669.96	73.73	845.72	166.43	5.10	PASS
11213.00†	7855.00	2689.68	-1482.05	10861.56	7618.00	2691.81	-670.22	73.73	845.72	172.13	4.93	PASS
11313.00†	7855.00	2789.68	-1482.31	10961.56	7618.00	2791.81	-670.49	73.73	845.72	177.84	4.77	PASS
11413.00†	7855.00	2889.68	-1482.57	11061.56	7618.00	2891.80	-670.75	73.73	845.72	183.58	4.62	PASS
11513.00†	7855.00	2989.68	-1482.84	11161.56	7618.00	2991.80	-671.01	73.73	845.72	189.34	4.48	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	7855.00	3089.68	-1483.10	11261.56	7618.00	3091.80	-671.27	73.73	845.71	195.12	4.35	PASS
11713.00†	7855.00	3189.68	-1483.36	11361.56	7618.00	3191.80	-671.53	73.73	845.71	200.91	4.22	PASS
11813.00†	7855.00	3289.68	-1483.62	11461.56	7618.00	3291.80	-671.79	73.73	845.71	206.72	4.10	PASS
11913.00†	7855.00	3389.68	-1483.88	11561.56	7618.00	3391.80	-672.06	73.73	845.71	212.54	3.99	PASS
12013.00†	7855.00	3489.68	-1484.14	11661.56	7618.00	3491.80	-672.32	73.73	845.71	218.37	3.88	PASS
12113.00†	7855.00	3589.68	-1484.40	11761.56	7618.00	3591.80	-672.58	73.73	845.71	224.21	3.78	PASS
12213.00†	7855.00	3689.68	-1484.66	11861.56	7618.00	3691.80	-672.84	73.73	845.71	230.06	3.68	PASS
12313.00†	7855.00	3789.68	-1484.92	11961.56	7618.00	3791.80	-673.10	73.73	845.71	235.93	3.59	PASS
12413.00†	7855.00	3889.68	-1485.18	12061.56	7618.00	3891.80	-673.37	73.73	845.71	241.80	3.50	PASS
12513.00†	7855.00	3989.68	-1485.44	12161.56	7618.00	3991.80	-673.63	73.73	845.70	247.68	3.42	PASS
12613.00†	7855.00	4089.68	-1485.70	12261.56	7618.00	4091.80	-673.89	73.73	845.70	253.56	3.34	PASS
12713.00†	7855.00	4189.67	-1485.96	12361.56	7618.00	4191.80	-674.15	73.73	845.70	259.46	3.27	PASS
12813.00†	7855.00	4289.67	-1486.22	12461.56	7618.00	4291.80	-674.41	73.73	845.70	265.36	3.19	PASS
12913.00†	7855.00	4389.67	-1486.48	12561.56	7618.00	4391.80	-674.67	73.73	845.70	271.27	3.12	PASS
13013.00†	7855.00	4489.67	-1486.75	12661.56	7618.00	4491.80	-674.94	73.73	845.70	277.18	3.06	PASS
13113.00†	7855.00	4589.67	-1487.01	12761.56	7618.00	4591.80	-675.20	73.73	845.70	283.10	2.99	PASS
13213.00†	7855.00	4689.67	-1487.27	12861.56	7618.00	4691.80	-675.46	73.73	845.70	289.02	2.93	PASS
13313.00†	7855.00	4789.67	-1487.53	12961.56	7618.00	4791.80	-675.72	73.73	845.70	294.95	2.87	PASS
13413.00†	7855.00	4889.67	-1487.79	13061.56	7618.00	4891.80	-675.98	73.73	845.70	300.88	2.81	PASS
13513.00†	7855.00	4989.67	-1488.05	13161.56	7618.00	4991.80	-676.25	73.73	845.69	306.82	2.76	PASS
13613.00†	7855.00	5089.67	-1488.31	13261.56	7618.00	5091.80	-676.51	73.73	845.69	312.76	2.71	PASS
13713.00†	7855.00	5189.67	-1488.57	13361.56	7618.00	5191.80	-676.77	73.73	845.69	318.71	2.66	PASS
13813.00†	7855.00	5289.67	-1488.83	13461.56	7618.00	5291.80	-677.03	73.73	845.69	324.65	2.61	PASS
13913.00†	7855.00	5389.67	-1489.09	13561.56	7618.00	5391.80	-677.29	73.73	845.69	330.61	2.56	PASS
14013.00†	7855.00	5489.67	-1489.35	13661.56	7618.00	5491.80	-677.55	73.73	845.69	336.56	2.52	PASS
14113.00†	7855.00	5589.67	-1489.61	13761.56	7618.00	5591.80	-677.82	73.73	845.69	342.52	2.47	PASS
14213.00†	7855.00	5689.67	-1489.87	13861.56	7618.00	5691.80	-678.08	73.73	845.69	348.48	2.43	PASS
14313.00†	7855.00	5789.67	-1490.13	13961.56	7618.00	5791.79	-678.34	73.73	845.69	354.44	2.39	PASS
14413.00†	7855.00	5889.67	-1490.39	14061.56	7618.00	5891.79	-678.60	73.73	845.68	360.41	2.35	PASS
14513.00†	7855.00	5989.67	-1490.66	14161.56	7618.00	5991.79	-678.86	73.73	845.68	366.38	2.31	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	7855.00	6089.67	-1490.92	14261.56	7618.00	6091.79	-679.13	73.73	845.68	372.35	2.27	PASS
14713.00†	7855.00	6189.67	-1491.18	14361.56	7618.00	6191.79	-679.39	73.73	845.68	378.32	2.24	PASS
14813.00†	7855.00	6289.67	-1491.44	14461.56	7618.00	6291.79	-679.65	73.73	845.68	384.30	2.20	PASS
14913.00†	7855.00	6389.67	-1491.70	14561.56	7618.00	6391.79	-679.91	73.73	845.68	390.28	2.17	PASS
15013.00†	7855.00	6489.67	-1491.96	14661.56	7618.00	6491.79	-680.17	73.73	845.68	396.26	2.14	PASS
15113.00†	7855.00	6589.67	-1492.22	14761.56	7618.00	6591.79	-680.43	73.73	845.68	402.24	2.10	PASS
15213.00†	7855.00	6689.67	-1492.48	14861.56	7618.00	6691.79	-680.70	73.73	845.68	408.22	2.07	PASS
15313.00†	7855.00	6789.67	-1492.74	14961.56	7618.00	6791.79	-680.96	73.73	845.67	414.21	2.04	PASS
15413.00†	7855.00	6889.67	-1493.00	15061.56	7618.00	6891.79	-681.22	73.73	845.67	420.19	2.01	PASS
15513.00†	7855.00	6989.67	-1493.26	15161.56	7618.00	6991.79	-681.48	73.73	845.67	426.18	1.99	PASS
15613.00†	7855.00	7089.66	-1493.52	15261.56	7618.00	7091.79	-681.74	73.73	845.67	432.17	1.96	PASS
15713.00†	7855.00	7189.66	-1493.78	15361.56	7618.00	7191.79	-682.01	73.73	845.67	438.16	1.93	PASS
15813.00†	7855.00	7289.66	-1494.04	15461.56	7618.00	7291.79	-682.27	73.73	845.67	444.16	1.91	PASS
15913.00†	7855.00	7389.66	-1494.30	15561.56	7618.00	7391.79	-682.53	73.73	845.67	450.15	1.88	PASS
16013.00†	7855.00	7489.66	-1494.57	15661.56	7618.00	7491.79	-682.79	73.73	845.67	456.14	1.86	PASS
16113.00†	7855.00	7589.66	-1494.83	15761.56	7618.00	7591.79	-683.05	73.73	845.67	462.14	1.83	PASS
16213.00†	7855.00	7689.66	-1495.09	15861.56	7618.00	7691.79	-683.31	73.73	845.66	468.14	1.81	PASS
16313.00†	7855.00	7789.66	-1495.35	15961.56	7618.00	7791.79	-683.58	73.73	845.66	474.14	1.78	PASS
16413.00†	7855.00	7889.66	-1495.61	16061.56	7618.00	7891.79	-683.84	73.73	845.66	480.14	1.76	PASS
16513.00†	7855.00	7989.66	-1495.87	16161.56	7618.00	7991.79	-684.10	73.73	845.66	486.14	1.74	PASS
16613.00†	7855.00	8089.66	-1496.13	16261.56	7618.00	8091.79	-684.36	73.73	845.66	492.14	1.72	PASS
16713.00†	7855.00	8189.66	-1496.39	16361.56	7618.00	8191.79	-684.62	73.73	845.66	498.14	1.70	PASS
16813.00†	7855.00	8289.66	-1496.65	16461.56	7618.00	8291.79	-684.89	73.73	845.66	504.15	1.68	PASS
16913.00†	7855.00	8389.66	-1496.91	16561.56	7618.00	8391.79	-685.15	73.73	845.66	510.15	1.66	PASS
17013.00†	7855.00	8489.66	-1497.17	16661.56	7618.00	8491.79	-685.41	73.73	845.66	516.16	1.64	PASS
17113.00†	7855.00	8589.66	-1497.43	16761.56	7618.00	8591.79	-685.67	73.72	845.65	522.16	1.62	PASS
17213.00†	7855.00	8689.66	-1497.69	16861.56	7618.00	8691.78	-685.93	73.72	845.65	528.17	1.60	PASS
17313.00†	7855.00	8789.66	-1497.95	16961.56	7618.00	8791.78	-686.19	73.72	845.65	534.18	1.58	PASS
17413.00†	7855.00	8889.66	-1498.22	17061.56	7618.00	8891.78	-686.46	73.72	845.65	540.19	1.57	PASS
17513.00†	7855.00	8989.66	-1498.48	17161.56	7618.00	8991.78	-686.72	73.72	845.65	546.19	1.55	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	7855.00	9089.66	-1498.74	17261.56	7618.00	9091.78	-686.98	73.72	845.65	552.20	1.53	PASS
17713.00†	7855.00	9189.66	-1499.00	17361.56	7618.00	9191.78	-687.24	73.72	845.65	558.22	1.52	PASS
17813.00†	7855.00	9289.66	-1499.26	17461.56	7618.00	9291.78	-687.50	73.72	845.65	564.23	1.50	PASS
17913.00†	7855.00	9389.66	-1499.52	17561.56	7618.00	9391.78	-687.77	73.72	845.65	570.24	1.48	PASS
18013.00†	7855.00	9489.66	-1499.78	17661.56	7618.00	9491.78	-688.03	73.72	845.64	576.25	1.47	PASS
18089.51	7855.00	9566.17	-1499.98	17738.07	7618.00	9568.29	-688.23	73.72	845.64	580.85	1.46	PASS

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	0.06	27.42	-17.39	11.84
8.5in Open Hole	1800.00	17742.92	15942.92	1794.69	7618.00	-17.39	11.84	2917.92	-196.07

## 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 2-35-1CDH PWP (REV-A.0)**  
**Closest Approach**  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

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

Facility: SEC.11-T02S-R66W Slot: SLOT#01 EX HSR-VAN SCHAAK #4-11 (623'FNL & 696'FWL, SEC.11, 8374, PR) Well: HSR-VAN SCHAAK #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	-1206.79	-1236.17	-134.31	1727.89	25.40	70.21	PASS
113.00†	113.00	0.00	0.00	53.00	113.00	-1206.79	-1236.17	-134.31	1727.56	51.25	34.23	PASS
213.00†	213.00	0.00	0.00	153.00	213.00	-1206.79	-1236.17	-134.31	1727.56	53.60	32.71	PASS
313.00†	313.00	0.00	0.00	253.00	313.00	-1206.79	-1236.17	-134.31	1727.56	55.95	31.31	PASS
413.00†	413.00	0.00	0.00	353.00	413.00	-1206.79	-1236.17	-134.31	1727.56	58.30	30.03	PASS
513.00†	513.00	0.00	0.00	453.00	513.00	-1206.79	-1236.17	-134.31	1727.56	60.66	28.85	PASS
613.00†	613.00	0.00	0.00	553.00	613.00	-1206.79	-1236.17	-134.31	1727.56	63.03	27.75	PASS
713.00†	713.00	0.00	0.00	653.00	713.00	-1206.79	-1236.17	-134.31	1727.56	65.40	26.73	PASS
800.00	800.00	0.00	0.00	740.00	800.00	-1206.79	-1236.17	-134.31	1727.56	67.46	25.91	PASS
813.00†	813.00	-0.01	-0.03	753.00	813.00	-1206.79	-1236.17	-16.23	1727.53	67.77	25.79	PASS
913.00†	912.97	-1.05	-1.97	852.97	912.97	-1206.79	-1236.17	-16.26	1725.42	70.16	24.87	PASS
1013.00†	1012.80	-3.73	-6.98	952.80	1012.80	-1206.79	-1236.17	-16.35	1719.96	72.59	23.95	PASS
1113.00†	1112.38	-8.04	-15.07	1052.38	1112.38	-1206.79	-1236.17	-16.48	1711.16	75.02	23.04	PASS
1213.00†	1211.57	-13.99	-26.22	1151.57	1211.57	-1206.79	-1236.17	-16.67	1699.04	77.45	22.16	PASS
1313.00†	1310.26	-21.56	-40.42	1250.26	1310.26	-1206.79	-1236.17	-16.92	1683.62	79.87	21.28	PASS
1413.00†	1408.33	-30.76	-57.64	1348.33	1408.33	-1206.79	-1236.17	-17.23	1664.92	82.28	20.42	PASS
1499.25	1492.33	-39.97	-74.92	1432.33	1492.33	-1206.79	-1236.17	-17.54	1646.19	84.35	19.70	PASS
1513.00†	1505.67	-41.54	-77.85	1445.67	1505.67	-1206.79	-1236.17	-17.58	1643.02	84.67	19.58	PASS
1613.00†	1602.71	-52.91	-99.17	1542.71	1602.71	-1206.79	-1236.17	-17.84	1619.93	87.02	18.78	PASS
1713.00†	1699.74	-64.29	-120.49	1639.74	1699.74	-1206.79	-1236.17	-18.10	1596.88	89.37	18.02	PASS
1813.00†	1796.78	-75.67	-141.82	1736.78	1796.78	-1206.79	-1236.17	-18.37	1573.86	91.64	17.30	PASS
1913.00†	1893.81	-87.04	-163.14	1833.81	1893.81	-1206.79	-1236.17	-18.65	1550.88	94.02	16.61	PASS
2013.00†	1990.85	-98.42	-184.46	1930.85	1990.85	-1206.79	-1236.17	-18.94	1527.93	96.40	15.96	PASS
2113.00†	2087.89	-109.79	-205.78	2027.89	2087.89	-1206.79	-1236.17	-19.24	1505.02	98.79	15.34	PASS
2213.00†	2184.92	-121.17	-227.10	2124.92	2184.92	-1206.79	-1236.17	-19.55	1482.15	101.18	14.74	PASS
2313.00†	2281.96	-132.55	-248.42	2221.96	2281.96	-1206.79	-1236.17	-19.86	1459.33	103.59	14.18	PASS
2413.00†	2378.99	-143.92	-269.75	2318.99	2378.99	-1206.79	-1236.17	-20.19	1436.54	106.01	13.64	PASS
2513.00†	2476.03	-155.30	-291.07	2416.03	2476.03	-1206.79	-1236.17	-20.53	1413.80	108.43	13.12	PASS
2613.00†	2573.06	-166.68	-312.39	2513.06	2573.06	-1206.79	-1236.17	-20.88	1391.11	110.87	12.62	PASS
2713.00†	2670.10	-178.05	-333.71	2610.10	2670.10	-1206.79	-1236.17	-21.24	1368.48	113.32	12.15	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

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

Facility: SEC.11-T02S-R66W Slot: SLOT#01 EX HSR-VAN SCHAAK #4-11 (623'FNL & 696'FWL, SEC.11, 8374, PR) Well: HSR-VAN SCHAAK #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
2813.00†	2767.14	-189.43	-355.03	2707.14	2767.14	-1206.79	-1236.17	-21.61	1345.89	115.77	11.69	PASS
2913.00†	2864.17	-200.81	-376.35	2804.17	2864.17	-1206.79	-1236.17	-21.99	1323.36	118.24	11.25	PASS
3013.00†	2961.21	-212.18	-397.68	2901.21	2961.21	-1206.79	-1236.17	-22.39	1300.89	120.71	10.83	PASS
3113.00†	3058.24	-223.56	-419.00	2998.24	3058.24	-1206.79	-1236.17	-22.80	1278.48	123.20	10.43	PASS
3213.00†	3155.28	-234.93	-440.32	3095.28	3155.28	-1206.79	-1236.17	-23.22	1256.13	125.70	10.04	PASS
3313.00†	3252.32	-246.31	-461.64	3192.32	3252.32	-1206.79	-1236.17	-23.66	1233.86	128.21	9.67	PASS
3413.00†	3349.35	-257.69	-482.96	3289.35	3349.35	-1206.79	-1236.17	-24.12	1211.66	130.73	9.31	PASS
3513.00†	3446.39	-269.06	-504.29	3386.39	3446.39	-1206.79	-1236.17	-24.59	1189.53	133.26	8.97	PASS
3613.00†	3543.42	-280.44	-525.61	3483.42	3543.42	-1206.79	-1236.17	-25.08	1167.48	135.81	8.64	PASS
3713.00†	3640.46	-291.82	-546.93	3580.46	3640.46	-1206.79	-1236.17	-25.59	1145.52	138.36	8.32	PASS
3813.00†	3737.50	-303.19	-568.25	3677.50	3737.50	-1206.79	-1236.17	-26.12	1123.65	140.94	8.01	PASS
3913.00†	3834.53	-314.57	-589.57	3774.53	3834.53	-1206.79	-1236.17	-26.67	1101.88	143.52	7.71	PASS
4013.00†	3931.57	-325.94	-610.89	3871.57	3931.57	-1206.79	-1236.17	-27.24	1080.21	146.13	7.42	PASS
4113.00†	4028.60	-337.32	-632.22	3968.60	4028.60	-1206.79	-1236.17	-27.84	1058.65	148.74	7.15	PASS
4213.00†	4125.64	-348.70	-653.54	4065.64	4125.64	-1206.79	-1236.17	-28.46	1037.20	151.38	6.88	PASS
4313.00†	4222.67	-360.07	-674.86	4162.67	4222.67	-1206.79	-1236.17	-29.10	1015.87	154.03	6.62	PASS
4413.00†	4319.71	-371.45	-696.18	4259.71	4319.71	-1206.79	-1236.17	-29.78	994.67	156.70	6.37	PASS
4513.00†	4416.75	-382.83	-717.50	4356.75	4416.75	-1206.79	-1236.17	-30.48	973.62	159.38	6.13	PASS
4613.00†	4513.78	-394.20	-738.82	4453.78	4513.78	-1206.79	-1236.17	-31.21	952.70	162.09	5.90	PASS
4713.00†	4610.82	-405.58	-760.15	4550.82	4610.82	-1206.79	-1236.17	-31.97	931.95	164.82	5.67	PASS
4813.00†	4707.85	-416.95	-781.47	4647.85	4707.85	-1206.79	-1236.17	-32.77	911.37	167.57	5.46	PASS
4913.00†	4804.89	-428.33	-802.79	4744.89	4804.89	-1206.79	-1236.17	-33.60	890.96	170.34	5.25	PASS
5013.00†	4901.93	-439.71	-824.11	4841.93	4901.93	-1206.79	-1236.17	-34.47	870.75	173.14	5.05	PASS
5113.00†	4998.96	-451.08	-845.43	4938.96	4998.96	-1206.79	-1236.17	-35.39	850.74	175.97	4.85	PASS
5213.00†	5096.00	-462.46	-866.76	5036.00	5096.00	-1206.79	-1236.17	-36.34	830.96	178.82	4.66	PASS
5313.00†	5193.03	-473.84	-888.08	5133.03	5193.03	-1206.79	-1236.17	-37.34	811.41	181.70	4.48	PASS
5413.00†	5290.07	-485.21	-909.40	5230.07	5290.07	-1206.79	-1236.17	-38.39	792.12	184.61	4.30	PASS
5513.00†	5387.11	-496.59	-930.72	5327.11	5387.11	-1206.79	-1236.17	-39.49	773.10	187.56	4.13	PASS
5613.00†	5484.14	-507.97	-952.04	5424.14	5484.14	-1206.79	-1236.17	-40.64	754.37	190.53	3.97	PASS
5713.00†	5581.18	-519.34	-973.36	5521.18	5581.18	-1206.79	-1236.17	-41.85	735.97	193.55	3.81	PASS

C-C Clearance Distance Cutoff: 1000.00 ft





# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

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

Facility: SEC.11-T02S-R66W Slot: SLOT#01 EX HSR-VAN SCHAAK #4-11 (623'FNL & 696'FWL, SEC.11, 8374, PR) Well: HSR-VAN SCHAAK #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
5813.00†	5678.21	-530.72	-994.69	5618.21	5678.21	-1206.79	-1236.17	-43.12	717.90	196.59	3.66	PASS
5913.00†	5775.25	-542.09	-1016.01	5715.25	5775.25	-1206.79	-1236.17	-44.45	700.21	199.68	3.52	PASS
6013.00†	5872.28	-553.47	-1037.33	5812.28	5872.28	-1206.79	-1236.17	-45.85	682.91	202.81	3.38	PASS
6113.00†	5969.32	-564.85	-1058.65	5909.32	5969.32	-1206.79	-1236.17	-47.32	666.03	205.97	3.24	PASS
6213.00†	6066.36	-576.22	-1079.97	6006.36	6066.36	-1206.79	-1236.17	-48.86	649.62	209.18	3.11	PASS
6313.00†	6163.39	-587.60	-1101.29	6103.39	6163.39	-1206.79	-1236.17	-50.48	633.71	212.42	2.99	PASS
6413.00†	6260.43	-598.98	-1122.62	6200.43	6260.43	-1206.79	-1236.17	-52.17	618.33	215.71	2.87	PASS
6513.00†	6357.46	-610.35	-1143.94	6297.46	6357.46	-1206.79	-1236.17	-53.95	603.53	219.03	2.76	PASS
6613.00†	6454.50	-621.73	-1165.26	6394.50	6454.50	-1206.79	-1236.17	-55.81	589.34	222.39	2.66	PASS
6713.00†	6551.54	-633.10	-1186.58	6491.54	6551.54	-1206.79	-1236.17	-57.76	575.82	225.79	2.56	PASS
6813.00†	6648.57	-644.48	-1207.90	6588.57	6648.57	-1206.79	-1236.17	-59.80	563.02	229.21	2.46	PASS
6913.00†	6745.61	-655.86	-1229.23	6685.61	6745.61	-1206.79	-1236.17	-61.92	550.98	232.66	2.37	PASS
7013.00†	6842.64	-667.23	-1250.55	6782.64	6842.64	-1206.79	-1236.17	-64.13	539.75	236.13	2.29	PASS
7113.00†	6939.68	-678.61	-1271.87	6879.68	6939.68	-1206.79	-1236.17	-66.42	529.38	239.60	2.21	PASS
7213.00†	7036.72	-689.99	-1293.19	6976.72	7036.72	-1206.79	-1236.17	-68.80	519.94	243.08	2.14	PASS
7313.00†	7133.75	-701.36	-1314.51	7073.75	7133.75	-1206.79	-1236.17	-71.26	511.46	246.55	2.08	PASS
7413.00†	7230.79	-712.74	-1335.83	7170.79	7230.79	-1206.79	-1236.17	-73.79	504.00	250.00	2.02	PASS
7414.33	7232.08	-712.89	-1336.12	7172.08	7232.08	-1206.79	-1236.17	-73.83	503.91	250.05	2.02	PASS
7452.60†	7269.32	-715.97	-1344.31	7207.86	7267.86	-1206.79	-1236.17	-89.98	502.59	251.34	2.00	PASS
7490.47†	7306.31	-716.51	-1352.44	7246.31	7306.31	-1206.79	-1236.17	-107.96	503.88	252.67	2.00	PASS
7513.00†	7328.29	-715.64	-1357.28	7268.29	7328.29	-1206.79	-1236.17	-118.40	505.86	253.44	2.00	PASS
7613.00†	7424.79	-701.16	-1378.55	7364.79	7424.79	-1206.79	-1236.17	-152.26	525.29	256.90	2.05	PASS
7713.00†	7517.36	-669.75	-1399.00	7457.36	7517.36	-1206.79	-1236.17	-169.18	561.19	260.05	2.16	PASS
7813.00†	7603.19	-622.35	-1418.01	7543.19	7603.19	-1206.79	-1236.17	-178.85	612.08	262.69	2.33	PASS
7913.00†	7679.66	-560.40	-1435.00	7619.66	7679.66	-1206.79	-1236.17	174.19	676.28	264.83	2.56	PASS
8013.00†	7744.47	-485.79	-1449.45	7684.47	7744.47	-1206.79	-1236.17	167.68	751.88	266.46	2.83	PASS
8113.00†	7795.62	-400.79	-1460.93	7735.62	7795.62	-1206.79	-1236.17	159.53	836.76	267.59	3.13	PASS
8213.00†	7831.58	-307.97	-1469.09	7771.58	7831.58	-1206.79	-1236.17	145.93	928.51	268.21	3.47	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

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

Facility: SEC.02-T03S-R66W Slot: SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02) Well: ACKARD NORTH 2-35-2CDH 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	89.90	59.99	1.40	98.64	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.11	59.99	89.90	59.99	1.73	64.13	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.11	59.99	89.90	59.99	2.30	39.63	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.11	59.99	89.90	59.99	2.90	28.22	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.11	59.99	89.90	59.99	3.51	21.82	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.11	59.99	89.90	59.99	4.13	17.76	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.11	59.99	89.90	59.99	4.76	14.97	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.11	59.99	89.90	59.99	5.38	12.93	PASS
800.00	800.00	0.00	0.00	800.00	800.00	0.11	59.99	89.90	59.99	5.92	11.55	PASS
813.00†	813.00	-0.01	-0.03	813.00	813.00	0.11	59.99	-152.04	60.01	6.00	11.38	PASS
913.00†	912.97	-1.05	-1.97	912.97	912.97	0.11	59.99	-152.97	61.96	6.73	10.31	PASS
1013.00†	1012.80	-3.73	-6.98	1012.80	1012.80	0.11	59.99	-155.14	67.08	7.72	9.58	PASS
1113.00†	1112.38	-8.04	-15.07	1112.38	1112.38	0.11	59.99	-158.00	75.50	8.66	9.51	PASS
1213.00†	1211.57	-13.99	-26.22	1211.76	1211.76	0.09	59.98	-161.02	87.34	9.56	9.88	PASS
1313.00†	1310.26	-21.56	-40.42	1312.46	1312.43	-1.94	59.17	-162.87	101.52	10.46	10.43	PASS
1413.00†	1408.33	-30.76	-57.64	1413.34	1413.14	-7.26	57.04	-163.28	117.16	11.40	10.98	PASS
1499.25	1492.33	-39.97	-74.92	1500.42	1499.86	-14.50	54.14	-162.84	131.76	12.18	11.51	PASS
1513.00†	1505.67	-41.54	-77.85	1514.30	1513.67	-15.88	53.59	-162.73	134.16	12.28	11.62	PASS
1613.00†	1602.71	-52.91	-99.17	1614.46	1613.05	-27.42	48.97	-161.47	150.68	12.94	12.35	PASS
1713.00†	1699.74	-64.29	-120.49	1713.07	1710.83	-39.35	44.20	-160.30	166.94	13.60	12.98	PASS
1813.00†	1796.78	-75.67	-141.82	1811.69	1808.60	-51.28	39.42	-159.34	183.25	14.22	13.51	PASS
1913.00†	1893.81	-87.04	-163.14	1910.31	1906.38	-63.21	34.65	-158.53	199.61	14.97	13.95	PASS
2013.00†	1990.85	-98.42	-184.46	2008.92	2004.15	-75.14	29.88	-157.84	216.00	15.75	14.31	PASS
2113.00†	2087.89	-109.79	-205.78	2107.54	2101.93	-87.07	25.10	-157.26	232.42	16.57	14.61	PASS
2213.00†	2184.92	-121.17	-227.10	2206.16	2199.71	-99.01	20.33	-156.75	248.86	17.41	14.86	PASS
2313.00†	2281.96	-132.55	-248.42	2304.78	2297.48	-110.94	15.55	-156.30	265.31	18.26	15.07	PASS
2413.00†	2378.99	-143.92	-269.75	2403.39	2395.26	-122.87	10.78	-155.90	281.78	19.14	15.25	PASS
2513.00†	2476.03	-155.30	-291.07	2502.01	2493.04	-134.80	6.01	-155.55	298.26	20.03	15.40	PASS
2613.00†	2573.06	-166.68	-312.39	2600.63	2590.81	-146.73	1.23	-155.24	314.75	20.94	15.52	PASS
2713.00†	2670.10	-178.05	-333.71	2699.24	2688.59	-158.66	-3.54	-154.95	331.25	21.85	15.63	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2CDH PWB Offset Wellpath: ACKARD NORTH 2-35-2CDH PWP (REV. A.0)												
Facility: SEC.02-T03S-R66W Slot: SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02) Well: ACKARD NORTH 2-35-2CDH 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†	2767.14	-189.43	-355.03	2797.86	2786.36	-170.59	-8.32	-154.70	347.76	22.78	15.72	PASS
2913.00†	2864.17	-200.81	-376.35	2896.48	2884.14	-182.52	-13.09	-154.46	364.27	23.72	15.80	PASS
3013.00†	2961.21	-212.18	-397.68	2995.09	2981.92	-194.46	-17.87	-154.25	380.79	24.66	15.87	PASS
3113.00†	3058.24	-223.56	-419.00	3093.71	3079.69	-206.39	-22.64	-154.06	397.31	25.61	15.92	PASS
3213.00†	3155.28	-234.93	-440.32	3192.33	3177.47	-218.32	-27.41	-153.88	413.84	26.57	15.97	PASS
3313.00†	3252.32	-246.31	-461.64	3290.95	3275.24	-230.25	-32.19	-153.71	430.37	27.53	16.02	PASS
3413.00†	3349.35	-257.69	-482.96	3389.56	3373.02	-242.18	-36.96	-153.56	446.90	28.50	16.05	PASS
3513.00†	3446.39	-269.06	-504.29	3488.18	3470.80	-254.11	-41.74	-153.41	463.43	29.47	16.09	PASS
3613.00†	3543.42	-280.44	-525.61	3586.80	3568.57	-266.04	-46.51	-153.28	479.97	30.45	16.11	PASS
3713.00†	3640.46	-291.82	-546.93	3685.41	3666.35	-277.97	-51.28	-153.16	496.51	31.43	16.14	PASS
3813.00†	3737.50	-303.19	-568.25	3784.03	3764.12	-289.91	-56.06	-153.04	513.06	32.41	16.16	PASS
3913.00†	3834.53	-314.57	-589.57	3882.65	3861.90	-301.84	-60.83	-152.93	529.60	33.40	16.18	PASS
4013.00†	3931.57	-325.94	-610.89	3981.26	3959.68	-313.77	-65.61	-152.83	546.15	34.39	16.20	PASS
4113.00†	4028.60	-337.32	-632.22	4079.88	4057.45	-325.70	-70.38	-152.74	562.70	35.38	16.21	PASS
4213.00†	4125.64	-348.70	-653.54	4178.50	4155.23	-337.63	-75.15	-152.64	579.25	36.37	16.22	PASS
4313.00†	4222.67	-360.07	-674.86	4277.12	4253.01	-349.56	-79.93	-152.56	595.80	37.37	16.23	PASS
4413.00†	4319.71	-371.45	-696.18	4375.73	4350.78	-361.49	-84.70	-152.48	612.35	38.37	16.24	PASS
4513.00†	4416.75	-382.83	-717.50	4474.35	4448.56	-373.42	-89.48	-152.40	628.90	39.37	16.25	PASS
4613.00†	4513.78	-394.20	-738.82	4572.97	4546.33	-385.35	-94.25	-152.33	645.46	40.37	16.26	PASS
4713.00†	4610.82	-405.58	-760.15	4671.58	4644.11	-397.29	-99.02	-152.26	662.01	41.37	16.26	PASS
4813.00†	4707.85	-416.95	-781.47	4770.20	4741.89	-409.22	-103.80	-152.19	678.57	42.37	16.27	PASS
4913.00†	4804.89	-428.33	-802.79	4868.82	4839.66	-421.15	-108.57	-152.13	695.13	43.38	16.27	PASS
5013.00†	4901.93	-439.71	-824.11	4967.44	4937.44	-433.08	-113.35	-152.07	711.68	44.39	16.28	PASS
5113.00†	4998.96	-451.08	-845.43	5066.05	5035.21	-445.01	-118.12	-152.01	728.24	45.39	16.28	PASS
5213.00†	5096.00	-462.46	-866.76	5164.67	5132.99	-456.94	-122.89	-151.96	744.80	46.40	16.28	PASS
5313.00†	5193.03	-473.84	-888.08	5263.29	5230.77	-468.87	-127.67	-151.91	761.36	47.41	16.29	PASS
5413.00†	5290.07	-485.21	-909.40	5361.90	5328.54	-480.80	-132.44	-151.86	777.92	48.43	16.29	PASS
5513.00†	5387.11	-496.59	-930.72	5460.52	5426.32	-492.74	-137.22	-151.81	794.48	49.44	16.29	PASS
5613.00†	5484.14	-507.97	-952.04	5559.14	5524.10	-504.67	-141.99	-151.76	811.04	50.45	16.29	PASS
5713.00†	5581.18	-519.34	-973.36	5657.75	5621.87	-516.60	-146.76	-151.72	827.61	51.46	16.29	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

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

Facility: SEC.02-T03S-R66W Slot: SLOT#05 ACKARD NORTH 2-35-2CDH (600'FSL & 1995'FWL, SEC.02) Well: ACKARD NORTH 2-35-2CDH 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†	5678.21	-530.72	-994.69	5756.37	5719.65	-528.53	-151.54	-151.68	844.17	52.48	16.29	PASS
5913.00†	5775.25	-542.09	-1016.01	5854.99	5817.42	-540.46	-156.31	-151.64	860.73	53.49	16.29	PASS
6013.00†	5872.28	-553.47	-1037.33	5953.61	5915.20	-552.39	-161.09	-151.60	877.29	54.51	16.29	PASS
6113.00†	5969.32	-564.85	-1058.65	6052.22	6012.98	-564.32	-165.86	-151.56	893.86	55.53	16.29	PASS
6213.00†	6066.36	-576.22	-1079.97	6150.84	6110.75	-576.25	-170.63	-151.52	910.42	56.54	16.29	PASS
6313.00†	6163.39	-587.60	-1101.29	6249.46	6208.53	-588.19	-175.41	-151.49	926.99	57.56	16.29	PASS
6413.00†	6260.43	-598.98	-1122.62	6348.07	6306.30	-600.12	-180.18	-151.46	943.55	58.58	16.29	PASS
6513.00†	6357.46	-610.35	-1143.94	6446.69	6404.08	-612.05	-184.96	-151.42	960.12	59.60	16.29	PASS
6613.00†	6454.50	-621.73	-1165.26	6545.31	6501.86	-623.98	-189.73	-151.39	976.68	60.62	16.29	PASS
6713.00†	6551.54	-633.10	-1186.58	6643.92	6599.63	-635.91	-194.50	-151.36	993.25	61.64	16.29	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## POSITIONAL UNCERTAINTY - Offset Wellbore: ACKARD NORTH 2-35-2CDH PWB Offset Wellpath: ACKARD NORTH 2-35-2CDH 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 2-35-2CDH PWB Offset 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	0.07	36.57	-15.17	30.47
8.5in Open Hole	1800.00	17937.78	16137.78	1797.01	7843.00	-15.17	30.47	2918.98	-67.77

## SURVEY PROGRAM - Offset Wellbore: ACKARD NORTH 2-35-2CDH PWB Offset 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 2-35-1CDH PWP (REV-A.0)**  
**Closest Approach**  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

OFFSET WELLPATH REFERENCE - Offset Wellbore: ACKARD NORTH 2-35-2CDH PWB Offset Wellpath: ACKARD NORTH 2-35-2CDH 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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	0.16	74.97	89.87	74.97	1.40	123.61	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.16	74.97	89.87	74.97	1.72	80.46	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.16	74.97	89.87	74.97	2.29	49.73	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.16	74.97	89.87	74.97	2.90	35.41	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.16	74.97	89.87	74.97	3.51	27.37	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.16	74.97	89.87	74.97	4.13	22.28	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.16	74.97	89.87	74.97	4.75	18.77	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.16	74.97	89.87	74.97	5.38	16.21	PASS
800.00	800.00	0.00	0.00	800.00	800.00	0.16	74.97	89.87	74.97	5.92	14.49	PASS
813.00†	813.00	-0.01	-0.03	813.00	813.00	0.16	74.97	-152.05	74.99	6.00	14.27	PASS
913.00†	912.97	-1.05	-1.97	912.97	912.97	0.16	74.97	-152.80	76.94	6.73	12.85	PASS
1013.00†	1012.80	-3.73	-6.98	1012.80	1012.80	0.16	74.97	-154.57	82.04	7.71	11.76	PASS
1113.00†	1112.38	-8.04	-15.07	1112.38	1112.38	0.16	74.97	-157.00	90.41	8.64	11.43	PASS
1213.00†	1211.57	-13.99	-26.22	1211.57	1211.57	0.16	74.97	-159.69	102.17	9.54	11.60	PASS
1313.00†	1310.26	-21.56	-40.42	1310.46	1310.46	0.15	74.96	-162.31	117.40	10.41	12.13	PASS
1413.00†	1408.33	-30.76	-57.64	1410.86	1410.83	-1.90	74.37	-163.96	135.16	11.28	12.82	PASS
1499.25	1492.33	-39.97	-74.92	1497.56	1497.40	-6.38	73.07	-164.39	151.84	12.04	13.44	PASS
1513.00†	1505.67	-41.54	-77.85	1511.39	1511.20	-7.32	72.80	-164.41	154.59	12.15	13.56	PASS
1613.00†	1602.71	-52.91	-99.17	1612.35	1611.73	-16.17	70.24	-163.90	173.58	12.83	14.37	PASS
1713.00†	1699.74	-64.29	-120.49	1713.19	1711.77	-28.36	66.71	-162.56	191.00	13.52	14.96	PASS
1813.00†	1796.78	-75.67	-141.82	1811.62	1809.27	-41.36	62.94	-161.18	207.99	14.11	15.47	PASS
1913.00†	1893.81	-87.04	-163.14	1910.06	1906.76	-54.37	59.18	-160.00	225.07	14.85	15.87	PASS
2013.00†	1990.85	-98.42	-184.46	2008.49	2004.26	-67.38	55.41	-159.00	242.24	15.63	16.19	PASS
2113.00†	2087.89	-109.79	-205.78	2106.92	2101.75	-80.39	51.64	-158.12	259.47	16.44	16.45	PASS
2213.00†	2184.92	-121.17	-227.10	2205.35	2199.25	-93.40	47.88	-157.36	276.75	17.29	16.65	PASS
2313.00†	2281.96	-132.55	-248.42	2303.79	2296.75	-106.41	44.11	-156.68	294.07	18.17	16.80	PASS
2413.00†	2378.99	-143.92	-269.75	2402.22	2394.24	-119.41	40.34	-156.08	311.43	19.05	16.94	PASS
2513.00†	2476.03	-155.30	-291.07	2500.65	2491.74	-132.42	36.57	-155.54	328.82	19.96	17.04	PASS
2613.00†	2573.06	-166.68	-312.39	2599.08	2589.24	-145.43	32.81	-155.06	346.23	20.89	17.12	PASS
2713.00†	2670.10	-178.05	-333.71	2697.52	2686.73	-158.44	29.04	-154.63	363.66	21.84	17.18	PASS

C-C Clearance Distance Cutoff: 1000.00 ft





# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	2767.14	-189.43	-355.03	2795.95	2784.23	-171.45	25.27	-154.23	381.12	22.79	17.23	PASS
2913.00†	2864.17	-200.81	-376.35	2894.38	2881.73	-184.45	21.51	-153.87	398.58	23.76	17.26	PASS
3013.00†	2961.21	-212.18	-397.68	2992.81	2979.22	-197.46	17.74	-153.53	416.07	24.74	17.28	PASS
3113.00†	3058.24	-223.56	-419.00	3091.25	3076.72	-210.47	13.97	-153.23	433.56	25.72	17.30	PASS
3213.00†	3155.28	-234.93	-440.32	3189.68	3174.21	-223.48	10.21	-152.95	451.07	26.72	17.31	PASS
3313.00†	3252.32	-246.31	-461.64	3288.11	3271.71	-236.49	6.44	-152.69	468.59	27.72	17.32	PASS
3413.00†	3349.35	-257.69	-482.96	3386.54	3369.21	-249.50	2.67	-152.45	486.11	28.73	17.32	PASS
3513.00†	3446.39	-269.06	-504.29	3484.98	3466.70	-262.50	-1.09	-152.22	503.64	29.74	17.32	PASS
3613.00†	3543.42	-280.44	-525.61	3583.41	3564.20	-275.51	-4.86	-152.01	521.18	30.76	17.32	PASS
3713.00†	3640.46	-291.82	-546.93	3681.84	3661.70	-288.52	-8.63	-151.82	538.73	31.78	17.32	PASS
3813.00†	3737.50	-303.19	-568.25	3780.27	3759.19	-301.53	-12.40	-151.63	556.28	32.81	17.31	PASS
3913.00†	3834.53	-314.57	-589.57	3878.71	3856.69	-314.54	-16.16	-151.46	573.84	33.84	17.30	PASS
4013.00†	3931.57	-325.94	-610.89	3977.14	3954.19	-327.55	-19.93	-151.30	591.40	34.87	17.29	PASS
4113.00†	4028.60	-337.32	-632.22	4075.57	4051.68	-340.55	-23.70	-151.15	608.97	35.91	17.28	PASS
4213.00†	4125.64	-348.70	-653.54	4174.00	4149.18	-353.56	-27.46	-151.00	626.54	36.94	17.27	PASS
4313.00†	4222.67	-360.07	-674.86	4272.44	4246.68	-366.57	-31.23	-150.87	644.11	37.99	17.26	PASS
4413.00†	4319.71	-371.45	-696.18	4370.87	4344.17	-379.58	-35.00	-150.74	661.69	39.03	17.25	PASS
4513.00†	4416.75	-382.83	-717.50	4469.30	4441.67	-392.59	-38.76	-150.61	679.27	40.08	17.24	PASS
4613.00†	4513.78	-394.20	-738.82	4567.73	4539.16	-405.60	-42.53	-150.50	696.85	41.12	17.22	PASS
4713.00†	4610.82	-405.58	-760.15	4666.17	4636.66	-418.60	-46.30	-150.39	714.44	42.17	17.21	PASS
4813.00†	4707.85	-416.95	-781.47	4764.60	4734.16	-431.61	-50.06	-150.28	732.02	43.23	17.20	PASS
4913.00†	4804.89	-428.33	-802.79	4863.03	4831.65	-444.62	-53.83	-150.18	749.61	44.28	17.19	PASS
5013.00†	4901.93	-439.71	-824.11	4961.46	4929.15	-457.63	-57.60	-150.09	767.21	45.33	17.18	PASS
5113.00†	4998.96	-451.08	-845.43	5059.90	5026.65	-470.64	-61.37	-149.99	784.80	46.39	17.16	PASS
5213.00†	5096.00	-462.46	-866.76	5158.33	5124.14	-483.65	-65.13	-149.91	802.40	47.45	17.15	PASS
5313.00†	5193.03	-473.84	-888.08	5256.76	5221.64	-496.65	-68.90	-149.82	819.99	48.50	17.14	PASS
5413.00†	5290.07	-485.21	-909.40	5355.19	5319.14	-509.66	-72.67	-149.74	837.59	49.56	17.13	PASS
5513.00†	5387.11	-496.59	-930.72	5453.63	5416.63	-522.67	-76.43	-149.67	855.20	50.63	17.12	PASS
5613.00†	5484.14	-507.97	-952.04	5552.06	5514.13	-535.68	-80.20	-149.59	872.80	51.69	17.11	PASS
5713.00†	5581.18	-519.34	-973.36	5650.49	5611.62	-548.69	-83.97	-149.52	890.40	52.75	17.10	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	5678.21	-530.72	-994.69	5748.92	5709.12	-561.69	-87.73	-149.45	908.01	53.81	17.09	PASS
5913.00†	5775.25	-542.09	-1016.01	5847.36	5806.62	-574.70	-91.50	-149.39	925.61	54.88	17.07	PASS
6013.00†	5872.28	-553.47	-1037.33	5945.79	5904.11	-587.71	-95.27	-149.33	943.22	55.94	17.06	PASS
6113.00†	5969.32	-564.85	-1058.65	6044.22	6001.61	-600.72	-99.03	-149.27	960.83	57.01	17.05	PASS
6213.00†	6066.36	-576.22	-1079.97	6142.65	6099.11	-613.73	-102.80	-149.21	978.44	58.08	17.04	PASS
6313.00†	6163.39	-587.60	-1101.29	6241.09	6196.60	-626.74	-106.57	-149.15	996.05	59.14	17.03	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	0.10	45.70	-12.09	42.17
8.5in Open Hole	1800.00	17752.02	15952.02	1797.75	N/A	-12.09	42.17	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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	0.22	90.01	89.86	90.01	1.40	148.67	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.22	90.01	89.86	90.01	1.72	96.77	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.22	90.01	89.86	90.01	2.29	59.82	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.22	90.01	89.86	90.01	2.90	42.59	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.22	90.01	89.86	90.01	3.51	32.92	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.22	90.01	89.86	90.01	4.13	26.79	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.22	90.01	89.86	90.01	4.75	22.57	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.22	90.01	89.86	90.01	5.38	19.49	PASS
800.00	800.00	0.00	0.00	800.00	800.00	0.22	90.01	89.86	90.01	5.92	17.43	PASS
813.00†	813.00	-0.01	-0.03	813.00	813.00	0.22	90.01	-152.07	90.03	6.00	17.16	PASS
913.00†	912.97	-1.05	-1.97	912.97	912.97	0.22	90.01	-152.69	91.98	6.73	15.38	PASS
1013.00†	1012.80	-3.73	-6.98	1012.80	1012.80	0.22	90.01	-154.19	97.07	7.71	13.94	PASS
1113.00†	1112.38	-8.04	-15.07	1112.38	1112.38	0.22	90.01	-156.29	105.40	8.63	13.35	PASS
1213.00†	1211.57	-13.99	-26.22	1211.57	1211.57	0.22	90.01	-158.69	117.09	9.53	13.33	PASS
1313.00†	1310.26	-21.56	-40.42	1310.26	1310.26	0.22	90.01	-161.12	132.23	10.40	13.69	PASS
1413.00†	1408.33	-30.76	-57.64	1408.39	1408.39	0.21	90.01	-163.40	150.86	11.25	14.37	PASS
1499.25	1492.33	-39.97	-74.92	1493.19	1493.17	-1.29	90.12	-164.69	169.52	11.94	15.15	PASS
1513.00†	1505.67	-41.54	-77.85	1506.69	1506.67	-1.76	90.16	-164.83	172.66	12.04	15.29	PASS
1613.00†	1602.71	-52.91	-99.17	1605.12	1604.94	-7.10	90.57	-165.11	195.20	12.65	16.41	PASS
1713.00†	1699.74	-64.29	-120.49	1703.73	1703.16	-15.82	91.24	-164.43	217.23	13.31	17.30	PASS
1813.00†	1796.78	-75.67	-141.82	1801.98	1800.68	-27.69	92.15	-163.10	238.86	13.87	18.09	PASS
1913.00†	1893.81	-87.04	-163.14	1899.46	1897.34	-40.26	93.11	-161.82	260.50	14.59	18.72	PASS
2013.00†	1990.85	-98.42	-184.46	1996.93	1994.00	-52.83	94.07	-160.73	282.25	15.34	19.24	PASS
2113.00†	2087.89	-109.79	-205.78	2094.41	2090.66	-65.40	95.03	-159.81	304.09	16.14	19.67	PASS
2213.00†	2184.92	-121.17	-227.10	2191.89	2187.32	-77.97	96.00	-159.00	325.98	16.96	20.02	PASS
2313.00†	2281.96	-132.55	-248.42	2289.37	2283.98	-90.53	96.96	-158.30	347.94	17.80	20.32	PASS
2413.00†	2378.99	-143.92	-269.75	2386.84	2380.64	-103.10	97.92	-157.68	369.93	18.66	20.56	PASS
2513.00†	2476.03	-155.30	-291.07	2484.32	2477.30	-115.67	98.89	-157.13	391.97	19.55	20.77	PASS
2613.00†	2573.06	-166.68	-312.39	2581.80	2573.96	-128.24	99.85	-156.64	414.03	20.45	20.94	PASS
2713.00†	2670.10	-178.05	-333.71	2679.28	2670.61	-140.81	100.81	-156.19	436.12	21.36	21.08	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	2767.14	-189.43	-355.03	2776.75	2767.27	-153.38	101.78	-155.79	458.23	22.29	21.20	PASS
2913.00†	2864.17	-200.81	-376.35	2874.23	2863.93	-165.94	102.74	-155.43	480.36	23.22	21.30	PASS
3013.00†	2961.21	-212.18	-397.68	2971.71	2960.59	-178.51	103.70	-155.10	502.51	24.17	21.39	PASS
3113.00†	3058.24	-223.56	-419.00	3069.19	3057.25	-191.08	104.67	-154.80	524.67	25.12	21.46	PASS
3213.00†	3155.28	-234.93	-440.32	3166.66	3153.91	-203.65	105.63	-154.52	546.85	26.08	21.53	PASS
3313.00†	3252.32	-246.31	-461.64	3264.14	3250.57	-216.22	106.59	-154.26	569.03	27.05	21.58	PASS
3413.00†	3349.35	-257.69	-482.96	3361.62	3347.23	-228.78	107.55	-154.03	591.23	28.02	21.62	PASS
3513.00†	3446.39	-269.06	-504.29	3459.09	3443.89	-241.35	108.52	-153.81	613.43	29.00	21.66	PASS
3613.00†	3543.42	-280.44	-525.61	3556.57	3540.54	-253.92	109.48	-153.60	635.65	29.98	21.69	PASS
3713.00†	3640.46	-291.82	-546.93	3654.05	3637.20	-266.49	110.44	-153.41	657.87	30.96	21.72	PASS
3813.00†	3737.50	-303.19	-568.25	3751.53	3733.86	-279.06	111.41	-153.23	680.10	31.95	21.74	PASS
3913.00†	3834.53	-314.57	-589.57	3849.00	3830.52	-291.62	112.37	-153.06	702.33	32.95	21.76	PASS
4013.00†	3931.57	-325.94	-610.89	3946.48	3927.18	-304.19	113.33	-152.91	724.57	33.94	21.78	PASS
4113.00†	4028.60	-337.32	-632.22	4043.96	4023.84	-316.76	114.30	-152.76	746.81	34.94	21.79	PASS
4213.00†	4125.64	-348.70	-653.54	4141.44	4120.50	-329.33	115.26	-152.62	769.06	35.94	21.81	PASS
4313.00†	4222.67	-360.07	-674.86	4238.91	4217.16	-341.90	116.22	-152.49	791.31	36.95	21.82	PASS
4413.00†	4319.71	-371.45	-696.18	4336.39	4313.82	-354.47	117.18	-152.37	813.56	37.96	21.82	PASS
4513.00†	4416.75	-382.83	-717.50	4433.87	4410.47	-367.03	118.15	-152.25	835.82	38.96	21.83	PASS
4613.00†	4513.78	-394.20	-738.82	4531.34	4507.13	-379.60	119.11	-152.14	858.09	39.97	21.83	PASS
4713.00†	4610.82	-405.58	-760.15	4628.82	4603.79	-392.17	120.07	-152.03	880.35	40.99	21.84	PASS
4813.00†	4707.85	-416.95	-781.47	4726.30	4700.45	-404.74	121.04	-151.93	902.62	42.00	21.84	PASS
4913.00†	4804.89	-428.33	-802.79	4823.78	4797.11	-417.31	122.00	-151.83	924.89	43.02	21.84	PASS
5013.00†	4901.93	-439.71	-824.11	4921.25	4893.77	-429.87	122.96	-151.74	947.16	44.03	21.85	PASS
5113.00†	4998.96	-451.08	-845.43	5018.73	4990.43	-442.44	123.93	-151.66	969.44	45.05	21.85	PASS
5213.00†	5096.00	-462.46	-866.76	5116.21	5087.09	-455.01	124.89	-151.57	991.71	46.07	21.85	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

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	0.13	54.87	-8.30	55.51
8.5in Open Hole	1800.00	17770.56	15970.56	1798.72	7678.00	-8.30	55.51	2920.07	65.09

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

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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	9284.55	55.87	0.35	9284.86	25.40	377.38	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

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

OFFSET WELLPATH REFERENCE - Offset Wellbore: CHAMPLIN 117 AMOCO G#6 AWB 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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	10587.83	-1294.69	-6.97	10666.90	25.40	433.56	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
Facility Surface Uncertainty @1SD		Horizontal	8.200ft

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
0.00	8313.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8313>

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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	0.27	104.99	89.85	104.99	1.40	173.65	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.27	104.99	89.85	104.99	1.72	113.03	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.27	104.99	89.85	104.99	2.29	69.87	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.27	104.99	89.85	104.99	2.90	49.74	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.27	104.99	89.85	104.99	3.51	38.45	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.27	104.99	89.85	104.99	4.13	31.29	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.27	104.99	89.85	104.99	4.75	26.36	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.27	104.99	89.85	104.99	5.38	22.77	PASS
800.00	800.00	0.00	0.00	800.00	800.00	0.27	104.99	89.85	104.99	5.92	20.35	PASS
813.00†	813.00	-0.01	-0.03	813.00	813.00	0.27	104.99	-152.08	105.02	6.00	20.04	PASS
913.00†	912.97	-1.05	-1.97	912.97	912.97	0.27	104.99	-152.61	106.96	6.73	17.91	PASS
1013.00†	1012.80	-3.73	-6.98	1012.80	1012.80	0.27	104.99	-153.90	112.04	7.71	16.11	PASS
1113.00†	1112.38	-8.04	-15.07	1112.38	1112.38	0.27	104.99	-155.75	120.35	8.63	15.27	PASS
1213.00†	1211.57	-13.99	-26.22	1211.57	1211.57	0.27	104.99	-157.92	131.98	9.52	15.05	PASS
1313.00†	1310.26	-21.56	-40.42	1310.26	1310.26	0.27	104.99	-160.17	147.04	10.39	15.25	PASS
1413.00†	1408.33	-30.76	-57.64	1408.33	1408.33	0.27	104.99	-162.34	165.57	11.24	15.79	PASS
1499.25	1492.33	-39.97	-74.92	1492.33	1492.33	0.27	104.99	-164.08	184.35	11.93	16.49	PASS
1513.00†	1505.67	-41.54	-77.85	1505.66	1505.66	0.27	104.99	-164.35	187.56	12.03	16.63	PASS
1613.00†	1602.71	-52.91	-99.17	1600.74	1600.72	-1.27	105.86	-165.61	211.45	12.63	17.81	PASS
1713.00†	1699.74	-64.29	-120.49	1695.65	1695.50	-5.53	108.29	-165.86	236.25	13.24	18.92	PASS
1813.00†	1796.78	-75.67	-141.82	1790.09	1789.60	-12.48	112.24	-165.37	261.90	13.82	19.99	PASS
1913.00†	1893.81	-87.04	-163.14	1883.86	1882.72	-22.05	117.68	-164.36	288.46	14.47	20.90	PASS
2013.00†	1990.85	-98.42	-184.46	1977.99	1975.81	-34.11	124.54	-163.01	315.98	15.19	21.76	PASS
2113.00†	2087.89	-109.79	-205.78	2073.78	2070.47	-46.88	131.81	-161.75	343.84	15.96	22.50	PASS
2213.00†	2184.92	-121.17	-227.10	2169.57	2165.12	-59.65	139.07	-160.68	371.83	16.76	23.12	PASS
2313.00†	2281.96	-132.55	-248.42	2265.35	2259.78	-72.42	146.33	-159.76	399.92	17.58	23.66	PASS
2413.00†	2378.99	-143.92	-269.75	2361.14	2354.43	-85.20	153.60	-158.96	428.10	18.44	24.11	PASS
2513.00†	2476.03	-155.30	-291.07	2456.93	2449.08	-97.97	160.86	-158.26	456.35	19.31	24.50	PASS
2613.00†	2573.06	-166.68	-312.39	2552.72	2543.74	-110.74	168.12	-157.64	484.65	20.19	24.84	PASS
2713.00†	2670.10	-178.05	-333.71	2648.50	2638.39	-123.52	175.39	-157.09	512.99	21.09	25.13	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV.A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	2767.14	-189.43	-355.03	2744.29	2733.04	-136.29	182.65	-156.59	541.38	22.00	25.39	PASS
2913.00†	2864.17	-200.81	-376.35	2840.08	2827.70	-149.06	189.92	-156.15	569.80	22.93	25.61	PASS
3013.00†	2961.21	-212.18	-397.68	2935.87	2922.35	-161.83	197.18	-155.74	598.25	23.87	25.80	PASS
3113.00†	3058.24	-223.56	-419.00	3031.65	3017.01	-174.61	204.44	-155.38	626.72	24.81	25.97	PASS
3213.00†	3155.28	-234.93	-440.32	3127.44	3111.66	-187.38	211.71	-155.04	655.21	25.76	26.12	PASS
3313.00†	3252.32	-246.31	-461.64	3223.23	3206.31	-200.15	218.97	-154.74	683.73	26.72	26.26	PASS
3413.00†	3349.35	-257.69	-482.96	3319.02	3300.97	-212.92	226.24	-154.46	712.26	27.69	26.37	PASS
3513.00†	3446.39	-269.06	-504.29	3414.80	3395.62	-225.70	233.50	-154.20	740.80	28.66	26.48	PASS
3613.00†	3543.42	-280.44	-525.61	3510.59	3490.27	-238.47	240.76	-153.96	769.36	29.64	26.57	PASS
3713.00†	3640.46	-291.82	-546.93	3606.38	3584.93	-251.24	248.03	-153.73	797.93	30.62	26.66	PASS
3813.00†	3737.50	-303.19	-568.25	3702.17	3679.58	-264.02	255.29	-153.52	826.51	31.60	26.73	PASS
3913.00†	3834.53	-314.57	-589.57	3797.95	3774.24	-276.79	262.56	-153.33	855.09	32.59	26.80	PASS
4013.00†	3931.57	-325.94	-610.89	3893.74	3868.89	-289.56	269.82	-153.15	883.69	33.58	26.86	PASS
4113.00†	4028.60	-337.32	-632.22	3989.53	3963.54	-302.33	277.08	-152.98	912.30	34.57	26.92	PASS
4213.00†	4125.64	-348.70	-653.54	4085.32	4058.20	-315.11	284.35	-152.82	940.91	35.57	26.97	PASS
4313.00†	4222.67	-360.07	-674.86	4181.10	4152.85	-327.88	291.61	-152.67	969.52	36.57	27.01	PASS
4413.00†	4319.71	-371.45	-696.18	4276.89	4247.50	-340.65	298.88	-152.53	998.15	37.57	27.06	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	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

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	0.17	64.00	-3.99	66.37
8.5in Open Hole	1800.00	17719.12	15919.12	1799.45	N/A	-3.99	66.37	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	Log Name/Comment	Wellbore
13.00	17719.12	Custom BHI NaviTrak (Standard Rotating) (Rockies 0.03Gt model)		ACKARD NORTH 2-35-2NBH

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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	2427.70	-2583.23	-46.78	3545.08	25.40	144.07	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



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	6610.28	58.15	0.50	6610.54	25.40	268.67	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
Facility Surface Uncertainty @1SD		Horizontal	8.200ft
		Vertical	1.000ft
		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	Wellbore
0.00	8360.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8360>
			SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWB

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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	10591.99	54.27	0.29	10592.25	25.40	430.52	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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	0.29	119.97	89.86	119.97	1.40	198.62	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.29	119.97	89.86	119.97	1.72	129.28	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.29	119.97	89.86	119.97	2.29	79.91	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.29	119.97	89.86	119.97	2.90	56.89	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.29	119.97	89.86	119.97	3.51	43.98	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.29	119.97	89.86	119.97	4.13	35.79	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.29	119.97	89.86	119.97	4.75	30.16	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.29	119.97	89.86	119.97	5.38	26.04	PASS
800.00	800.00	0.00	0.00	800.00	800.00	0.29	119.97	89.86	119.97	5.92	23.28	PASS
813.00†	813.00	-0.01	-0.03	813.00	813.00	0.29	119.97	-152.06	120.00	6.00	22.92	PASS
913.00†	912.97	-1.05	-1.97	912.97	912.97	0.29	119.97	-152.53	121.94	6.73	20.44	PASS
1013.00†	1012.80	-3.73	-6.98	1012.80	1012.80	0.29	119.97	-153.67	127.02	7.71	18.28	PASS
1113.00†	1112.38	-8.04	-15.07	1112.38	1112.38	0.29	119.97	-155.32	135.30	8.62	17.19	PASS
1213.00†	1211.57	-13.99	-26.22	1211.57	1211.57	0.29	119.97	-157.29	146.89	9.51	16.77	PASS
1313.00†	1310.26	-21.56	-40.42	1310.26	1310.26	0.29	119.97	-159.38	161.87	10.38	16.82	PASS
1413.00†	1408.33	-30.76	-57.64	1408.33	1408.33	0.29	119.97	-161.44	180.31	11.23	17.22	PASS
1499.25	1492.33	-39.97	-74.92	1492.33	1492.33	0.29	119.97	-163.12	199.01	11.93	17.82	PASS
1513.00†	1505.67	-41.54	-77.85	1505.67	1505.67	0.29	119.97	-163.39	202.20	12.02	17.95	PASS
1613.00†	1602.71	-52.91	-99.17	1602.61	1602.61	0.29	119.97	-165.14	225.51	12.63	19.00	PASS
1713.00†	1699.74	-64.29	-120.49	1695.82	1695.80	-0.88	121.06	-166.18	249.77	13.25	20.00	PASS
1813.00†	1796.78	-75.67	-141.82	1788.44	1788.31	-4.25	124.19	-166.46	275.55	13.75	21.15	PASS
1913.00†	1893.81	-87.04	-163.14	1880.30	1879.85	-9.75	129.29	-166.18	302.79	14.45	21.98	PASS
2013.00†	1990.85	-98.42	-184.46	1971.20	1970.17	-17.31	136.31	-165.48	331.51	15.14	22.92	PASS
2113.00†	2087.89	-109.79	-205.78	2061.00	2059.01	-26.84	145.15	-164.48	361.75	15.62	24.22	PASS
2213.00†	2184.92	-121.17	-227.10	2150.96	2147.58	-38.36	155.84	-163.27	393.57	16.60	24.72	PASS
2313.00†	2281.96	-132.55	-248.42	2245.21	2240.23	-51.06	167.62	-162.08	426.00	17.40	25.49	PASS
2413.00†	2378.99	-143.92	-269.75	2339.46	2332.88	-63.75	179.40	-161.06	458.57	18.21	26.16	PASS
2513.00†	2476.03	-155.30	-291.07	2433.72	2425.53	-76.44	191.18	-160.17	491.25	19.06	26.74	PASS
2613.00†	2573.06	-166.68	-312.39	2527.97	2518.18	-89.13	202.95	-159.40	524.03	19.92	27.25	PASS
2713.00†	2670.10	-178.05	-333.71	2622.22	2610.82	-101.82	214.73	-158.71	556.88	20.79	27.69	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	2767.14	-189.43	-355.03	2716.47	2703.47	-114.51	226.51	-158.11	589.79	21.68	28.08	PASS
2913.00†	2864.17	-200.81	-376.35	2810.72	2796.12	-127.20	238.29	-157.56	622.76	22.59	28.43	PASS
3013.00†	2961.21	-212.18	-397.68	2904.98	2888.77	-139.90	250.06	-157.07	655.77	23.51	28.73	PASS
3113.00†	3058.24	-223.56	-419.00	2999.23	2981.42	-152.59	261.84	-156.63	688.83	24.44	29.00	PASS
3213.00†	3155.28	-234.93	-440.32	3093.48	3074.07	-165.28	273.62	-156.23	721.91	25.38	29.24	PASS
3313.00†	3252.32	-246.31	-461.64	3187.73	3166.71	-177.97	285.40	-155.86	755.03	26.32	29.45	PASS
3413.00†	3349.35	-257.69	-482.96	3281.98	3259.36	-190.66	297.17	-155.52	788.17	27.28	29.64	PASS
3513.00†	3446.39	-269.06	-504.29	3376.24	3352.01	-203.35	308.95	-155.21	821.33	28.23	29.81	PASS
3613.00†	3543.42	-280.44	-525.61	3470.49	3444.66	-216.05	320.73	-154.93	854.51	29.20	29.97	PASS
3713.00†	3640.46	-291.82	-546.93	3564.74	3537.31	-228.74	332.51	-154.66	887.71	30.17	30.11	PASS
3813.00†	3737.50	-303.19	-568.25	3658.99	3629.95	-241.43	344.28	-154.42	920.92	31.14	30.24	PASS
3913.00†	3834.53	-314.57	-589.57	3753.24	3722.60	-254.12	356.06	-154.19	954.15	32.12	30.35	PASS
4013.00†	3931.57	-325.94	-610.89	3847.50	3815.25	-266.81	367.84	-153.98	987.39	33.10	30.46	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	0.18	73.13	-1.38	74.58
8.5in Open Hole	1800.00	17807.10	16007.10	1799.84	7663.00	-1.38	74.58	2921.97	294.70





# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	56.77	-2596.70	-88.75	2597.62	25.40	105.56	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



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	0.31	134.98	89.87	134.98	1.40	223.63	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.31	134.98	89.87	134.98	1.72	145.57	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.31	134.98	89.87	134.98	2.29	89.98	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.31	134.98	89.87	134.98	2.90	64.06	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.31	134.98	89.87	134.98	3.51	49.52	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.31	134.98	89.87	134.98	4.13	40.30	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.31	134.98	89.87	134.98	4.75	33.95	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.31	134.98	89.87	134.98	5.38	29.32	PASS
800.00	800.00	0.00	0.00	800.00	800.00	0.31	134.98	89.87	134.98	5.92	26.21	PASS
813.00†	813.00	-0.01	-0.03	813.00	813.00	0.31	134.98	-152.06	135.01	6.00	25.81	PASS
913.00†	912.97	-1.05	-1.97	912.97	912.97	0.31	134.98	-152.47	136.95	6.73	22.97	PASS
1013.00†	1012.80	-3.73	-6.98	1012.80	1012.80	0.31	134.98	-153.48	142.02	7.70	20.46	PASS
1113.00†	1112.38	-8.04	-15.07	1112.38	1112.38	0.31	134.98	-154.97	150.29	8.62	19.12	PASS
1213.00†	1211.57	-13.99	-26.22	1211.57	1211.57	0.31	134.98	-156.77	161.84	9.51	18.50	PASS
1313.00†	1310.26	-21.56	-40.42	1310.26	1310.26	0.31	134.98	-158.72	176.76	10.37	18.39	PASS
1413.00†	1408.33	-30.76	-57.64	1408.33	1408.33	0.31	134.98	-160.67	195.11	11.22	18.65	PASS
1499.25	1492.33	-39.97	-74.92	1492.33	1492.33	0.31	134.98	-162.29	213.73	11.92	19.16	PASS
1513.00†	1505.67	-41.54	-77.85	1505.39	1505.39	0.31	134.99	-162.55	216.91	12.02	19.27	PASS
1613.00†	1602.71	-52.91	-99.17	1597.20	1597.19	-0.64	136.33	-163.89	241.30	12.63	20.33	PASS
1713.00†	1699.74	-64.29	-120.49	1688.17	1688.03	-3.24	140.04	-164.51	267.84	13.31	21.35	PASS
1813.00†	1796.78	-75.67	-141.82	1778.10	1777.66	-7.44	146.02	-164.58	296.42	13.91	22.48	PASS
1913.00†	1893.81	-87.04	-163.14	1866.86	1865.85	-13.18	154.17	-164.25	326.99	14.61	23.46	PASS
2013.00†	1990.85	-98.42	-184.46	1954.29	1952.38	-20.36	164.39	-163.65	359.54	15.28	24.62	PASS
2113.00†	2087.89	-109.79	-205.78	2040.26	2037.06	-28.89	176.54	-162.85	394.08	16.06	25.62	PASS
2213.00†	2184.92	-121.17	-227.10	2124.67	2119.73	-38.69	190.48	-161.93	430.61	16.81	26.70	PASS
2313.00†	2281.96	-132.55	-248.42	2211.32	2204.09	-50.07	206.67	-160.90	469.01	17.57	27.77	PASS
2413.00†	2378.99	-143.92	-269.75	2303.15	2293.39	-62.37	224.18	-159.93	507.87	18.38	28.70	PASS
2513.00†	2476.03	-155.30	-291.07	2394.97	2382.68	-74.68	241.68	-159.10	546.84	19.21	29.51	PASS
2613.00†	2573.06	-166.68	-312.39	2486.79	2471.98	-86.98	259.19	-158.37	585.90	20.11	30.16	PASS
2713.00†	2670.10	-178.05	-333.71	2578.61	2561.27	-99.29	276.70	-157.74	625.02	20.93	30.88	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	2767.14	-189.43	-355.03	2670.44	2650.57	-111.59	294.21	-157.18	664.20	21.81	31.45	PASS
2913.00†	2864.17	-200.81	-376.35	2762.26	2739.86	-123.90	311.71	-156.69	703.43	22.70	31.95	PASS
3013.00†	2961.21	-212.18	-397.68	2854.08	2829.16	-136.20	329.22	-156.24	742.69	23.61	32.40	PASS
3113.00†	3058.24	-223.56	-419.00	2945.91	2918.45	-148.51	346.73	-155.84	781.99	24.53	32.80	PASS
3213.00†	3155.28	-234.93	-440.32	3037.73	3007.75	-160.81	364.24	-155.48	821.32	25.46	33.16	PASS
3313.00†	3252.32	-246.31	-461.64	3129.55	3097.04	-173.11	381.75	-155.15	860.68	26.39	33.48	PASS
3413.00†	3349.35	-257.69	-482.96	3221.38	3186.34	-185.42	399.25	-154.86	900.06	27.34	33.77	PASS
3513.00†	3446.39	-269.06	-504.29	3313.20	3275.63	-197.72	416.76	-154.58	939.45	28.29	34.04	PASS
3613.00†	3543.42	-280.44	-525.61	3405.02	3364.93	-210.03	434.27	-154.33	978.87	29.24	34.28	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

## 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	0.19	82.29	-2.56	86.20
8.5in Open Hole	1800.00	17798.06	15998.06	1799.45	7591.00	-2.56	86.20	2922.94	422.99

## 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



**Clearance Report**  
**ACKARD NORTH 2-35-1CDH PWP (REV-A.0)**  
**Closest Approach**  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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
13.00	13.00	0.00	0.00	27.00	13.00	4042.47	112.83	1.60	4044.05	50.64	81.13
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

WELLPATH COMPOSITION - Offset Wellbore: MARTIN #1 AWB Offset Wellpath: MARTIN #1 AWP			
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Wellbore
0.00	8400.00	Drift Indicator - Inclination Only (Actual Survey)	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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	0.37	149.94	89.86	149.94	1.40	248.56	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.37	149.94	89.86	149.94	1.72	161.79	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.37	149.94	89.86	149.94	2.29	100.01	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.37	149.94	89.86	149.94	2.90	71.20	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.37	149.94	89.86	149.94	3.51	55.04	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.37	149.94	89.86	149.94	4.13	44.80	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.37	149.94	89.86	149.94	4.75	37.74	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.37	149.94	89.86	149.94	5.38	32.59	PASS
800.00	800.00	0.00	0.00	800.00	800.00	0.37	149.94	89.86	149.94	5.92	29.13	PASS
813.00†	813.00	-0.01	-0.03	813.00	813.00	0.37	149.94	-152.06	149.96	6.00	28.69	PASS
913.00†	912.97	-1.05	-1.97	912.97	912.97	0.37	149.94	-152.43	151.91	6.73	25.50	PASS
1013.00†	1012.80	-3.73	-6.98	1012.80	1012.80	0.37	149.94	-153.35	156.97	7.70	22.63	PASS
1113.00†	1112.38	-8.04	-15.07	1112.38	1112.38	0.37	149.94	-154.70	165.22	8.62	21.04	PASS
1213.00†	1211.57	-13.99	-26.22	1211.57	1211.57	0.37	149.94	-156.36	176.74	9.50	20.22	PASS
1313.00†	1310.26	-21.56	-40.42	1310.26	1310.26	0.37	149.94	-158.17	191.61	10.37	19.95	PASS
1413.00†	1408.33	-30.76	-57.64	1407.88	1407.88	0.36	149.95	-160.01	209.91	11.21	20.09	PASS
1499.25	1492.33	-39.97	-74.92	1487.05	1487.03	-0.31	151.07	-161.25	229.51	11.92	20.57	PASS
1513.00†	1505.67	-41.54	-77.85	1499.56	1499.54	-0.52	151.42	-161.43	233.00	12.02	20.69	PASS
1613.00†	1602.71	-52.91	-99.17	1590.00	1589.86	-2.84	155.35	-162.35	259.72	12.76	21.66	PASS
1713.00†	1699.74	-64.29	-120.49	1679.32	1678.88	-6.57	161.64	-162.70	288.73	13.36	22.94	PASS
1813.00†	1796.78	-75.67	-141.82	1767.38	1766.37	-11.63	170.18	-162.64	319.94	14.11	23.90	PASS
1913.00†	1893.81	-87.04	-163.14	1854.04	1852.14	-17.94	180.83	-162.28	353.30	14.78	25.06	PASS
2013.00†	1990.85	-98.42	-184.46	1939.18	1936.01	-25.42	193.46	-161.72	388.79	15.49	26.26	PASS
2113.00†	2087.89	-109.79	-205.78	2022.70	2017.81	-33.99	207.93	-161.02	426.40	16.24	27.41	PASS
2213.00†	2184.92	-121.17	-227.10	2104.50	2097.42	-43.56	224.09	-160.24	466.10	17.00	28.57	PASS
2313.00†	2281.96	-132.55	-248.42	2186.83	2176.99	-54.33	242.26	-159.38	507.85	17.75	29.76	PASS
2413.00†	2378.99	-143.92	-269.75	2277.08	2264.02	-66.51	262.82	-158.52	550.31	18.56	30.79	PASS
2513.00†	2476.03	-155.30	-291.07	2367.33	2351.05	-78.69	283.38	-157.78	592.86	19.46	31.57	PASS
2613.00†	2573.06	-166.68	-312.39	2457.58	2438.08	-90.87	303.94	-157.15	635.48	20.23	32.52	PASS
2713.00†	2670.10	-178.05	-333.71	2547.83	2525.11	-103.05	324.50	-156.59	678.15	21.09	33.24	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	2767.14	-189.43	-355.03	2638.08	2612.14	-115.23	345.06	-156.09	720.87	21.97	33.87	PASS
2913.00†	2864.17	-200.81	-376.35	2728.33	2699.17	-127.41	365.62	-155.66	763.63	22.86	34.44	PASS
3013.00†	2961.21	-212.18	-397.68	2818.58	2786.20	-139.59	386.18	-155.27	806.43	23.77	34.94	PASS
3113.00†	3058.24	-223.56	-419.00	2908.84	2873.23	-151.77	406.73	-154.91	849.25	24.69	35.39	PASS
3213.00†	3155.28	-234.93	-440.32	2999.09	2960.26	-163.95	427.29	-154.60	892.09	25.61	35.79	PASS
3313.00†	3252.32	-246.31	-461.64	3089.34	3047.29	-176.13	447.85	-154.31	934.95	26.55	36.16	PASS
3413.00†	3349.35	-257.69	-482.96	3179.59	3134.32	-188.31	468.41	-154.04	977.84	27.49	36.49	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

## 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	0.22	91.40	-4.11	98.71
8.5in Open Hole	1800.00	17693.67	15893.67	1798.70	7440.00	-4.11	98.71	2923.66	520.79

## 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





# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	0.42	164.95	89.85	164.95	1.40	273.58	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.42	164.95	89.85	164.95	1.72	178.07	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.42	164.95	89.85	164.95	2.29	110.07	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.42	164.95	89.85	164.95	2.90	78.36	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.42	164.95	89.85	164.95	3.51	60.58	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.42	164.95	89.85	164.95	4.13	49.30	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.42	164.95	89.85	164.95	4.75	41.54	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.42	164.95	89.85	164.95	5.38	35.87	PASS
800.00	800.00	0.00	0.00	800.00	800.00	0.42	164.95	89.85	164.95	5.92	32.07	PASS
813.00†	813.00	-0.01	-0.03	813.00	813.00	0.42	164.95	-152.07	164.97	6.00	31.57	PASS
913.00†	912.97	-1.05	-1.97	912.97	912.97	0.42	164.95	-152.40	166.92	6.73	28.03	PASS
1013.00†	1012.80	-3.73	-6.98	1012.80	1012.80	0.42	164.95	-153.24	171.98	7.70	24.81	PASS
1113.00†	1112.38	-8.04	-15.07	1112.38	1112.38	0.42	164.95	-154.48	180.22	8.62	22.96	PASS
1213.00†	1211.57	-13.99	-26.22	1211.57	1211.57	0.42	164.95	-156.01	191.71	9.50	21.95	PASS
1313.00†	1310.26	-21.56	-40.42	1309.68	1309.68	0.41	164.96	-157.69	206.55	10.36	21.53	PASS
1413.00†	1408.33	-30.76	-57.64	1401.79	1401.77	-0.42	166.55	-159.06	226.33	11.23	21.63	PASS
1499.25	1492.33	-39.97	-74.92	1479.90	1479.78	-2.19	169.95	-159.90	248.09	12.04	22.00	PASS
1513.00†	1505.67	-41.54	-77.85	1492.22	1492.08	-2.56	170.66	-160.03	251.92	12.16	22.11	PASS
1613.00†	1602.71	-52.91	-99.17	1581.17	1580.72	-5.96	177.17	-160.67	281.16	12.86	23.24	PASS
1713.00†	1699.74	-64.29	-120.49	1668.80	1667.79	-10.54	185.97	-160.87	312.77	13.65	24.28	PASS
1813.00†	1796.78	-75.67	-141.82	1754.99	1753.08	-16.26	196.91	-160.75	346.66	14.27	25.59	PASS
1913.00†	1893.81	-87.04	-163.14	1839.60	1836.42	-23.01	209.87	-160.41	382.79	14.93	26.87	PASS
2013.00†	1990.85	-98.42	-184.46	1922.55	1917.66	-30.74	224.69	-159.92	421.11	15.68	28.08	PASS
2113.00†	2087.89	-109.79	-205.78	2003.75	1996.69	-39.36	241.20	-159.32	461.59	16.42	29.33	PASS
2213.00†	2184.92	-121.17	-227.10	2084.70	2074.93	-48.96	259.61	-158.65	504.19	17.15	30.63	PASS
2313.00†	2281.96	-132.55	-248.42	2174.60	2161.59	-60.04	280.84	-157.95	547.60	17.93	31.76	PASS
2413.00†	2378.99	-143.92	-269.75	2264.50	2248.24	-71.11	302.06	-157.35	591.07	18.80	32.63	PASS
2513.00†	2476.03	-155.30	-291.07	2354.40	2334.89	-82.18	323.29	-156.84	634.58	19.53	33.67	PASS
2613.00†	2573.06	-166.68	-312.39	2444.30	2421.55	-93.25	344.51	-156.39	678.14	20.36	34.47	PASS
2713.00†	2670.10	-178.05	-333.71	2534.20	2508.20	-104.32	365.74	-156.00	721.72	21.21	35.16	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	2767.14	-189.43	-355.03	2624.10	2594.85	-115.40	386.96	-155.65	765.32	22.08	35.78	PASS
2913.00†	2864.17	-200.81	-376.35	2714.00	2681.51	-126.47	408.19	-155.34	808.95	22.95	36.33	PASS
3013.00†	2961.21	-212.18	-397.68	2803.90	2768.16	-137.54	429.41	-155.06	852.59	23.84	36.83	PASS
3113.00†	3058.24	-223.56	-419.00	2893.80	2854.82	-148.61	450.63	-154.80	896.25	24.74	37.27	PASS
3213.00†	3155.28	-234.93	-440.32	2983.70	2941.47	-159.68	471.86	-154.58	939.92	25.65	37.66	PASS
3313.00†	3252.32	-246.31	-461.64	3073.60	3028.12	-170.76	493.08	-154.37	983.60	26.56	38.02	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

## 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	0.26	100.55	-5.88	112.31
8.5in Open Hole	1800.00	18103.54	16303.54	1797.47	7828.00	-5.88	112.31	2923.94	555.83

## 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



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	1349.45	94.24	4.00	1352.74	50.22	27.36	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

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

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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	0.44	179.99	89.86	179.99	1.40	298.64	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.44	179.99	89.86	179.99	1.72	194.39	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.44	179.99	89.86	179.99	2.29	120.16	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.44	179.99	89.86	179.99	2.90	85.54	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.44	179.99	89.86	179.99	3.51	66.13	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.44	179.99	89.86	179.99	4.13	53.82	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.44	179.99	89.86	179.99	4.75	45.34	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.44	179.99	89.86	179.99	5.38	39.16	PASS
800.00	800.00	0.00	0.00	800.00	800.00	0.44	179.99	89.86	179.99	5.92	35.00	PASS
813.00†	813.00	-0.01	-0.03	813.00	813.00	0.44	179.99	-152.06	180.01	6.00	34.46	PASS
913.00†	912.97	-1.05	-1.97	912.97	912.97	0.44	179.99	-152.37	181.96	6.73	30.57	PASS
1013.00†	1012.80	-3.73	-6.98	1012.80	1012.80	0.44	179.99	-153.13	187.01	7.70	26.99	PASS
1113.00†	1112.38	-8.04	-15.07	1112.38	1112.38	0.44	179.99	-154.27	195.24	8.61	24.89	PASS
1213.00†	1211.57	-13.99	-26.22	1210.87	1210.87	0.43	180.00	-155.68	206.73	9.49	23.70	PASS
1313.00†	1310.26	-21.56	-40.42	1303.18	1303.16	-0.27	181.70	-156.94	223.25	10.39	23.19	PASS
1413.00†	1408.33	-30.76	-57.64	1393.96	1393.81	-2.07	186.05	-157.90	245.80	11.41	23.10	PASS
1499.25	1492.33	-39.97	-74.92	1470.67	1470.26	-4.45	191.79	-158.51	269.97	12.23	23.54	PASS
1513.00†	1505.67	-41.54	-77.85	1482.75	1482.29	-4.89	192.87	-158.61	274.19	12.36	23.65	PASS
1613.00†	1602.71	-52.91	-99.17	1569.80	1568.78	-8.67	202.01	-159.16	306.30	13.08	24.89	PASS
1713.00†	1699.74	-64.29	-120.49	1655.33	1653.41	-13.37	213.35	-159.36	340.87	13.83	26.11	PASS
1813.00†	1796.78	-75.67	-141.82	1739.22	1736.04	-18.91	226.74	-159.31	377.81	14.45	27.54	PASS
1913.00†	1893.81	-87.04	-163.14	1821.38	1816.52	-25.23	242.01	-159.09	417.06	15.14	28.85	PASS
2013.00†	1990.85	-98.42	-184.46	1901.74	1894.74	-32.26	259.01	-158.75	458.56	15.86	30.22	PASS
2113.00†	2087.89	-109.79	-205.78	1980.22	1970.61	-39.93	277.55	-158.32	502.24	16.58	31.59	PASS
2213.00†	2184.92	-121.17	-227.10	2056.78	2044.07	-48.18	297.49	-157.85	548.06	17.31	32.97	PASS
2313.00†	2281.96	-132.55	-248.42	2131.39	2115.07	-56.94	318.66	-157.34	595.95	18.03	34.37	PASS
2413.00†	2378.99	-143.92	-269.75	2215.50	2194.65	-67.35	343.83	-156.78	645.23	18.79	35.65	PASS
2513.00†	2476.03	-155.30	-291.07	2302.31	2276.77	-78.12	369.85	-156.27	694.60	19.59	36.75	PASS
2613.00†	2573.06	-166.68	-312.39	2389.13	2358.89	-88.88	395.86	-155.84	744.01	20.40	37.75	PASS
2713.00†	2670.10	-178.05	-333.71	2475.94	2441.00	-99.65	421.88	-155.45	793.44	21.23	38.62	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	2767.14	-189.43	-355.03	2562.75	2523.12	-110.41	447.90	-155.12	842.90	22.09	39.40	PASS
2913.00†	2864.17	-200.81	-376.35	2649.56	2605.24	-121.18	473.91	-154.81	892.38	22.95	40.09	PASS
3013.00†	2961.21	-212.18	-397.68	2736.37	2687.36	-131.94	499.93	-154.55	941.87	23.83	40.71	PASS
3113.00†	3058.24	-223.56	-419.00	2823.18	2769.48	-142.70	525.94	-154.30	991.38	24.72	41.26	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	0.27	109.72	-7.03	127.35
8.5in Open Hole	1800.00	18043.25	16243.25	1795.62	7658.00	-7.03	127.35	2924.91	684.15

## 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



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	7976.28	1368.18	9.73	8092.78	25.40	328.92	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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	10830.63	1549.86	8.14	10941.10	25.40	444.70	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
Facility Surface Uncertainty @1SD		Horizontal	8.200ft

WELLPATH COMPOSITION - Offset Wellbore: MAUL #2 AWB Offset Wellpath: MAUL #2 AWP			
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Wellbore
0.00	8280.00	Drift Indicator - Inclination Only (Actual Survey)	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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	0.53	194.94	89.84	194.94	1.40	323.56	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.53	194.94	89.84	194.94	1.72	210.61	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.53	194.94	89.84	194.94	2.29	130.18	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.53	194.94	89.84	194.94	2.90	92.68	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.53	194.94	89.84	194.94	3.51	71.65	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.53	194.94	89.84	194.94	4.13	58.31	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.53	194.94	89.84	194.94	4.75	49.13	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.53	194.94	89.84	194.94	5.38	42.43	PASS
800.00	800.00	0.00	0.00	800.00	800.00	0.53	194.94	89.84	194.94	5.92	37.92	PASS
813.00†	813.00	-0.01	-0.03	813.00	813.00	0.53	194.94	-152.08	194.97	6.00	37.34	PASS
913.00†	912.97	-1.05	-1.97	912.97	912.97	0.53	194.94	-152.36	196.91	6.73	33.09	PASS
1013.00†	1012.80	-3.73	-6.98	1012.80	1012.80	0.53	194.94	-153.06	201.97	7.70	29.16	PASS
1113.00†	1112.38	-8.04	-15.07	1111.59	1111.59	0.52	194.96	-154.11	210.21	8.61	26.82	PASS
1213.00†	1211.57	-13.99	-26.22	1204.09	1204.07	-0.08	196.73	-155.14	223.51	9.54	25.48	PASS
1313.00†	1310.26	-21.56	-40.42	1295.25	1295.10	-1.62	201.23	-156.03	242.94	10.61	24.68	PASS
1413.00†	1408.33	-30.76	-57.64	1384.58	1384.12	-4.04	208.30	-156.74	268.38	11.66	24.65	PASS
1499.25	1492.33	-39.97	-74.92	1459.84	1458.89	-6.77	216.29	-157.20	295.00	12.41	25.34	PASS
1513.00†	1505.67	-41.54	-77.85	1471.67	1470.63	-7.26	217.72	-157.29	299.61	12.53	25.47	PASS
1613.00†	1602.71	-52.91	-99.17	1556.82	1554.89	-11.23	229.33	-157.79	334.57	13.27	26.76	PASS
1713.00†	1699.74	-64.29	-120.49	1640.28	1637.09	-15.91	243.00	-158.02	372.02	14.00	28.13	PASS
1813.00†	1796.78	-75.67	-141.82	1721.97	1717.10	-21.24	258.57	-158.04	411.85	14.65	29.59	PASS
1913.00†	1893.81	-87.04	-163.14	1801.81	1794.81	-27.15	275.87	-157.92	454.00	15.31	31.05	PASS
2013.00†	1990.85	-98.42	-184.46	1879.75	1870.16	-33.60	294.73	-157.71	498.38	16.02	32.51	PASS
2113.00†	2087.89	-109.79	-205.78	1955.74	1943.07	-40.53	314.97	-157.42	544.93	16.72	33.98	PASS
2213.00†	2184.92	-121.17	-227.10	2029.74	2013.51	-47.87	336.44	-157.08	593.58	17.46	35.40	PASS
2313.00†	2281.96	-132.55	-248.42	2101.75	2081.46	-55.58	358.98	-156.72	644.25	18.14	36.92	PASS
2413.00†	2378.99	-143.92	-269.75	2171.76	2146.93	-63.60	382.43	-156.34	696.87	18.90	38.27	PASS
2513.00†	2476.03	-155.30	-291.07	2247.10	2216.78	-72.73	409.13	-155.92	751.20	19.58	39.77	PASS
2613.00†	2573.06	-166.68	-312.39	2330.72	2294.22	-82.95	439.00	-155.50	805.83	20.36	40.96	PASS
2713.00†	2670.10	-178.05	-333.71	2414.35	2371.66	-93.17	468.88	-155.14	860.48	21.18	42.00	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	2767.14	-189.43	-355.03	2497.97	2449.09	-103.39	498.75	-154.82	915.15	22.01	42.93	PASS
2913.00†	2864.17	-200.81	-376.35	2581.60	2526.53	-113.61	528.63	-154.54	969.85	22.86	43.76	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
Facility Surface Uncertainty @1SD		Horizontal	8.200ft

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	0.32	118.84	-8.07	143.38
8.5in Open Hole	1800.00	18099.99	16299.99	1793.06	7586.00	-8.07	143.38	2925.91	812.41

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
13.00	18099.99	Custom BHI NaviTrak (Standard Rotating) (Rockies 0.03Gt model)	ACKARD NORTH 2-35-4NBH

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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	0.55	209.95	89.85	209.95	1.40	348.58	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.55	209.95	89.85	209.95	1.72	226.89	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.55	209.95	89.85	209.95	2.29	140.25	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.55	209.95	89.85	209.95	2.90	99.85	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.55	209.95	89.85	209.95	3.51	77.19	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.55	209.95	89.85	209.95	4.13	62.82	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.55	209.95	89.85	209.95	4.75	52.93	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.55	209.95	89.85	209.95	5.38	45.71	PASS
800.00	800.00	0.00	0.00	800.00	800.00	0.55	209.95	89.85	209.95	5.92	40.86	PASS
813.00†	813.00	-0.01	-0.03	813.00	813.00	0.55	209.95	-152.07	209.98	6.00	40.23	PASS
913.00†	912.97	-1.05	-1.97	912.97	912.97	0.55	209.95	-152.33	211.92	6.73	35.62	PASS
1013.00†	1012.80	-3.73	-6.98	1011.95	1011.95	0.54	209.97	-152.97	217.00	7.70	31.36	PASS
1113.00†	1112.38	-8.04	-15.07	1104.61	1104.59	-0.04	211.77	-153.71	227.11	8.68	28.75	PASS
1213.00†	1211.57	-13.99	-26.22	1196.17	1196.01	-1.53	216.34	-154.40	243.37	9.80	26.97	PASS
1313.00†	1310.26	-21.56	-40.42	1286.13	1285.65	-3.86	223.53	-155.00	265.68	10.85	26.35	PASS
1413.00†	1408.33	-30.76	-57.64	1374.04	1372.98	-6.98	233.14	-155.48	293.89	11.81	26.62	PASS
1499.25	1492.33	-39.97	-74.92	1447.91	1446.09	-10.25	243.18	-155.79	322.82	12.62	27.24	PASS
1513.00†	1505.67	-41.54	-77.85	1459.51	1457.54	-10.81	244.92	-155.88	327.79	12.74	27.39	PASS
1613.00†	1602.71	-52.91	-99.17	1542.89	1539.64	-15.29	258.73	-156.31	365.35	13.48	28.77	PASS
1713.00†	1699.74	-64.29	-120.49	1624.48	1619.55	-20.39	274.43	-156.52	405.37	14.16	30.29	PASS
1813.00†	1796.78	-75.67	-141.82	1704.21	1697.14	-26.05	291.86	-156.56	447.73	14.81	31.80	PASS
1913.00†	1893.81	-87.04	-163.14	1782.02	1772.35	-32.22	310.84	-156.48	492.35	15.51	33.31	PASS
2013.00†	1990.85	-98.42	-184.46	1857.88	1845.11	-38.84	331.21	-156.31	539.17	16.17	34.82	PASS
2113.00†	2087.89	-109.79	-205.78	1931.74	1915.40	-45.85	352.79	-156.09	588.09	16.90	36.29	PASS
2213.00†	2184.92	-121.17	-227.10	2003.60	1983.20	-53.20	375.44	-155.82	639.04	17.57	37.86	PASS
2313.00†	2281.96	-132.55	-248.42	2073.44	2048.50	-60.85	399.00	-155.53	691.95	18.34	39.21	PASS
2413.00†	2378.99	-143.92	-269.75	2141.28	2111.33	-68.75	423.32	-155.22	746.75	18.95	40.90	PASS
2513.00†	2476.03	-155.30	-291.07	2218.59	2182.39	-78.16	452.28	-154.86	802.96	19.69	42.26	PASS
2613.00†	2573.06	-166.68	-312.39	2301.12	2258.21	-88.23	483.28	-154.53	859.29	20.49	43.41	PASS
2713.00†	2670.10	-178.05	-333.71	2383.65	2334.04	-98.30	514.28	-154.23	915.63	21.30	44.43	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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†	2767.14	-189.43	-355.03	2466.18	2409.86	-108.36	545.27	-153.97	971.99	22.13	45.33	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	0.33	127.99	-10.11	160.16
8.5in Open Hole	1800.00	17994.78	16194.78	1789.64	7436.00	-10.11	160.16	2926.63	910.23

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

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 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	0.60	224.96	89.85	224.96	1.40	373.60	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.60	224.96	89.85	224.96	1.72	243.18	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.60	224.96	89.85	224.96	2.29	150.31	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.60	224.96	89.85	224.96	2.90	107.01	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.60	224.96	89.85	224.96	3.51	82.73	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.60	224.96	89.85	224.96	4.13	67.33	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.60	224.96	89.85	224.96	4.75	56.72	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.60	224.96	89.85	224.96	5.38	48.99	PASS
800.00	800.00	0.00	0.00	800.00	800.00	0.60	224.96	89.85	224.96	5.92	43.79	PASS
813.00†	813.00	-0.01	-0.03	813.00	813.00	0.60	224.96	-152.08	224.99	6.00	43.11	PASS
913.00†	912.97	-1.05	-1.97	912.06	912.06	0.60	224.98	-152.31	226.96	6.73	38.18	PASS
1013.00†	1012.80	-3.73	-6.98	1004.66	1004.64	0.07	226.80	-152.72	233.95	7.78	33.43	PASS
1113.00†	1112.38	-8.04	-15.07	1096.41	1096.25	-1.28	231.42	-153.17	247.11	8.97	30.16	PASS
1213.00†	1211.57	-13.99	-26.22	1186.79	1186.31	-3.40	238.73	-153.62	266.36	10.07	28.65	PASS
1313.00†	1310.26	-21.56	-40.42	1275.34	1274.27	-6.26	248.54	-154.03	291.59	11.11	28.20	PASS
1413.00†	1408.33	-30.76	-57.64	1361.61	1359.62	-9.76	260.59	-154.37	322.63	12.04	28.63	PASS
1499.25	1492.33	-39.97	-74.92	1433.90	1430.82	-13.25	272.59	-154.60	353.92	12.81	29.40	PASS
1513.00†	1505.67	-41.54	-77.85	1445.24	1441.96	-13.85	274.63	-154.68	359.26	12.91	29.60	PASS
1613.00†	1602.71	-52.91	-99.17	1526.65	1521.67	-18.47	290.51	-155.10	399.51	13.64	31.07	PASS
1713.00†	1699.74	-64.29	-120.49	1606.18	1599.05	-23.59	308.11	-155.34	442.15	14.33	32.62	PASS
1813.00†	1796.78	-75.67	-141.82	1683.77	1674.03	-29.16	327.27	-155.43	487.10	14.97	34.20	PASS
1913.00†	1893.81	-87.04	-163.14	1759.38	1746.55	-35.13	347.80	-155.41	534.27	15.67	35.78	PASS
2013.00†	1990.85	-98.42	-184.46	1832.99	1816.58	-41.46	369.55	-155.32	583.56	16.33	37.30	PASS
2113.00†	2087.89	-109.79	-205.78	1904.57	1884.11	-48.09	392.36	-155.18	634.90	17.00	38.94	PASS
2213.00†	2184.92	-121.17	-227.10	1974.14	1949.15	-54.99	416.06	-154.99	688.21	17.75	40.33	PASS
2313.00†	2281.96	-132.55	-248.42	2041.69	2011.70	-62.11	440.52	-154.78	743.40	18.36	42.08	PASS
2413.00†	2378.99	-143.92	-269.75	2113.41	2077.52	-70.07	467.91	-154.54	800.29	19.05	43.59	PASS
2513.00†	2476.03	-155.30	-291.07	2195.34	2152.55	-79.26	499.49	-154.28	857.56	19.82	44.83	PASS
2613.00†	2573.06	-166.68	-312.39	2277.27	2227.58	-88.45	531.08	-154.06	914.83	20.61	45.93	PASS
2713.00†	2670.10	-178.05	-333.71	2359.19	2302.61	-97.64	562.66	-153.86	972.11	21.42	46.90	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH PWB
Facility	SEC.02-T03S-R66W		

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	0.37	137.14	-11.57	178.17
8.5in Open Hole	1800.00	18444.07	16644.07	1785.27	7823.00	-11.57	178.17	2926.88	945.27

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

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





# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	5342.81	1369.69	14.38	5515.58	50.38	111.23	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 2-35-1CDH PWP (REV-A.0)  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	10621.76	2679.09	14.16	10954.50	25.40	445.24	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



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	6610.79	2669.62	21.99	7129.47	50.08	144.67	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



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	-1196.67	1408.30	130.36	1848.06	25.40	75.09	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



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
Closest Approach  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	4031.84	2699.41	33.80	4852.07	50.94	96.75	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	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

## WELLPATH COMPOSITION - Offset Wellbore: CARLSON #1 AWB Offset Wellpath: CARLSON #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>	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



# Clearance Report

ACKARD NORTH 2-35-1CDH PWP (REV-A.0)  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1CDH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1CDH 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	2695.01	3979.00	55.89	4805.78	50.92	95.88	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
Facility Surface Uncertainty @1SD		Horizontal	8.200ft
		Vertical	1.000ft
		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
0.00	8410.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8410>
		Wellbore	
		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