

PETROSHARE

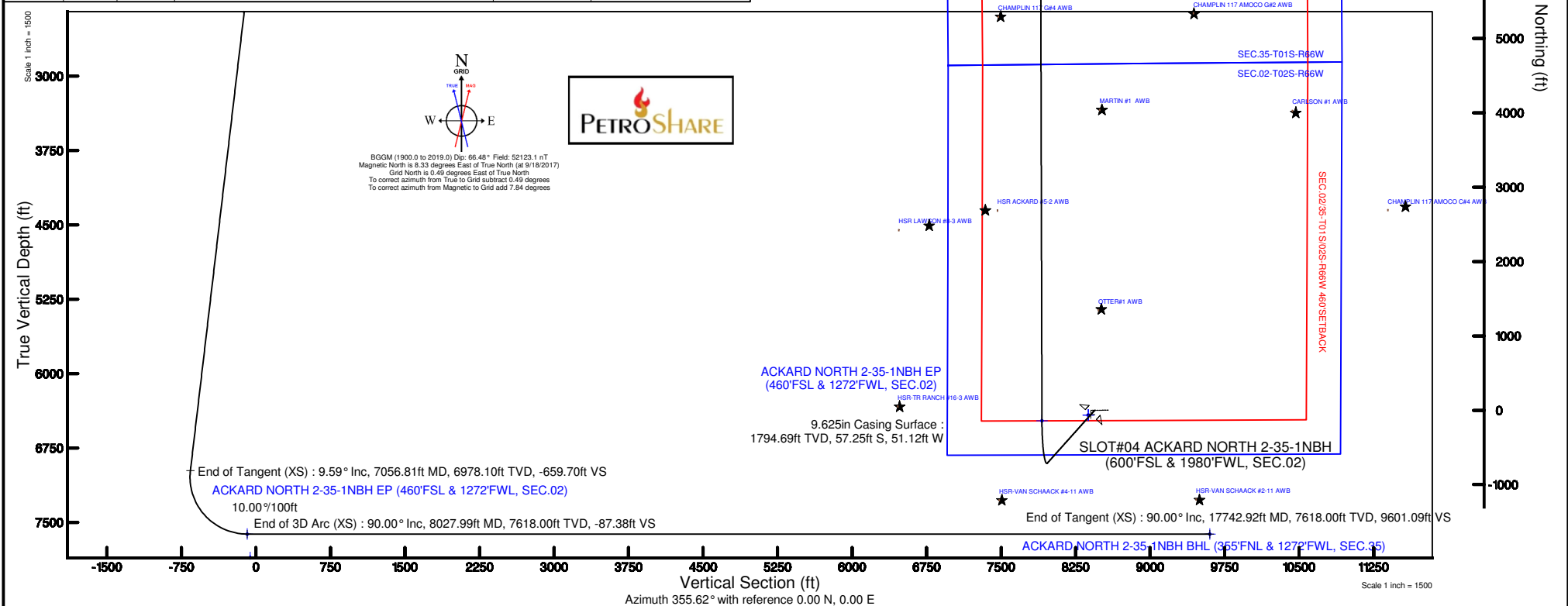
Location: COLORADO Field: ADAMS COUNTY (NAD83/ GRID NORTH) Facility: SEC.02-T03S-R66W	Slot: SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02) Well: ACKARD NORTH 2-35-1NBH Wellbore: ACKARD NORTH 2-35-1NBH PWB	
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Plot reference wellpath is ACKARD NORTH 2-35-1NBH PWP (REV. A.0)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (13KB) (RKB)	* - Wellpath was transformed from a different geodetic datum
Measured depths are referenced to RIG (13KB) (RKB)	North Reference: Grid north
RIG (13KB) (RKB) to Mean Sea Level: 5213 feet	Scale: True distance
Mean Sea Level to Ground level (At Slot: SLOT#04 ACKARD NORTH 2-35-1NBH (6007SL & 19807FWL, SEC.02)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: cantriyat 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°14'44.357"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#04 ACKARD NORTH 2-35-1NBH (600FSL & 1980FWL, SEC.02)	0.10	44.98	3211679.936	1207893.927	39°54'05.670"N	104°14'44.780"W
RIG (13"XB) (R#B) to Ground level (At Slot: SLOT#04 ACKARD NORTH 2-35-1NBH (600FSL & 1980FWL, SEC.02))					5213ft	
Mean Sea Level to Ground level (At Slot: SLOT#04 ACKARD NORTH 2-35-1NBH (600FSL & 1980FWL, SEC.02))					0ft	
RIG (13"XB) (R#B) to Mean Sea Level					5213ft	

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	1794.69	0.00	0.00	-57.25	-51.12	ACKARD NORTH 2-35-INB PWB
8.5in Open Hole	1800.00	17742.92	15942.92	1794.69	7618.00	-57.25	-51.12	9573.05	-733.22	ACKARD NORTH 2-35-INB PWB

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
13.00	17742.92	BHI NavTrak	Custom BHI NavTrak (Standard Rotating) (Rockies 0.03Gt model)		ACKARD NORTH 2-35-1NBH PWB





Planned Wellpath Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.0
North Reference	Grid	User	Cantryat
Scale	0.999975	Report Generated	10/20/2017 at 10:09:34 AM
Convergence at slot	0.49° East	Database/Source file	WellArchitectDB/ACKARD_NORTH_2-35-1NBH_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	0.10	44.98	3211679.94	1207893.93	39°54'05.670"N	104°44'43.780"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#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'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	355.62°



Planned Wellpath Report

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

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REFERENCE WELLPATH IDENTIFICATION

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Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH DATA (189 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	221.760	0.00	0.00	0.00	0.00	39°54'05.670"N	104°44'43.780"W	0.00	
13.00	0.000	221.760	13.00	0.00	0.00	0.00	39°54'05.670"N	104°44'43.780"W	0.00	Tie On
113.00†	0.000	221.760	113.00	0.00	0.00	0.00	39°54'05.670"N	104°44'43.780"W	0.00	
213.00†	0.000	221.760	213.00	0.00	0.00	0.00	39°54'05.670"N	104°44'43.780"W	0.00	
313.00†	0.000	221.760	313.00	0.00	0.00	0.00	39°54'05.670"N	104°44'43.780"W	0.00	
413.00†	0.000	221.760	413.00	0.00	0.00	0.00	39°54'05.670"N	104°44'43.780"W	0.00	
500.00†	0.000	221.760	500.00	0.00	0.00	0.00	39°54'05.670"N	104°44'43.780"W	0.00	Fox Hills
513.00†	0.000	221.760	513.00	0.00	0.00	0.00	39°54'05.670"N	104°44'43.780"W	0.00	
613.00†	0.000	221.760	613.00	0.00	0.00	0.00	39°54'05.670"N	104°44'43.780"W	0.00	
713.00†	0.000	221.760	713.00	0.00	0.00	0.00	39°54'05.670"N	104°44'43.780"W	0.00	
813.00†	0.000	221.760	813.00	0.00	0.00	0.00	39°54'05.670"N	104°44'43.780"W	0.00	
913.00†	0.000	221.760	913.00	0.00	0.00	0.00	39°54'05.670"N	104°44'43.780"W	0.00	
1013.00†	0.000	221.760	1013.00	0.00	0.00	0.00	39°54'05.670"N	104°44'43.780"W	0.00	
1100.00	0.000	221.760	1100.00	0.00	0.00	0.00	39°54'05.670"N	104°44'43.780"W	0.00	End of Tangent
1113.00†	0.260	221.760	1113.00	-0.02	-0.02	-0.02	39°54'05.670"N	104°44'43.780"W	2.00	
1213.00†	2.260	221.760	1212.97	-1.54	-1.66	-1.48	39°54'05.654"N	104°44'43.799"W	2.00	
1313.00†	4.260	221.760	1312.80	-5.48	-5.90	-5.27	39°54'05.612"N	104°44'43.848"W	2.00	
1413.00†	6.260	221.760	1412.38	-11.84	-12.74	-11.38	39°54'05.545"N	104°44'43.928"W	2.00	
1513.00†	8.260	221.760	1511.57	-20.59	-22.17	-19.79	39°54'05.453"N	104°44'44.037"W	2.00	
1579.26	9.585	221.760	1577.03	-27.71	-29.83	-26.64	39°54'05.378"N	104°44'44.125"W	2.00	End of Build (XS)
1613.00†	9.585	221.760	1610.30	-31.61	-34.02	-30.38	39°54'05.337"N	104°44'44.174"W	0.00	
1713.00†	9.585	221.760	1708.90	-43.14	-46.45	-41.47	39°54'05.215"N	104°44'44.317"W	0.00	
1813.00†	9.585	221.760	1807.50	-54.68	-58.87	-52.56	39°54'05.093"N	104°44'44.461"W	0.00	
1913.00†	9.585	221.760	1906.11	-66.22	-71.29	-63.65	39°54'04.971"N	104°44'44.605"W	0.00	
2013.00†	9.585	221.760	2004.71	-77.76	-83.71	-74.74	39°54'04.849"N	104°44'44.748"W	0.00	
2113.00†	9.585	221.760	2103.32	-89.29	-96.13	-85.83	39°54'04.728"N	104°44'44.892"W	0.00	
2213.00†	9.585	221.760	2201.92	-100.83	-108.55	-96.92	39°54'04.606"N	104°44'45.036"W	0.00	
2313.00†	9.585	221.760	2300.52	-112.37	-120.97	-108.01	39°54'04.484"N	104°44'45.179"W	0.00	
2413.00†	9.585	221.760	2399.13	-123.91	-133.39	-119.10	39°54'04.362"N	104°44'45.323"W	0.00	
2513.00†	9.585	221.760	2497.73	-135.45	-145.81	-130.19	39°54'04.240"N	104°44'45.467"W	0.00	



Planned Wellpath Report

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

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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH DATA (189 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2613.00†	9.585	221.760	2596.34	-146.98	-158.23	-141.28	39°54'04.119"N	104°44'45.610"W	0.00	
2713.00†	9.585	221.760	2694.94	-158.52	-170.66	-152.37	39°54'03.997"N	104°44'45.754"W	0.00	
2813.00†	9.585	221.760	2793.54	-170.06	-183.08	-163.46	39°54'03.875"N	104°44'45.898"W	0.00	
2913.00†	9.585	221.760	2892.15	-181.60	-195.50	-174.55	39°54'03.753"N	104°44'46.041"W	0.00	
3013.00†	9.585	221.760	2990.75	-193.13	-207.92	-185.64	39°54'03.631"N	104°44'46.185"W	0.00	
3113.00†	9.585	221.760	3089.35	-204.67	-220.34	-196.73	39°54'03.509"N	104°44'46.328"W	0.00	
3213.00†	9.585	221.760	3187.96	-216.21	-232.76	-207.82	39°54'03.388"N	104°44'46.472"W	0.00	
3313.00†	9.585	221.760	3286.56	-227.75	-245.18	-218.91	39°54'03.266"N	104°44'46.616"W	0.00	
3413.00†	9.585	221.760	3385.17	-239.29	-257.60	-230.00	39°54'03.144"N	104°44'46.759"W	0.00	
3513.00†	9.585	221.760	3483.77	-250.82	-270.02	-241.09	39°54'03.022"N	104°44'46.903"W	0.00	
3613.00†	9.585	221.760	3582.37	-262.36	-282.44	-252.18	39°54'02.900"N	104°44'47.047"W	0.00	
3713.00†	9.585	221.760	3680.98	-273.90	-294.87	-263.27	39°54'02.779"N	104°44'47.190"W	0.00	
3813.00†	9.585	221.760	3779.58	-285.44	-307.29	-274.36	39°54'02.657"N	104°44'47.334"W	0.00	
3913.00†	9.585	221.760	3878.19	-296.97	-319.71	-285.45	39°54'02.535"N	104°44'47.478"W	0.00	
4013.00†	9.585	221.760	3976.79	-308.51	-332.13	-296.54	39°54'02.413"N	104°44'47.621"W	0.00	
4113.00†	9.585	221.760	4075.39	-320.05	-344.55	-307.64	39°54'02.291"N	104°44'47.765"W	0.00	
4213.00†	9.585	221.760	4174.00	-331.59	-356.97	-318.73	39°54'02.170"N	104°44'47.909"W	0.00	
4313.00†	9.585	221.760	4272.60	-343.13	-369.39	-329.82	39°54'02.048"N	104°44'48.052"W	0.00	
4413.00†	9.585	221.760	4371.21	-354.66	-381.81	-340.91	39°54'01.926"N	104°44'48.196"W	0.00	
4513.00†	9.585	221.760	4469.81	-366.20	-394.23	-352.00	39°54'01.804"N	104°44'48.340"W	0.00	
4613.00†	9.585	221.760	4568.41	-377.74	-406.65	-363.09	39°54'01.682"N	104°44'48.483"W	0.00	
4713.00†	9.585	221.760	4667.02	-389.28	-419.08	-374.18	39°54'01.560"N	104°44'48.627"W	0.00	
4813.00†	9.585	221.760	4765.62	-400.81	-431.50	-385.27	39°54'01.439"N	104°44'48.770"W	0.00	
4913.00†	9.585	221.760	4864.22	-412.35	-443.92	-396.36	39°54'01.317"N	104°44'48.914"W	0.00	
5013.00†	9.585	221.760	4962.83	-423.89	-456.34	-407.45	39°54'01.195"N	104°44'49.058"W	0.00	
5101.41†	9.585	221.760	5050.00	-434.09	-467.32	-417.25	39°54'01.087"N	104°44'49.185"W	0.00	Sussex / Shannon
5113.00†	9.585	221.760	5061.43	-435.43	-468.76	-418.54	39°54'01.073"N	104°44'49.201"W	0.00	
5213.00†	9.585	221.760	5160.04	-446.97	-481.18	-429.63	39°54'00.951"N	104°44'49.345"W	0.00	
5313.00†	9.585	221.760	5258.64	-458.50	-493.60	-440.72	39°54'00.830"N	104°44'49.489"W	0.00	
5413.00†	9.585	221.760	5357.24	-470.04	-506.02	-451.81	39°54'00.708"N	104°44'49.632"W	0.00	



Planned Wellpath Report

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

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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH DATA (189 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5513.00†	9.585	221.760	5455.85	-481.58	-518.44	-462.90	39°54'00.586"N	104°44'49.776"W	0.00	
5613.00†	9.585	221.760	5554.45	-493.12	-530.86	-473.99	39°54'00.464"N	104°44'49.920"W	0.00	
5713.00†	9.585	221.760	5653.06	-504.65	-543.29	-485.08	39°54'00.342"N	104°44'50.063"W	0.00	
5813.00†	9.585	221.760	5751.66	-516.19	-555.71	-496.17	39°54'00.220"N	104°44'50.207"W	0.00	
5913.00†	9.585	221.760	5850.26	-527.73	-568.13	-507.26	39°54'00.099"N	104°44'50.351"W	0.00	
6013.00†	9.585	221.760	5948.87	-539.27	-580.55	-518.35	39°53'59.977"N	104°44'50.494"W	0.00	
6113.00†	9.585	221.760	6047.47	-550.81	-592.97	-529.44	39°53'59.855"N	104°44'50.638"W	0.00	
6213.00†	9.585	221.760	6146.08	-562.34	-605.39	-540.53	39°53'59.733"N	104°44'50.782"W	0.00	
6313.00†	9.585	221.760	6244.68	-573.88	-617.81	-551.62	39°53'59.611"N	104°44'50.925"W	0.00	
6413.00†	9.585	221.760	6343.28	-585.42	-630.23	-562.71	39°53'59.490"N	104°44'51.069"W	0.00	
6513.00†	9.585	221.760	6441.89	-596.96	-642.65	-573.80	39°53'59.368"N	104°44'51.212"W	0.00	
6613.00†	9.585	221.760	6540.49	-608.50	-655.07	-584.89	39°53'59.246"N	104°44'51.356"W	0.00	
6713.00†	9.585	221.760	6639.09	-620.03	-667.50	-595.98	39°53'59.124"N	104°44'51.500"W	0.00	
6813.00†	9.585	221.760	6737.70	-631.57	-679.92	-607.07	39°53'59.002"N	104°44'51.643"W	0.00	
6913.00†	9.585	221.760	6836.30	-643.11	-692.34	-618.16	39°53'58.880"N	104°44'51.787"W	0.00	
7013.00†	9.585	221.760	6934.91	-654.65	-704.76	-629.25	39°53'58.759"N	104°44'51.931"W	0.00	
7056.81	9.585	221.760	6978.10	-659.70	-710.20	-634.11	39°53'58.705"N	104°44'51.994"W	0.00	End of Tangent (XS)
7113.00†	6.607	256.710	7033.76	-663.45	-714.44	-640.38	39°53'58.664"N	104°44'52.074"W	10.00	
7213.00†	10.648	322.983	7132.82	-656.54	-708.37	-651.57	39°53'58.725"N	104°44'52.217"W	10.00	
7313.00†	19.551	341.330	7229.32	-632.48	-685.08	-662.51	39°53'58.956"N	104°44'52.355"W	10.00	
7413.00†	29.159	348.186	7320.33	-592.01	-645.28	-672.88	39°53'59.350"N	104°44'52.484"W	10.00	
7513.00†	38.953	351.829	7403.09	-536.34	-590.18	-682.36	39°53'59.895"N	104°44'52.600"W	10.00	
7613.00†	48.820	354.187	7475.08	-467.18	-521.45	-690.66	39°54'00.575"N	104°44'52.699"W	10.00	
7713.00†	58.722	355.921	7534.11	-386.63	-441.18	-697.53	39°54'01.369"N	104°44'52.778"W	10.00	
7813.00†	68.643	357.322	7578.39	-297.12	-351.82	-702.76	39°54'02.253"N	104°44'52.835"W	10.00	
7913.00†	78.575	358.544	7606.57	-201.39	-256.06	-706.19	39°54'03.199"N	104°44'52.869"W	10.00	
8013.00†	88.511	359.682	7617.81	-102.33	-156.84	-707.72	39°54'04.180"N	104°44'52.878"W	10.00	
8027.94†	89.995	359.849	7618.00	-87.43	-141.90	-707.78	39°54'04.328"N	104°44'52.877"W	10.00	Niobrara A Chalk, Niobrara A Marl
8027.99	90.000	359.850	7618.00†	-87.38	-141.85	-707.78	39°54'04.328"N	104°44'52.877"W	10.00	End of 3D Arc (XS)
8113.00†	90.000	359.850	7618.00	-2.60	-56.84	-708.00	39°54'05.168"N	104°44'52.871"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION

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Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8213.00†	90.000	359.850	7618.00	97.12	43.16	-708.26	39°54'06.156"N	104°44'52.863"W	0.00	
8313.00†	90.000	359.850	7618.00	196.85	143.16	-708.53	39°54'07.145"N	104°44'52.856"W	0.00	
8413.00†	90.000	359.850	7618.00	296.58	243.16	-708.79	39°54'08.133"N	104°44'52.848"W	0.00	
8513.00†	90.000	359.850	7618.00	396.31	343.16	-709.05	39°54'09.121"N	104°44'52.841"W	0.00	
8613.00†	90.000	359.850	7618.00	496.03	443.16	-709.31	39°54'10.109"N	104°44'52.833"W	0.00	
8713.00†	90.000	359.850	7618.00	595.76	543.16	-709.57	39°54'11.097"N	104°44'52.825"W	0.00	
8813.00†	90.000	359.850	7618.00	695.49	643.16	-709.84	39°54'12.086"N	104°44'52.818"W	0.00	
8913.00†	90.000	359.850	7618.00	795.22	743.16	-710.10	39°54'13.074"N	104°44'52.810"W	0.00	
9013.00†	90.000	359.850	7618.00	894.94	843.16	-710.36	39°54'14.062"N	104°44'52.803"W	0.00	
9113.00†	90.000	359.850	7618.00	994.67	943.16	-710.62	39°54'15.050"N	104°44'52.795"W	0.00	
9213.00†	90.000	359.850	7618.00	1094.40	1043.16	-710.88	39°54'16.039"N	104°44'52.788"W	0.00	
9313.00†	90.000	359.850	7618.00	1194.13	1143.16	-711.14	39°54'17.027"N	104°44'52.780"W	0.00	
9413.00†	90.000	359.850	7618.00	1293.86	1243.16	-711.41	39°54'18.015"N	104°44'52.773"W	0.00	
9513.00†	90.000	359.850	7618.00	1393.58	1343.16	-711.67	39°54'19.003"N	104°44'52.765"W	0.00	
9613.00†	90.000	359.850	7618.00	1493.31	1443.16	-711.93	39°54'19.992"N	104°44'52.758"W	0.00	
9713.00†	90.000	359.850	7618.00	1593.04	1543.16	-712.19	39°54'20.980"N	104°44'52.750"W	0.00	
9813.00†	90.000	359.850	7618.00	1692.77	1643.16	-712.45	39°54'21.968"N	104°44'52.743"W	0.00	
9913.00†	90.000	359.850	7618.00	1792.49	1743.16	-712.72	39°54'22.956"N	104°44'52.735"W	0.00	
10013.00†	90.000	359.850	7618.00	1892.22	1843.15	-712.98	39°54'23.945"N	104°44'52.728"W	0.00	
10113.00†	90.000	359.850	7618.00	1991.95	1943.15	-713.24	39°54'24.933"N	104°44'52.720"W	0.00	
10213.00†	90.000	359.850	7618.00	2091.68	2043.15	-713.50	39°54'25.921"N	104°44'52.713"W	0.00	
10313.00†	90.000	359.850	7618.00	2191.40	2143.15	-713.76	39°54'26.909"N	104°44'52.705"W	0.00	
10413.00†	90.000	359.850	7618.00	2291.13	2243.15	-714.02	39°54'27.897"N	104°44'52.698"W	0.00	
10513.00†	90.000	359.850	7618.00	2390.86	2343.15	-714.29	39°54'28.886"N	104°44'52.690"W	0.00	
10613.00†	90.000	359.850	7618.00	2490.59	2443.15	-714.55	39°54'29.874"N	104°44'52.683"W	0.00	
10713.00†	90.000	359.850	7618.00	2590.31	2543.15	-714.81	39°54'30.862"N	104°44'52.675"W	0.00	
10813.00†	90.000	359.850	7618.00	2690.04	2643.15	-715.07	39°54'31.850"N	104°44'52.668"W	0.00	
10913.00†	90.000	359.850	7618.00	2789.77	2743.15	-715.33	39°54'32.839"N	104°44'52.660"W	0.00	
11013.00†	90.000	359.850	7618.00	2889.50	2843.15	-715.60	39°54'33.827"N	104°44'52.652"W	0.00	
11113.00†	90.000	359.850	7618.00	2989.22	2943.15	-715.86	39°54'34.815"N	104°44'52.645"W	0.00	



Planned Wellpath Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH DATA (189 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11213.00†	90.000	359.850	7618.00	3088.95	3043.15	-716.12	39°54'35.803"N	104°44'52.637"W	0.00	
11313.00†	90.000	359.850	7618.00	3188.68	3143.15	-716.38	39°54'36.792"N	104°44'52.630"W	0.00	
11413.00†	90.000	359.850	7618.00	3288.41	3243.15	-716.64	39°54'37.780"N	104°44'52.622"W	0.00	
11513.00†	90.000	359.850	7618.00	3388.14	3343.15	-716.90	39°54'38.768"N	104°44'52.615"W	0.00	
11613.00†	90.000	359.850	7618.00	3487.86	3443.15	-717.17	39°54'39.756"N	104°44'52.607"W	0.00	
11713.00†	90.000	359.850	7618.00	3587.59	3543.15	-717.43	39°54'40.744"N	104°44'52.600"W	0.00	
11813.00†	90.000	359.850	7618.00	3687.32	3643.15	-717.69	39°54'41.733"N	104°44'52.592"W	0.00	
11913.00†	90.000	359.850	7618.00	3787.05	3743.15	-717.95	39°54'42.721"N	104°44'52.585"W	0.00	
12013.00†	90.000	359.850	7618.00	3886.77	3843.15	-718.21	39°54'43.709"N	104°44'52.577"W	0.00	
12113.00†	90.000	359.850	7618.00	3986.50	3943.15	-718.48	39°54'44.697"N	104°44'52.570"W	0.00	
12213.00†	90.000	359.850	7618.00	4086.23	4043.15	-718.74	39°54'45.686"N	104°44'52.562"W	0.00	
12313.00†	90.000	359.850	7618.00	4185.96	4143.15	-719.00	39°54'46.674"N	104°44'52.555"W	0.00	
12413.00†	90.000	359.850	7618.00	4285.68	4243.15	-719.26	39°54'47.662"N	104°44'52.547"W	0.00	
12513.00†	90.000	359.850	7618.00	4385.41	4343.15	-719.52	39°54'48.650"N	104°44'52.540"W	0.00	
12613.00†	90.000	359.850	7618.00	4485.14	4443.15	-719.78	39°54'49.639"N	104°44'52.532"W	0.00	
12713.00†	90.000	359.850	7618.00	4584.87	4543.15	-720.05	39°54'50.627"N	104°44'52.525"W	0.00	
12813.00†	90.000	359.850	7618.00	4684.59	4643.15	-720.31	39°54'51.615"N	104°44'52.517"W	0.00	
12885.46†	90.000	359.850	7618.00	4756.85	4715.60	-720.50	39°54'52.331"N	104°44'52.512"W	0.00	Niobrara A Chalk, Niobrara A Marl
12913.00†	90.000	359.850	7618.00	4784.32	4743.14	-720.57	39°54'52.603"N	104°44'52.509"W	0.00	
13013.00†	90.000	359.850	7618.00	4884.05	4843.14	-720.83	39°54'53.591"N	104°44'52.502"W	0.00	
13113.00†	90.000	359.850	7618.00	4983.78	4943.14	-721.09	39°54'54.580"N	104°44'52.494"W	0.00	
13213.00†	90.000	359.850	7618.00	5083.50	5043.14	-721.36	39°54'55.568"N	104°44'52.487"W	0.00	
13313.00†	90.000	359.850	7618.00	5183.23	5143.14	-721.62	39°54'56.556"N	104°44'52.479"W	0.00	
13413.00†	90.000	359.850	7618.00	5282.96	5243.14	-721.88	39°54'57.544"N	104°44'52.472"W	0.00	
13513.00†	90.000	359.850	7618.00	5382.69	5343.14	-722.14	39°54'58.533"N	104°44'52.464"W	0.00	
13613.00†	90.000	359.850	7618.00	5482.42	5443.14	-722.40	39°54'59.521"N	104°44'52.457"W	0.00	
13713.00†	90.000	359.850	7618.00	5582.14	5543.14	-722.66	39°55'00.509"N	104°44'52.449"W	0.00	
13813.00†	90.000	359.850	7618.00	5681.87	5643.14	-722.93	39°55'01.497"N	104°44'52.442"W	0.00	
13913.00†	90.000	359.850	7618.00	5781.60	5743.14	-723.19	39°55'02.486"N	104°44'52.434"W	0.00	
14013.00†	90.000	359.850	7618.00	5881.33	5843.14	-723.45	39°55'03.474"N	104°44'52.427"W	0.00	



Planned Wellpath Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH DATA (189 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
14113.00†	90.000	359.850	7618.00	5981.05	5943.14	-723.71	39°55'04.462"N	104°44'52.419"W	0.00	
14213.00†	90.000	359.850	7618.00	6080.78	6043.14	-723.97	39°55'05.450"N	104°44'52.412"W	0.00	
14313.00†	90.000	359.850	7618.00	6180.51	6143.14	-724.24	39°55'06.438"N	104°44'52.404"W	0.00	
14413.00†	90.000	359.850	7618.00	6280.24	6243.14	-724.50	39°55'07.427"N	104°44'52.397"W	0.00	
14513.00†	90.000	359.850	7618.00	6379.96	6343.14	-724.76	39°55'08.415"N	104°44'52.389"W	0.00	
14613.00†	90.000	359.850	7618.00	6479.69	6443.14	-725.02	39°55'09.403"N	104°44'52.382"W	0.00	
14713.00†	90.000	359.850	7618.00	6579.42	6543.14	-725.28	39°55'10.391"N	104°44'52.374"W	0.00	
14813.00†	90.000	359.850	7618.00	6679.15	6643.14	-725.54	39°55'11.380"N	104°44'52.367"W	0.00	
14913.00†	90.000	359.850	7618.00	6778.87	6743.14	-725.81	39°55'12.368"N	104°44'52.359"W	0.00	
15013.00†	90.000	359.850	7618.00	6878.60	6843.14	-726.07	39°55'13.356"N	104°44'52.351"W	0.00	
15113.00†	90.000	359.850	7618.00	6978.33	6943.14	-726.33	39°55'14.344"N	104°44'52.344"W	0.00	
15213.00†	90.000	359.850	7618.00	7078.06	7043.14	-726.59	39°55'15.333"N	104°44'52.336"W	0.00	
15313.00†	90.000	359.850	7618.00	7177.79	7143.14	-726.85	39°55'16.321"N	104°44'52.329"W	0.00	
15413.00†	90.000	359.850	7618.00	7277.51	7243.14	-727.12	39°55'17.309"N	104°44'52.321"W	0.00	
15513.00†	90.000	359.850	7618.00	7377.24	7343.14	-727.38	39°55'18.297"N	104°44'52.314"W	0.00	
15613.00†	90.000	359.850	7618.00	7476.97	7443.14	-727.64	39°55'19.285"N	104°44'52.306"W	0.00	
15713.00†	90.000	359.850	7618.00	7576.70	7543.14	-727.90	39°55'20.274"N	104°44'52.299"W	0.00	
15813.00†	90.000	359.850	7618.00	7676.42	7643.14	-728.16	39°55'21.262"N	104°44'52.291"W	0.00	
15913.00†	90.000	359.850	7618.00	7776.15	7743.13	-728.42	39°55'22.250"N	104°44'52.284"W	0.00	
16013.00†	90.000	359.850	7618.00	7875.88	7843.13	-728.69	39°55'23.238"N	104°44'52.276"W	0.00	
16113.00†	90.000	359.850	7618.00	7975.61	7943.13	-728.95	39°55'24.227"N	104°44'52.269"W	0.00	
16213.00†	90.000	359.850	7618.00	8075.33	8043.13	-729.21	39°55'25.215"N	104°44'52.261"W	0.00	
16313.00†	90.000	359.850	7618.00	8175.06	8143.13	-729.47	39°55'26.203"N	104°44'52.254"W	0.00	
16413.00†	90.000	359.850	7618.00	8274.79	8243.13	-729.73	39°55'27.191"N	104°44'52.246"W	0.00	
16513.00†	90.000	359.850	7618.00	8374.52	8343.13	-730.00	39°55'28.180"N	104°44'52.239"W	0.00	
16613.00†	90.000	359.850	7618.00	8474.24	8443.13	-730.26	39°55'29.168"N	104°44'52.231"W	0.00	
16713.00†	90.000	359.850	7618.00	8573.97	8543.13	-730.52	39°55'30.156"N	104°44'52.224"W	0.00	
16813.00†	90.000	359.850	7618.00	8673.70	8643.13	-730.78	39°55'31.144"N	104°44'52.216"W	0.00	
16913.00†	90.000	359.850	7618.00	8773.43	8743.13	-731.04	39°55'32.132"N	104°44'52.208"W	0.00	
17013.00†	90.000	359.850	7618.00	8873.15	8843.13	-731.30	39°55'33.121"N	104°44'52.201"W	0.00	



Planned Wellpath Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH DATA (189 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
17113.00†	90.000	359.850	7618.00	8972.88	8943.13	-731.57	39°55'34.109"N	104°44'52.193"W	0.00	
17213.00†	90.000	359.850	7618.00	9072.61	9043.13	-731.83	39°55'35.097"N	104°44'52.186"W	0.00	
17313.00†	90.000	359.850	7618.00	9172.34	9143.13	-732.09	39°55'36.085"N	104°44'52.178"W	0.00	
17413.00†	90.000	359.850	7618.00	9272.07	9243.13	-732.35	39°55'37.074"N	104°44'52.171"W	0.00	
17513.00†	90.000	359.850	7618.00	9371.79	9343.13	-732.61	39°55'38.062"N	104°44'52.163"W	0.00	
17613.00†	90.000	359.850	7618.00	9471.52	9443.13	-732.88	39°55'39.050"N	104°44'52.156"W	0.00	
17713.00†	90.000	359.850	7618.00	9571.25	9543.13	-733.14	39°55'40.038"N	104°44'52.148"W	0.00	
17742.92†	90.000	359.850	7618.00	9601.09	9573.05	-733.22	39°55'40.334"N	104°44'52.146"W	0.00	Niobrara B Chalk
17742.92	90.000	359.850	7618.00 ²	9601.09	9573.05	-733.22	39°55'40.334"N	104°44'52.146"W	0.00	End of Tangent (XS)

HOLE & CASING SECTIONS

- Ref Wellbore: ACKARD NORTH 2-35-1NBH PWB Ref 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	0.00	0.00	-57.25	-51.12
8.5in Open Hole	1800.00	17742.92	15942.92	1794.69	7618.00	-57.25	-51.12	9573.05	-733.22



Planned Wellpath Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	-64.51	-85.17	3211594.77	1207829.42	39°54'05.040"N	104°44'44.880"W	polygon
SEC.35-T01S-R66W		0.00	-64.51	-85.17	3211594.77	1207829.42	39°54'05.040"N	104°44'44.880"W	polygon
2) ACKARD NORTH 2-35-1NBH BHL (355'FNL & 1272'FWL, SEC.35)	17742.92	7618.00	9573.05	-733.22	3210946.74	1217466.72	39°55'40.334"N	104°44'52.146"W	point
1) ACKARD NORTH 2-35-1NBH EP (460'FSL & 1272'FWL, SEC.02)	8027.99	7618.00	-141.85	-707.78	3210972.17	1207752.08	39°54'04.328"N	104°44'52.877"W	point
SEC.02/35-T01S/02S-R66W 460'SETBACK		7855.00	-64.51	-85.17	3211594.77	1207829.42	39°54'05.040"N	104°44'44.880"W	polygon

SURVEY PROGRAM -

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



Planned Wellpath Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
500.00	0.000	221.760	500.00	Fox Hills
5101.41	9.585	221.760	5050.00	Sussex / Shannon
8027.94	89.995	359.849	7618.00	Niobrara A Chalk, Niobrara A Marl
12885.46	90.000	359.850	7618.00	Niobrara A Chalk, Niobrara A Marl
17742.92	90.000	359.850	7618.00	Niobrara B Chalk



Clearance Report

ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.1
North Reference	Grid	User	Bushjamh
Scale	0.999975	Report Generated	11/3/2017 at 8:07:05 AM
Convergence at slot	0.49° East	Database/Source file	Denver/ACKARD_NORTH_2-35-1NBH_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	0.10	44.98	3211679.94	1207893.93	39°54'05.670"N	104°44'43.780"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#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'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 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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 2-35-1NBH PWB Ref 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	0.00	0.00	-57.25	-51.12
8.5in Open Hole	1800.00	17742.92	15942.92	1794.69	7618.00	-57.25	-51.12	9573.05	-733.22

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

CALCULATION RANGE & CUTOFF

From: 13.00ft MD	To: 17742.92ft 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	17400.50	3351.16	17400.50	17400.50	0.32	17400.50	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	14.95	17713.00	17742.92	0.69	17742.92	FAIL
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	15.01	1100.00	17742.92	0.86	17742.92	FAIL
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	29.99	1100.00	17742.92	0.92	17742.92	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	29.97	813.00	17742.92	1.22	17742.92	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	45.03	1100.00	17742.92	1.35	17742.92	PASS
SEC.35-T01S-R66W	SLOT#02 EX CHAMPLIN 117 AMOCO G #5 (1980'FNL & 660'FWL, SEC.35,8340, PR)	CHAMPLIN 117 AMOCO G#5	CHAMPLIN 117 AMOCO G#5 AWB	CHAMPLIN 117 AMOCO G#5 AWP	16075.50	620.09	16075.50	16113.00	1.37	16113.00	PASS
SEC.02-T03S-R66W	SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02)	ACKARD NORTH 2-35-1CDH	ACKARD NORTH 2-35-1CDH PWB	ACKARD NORTH 2-35-1CDH PWP (REV-A.0)	13.00	44.98	17713.00	17742.92	1.46	17742.92	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	17452.49	743.35	17452.49	17452.49	1.50	17452.49	PASS
SEC.35-T01S-R66W	SLOT#04 EX CHAMPLIN 117 G#4 (660'FSL & 660'FWL, SEC.35,8350, PR)	CHAMPLIN 117 G#4	CHAMPLIN 117 G#4 AWB	CHAMPLIN 117 G#4 AWP	13466.76	572.33	13466.76	13513.00	1.53	13513.00	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	14778.05	738.63	14778.05	14778.05	1.79	14778.05	PASS
SEC.02-T02S-R66W	SLOT#02 EX HSR ACKARD #5-2 (1980'FNL & 656'FWL, SEC.02,8400, PR)	HSR ACKARD #5-2	HSR ACKARD #5-2 AWB	HSR ACKARD #5-2 AWP	10861.00	589.64	10861.00	10922.20	1.98	10922.20	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	60.01	17713.00	17742.92	2.02	17742.92	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	12213.00	786.59	12213.00	12213.00	2.34	12213.00	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	75.00	1100.00	17742.92	2.55	17742.92	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	9519.29	760.94	9519.29	9513.00	2.94	9513.00	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	17742.92	1260.71	17742.92	17742.92	3.14	17742.92	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	90.01	1100.00	17742.92	3.22	17742.92	PASS
SEC.11-T02S-R66W	SLOT#01 EX HSR-VAN SCHAACK #4-11 (623'FNL & 696'FWL, SEC.11, 8374, PR)	HSR-VAN SCHAACK #4-11	HSR-VAN SCHAACK #4-11 AWB	HSR-VAN SCHAACK #4-11 AWP	7208.00	803.04	7208.00	7363.04	3.42	7363.04	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	17742.92	1182.10	17742.92	17742.92	3.46	17742.92	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	104.96	1100.00	17742.92	3.75	17742.92	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	119.97	1100.00	17742.92	3.92	17742.92	PASS
SEC.35-T01S-R66W	SLOT#03 EX BOX ELDER FARMS 32-35#4 (1980'FNL & 1980'FEL, SEC.35, 8312 PR)	BOX ELDER FARMS 32-35#4	BOX ELDER FARMS 32-35#4 AWB	BOX ELDER FARMS 32-35#4 AWP	16138.00	2052.23	16138.00	16261.33	4.50	16261.33	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	135.01	1100.00	17742.92	4.56	17742.92	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	149.96	1100.00	17742.92	5.23	17742.92	PASS



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

CALCULATION RANGE & CUTOFF

From: 13.00ft MD	To: 17742.92ft 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.26-T01S-R66W	SLOT#02 EX MAUL #2 (859'FSL & 1800'FEL, SEC.26,8280, PR)	MAUL #2	MAUL #2 AWB	MAUL #2 AWP	17742.92	2567.17	17742.92	17742.92	5.39	17742.92	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	13510.50	2046.86	13510.50	13660.35	5.44	13660.35	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	164.98	913.00	17742.92	5.76	17742.92	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	179.99	813.00	17742.92	5.92	17742.92	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	10600.50	1913.70	10600.50	10995.68	6.49	10995.68	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	17742.92	3526.82	17742.92	17742.92	7.10	17742.92	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	14775.50	3350.09	14775.50	15213.00	8.01	15213.00	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	8232.23	1933.37	8232.23	8865.50	8.07	8865.50	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	1814.08	1100.00	7359.00	8.77	7359.00	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	12188.00	3373.14	12188.00	12765.13	9.87	12765.13	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	10850.50	4649.22	10850.50	12165.66	14.92	12165.66	PASS



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	9237.21	2618.84	15.83	9601.28	25.40	390.23	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

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

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

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

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

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

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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#03 ACKARD NORTH 2-35-1NBH (600'FSL & 1965'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	-0.05	-14.95	-90.21	14.95	1.40	23.59	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	-0.05	-14.95	-90.21	14.95	1.72	15.37	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	-0.05	-14.95	-90.21	14.95	2.29	9.50	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	-0.05	-14.95	-90.21	14.95	2.89	6.76	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	-0.05	-14.95	-90.21	14.95	3.51	5.23	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	-0.05	-14.95	-90.21	14.95	4.13	4.25	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	-0.05	-14.95	-90.21	14.95	4.75	3.58	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	-0.05	-14.95	-90.21	14.95	5.38	3.09	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	-0.05	-14.95	-90.21	14.95	6.00	2.72	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	-0.05	-14.95	-90.21	14.95	6.63	2.43	PASS
1013.00†	1013.00	0.00	0.00	1012.94	1012.94	-0.07	-14.98	-90.27	14.98	7.25	2.20	PASS
1100.00	1100.00	0.00	0.00	1099.54	1099.52	-1.06	-16.36	-93.72	16.40	7.86	2.21	PASS
1113.00†	1113.00	-0.02	-0.02	1112.47	1112.44	-1.34	-16.75	43.72	16.79	7.96	2.23	PASS
1213.00†	1212.97	-1.66	-1.48	1211.84	1211.65	-4.63	-21.31	39.66	20.09	8.94	2.37	PASS
1313.00†	1312.80	-5.90	-5.27	1311.09	1310.48	-9.91	-28.65	38.33	23.83	10.03	2.50	PASS
1413.00†	1412.38	-12.74	-11.38	1410.20	1408.80	-17.18	-38.75	38.69	27.96	11.04	2.65	PASS
1513.00†	1511.57	-22.17	-19.79	1509.17	1506.49	-26.42	-51.58	40.08	32.47	11.97	2.83	PASS
1579.26	1577.03	-29.83	-26.64	1574.66	1570.82	-33.61	-61.58	41.35	35.69	12.55	2.97	PASS
1613.00†	1610.30	-34.02	-30.38	1608.10	1603.55	-37.60	-67.12	41.91	37.53	12.78	3.07	PASS
1713.00†	1708.90	-46.45	-41.47	1707.93	1701.22	-49.67	-83.89	43.11	43.23	13.44	3.36	PASS
1813.00†	1807.50	-58.87	-52.56	1807.77	1798.89	-61.74	-100.66	44.04	48.95	14.06	3.61	PASS
1913.00†	1906.11	-71.29	-63.65	1907.60	1896.56	-73.80	-117.43	44.76	54.68	14.83	3.82	PASS
2013.00†	2004.71	-83.71	-74.74	2007.43	1994.24	-85.87	-134.20	45.36	60.41	15.64	4.00	PASS
2113.00†	2103.32	-96.13	-85.83	2107.27	2091.91	-97.94	-150.97	45.84	66.15	16.47	4.15	PASS
2213.00†	2201.92	-108.55	-96.92	2207.10	2189.58	-110.01	-167.73	46.25	71.89	17.34	4.28	PASS
2313.00†	2300.52	-120.97	-108.01	2306.93	2287.26	-122.07	-184.50	46.60	77.64	18.23	4.39	PASS
2413.00†	2399.13	-133.39	-119.10	2406.77	2384.93	-134.14	-201.27	46.91	83.39	19.14	4.49	PASS
2513.00†	2497.73	-145.81	-130.19	2506.60	2482.60	-146.21	-218.04	47.17	89.14	20.06	4.57	PASS
2613.00†	2596.34	-158.23	-141.28	2606.44	2580.27	-158.28	-234.81	47.40	94.89	21.00	4.64	PASS
2713.00†	2694.94	-170.66	-152.37	2706.27	2677.95	-170.35	-251.57	47.60	100.65	21.96	4.70	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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#03 ACKARD NORTH 2-35-1NBH (600'FSL & 1965'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†	2793.54	-183.08	-163.46	2806.10	2775.62	-182.41	-268.34	47.79	106.40	22.92	4.76	PASS
2913.00†	2892.15	-195.50	-174.55	2905.94	2873.29	-194.48	-285.11	47.95	112.16	23.89	4.81	PASS
3013.00†	2990.75	-207.92	-185.64	3005.77	2970.97	-206.55	-301.88	48.10	117.92	24.87	4.85	PASS
3113.00†	3089.35	-220.34	-196.73	3105.60	3068.64	-218.62	-318.65	48.23	123.67	25.86	4.89	PASS
3213.00†	3187.96	-232.76	-207.82	3205.44	3166.31	-230.68	-335.41	48.35	129.43	26.85	4.92	PASS
3313.00†	3286.56	-245.18	-218.91	3305.27	3263.98	-242.75	-352.18	48.47	135.19	27.85	4.95	PASS
3413.00†	3385.17	-257.60	-230.00	3405.11	3361.66	-254.82	-368.95	48.57	140.95	28.85	4.98	PASS
3513.00†	3483.77	-270.02	-241.09	3504.94	3459.33	-266.89	-385.72	48.66	146.71	29.86	5.01	PASS
3613.00†	3582.37	-282.44	-252.18	3604.77	3557.00	-278.96	-402.49	48.75	152.47	30.88	5.03	PASS
3713.00†	3680.98	-294.87	-263.27	3704.61	3654.67	-291.02	-419.25	48.83	158.23	31.89	5.05	PASS
3813.00†	3779.58	-307.29	-274.36	3804.44	3752.35	-303.09	-436.02	48.91	163.99	32.91	5.07	PASS
3913.00†	3878.19	-319.71	-285.45	3904.27	3850.02	-315.16	-452.79	48.98	169.75	33.93	5.09	PASS
4013.00†	3976.79	-332.13	-296.54	4004.11	3947.69	-327.23	-469.56	49.04	175.51	34.96	5.10	PASS
4113.00†	4075.39	-344.55	-307.64	4103.94	4045.37	-339.29	-486.33	49.10	181.27	35.99	5.12	PASS
4213.00†	4174.00	-356.97	-318.73	4203.77	4143.04	-351.36	-503.10	49.16	187.04	37.02	5.13	PASS
4313.00†	4272.60	-369.39	-329.82	4303.61	4240.71	-363.43	-519.86	49.21	192.80	38.05	5.14	PASS
4413.00†	4371.21	-381.81	-340.91	4403.44	4338.38	-375.50	-536.63	49.27	198.56	39.08	5.16	PASS
4513.00†	4469.81	-394.23	-352.00	4503.28	4436.06	-387.56	-553.40	49.31	204.32	40.12	5.17	PASS
4613.00†	4568.41	-406.65	-363.09	4603.11	4533.73	-399.63	-570.17	49.36	210.08	41.15	5.18	PASS
4713.00†	4667.02	-419.08	-374.18	4702.94	4631.40	-411.70	-586.94	49.40	215.85	42.19	5.19	PASS
4813.00†	4765.62	-431.50	-385.27	4802.78	4729.08	-423.77	-603.70	49.44	221.61	43.23	5.19	PASS
4913.00†	4864.22	-443.92	-396.36	4902.61	4826.75	-435.84	-620.47	49.48	227.37	44.27	5.20	PASS
5013.00†	4962.83	-456.34	-407.45	5002.44	4924.42	-447.90	-637.24	49.52	233.13	45.32	5.21	PASS
5113.00†	5061.43	-468.76	-418.54	5102.28	5022.09	-459.97	-654.01	49.55	238.90	46.36	5.22	PASS
5213.00†	5160.04	-481.18	-429.63	5202.11	5119.77	-472.04	-670.78	49.59	244.66	47.40	5.22	PASS
5313.00†	5258.64	-493.60	-440.72	5301.95	5217.44	-484.11	-687.54	49.62	250.42	48.45	5.23	PASS
5413.00†	5357.24	-506.02	-451.81	5401.78	5315.11	-496.17	-704.31	49.65	256.18	49.50	5.24	PASS
5513.00†	5455.85	-518.44	-462.90	5501.61	5412.78	-508.24	-721.08	49.68	261.95	50.54	5.24	PASS
5613.00†	5554.45	-530.86	-473.99	5601.45	5510.46	-520.31	-737.85	49.71	267.71	51.59	5.25	PASS
5713.00†	5653.06	-543.29	-485.08	5701.28	5608.13	-532.38	-754.62	49.73	273.47	52.64	5.25	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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#03 ACKARD NORTH 2-35-1NBH (600'FSL & 1965'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†	5751.66	-555.71	-496.17	5801.11	5705.80	-544.45	-771.38	49.76	279.24	53.69	5.26	PASS
5913.00†	5850.26	-568.13	-507.26	5900.95	5803.48	-556.51	-788.15	49.78	285.00	54.74	5.26	PASS
6013.00†	5948.87	-580.55	-518.35	6000.78	5901.15	-568.58	-804.92	49.81	290.76	55.79	5.27	PASS
6113.00†	6047.47	-592.97	-529.44	6100.62	5998.82	-580.65	-821.69	49.83	296.53	56.84	5.27	PASS
6213.00†	6146.08	-605.39	-540.53	6200.45	6096.49	-592.72	-838.46	49.85	302.29	57.89	5.27	PASS
6313.00†	6244.68	-617.81	-551.62	6300.28	6194.17	-604.78	-855.22	49.87	308.05	58.94	5.28	PASS
6413.00†	6343.28	-630.23	-562.71	6400.12	6291.84	-616.85	-871.99	49.89	313.82	60.00	5.28	PASS
6513.00†	6441.89	-642.65	-573.80	6499.95	6389.51	-628.92	-888.76	49.91	319.58	61.05	5.28	PASS
6613.00†	6540.49	-655.07	-584.89	6599.78	6487.19	-640.99	-905.53	49.93	325.34	62.10	5.29	PASS
6713.00†	6639.09	-667.50	-595.98	6699.62	6584.86	-653.05	-922.30	49.95	331.11	63.16	5.29	PASS
6813.00†	6737.70	-679.92	-607.07	6799.45	6682.53	-665.12	-939.07	49.97	336.87	64.21	5.29	PASS
6913.00†	6836.30	-692.34	-618.16	6899.29	6780.20	-677.19	-955.83	49.98	342.64	65.27	5.30	PASS
7013.00†	6934.91	-704.76	-629.25	6999.12	6877.88	-689.26	-972.60	50.00	348.40	66.32	5.30	PASS
7056.81	6978.10	-710.20	-634.11	7042.85	6920.66	-694.54	-979.95	50.01	350.92	66.78	5.30	PASS
7113.00†	7033.76	-714.44	-640.38	7098.87	6975.47	-701.32	-989.36	15.25	354.06	67.09	5.32	PASS
7213.00†	7132.82	-708.37	-651.57	7197.03	7071.52	-713.00	-1005.85	-52.74	359.57	66.43	5.46	PASS
7313.00†	7229.32	-685.08	-662.51	7296.65	7169.58	-713.89	-1022.71	-73.63	366.25	65.19	5.67	PASS
7413.00†	7320.33	-645.28	-672.88	7400.89	7270.70	-696.39	-1040.15	-82.89	374.11	63.94	5.90	PASS
7513.00†	7403.09	-590.18	-682.36	7510.26	7371.58	-658.39	-1057.60	-88.68	382.68	62.58	6.17	PASS
7613.00†	7475.08	-521.45	-690.66	7625.10	7467.82	-598.37	-1074.31	-92.84	391.35	61.27	6.45	PASS
7713.00†	7534.11	-441.18	-697.53	7745.44	7553.89	-515.94	-1089.33	-95.93	399.35	59.98	6.73	PASS
7813.00†	7578.39	-351.82	-702.76	7870.82	7623.49	-412.68	-1101.57	-98.14	405.94	58.70	6.99	PASS
7913.00†	7606.57	-256.06	-706.19	8000.19	7670.37	-292.68	-1109.95	-99.51	410.40	57.41	7.22	PASS
8013.00†	7617.81	-156.84	-707.72	8131.91	7689.66	-162.72	-1113.60	-100.05	412.24	56.14	7.42	PASS
8027.99	7618.00	-141.85	-707.78	8151.73	7690.00	-142.91	-1113.71	-100.06	412.27	55.94	7.45	PASS
8113.00†	7618.00	-56.84	-708.00	8236.74	7690.00	-57.90	-1113.94	-100.06	412.27	55.36	7.53	PASS
8213.00†	7618.00	43.16	-708.26	8336.74	7690.00	42.10	-1114.20	-100.06	412.27	55.30	7.54	PASS
8313.00†	7618.00	143.16	-708.53	8436.74	7690.00	142.10	-1114.46	-100.06	412.27	55.95	7.45	PASS
8413.00†	7618.00	243.16	-708.79	8536.74	7690.00	242.10	-1114.72	-100.06	412.27	57.27	7.28	PASS
8513.00†	7618.00	343.16	-709.05	8636.74	7690.00	342.10	-1114.98	-100.06	412.27	59.22	7.03	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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#03 ACKARD NORTH 2-35-1NBH (600'FSL & 1965'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†	7618.00	443.16	-709.31	8736.74	7690.00	442.10	-1115.24	-100.06	412.27	61.74	6.74	PASS
8713.00†	7618.00	543.16	-709.57	8836.74	7690.00	542.10	-1115.50	-100.06	412.27	63.69	6.53	PASS
8813.00†	7618.00	643.16	-709.84	8936.74	7690.00	642.10	-1115.76	-100.06	412.27	68.20	6.10	PASS
8913.00†	7618.00	743.16	-710.10	9036.74	7690.00	742.10	-1116.02	-100.06	412.26	72.01	5.77	PASS
9013.00†	7618.00	843.16	-710.36	9136.74	7690.00	842.10	-1116.29	-100.06	412.26	76.14	5.46	PASS
9113.00†	7618.00	943.16	-710.62	9236.74	7690.00	942.10	-1116.55	-100.06	412.26	80.53	5.16	PASS
9213.00†	7618.00	1043.16	-710.88	9336.74	7690.00	1042.10	-1116.81	-100.06	412.26	85.15	4.87	PASS
9313.00†	7618.00	1143.16	-711.14	9436.74	7690.00	1142.10	-1117.07	-100.06	412.26	89.96	4.61	PASS
9413.00†	7618.00	1243.16	-711.41	9536.74	7690.00	1242.10	-1117.33	-100.06	412.26	94.92	4.37	PASS
9513.00†	7618.00	1343.16	-711.67	9636.74	7690.00	1342.10	-1117.59	-100.06	412.26	100.02	4.14	PASS
9613.00†	7618.00	1443.16	-711.93	9736.74	7690.00	1442.10	-1117.85	-100.06	412.26	105.24	3.94	PASS
9713.00†	7618.00	1543.16	-712.19	9836.74	7690.00	1542.10	-1118.11	-100.06	412.26	110.56	3.75	PASS
9813.00†	7618.00	1643.16	-712.45	9936.74	7690.00	1642.10	-1118.38	-100.06	412.26	115.96	3.57	PASS
9913.00†	7618.00	1743.16	-712.72	10036.74	7690.00	1742.09	-1118.64	-100.06	412.26	121.44	3.41	PASS
10013.00†	7618.00	1843.15	-712.98	10136.74	7690.00	1842.09	-1118.90	-100.06	412.26	126.98	3.26	PASS
10113.00†	7618.00	1943.15	-713.24	10236.74	7690.00	1942.09	-1119.16	-100.06	412.26	132.57	3.12	PASS
10213.00†	7618.00	2043.15	-713.50	10336.74	7690.00	2042.09	-1119.42	-100.06	412.26	138.22	2.99	PASS
10313.00†	7618.00	2143.15	-713.76	10436.74	7690.00	2142.09	-1119.68	-100.06	412.26	143.91	2.87	PASS
10413.00†	7618.00	2243.15	-714.02	10536.74	7690.00	2242.09	-1119.94	-100.06	412.26	149.64	2.76	PASS
10513.00†	7618.00	2343.15	-714.29	10636.74	7690.00	2342.09	-1120.20	-100.06	412.26	155.41	2.66	PASS
10613.00†	7618.00	2443.15	-714.55	10736.74	7690.00	2442.09	-1120.47	-100.06	412.25	161.20	2.56	PASS
10713.00†	7618.00	2543.15	-714.81	10836.74	7690.00	2542.09	-1120.73	-100.06	412.25	167.02	2.47	PASS
10813.00†	7618.00	2643.15	-715.07	10936.74	7690.00	2642.09	-1120.99	-100.06	412.25	172.87	2.39	PASS
10913.00†	7618.00	2743.15	-715.33	11036.74	7690.00	2742.09	-1121.25	-100.06	412.25	178.74	2.31	PASS
11013.00†	7618.00	2843.15	-715.60	11136.74	7690.00	2842.09	-1121.51	-100.06	412.25	184.63	2.24	PASS
11113.00†	7618.00	2943.15	-715.86	11236.74	7690.00	2942.09	-1121.77	-100.06	412.25	190.53	2.17	PASS
11213.00†	7618.00	3043.15	-716.12	11336.74	7690.00	3042.09	-1122.03	-100.06	412.25	196.46	2.10	PASS
11313.00†	7618.00	3143.15	-716.38	11436.74	7690.00	3142.09	-1122.29	-100.06	412.25	202.41	2.04	PASS
11413.00†	7618.00	3243.15	-716.64	11536.74	7690.00	3242.09	-1122.56	-100.06	412.25	208.35	1.98	PASS
11513.00†	7618.00	3343.15	-716.90	11636.74	7690.00	3342.09	-1122.82	-100.06	412.25	214.32	1.93	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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#03 ACKARD NORTH 2-35-1NBH (600'FSL & 1965'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†	7618.00	3443.15	-717.17	11736.74	7690.00	3442.09	-1123.08	-100.06	412.25	220.29	1.87	PASS
11713.00†	7618.00	3543.15	-717.43	11836.74	7690.00	3542.09	-1123.34	-100.06	412.25	226.28	1.82	PASS
11813.00†	7618.00	3643.15	-717.69	11936.74	7690.00	3642.09	-1123.60	-100.06	412.25	232.28	1.78	PASS
11913.00†	7618.00	3743.15	-717.95	12036.74	7690.00	3742.09	-1123.86	-100.06	412.25	238.28	1.73	PASS
12013.00†	7618.00	3843.15	-718.21	12136.74	7690.00	3842.09	-1124.12	-100.06	412.25	244.30	1.69	PASS
12113.00†	7618.00	3943.15	-718.48	12236.74	7690.00	3942.09	-1124.38	-100.06	412.25	250.32	1.65	PASS
12213.00†	7618.00	4043.15	-718.74	12336.74	7690.00	4042.09	-1124.65	-100.06	412.25	256.35	1.61	PASS
12313.00†	7618.00	4143.15	-719.00	12436.74	7690.00	4142.09	-1124.91	-100.06	412.25	262.39	1.57	PASS
12413.00†	7618.00	4243.15	-719.26	12536.74	7690.00	4242.09	-1125.17	-100.06	412.24	268.43	1.54	PASS
12513.00†	7618.00	4343.15	-719.52	12636.74	7690.00	4342.09	-1125.43	-100.06	412.24	274.48	1.50	PASS
12613.00†	7618.00	4443.15	-719.78	12736.74	7690.00	4442.09	-1125.69	-100.06	412.24	280.54	1.47	PASS
12713.00†	7618.00	4543.15	-720.05	12836.74	7690.00	4542.09	-1125.95	-100.06	412.24	286.60	1.44	PASS
12813.00†	7618.00	4643.15	-720.31	12936.74	7690.00	4642.08	-1126.21	-100.06	412.24	292.66	1.41	PASS
12913.00†	7618.00	4743.14	-720.57	13036.74	7690.00	4742.08	-1126.47	-100.06	412.24	298.73	1.38	PASS
13013.00†	7618.00	4843.14	-720.83	13136.74	7690.00	4842.08	-1126.74	-100.06	412.24	304.81	1.35	PASS
13113.00†	7618.00	4943.14	-721.09	13236.74	7690.00	4942.08	-1127.00	-100.06	412.24	310.89	1.33	PASS
13213.00†	7618.00	5043.14	-721.36	13336.74	7690.00	5042.08	-1127.26	-100.06	412.24	316.97	1.30	PASS
13313.00†	7618.00	5143.14	-721.62	13436.74	7690.00	5142.08	-1127.52	-100.06	412.24	323.05	1.28	PASS
13413.00†	7618.00	5243.14	-721.88	13536.74	7690.00	5242.08	-1127.78	-100.06	412.24	329.14	1.25	PASS
13513.00†	7618.00	5343.14	-722.14	13636.74	7690.00	5342.08	-1128.04	-100.06	412.24	335.23	1.23	PASS
13613.00†	7618.00	5443.14	-722.40	13736.74	7690.00	5442.08	-1128.30	-100.06	412.24	341.33	1.21	PASS
13713.00†	7618.00	5543.14	-722.66	13836.74	7690.00	5542.08	-1128.56	-100.06	412.24	347.43	1.19	PASS
13813.00†	7618.00	5643.14	-722.93	13936.74	7690.00	5642.08	-1128.82	-100.06	412.24	353.53	1.17	PASS
13913.00†	7618.00	5743.14	-723.19	14036.74	7690.00	5742.08	-1129.09	-100.06	412.24	359.63	1.15	PASS
14013.00†	7618.00	5843.14	-723.45	14136.74	7690.00	5842.08	-1129.35	-100.06	412.24	365.74	1.13	PASS
14113.00†	7618.00	5943.14	-723.71	14236.74	7690.00	5942.08	-1129.61	-100.06	412.23	371.84	1.11	PASS
14213.00†	7618.00	6043.14	-723.97	14336.74	7690.00	6042.08	-1129.87	-100.06	412.23	377.95	1.09	PASS
14313.00†	7618.00	6143.14	-724.24	14436.74	7690.00	6142.08	-1130.13	-100.06	412.23	384.07	1.07	PASS
14413.00†	7618.00	6243.14	-724.50	14536.74	7690.00	6242.08	-1130.39	-100.06	412.23	390.18	1.06	PASS
14513.00†	7618.00	6343.14	-724.76	14636.74	7690.00	6342.08	-1130.65	-100.06	412.23	396.30	1.04	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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#03 ACKARD NORTH 2-35-1NBH (600'FSL & 1965'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†	7618.00	6443.14	-725.02	14736.74	7690.00	6442.08	-1130.91	-100.06	412.23	402.41	1.02	PASS
14713.00†	7618.00	6543.14	-725.28	14836.74	7690.00	6542.08	-1131.18	-100.06	412.23	408.53	1.01	PASS
14813.00†	7618.00	6643.14	-725.54	14936.74	7690.00	6642.08	-1131.44	-100.06	412.23	414.66	0.99	FAIL
14913.00†	7618.00	6743.14	-725.81	15036.74	7690.00	6742.08	-1131.70	-100.06	412.23	420.78	0.98	FAIL
15013.00†	7618.00	6843.14	-726.07	15136.74	7690.00	6842.08	-1131.96	-100.06	412.23	426.90	0.97	FAIL
15113.00†	7618.00	6943.14	-726.33	15236.74	7690.00	6942.08	-1132.22	-100.06	412.23	433.03	0.95	FAIL
15213.00†	7618.00	7043.14	-726.59	15336.74	7690.00	7042.08	-1132.48	-100.06	412.23	439.16	0.94	FAIL
15313.00†	7618.00	7143.14	-726.85	15436.74	7690.00	7142.08	-1132.74	-100.06	412.23	445.29	0.93	FAIL
15413.00†	7618.00	7243.14	-727.12	15536.74	7690.00	7242.08	-1133.00	-100.06	412.23	451.42	0.91	FAIL
15513.00†	7618.00	7343.14	-727.38	15636.74	7690.00	7342.08	-1133.27	-100.06	412.23	457.55	0.90	FAIL
15613.00†	7618.00	7443.14	-727.64	15736.74	7690.00	7442.08	-1133.53	-100.06	412.23	463.68	0.89	FAIL
15713.00†	7618.00	7543.14	-727.90	15836.74	7690.00	7542.08	-1133.79	-100.06	412.23	469.81	0.88	FAIL
15813.00†	7618.00	7643.14	-728.16	15936.74	7690.00	7642.07	-1134.05	-100.06	412.22	475.95	0.87	FAIL
15913.00†	7618.00	7743.13	-728.42	16036.74	7690.00	7742.07	-1134.31	-100.06	412.22	482.08	0.85	FAIL
16013.00†	7618.00	7843.13	-728.69	16136.74	7690.00	7842.07	-1134.57	-100.06	412.22	488.22	0.84	FAIL
16113.00†	7618.00	7943.13	-728.95	16236.74	7690.00	7942.07	-1134.83	-100.06	412.22	494.36	0.83	FAIL
16213.00†	7618.00	8043.13	-729.21	16336.74	7690.00	8042.07	-1135.09	-100.06	412.22	500.50	0.82	FAIL
16313.00†	7618.00	8143.13	-729.47	16436.74	7690.00	8142.07	-1135.36	-100.06	412.22	506.64	0.81	FAIL
16413.00†	7618.00	8243.13	-729.73	16536.74	7690.00	8242.07	-1135.62	-100.06	412.22	512.78	0.80	FAIL
16513.00†	7618.00	8343.13	-730.00	16636.74	7690.00	8342.07	-1135.88	-100.06	412.22	518.92	0.79	FAIL
16613.00†	7618.00	8443.13	-730.26	16736.74	7690.00	8442.07	-1136.14	-100.06	412.22	525.06	0.78	FAIL
16713.00†	7618.00	8543.13	-730.52	16836.74	7690.00	8542.07	-1136.40	-100.06	412.22	531.20	0.78	FAIL
16813.00†	7618.00	8643.13	-730.78	16936.74	7690.00	8642.07	-1136.66	-100.06	412.22	537.35	0.77	FAIL
16913.00†	7618.00	8743.13	-731.04	17036.74	7690.00	8742.07	-1136.92	-100.06	412.22	543.49	0.76	FAIL
17013.00†	7618.00	8843.13	-731.30	17136.74	7690.00	8842.07	-1137.18	-100.06	412.22	549.64	0.75	FAIL
17113.00†	7618.00	8943.13	-731.57	17236.74	7690.00	8942.07	-1137.45	-100.06	412.22	555.78	0.74	FAIL
17213.00†	7618.00	9043.13	-731.83	17336.74	7690.00	9042.07	-1137.71	-100.06	412.22	561.93	0.73	FAIL
17313.00†	7618.00	9143.13	-732.09	17436.74	7690.00	9142.07	-1137.97	-100.06	412.22	568.08	0.73	FAIL
17413.00†	7618.00	9243.13	-732.35	17536.74	7690.00	9242.07	-1138.23	-100.06	412.22	574.22	0.72	FAIL
17513.00†	7618.00	9343.13	-732.61	17636.74	7690.00	9342.07	-1138.49	-100.06	412.21	580.37	0.71	FAIL

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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#03 ACKARD NORTH 2-35-1NBH (600'FSL & 1965'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†	7618.00	9443.13	-732.88	17736.74	7690.00	9442.07	-1138.75	-100.06	412.21	586.52	0.70	FAIL
17713.00†	7618.00	9543.13	-733.14	17836.74	7690.00	9542.07	-1139.01	-100.06	412.21	592.67	0.70	FAIL
17742.92†	7618.00	9573.05	-733.22	17848.17	7690.00	9553.50	-1139.04	-100.06	412.63	595.84	0.69	FAIL

C-C Clearance Distance Cutoff: 1000.00 ft

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

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

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

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1791.29	-0.03	-9.12	-18.55	-34.84
8.5in Open Hole	1800.00	17864.18	16064.18	1791.29	7690.00	-18.55	-34.84	2916.77	-351.75

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	17864.18	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		ACKARD NORTH 2-35-1NBH PWB

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	0.02	15.01	89.93	15.01	1.40	23.68	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.02	15.01	89.93	15.01	1.72	15.50	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.02	15.01	89.93	15.01	2.28	9.59	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.02	15.01	89.93	15.01	2.89	6.82	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.02	15.01	89.93	15.01	3.50	5.27	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.02	15.01	89.93	15.01	4.12	4.28	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.02	15.01	89.93	15.01	4.74	3.61	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.02	15.01	89.93	15.01	5.36	3.11	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.02	15.01	89.93	15.01	5.99	2.74	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.02	15.01	89.93	15.01	6.61	2.44	PASS
1013.00†	1013.00	0.00	0.00	1013.00	1013.00	0.02	15.01	89.93	15.01	7.24	2.21	PASS
1100.00	1100.00	0.00	0.00	1100.00	1100.00	0.02	15.01	89.93	15.01	7.79	2.03	PASS
1113.00†	1113.00	-0.02	-0.02	1113.00	1113.00	0.02	15.01	-131.91	15.03	7.87	2.01	PASS
1213.00†	1212.97	-1.66	-1.48	1213.01	1213.01	-0.01	15.00	-137.47	16.57	8.55	2.04	PASS
1313.00†	1312.80	-5.90	-5.27	1313.26	1313.23	-2.06	14.18	-142.92	19.83	9.44	2.20	PASS
1413.00†	1412.38	-12.74	-11.38	1413.60	1413.40	-7.37	12.05	-144.66	24.06	10.39	2.42	PASS
1513.00†	1511.57	-22.17	-19.79	1514.00	1513.37	-15.94	8.62	-144.13	29.15	11.30	2.70	PASS
1579.26	1577.03	-29.83	-26.64	1580.51	1579.39	-23.40	5.64	-143.06	33.00	11.83	2.92	PASS
1613.00†	1610.30	-34.02	-30.38	1614.18	1612.77	-27.48	4.01	-142.57	35.09	12.05	3.05	PASS
1713.00†	1708.90	-46.45	-41.47	1713.98	1711.73	-39.55	-0.82	-141.41	41.32	12.72	3.40	PASS
1813.00†	1807.50	-58.87	-52.56	1813.78	1810.68	-51.63	-5.65	-140.55	47.57	13.35	3.71	PASS
1913.00†	1906.11	-71.29	-63.65	1913.59	1909.63	-63.70	-10.49	-139.89	53.82	14.10	3.97	PASS
2013.00†	2004.71	-83.71	-74.74	2013.39	2008.58	-75.77	-15.32	-139.37	60.08	14.89	4.19	PASS
2113.00†	2103.32	-96.13	-85.83	2113.19	2107.53	-87.85	-20.15	-138.95	66.34	15.70	4.38	PASS
2213.00†	2201.92	-108.55	-96.92	2213.00	2206.49	-99.92	-24.98	-138.60	72.60	16.54	4.54	PASS
2313.00†	2300.52	-120.97	-108.01	2312.80	2305.44	-112.00	-29.81	-138.31	78.87	17.39	4.69	PASS
2413.00†	2399.13	-133.39	-119.10	2412.60	2404.39	-124.07	-34.64	-138.05	85.13	18.25	4.81	PASS
2513.00†	2497.73	-145.81	-130.19	2512.40	2503.34	-136.15	-39.47	-137.84	91.40	19.13	4.92	PASS
2613.00†	2596.34	-158.23	-141.28	2612.21	2602.29	-148.22	-44.31	-137.65	97.67	20.02	5.02	PASS
2713.00†	2694.94	-170.66	-152.37	2712.01	2701.24	-160.30	-49.14	-137.48	103.95	20.92	5.11	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	2793.54	-183.08	-163.46	2811.81	2800.20	-172.37	-53.97	-137.34	110.22	21.82	5.19	PASS
2913.00†	2892.15	-195.50	-174.55	2911.61	2899.15	-184.45	-58.80	-137.21	116.49	22.74	5.26	PASS
3013.00†	2990.75	-207.92	-185.64	3011.42	2998.10	-196.52	-63.63	-137.09	122.76	23.66	5.32	PASS
3113.00†	3089.35	-220.34	-196.73	3111.22	3097.05	-208.60	-68.46	-136.98	129.04	24.58	5.38	PASS
3213.00†	3187.96	-232.76	-207.82	3211.02	3196.00	-220.67	-73.29	-136.89	135.31	25.51	5.43	PASS
3313.00†	3286.56	-245.18	-218.91	3310.83	3294.95	-232.75	-78.13	-136.80	141.59	26.44	5.47	PASS
3413.00†	3385.17	-257.60	-230.00	3410.63	3393.91	-244.82	-82.96	-136.72	147.86	27.38	5.52	PASS
3513.00†	3483.77	-270.02	-241.09	3510.43	3492.86	-256.89	-87.79	-136.64	154.14	28.32	5.56	PASS
3613.00†	3582.37	-282.44	-252.18	3610.23	3591.81	-268.97	-92.62	-136.57	160.41	29.26	5.59	PASS
3713.00†	3680.98	-294.87	-263.27	3710.04	3690.76	-281.04	-97.45	-136.51	166.69	30.21	5.63	PASS
3813.00†	3779.58	-307.29	-274.36	3809.84	3789.71	-293.12	-102.28	-136.45	172.96	31.16	5.66	PASS
3913.00†	3878.19	-319.71	-285.45	3909.64	3888.66	-305.19	-107.11	-136.40	179.24	32.11	5.69	PASS
4013.00†	3976.79	-332.13	-296.54	4009.44	3987.62	-317.27	-111.94	-136.35	185.51	33.06	5.71	PASS
4113.00†	4075.39	-344.55	-307.64	4109.25	4086.57	-329.34	-116.78	-136.30	191.79	34.02	5.74	PASS
4213.00†	4174.00	-356.97	-318.73	4209.05	4185.52	-341.42	-121.61	-136.26	198.07	34.97	5.76	PASS
4313.00†	4272.60	-369.39	-329.82	4308.85	4284.47	-353.49	-126.44	-136.22	204.34	35.93	5.78	PASS
4413.00†	4371.21	-381.81	-340.91	4408.66	4383.42	-365.57	-131.27	-136.18	210.62	36.89	5.80	PASS
4513.00†	4469.81	-394.23	-352.00	4508.46	4482.38	-377.64	-136.10	-136.14	216.89	37.85	5.82	PASS
4613.00†	4568.41	-406.65	-363.09	4608.26	4581.33	-389.72	-140.93	-136.10	223.17	38.82	5.84	PASS
4713.00†	4667.02	-419.08	-374.18	4708.06	4680.28	-401.79	-145.76	-136.07	229.45	39.78	5.85	PASS
4813.00†	4765.62	-431.50	-385.27	4807.87	4779.23	-413.87	-150.60	-136.04	235.72	40.74	5.87	PASS
4913.00†	4864.22	-443.92	-396.36	4907.67	4878.18	-425.94	-155.43	-136.01	242.00	41.71	5.89	PASS
5013.00†	4962.83	-456.34	-407.45	5007.47	4977.13	-438.01	-160.26	-135.98	248.28	42.68	5.90	PASS
5113.00†	5061.43	-468.76	-418.54	5107.27	5076.09	-450.09	-165.09	-135.96	254.56	43.64	5.91	PASS
5213.00†	5160.04	-481.18	-429.63	5207.08	5175.04	-462.16	-169.92	-135.93	260.83	44.61	5.92	PASS
5313.00†	5258.64	-493.60	-440.72	5306.88	5273.99	-474.24	-174.75	-135.91	267.11	45.58	5.94	PASS
5413.00†	5357.24	-506.02	-451.81	5406.68	5372.94	-486.31	-179.58	-135.88	273.39	46.55	5.95	PASS
5513.00†	5455.85	-518.44	-462.90	5506.49	5471.89	-498.39	-184.42	-135.86	279.66	47.52	5.96	PASS
5613.00†	5554.45	-530.86	-473.99	5606.29	5570.84	-510.46	-189.25	-135.84	285.94	48.49	5.97	PASS
5713.00†	5653.06	-543.29	-485.08	5706.09	5669.80	-522.54	-194.08	-135.82	292.22	49.46	5.98	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	5751.66	-555.71	-496.17	5805.89	5768.75	-534.61	-198.91	-135.80	298.50	50.43	5.99	PASS
5913.00†	5850.26	-568.13	-507.26	5905.70	5867.70	-546.69	-203.74	-135.78	304.77	51.41	6.00	PASS
6013.00†	5948.87	-580.55	-518.35	6005.50	5966.65	-558.76	-208.57	-135.76	311.05	52.38	6.01	PASS
6113.00†	6047.47	-592.97	-529.44	6105.30	6065.60	-570.84	-213.40	-135.75	317.33	53.35	6.01	PASS
6213.00†	6146.08	-605.39	-540.53	6205.10	6164.55	-582.91	-218.24	-135.73	323.60	54.33	6.02	PASS
6313.00†	6244.68	-617.81	-551.62	6304.91	6263.51	-594.99	-223.07	-135.72	329.88	55.30	6.03	PASS
6413.00†	6343.28	-630.23	-562.71	6404.71	6362.46	-607.06	-227.90	-135.70	336.16	56.27	6.04	PASS
6513.00†	6441.89	-642.65	-573.80	6504.51	6461.41	-619.13	-232.73	-135.69	342.44	57.25	6.04	PASS
6613.00†	6540.49	-655.07	-584.89	6604.32	6560.36	-631.21	-237.56	-135.67	348.71	58.22	6.05	PASS
6713.00†	6639.09	-667.50	-595.98	6704.12	6659.31	-643.28	-242.39	-135.66	354.99	59.20	6.06	PASS
6813.00†	6737.70	-679.92	-607.07	6803.92	6758.27	-655.36	-247.22	-135.65	361.27	60.18	6.06	PASS
6913.00†	6836.30	-692.34	-618.16	6903.72	6857.22	-667.43	-252.06	-135.63	367.55	61.15	6.07	PASS
7013.00†	6934.91	-704.76	-629.25	7003.53	6956.17	-679.51	-256.89	-135.62	373.82	62.13	6.07	PASS
7056.81	6978.10	-710.20	-634.11	7047.25	6999.51	-684.80	-259.00	-135.62	376.57	62.56	6.08	PASS
7113.00†	7033.76	-714.44	-640.38	7103.25	7055.04	-691.57	-261.72	-170.17	379.95	63.18	6.07	PASS
7213.00†	7132.82	-708.37	-651.57	7201.27	7152.22	-703.43	-266.46	126.24	385.63	64.80	6.01	PASS
7313.00†	7229.32	-685.08	-662.51	7297.05	7247.36	-713.18	-271.11	112.41	392.83	66.70	5.94	PASS
7413.00†	7320.33	-645.28	-672.88	7398.70	7348.64	-708.34	-276.10	110.27	402.76	67.66	6.01	PASS
7513.00†	7403.09	-590.18	-682.36	7508.07	7454.79	-683.24	-281.38	111.15	414.87	67.77	6.18	PASS
7613.00†	7475.08	-521.45	-690.66	7626.55	7562.12	-633.86	-286.79	113.05	428.17	65.88	6.56	PASS
7713.00†	7534.11	-441.18	-697.53	7755.26	7664.52	-556.50	-292.02	115.16	441.30	63.15	7.06	PASS
7813.00†	7578.39	-351.82	-702.76	7894.47	7752.85	-449.44	-296.64	117.06	452.66	59.81	7.65	PASS
7913.00†	7606.57	-256.06	-706.19	8042.88	7815.73	-315.52	-300.08	118.42	460.66	56.91	8.18	PASS
8013.00†	7617.81	-156.84	-707.72	8197.12	7842.53	-164.11	-301.80	118.99	464.03	55.62	8.44	PASS
8027.99	7618.00	-141.85	-707.78	8220.44	7843.00	-140.79	-301.88	119.00	464.09	55.52	8.45	PASS
8113.00†	7618.00	-56.84	-708.00	8305.46	7843.00	-55.78	-302.10	119.00	464.09	55.40	8.47	PASS
8213.00†	7618.00	43.16	-708.26	8405.46	7843.00	44.22	-302.37	119.00	464.09	55.78	8.41	PASS
8313.00†	7618.00	143.16	-708.53	8505.46	7843.00	144.22	-302.63	119.00	464.09	56.72	8.27	PASS
8413.00†	7618.00	243.16	-708.79	8605.46	7843.00	244.22	-302.89	119.00	464.09	58.19	8.06	PASS
8513.00†	7618.00	343.16	-709.05	8705.46	7843.00	344.22	-303.15	119.00	464.09	60.15	7.80	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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
8613.00†	7618.00	443.16	-709.31	8805.46	7843.00	444.22	-303.41	119.00	464.09	62.55	7.49	PASS
8713.00†	7618.00	543.16	-709.57	8905.46	7843.00	544.22	-303.67	119.00	464.09	65.34	7.17	PASS
8813.00†	7618.00	643.16	-709.84	9005.46	7843.00	644.22	-303.94	119.00	464.09	68.48	6.84	PASS
8913.00†	7618.00	743.16	-710.10	9105.46	7843.00	744.22	-304.20	119.00	464.09	71.92	6.51	PASS
9013.00†	7618.00	843.16	-710.36	9205.46	7843.00	844.22	-304.46	119.00	464.09	75.77	6.17	PASS
9113.00†	7618.00	943.16	-710.62	9305.46	7843.00	944.22	-304.72	119.00	464.09	79.54	5.88	PASS
9213.00†	7618.00	1043.16	-710.88	9405.46	7843.00	1044.22	-304.98	119.00	464.09	83.65	5.59	PASS
9313.00†	7618.00	1143.16	-711.14	9505.46	7843.00	1144.22	-305.24	119.00	464.09	87.92	5.31	PASS
9413.00†	7618.00	1243.16	-711.41	9605.46	7843.00	1244.22	-305.51	119.00	464.09	92.33	5.06	PASS
9513.00†	7618.00	1343.16	-711.67	9705.46	7843.00	1344.22	-305.77	119.00	464.09	96.87	4.82	PASS
9613.00†	7618.00	1443.16	-711.93	9805.46	7843.00	1444.22	-306.03	119.00	464.09	101.50	4.60	PASS
9713.00†	7618.00	1543.16	-712.19	9905.46	7843.00	1544.22	-306.29	119.00	464.09	106.23	4.39	PASS
9813.00†	7618.00	1643.16	-712.45	10005.46	7843.00	1644.22	-306.55	119.00	464.09	111.03	4.20	PASS
9913.00†	7618.00	1743.16	-712.72	10105.46	7843.00	1744.22	-306.82	119.00	464.09	115.92	4.02	PASS
10013.00†	7618.00	1843.15	-712.98	10205.46	7843.00	1844.22	-307.08	119.00	464.09	120.86	3.86	PASS
10113.00†	7618.00	1943.15	-713.24	10305.46	7843.00	1944.22	-307.34	119.00	464.09	125.85	3.70	PASS
10213.00†	7618.00	2043.15	-713.50	10405.46	7843.00	2044.22	-307.60	119.00	464.09	130.89	3.56	PASS
10313.00†	7618.00	2143.15	-713.76	10505.46	7843.00	2144.22	-307.86	119.00	464.09	135.97	3.43	PASS
10413.00†	7618.00	2243.15	-714.02	10605.46	7843.00	2244.22	-308.12	119.00	464.09	141.09	3.30	PASS
10513.00†	7618.00	2343.15	-714.29	10705.46	7843.00	2344.22	-308.39	119.00	464.09	146.25	3.18	PASS
10613.00†	7618.00	2443.15	-714.55	10805.46	7843.00	2444.22	-308.65	119.00	464.09	151.43	3.07	PASS
10713.00†	7618.00	2543.15	-714.81	10905.46	7843.00	2544.21	-308.91	119.00	464.09	156.64	2.97	PASS
10813.00†	7618.00	2643.15	-715.07	11005.46	7843.00	2644.21	-309.17	119.00	464.09	161.88	2.88	PASS
10913.00†	7618.00	2743.15	-715.33	11105.46	7843.00	2744.21	-309.43	119.00	464.09	167.14	2.78	PASS
11013.00†	7618.00	2843.15	-715.60	11205.46	7843.00	2844.21	-309.69	119.00	464.09	172.41	2.70	PASS
11113.00†	7618.00	2943.15	-715.86	11305.46	7843.00	2944.21	-309.96	119.00	464.09	177.71	2.62	PASS
11213.00†	7618.00	3043.15	-716.12	11405.46	7843.00	3044.21	-310.22	119.00	464.09	183.02	2.54	PASS
11313.00†	7618.00	3143.15	-716.38	11505.46	7843.00	3144.21	-310.48	119.00	464.09	188.35	2.47	PASS
11413.00†	7618.00	3243.15	-716.64	11605.46	7843.00	3244.21	-310.74	119.00	464.09	193.70	2.40	PASS
11513.00†	7618.00	3343.15	-716.90	11705.46	7843.00	3344.21	-311.00	119.00	464.09	199.05	2.34	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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
11613.00†	7618.00	3443.15	-717.17	11805.46	7843.00	3444.21	-311.26	119.00	464.09	204.42	2.27	PASS
11713.00†	7618.00	3543.15	-717.43	11905.46	7843.00	3544.21	-311.53	119.00	464.09	209.80	2.22	PASS
11813.00†	7618.00	3643.15	-717.69	12005.46	7843.00	3644.21	-311.79	119.00	464.09	215.19	2.16	PASS
11913.00†	7618.00	3743.15	-717.95	12105.46	7843.00	3744.21	-312.05	119.00	464.09	220.58	2.11	PASS
12013.00†	7618.00	3843.15	-718.21	12205.46	7843.00	3844.21	-312.31	119.00	464.09	225.99	2.06	PASS
12113.00†	7618.00	3943.15	-718.48	12305.46	7843.00	3944.21	-312.57	119.00	464.09	231.41	2.01	PASS
12213.00†	7618.00	4043.15	-718.74	12405.46	7843.00	4044.21	-312.84	119.00	464.09	236.83	1.96	PASS
12313.00†	7618.00	4143.15	-719.00	12505.46	7843.00	4144.21	-313.10	119.00	464.09	242.26	1.92	PASS
12413.00†	7618.00	4243.15	-719.26	12605.46	7843.00	4244.21	-313.36	119.00	464.09	247.69	1.88	PASS
12513.00†	7618.00	4343.15	-719.52	12705.46	7843.00	4344.21	-313.62	119.00	464.09	253.14	1.84	PASS
12613.00†	7618.00	4443.15	-719.78	12805.46	7843.00	4444.21	-313.88	119.00	464.09	258.58	1.80	PASS
12713.00†	7618.00	4543.15	-720.05	12905.46	7843.00	4544.21	-314.14	119.00	464.09	264.04	1.76	PASS
12813.00†	7618.00	4643.15	-720.31	13005.46	7843.00	4644.21	-314.41	119.00	464.09	269.50	1.72	PASS
12913.00†	7618.00	4743.14	-720.57	13105.46	7843.00	4744.21	-314.67	119.00	464.09	274.96	1.69	PASS
13013.00†	7618.00	4843.14	-720.83	13205.46	7843.00	4844.21	-314.93	119.00	464.09	280.43	1.66	PASS
13113.00†	7618.00	4943.14	-721.09	13305.46	7843.00	4944.21	-315.19	119.00	464.09	285.90	1.62	PASS
13213.00†	7618.00	5043.14	-721.36	13405.46	7843.00	5044.21	-315.45	119.00	464.09	291.38	1.59	PASS
13313.00†	7618.00	5143.14	-721.62	13505.46	7843.00	5144.21	-315.71	119.00	464.09	296.86	1.56	PASS
13413.00†	7618.00	5243.14	-721.88	13605.46	7843.00	5244.21	-315.98	119.00	464.09	302.34	1.54	PASS
13513.00†	7618.00	5343.14	-722.14	13705.46	7843.00	5344.21	-316.24	119.00	464.09	307.83	1.51	PASS
13613.00†	7618.00	5443.14	-722.40	13805.46	7843.00	5444.20	-316.50	119.00	464.09	313.32	1.48	PASS
13713.00†	7618.00	5543.14	-722.66	13905.46	7843.00	5544.20	-316.76	119.00	464.09	318.81	1.46	PASS
13813.00†	7618.00	5643.14	-722.93	14005.46	7843.00	5644.20	-317.02	119.00	464.09	324.31	1.43	PASS
13913.00†	7618.00	5743.14	-723.19	14105.46	7843.00	5744.20	-317.28	119.00	464.09	329.81	1.41	PASS
14013.00†	7618.00	5843.14	-723.45	14205.46	7843.00	5844.20	-317.55	119.00	464.09	335.31	1.38	PASS
14113.00†	7618.00	5943.14	-723.71	14305.46	7843.00	5944.20	-317.81	119.00	464.09	340.81	1.36	PASS
14213.00†	7618.00	6043.14	-723.97	14405.46	7843.00	6044.20	-318.07	119.00	464.09	346.32	1.34	PASS
14313.00†	7618.00	6143.14	-724.24	14505.46	7843.00	6144.20	-318.33	119.00	464.09	351.83	1.32	PASS
14413.00†	7618.00	6243.14	-724.50	14605.46	7843.00	6244.20	-318.59	119.00	464.10	357.34	1.30	PASS
14513.00†	7618.00	6343.14	-724.76	14705.46	7843.00	6344.20	-318.86	119.00	464.10	362.85	1.28	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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
14613.00†	7618.00	6443.14	-725.02	14805.46	7843.00	6444.20	-319.12	119.00	464.10	368.37	1.26	PASS
14713.00†	7618.00	6543.14	-725.28	14905.46	7843.00	6544.20	-319.38	119.00	464.10	373.88	1.24	PASS
14813.00†	7618.00	6643.14	-725.54	15005.46	7843.00	6644.20	-319.64	119.00	464.10	379.40	1.22	PASS
14913.00†	7618.00	6743.14	-725.81	15105.46	7843.00	6744.20	-319.90	119.00	464.10	384.92	1.21	PASS
15013.00†	7618.00	6843.14	-726.07	15205.46	7843.00	6844.20	-320.16	119.00	464.10	390.44	1.19	PASS
15113.00†	7618.00	6943.14	-726.33	15305.46	7843.00	6944.20	-320.43	119.00	464.10	395.97	1.17	PASS
15213.00†	7618.00	7043.14	-726.59	15405.46	7843.00	7044.20	-320.69	119.00	464.10	401.49	1.16	PASS
15313.00†	7618.00	7143.14	-726.85	15505.46	7843.00	7144.20	-320.95	119.00	464.10	407.02	1.14	PASS
15413.00†	7618.00	7243.14	-727.12	15605.46	7843.00	7244.20	-321.21	119.00	464.10	412.54	1.13	PASS
15513.00†	7618.00	7343.14	-727.38	15705.46	7843.00	7344.20	-321.47	119.00	464.10	418.07	1.11	PASS
15613.00†	7618.00	7443.14	-727.64	15805.46	7843.00	7444.20	-321.73	119.00	464.10	423.60	1.10	PASS
15713.00†	7618.00	7543.14	-727.90	15905.46	7843.00	7544.20	-322.00	119.00	464.10	429.14	1.08	PASS
15813.00†	7618.00	7643.14	-728.16	16005.46	7843.00	7644.20	-322.26	119.00	464.10	434.67	1.07	PASS
15913.00†	7618.00	7743.13	-728.42	16105.46	7843.00	7744.20	-322.52	119.00	464.10	440.20	1.05	PASS
16013.00†	7618.00	7843.13	-728.69	16205.46	7843.00	7844.20	-322.78	119.00	464.10	445.74	1.04	PASS
16113.00†	7618.00	7943.13	-728.95	16305.46	7843.00	7944.20	-323.04	119.00	464.10	451.27	1.03	PASS
16213.00†	7618.00	8043.13	-729.21	16405.46	7843.00	8044.20	-323.30	119.00	464.10	456.81	1.02	PASS
16313.00†	7618.00	8143.13	-729.47	16505.46	7843.00	8144.20	-323.57	119.00	464.10	462.35	1.00	PASS
16413.00†	7618.00	8243.13	-729.73	16605.46	7843.00	8244.20	-323.83	119.00	464.10	467.89	0.99	FAIL
16513.00†	7618.00	8343.13	-730.00	16705.46	7843.00	8344.20	-324.09	119.00	464.10	473.43	0.98	FAIL
16613.00†	7618.00	8443.13	-730.26	16805.46	7843.00	8444.19	-324.35	119.00	464.10	478.97	0.97	FAIL
16713.00†	7618.00	8543.13	-730.52	16905.46	7843.00	8544.19	-324.61	119.00	464.10	484.51	0.96	FAIL
16813.00†	7618.00	8643.13	-730.78	17005.46	7843.00	8644.19	-324.87	119.00	464.10	490.05	0.95	FAIL
16913.00†	7618.00	8743.13	-731.04	17105.46	7843.00	8744.19	-325.14	119.00	464.10	495.59	0.94	FAIL
17013.00†	7618.00	8843.13	-731.30	17205.46	7843.00	8844.19	-325.40	119.00	464.10	501.14	0.93	FAIL
17113.00†	7618.00	8943.13	-731.57	17305.46	7843.00	8944.19	-325.66	119.00	464.10	506.68	0.92	FAIL
17213.00†	7618.00	9043.13	-731.83	17405.46	7843.00	9044.19	-325.92	119.00	464.10	512.23	0.91	FAIL
17313.00†	7618.00	9143.13	-732.09	17505.46	7843.00	9144.19	-326.18	119.00	464.10	517.78	0.90	FAIL
17413.00†	7618.00	9243.13	-732.35	17605.46	7843.00	9244.19	-326.45	119.00	464.10	523.32	0.89	FAIL
17513.00†	7618.00	9343.13	-732.61	17705.46	7843.00	9344.19	-326.71	119.00	464.10	528.87	0.88	FAIL

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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
17613.00†	7618.00	9443.13	-732.88	17805.46	7843.00	9444.19	-326.97	119.00	464.10	534.42	0.87	FAIL
17713.00†	7618.00	9543.13	-733.14	17905.46	7843.00	9544.19	-327.23	119.00	464.10	539.97	0.86	FAIL
17742.92†	7618.00	9573.05	-733.22	17916.89	7843.00	9555.62	-327.26	119.00	464.47	539.32	0.86	FAIL

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	0.01	9.15	-15.22	3.06
8.5in Open Hole	1800.00	17937.78	16137.78	1797.01	7843.00	-15.22	3.06	2918.93	-95.19

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

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	0.07	29.99	89.86	29.99	1.40	48.65	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.07	29.99	89.86	29.99	1.72	31.89	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.07	29.99	89.86	29.99	2.28	19.73	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.07	29.99	89.86	29.99	2.88	14.03	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.07	29.99	89.86	29.99	3.50	10.83	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.07	29.99	89.86	29.99	4.12	8.81	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.07	29.99	89.86	29.99	4.74	7.42	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.07	29.99	89.86	29.99	5.36	6.40	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.07	29.99	89.86	29.99	5.99	5.63	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.07	29.99	89.86	29.99	6.61	5.02	PASS
1013.00†	1013.00	0.00	0.00	1013.00	1013.00	0.07	29.99	89.86	29.99	7.24	4.54	PASS
1100.00	1100.00	0.00	0.00	1100.00	1100.00	0.07	29.99	89.86	29.99	7.78	4.18	PASS
1113.00†	1113.00	-0.02	-0.02	1113.00	1113.00	0.07	29.99	-131.94	30.01	7.86	4.14	PASS
1213.00†	1212.97	-1.66	-1.48	1212.97	1212.97	0.07	29.99	-134.89	31.52	8.54	3.97	PASS
1313.00†	1312.80	-5.90	-5.27	1312.87	1312.87	0.05	29.98	-141.27	35.75	9.39	4.07	PASS
1413.00†	1412.38	-12.74	-11.38	1413.26	1413.23	-2.08	29.37	-146.34	42.13	10.29	4.36	PASS
1513.00†	1511.57	-22.17	-19.79	1513.81	1513.61	-7.59	27.77	-148.71	49.79	11.24	4.70	PASS
1579.26	1577.03	-29.83	-26.64	1580.50	1580.05	-13.11	26.18	-149.25	55.48	11.81	4.97	PASS
1613.00†	1610.30	-34.02	-30.38	1614.49	1613.86	-16.49	25.20	-149.22	58.38	12.08	5.11	PASS
1713.00†	1708.90	-46.45	-41.47	1715.15	1713.71	-28.71	21.66	-147.47	65.75	12.75	5.44	PASS
1813.00†	1807.50	-58.87	-52.56	1814.88	1812.49	-41.89	17.84	-145.32	72.59	13.32	5.70	PASS
1913.00†	1906.11	-71.29	-63.65	1914.61	1911.27	-55.07	14.03	-143.54	79.52	14.03	5.91	PASS
2013.00†	2004.71	-83.71	-74.74	2014.34	2010.06	-68.25	10.21	-142.05	86.51	14.80	6.09	PASS
2113.00†	2103.32	-96.13	-85.83	2114.08	2108.84	-81.43	6.39	-140.78	93.55	15.60	6.23	PASS
2213.00†	2201.92	-108.55	-96.92	2213.81	2207.62	-94.61	2.58	-139.70	100.63	16.44	6.35	PASS
2313.00†	2300.52	-120.97	-108.01	2313.54	2306.41	-107.79	-1.24	-138.75	107.74	17.30	6.45	PASS
2413.00†	2399.13	-133.39	-119.10	2413.27	2405.19	-120.97	-5.06	-137.92	114.88	18.19	6.53	PASS
2513.00†	2497.73	-145.81	-130.19	2513.01	2503.98	-134.15	-8.87	-137.19	122.04	19.10	6.60	PASS
2613.00†	2596.34	-158.23	-141.28	2612.74	2602.76	-147.33	-12.69	-136.54	129.21	20.02	6.65	PASS
2713.00†	2694.94	-170.66	-152.37	2712.47	2701.54	-160.51	-16.51	-135.95	136.40	20.96	6.70	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	2793.54	-183.08	-163.46	2812.20	2800.33	-173.69	-20.32	-135.43	143.61	21.91	6.74	PASS
2913.00†	2892.15	-195.50	-174.55	2911.93	2899.11	-186.87	-24.14	-134.96	150.82	22.87	6.77	PASS
3013.00†	2990.75	-207.92	-185.64	3011.67	2997.89	-200.05	-27.96	-134.53	158.04	23.84	6.80	PASS
3113.00†	3089.35	-220.34	-196.73	3111.40	3096.68	-213.23	-31.77	-134.13	165.27	24.81	6.83	PASS
3213.00†	3187.96	-232.76	-207.82	3211.13	3195.46	-226.41	-35.59	-133.77	172.51	25.80	6.85	PASS
3313.00†	3286.56	-245.18	-218.91	3310.86	3294.24	-239.59	-39.41	-133.44	179.76	26.79	6.87	PASS
3413.00†	3385.17	-257.60	-230.00	3410.59	3393.03	-252.77	-43.22	-133.14	187.01	27.79	6.88	PASS
3513.00†	3483.77	-270.02	-241.09	3510.33	3491.81	-265.95	-47.04	-132.85	194.26	28.79	6.89	PASS
3613.00†	3582.37	-282.44	-252.18	3610.06	3590.60	-279.13	-50.86	-132.59	201.52	29.79	6.90	PASS
3713.00†	3680.98	-294.87	-263.27	3709.79	3689.38	-292.31	-54.67	-132.35	208.79	30.80	6.91	PASS
3813.00†	3779.58	-307.29	-274.36	3809.52	3788.16	-305.49	-58.49	-132.12	216.05	31.81	6.92	PASS
3913.00†	3878.19	-319.71	-285.45	3909.25	3886.95	-318.67	-62.31	-131.91	223.32	32.83	6.93	PASS
4013.00†	3976.79	-332.13	-296.54	4008.99	3985.73	-331.85	-66.12	-131.71	230.59	33.85	6.94	PASS
4113.00†	4075.39	-344.55	-307.64	4108.72	4084.51	-345.03	-69.94	-131.52	237.87	34.87	6.94	PASS
4213.00†	4174.00	-356.97	-318.73	4208.45	4183.30	-358.21	-73.76	-131.35	245.15	35.89	6.95	PASS
4313.00†	4272.60	-369.39	-329.82	4308.18	4282.08	-371.39	-77.57	-131.18	252.43	36.91	6.95	PASS
4413.00†	4371.21	-381.81	-340.91	4407.91	4380.86	-384.57	-81.39	-131.02	259.71	37.94	6.96	PASS
4513.00†	4469.81	-394.23	-352.00	4507.65	4479.65	-397.75	-85.21	-130.88	266.99	38.97	6.96	PASS
4613.00†	4568.41	-406.65	-363.09	4607.38	4578.43	-410.93	-89.02	-130.74	274.28	40.00	6.96	PASS
4713.00†	4667.02	-419.08	-374.18	4707.11	4677.22	-424.11	-92.84	-130.60	281.57	41.03	6.96	PASS
4813.00†	4765.62	-431.50	-385.27	4806.84	4776.00	-437.29	-96.66	-130.48	288.85	42.07	6.97	PASS
4913.00†	4864.22	-443.92	-396.36	4906.57	4874.78	-450.47	-100.47	-130.36	296.14	43.10	6.97	PASS
5013.00†	4962.83	-456.34	-407.45	5006.31	4973.57	-463.65	-104.29	-130.24	303.44	44.14	6.97	PASS
5113.00†	5061.43	-468.76	-418.54	5106.04	5072.35	-476.83	-108.11	-130.13	310.73	45.18	6.97	PASS
5213.00†	5160.04	-481.18	-429.63	5205.77	5171.13	-490.01	-111.92	-130.03	318.02	46.21	6.97	PASS
5313.00†	5258.64	-493.60	-440.72	5305.50	5269.92	-503.19	-115.74	-129.93	325.31	47.25	6.97	PASS
5413.00†	5357.24	-506.02	-451.81	5405.24	5368.70	-516.37	-119.56	-129.84	332.61	48.29	6.98	PASS
5513.00†	5455.85	-518.44	-462.90	5504.97	5467.48	-529.55	-123.37	-129.74	339.91	49.33	6.98	PASS
5613.00†	5554.45	-530.86	-473.99	5604.70	5566.27	-542.73	-127.19	-129.66	347.20	50.37	6.98	PASS
5713.00†	5653.06	-543.29	-485.08	5704.43	5665.05	-555.91	-131.01	-129.57	354.50	51.42	6.98	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	5751.66	-555.71	-496.17	5804.16	5763.84	-569.09	-134.82	-129.49	361.80	52.46	6.98	PASS
5913.00†	5850.26	-568.13	-507.26	5903.90	5862.62	-582.27	-138.64	-129.42	369.10	53.50	6.98	PASS
6013.00†	5948.87	-580.55	-518.35	6003.63	5961.40	-595.45	-142.46	-129.34	376.40	54.55	6.98	PASS
6113.00†	6047.47	-592.97	-529.44	6103.36	6060.19	-608.63	-146.27	-129.27	383.70	55.59	6.98	PASS
6213.00†	6146.08	-605.39	-540.53	6203.09	6158.97	-621.81	-150.09	-129.20	391.00	56.64	6.98	PASS
6313.00†	6244.68	-617.81	-551.62	6302.82	6257.75	-634.99	-153.91	-129.14	398.30	57.68	6.98	PASS
6413.00†	6343.28	-630.23	-562.71	6402.56	6356.54	-648.17	-157.72	-129.07	405.60	58.73	6.98	PASS
6513.00†	6441.89	-642.65	-573.80	6502.29	6455.32	-661.35	-161.54	-129.01	412.90	59.78	6.98	PASS
6613.00†	6540.49	-655.07	-584.89	6602.02	6554.10	-674.53	-165.36	-128.95	420.21	60.82	6.98	PASS
6713.00†	6639.09	-667.50	-595.98	6701.75	6652.89	-687.71	-169.17	-128.90	427.51	61.87	6.98	PASS
6813.00†	6737.70	-679.92	-607.07	6801.48	6751.67	-700.89	-172.99	-128.84	434.81	62.92	6.98	PASS
6913.00†	6836.30	-692.34	-618.16	6902.93	6852.34	-712.56	-176.88	-129.01	442.03	63.88	6.99	PASS
7013.00†	6934.91	-704.76	-629.25	7003.93	6953.07	-709.17	-180.82	-131.09	448.82	64.63	7.01	PASS
7056.81	6978.10	-710.20	-634.11	7045.85	6994.43	-702.56	-182.45	-132.58	452.02	64.23	7.10	PASS
7113.00†	7033.76	-714.44	-640.38	7097.74	7044.77	-690.22	-184.44	-169.71	456.71	65.83	7.00	PASS
7213.00†	7132.82	-708.37	-651.57	7186.89	7127.95	-658.57	-187.77	120.36	466.49	65.28	7.21	PASS
7313.00†	7229.32	-685.08	-662.51	7272.62	7202.39	-616.32	-190.78	98.72	477.48	64.72	7.45	PASS
7413.00†	7320.33	-645.28	-672.88	7355.62	7267.69	-565.27	-193.46	89.02	488.90	63.48	7.78	PASS
7513.00†	7403.09	-590.18	-682.36	7436.45	7323.56	-506.99	-195.79	83.04	500.00	62.04	8.14	PASS
7613.00†	7475.08	-521.45	-690.66	7515.59	7369.79	-442.87	-197.76	78.89	510.11	60.39	8.54	PASS
7713.00†	7534.11	-441.18	-697.53	7593.45	7406.24	-374.15	-199.36	75.94	518.67	58.91	8.90	PASS
7813.00†	7578.39	-351.82	-702.76	7670.39	7432.79	-302.01	-200.59	73.93	525.22	57.45	9.24	PASS
7913.00†	7606.57	-256.06	-706.19	7746.72	7449.35	-227.57	-201.43	72.72	529.45	56.17	9.53	PASS
8013.00†	7617.81	-156.84	-707.72	7822.72	7455.89	-151.90	-201.88	72.25	531.14	55.13	9.75	PASS
8027.99	7618.00	-141.85	-707.78	7834.10	7456.00	-140.52	-201.91	72.24	531.17	54.97	9.78	PASS
8113.00†	7618.00	-56.84	-708.00	7919.11	7456.00	-55.52	-202.14	72.24	531.17	54.42	9.88	PASS
8213.00†	7618.00	43.16	-708.26	8019.11	7456.00	44.48	-202.40	72.24	531.17	54.42	9.88	PASS
8313.00†	7618.00	143.16	-708.53	8119.11	7456.00	144.48	-202.66	72.24	531.17	55.08	9.76	PASS
8413.00†	7618.00	243.16	-708.79	8219.11	7456.00	244.48	-202.92	72.24	531.18	56.39	9.53	PASS
8513.00†	7618.00	343.16	-709.05	8319.11	7456.00	344.48	-203.18	72.24	531.18	58.30	9.21	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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
8613.00†	7618.00	443.16	-709.31	8419.11	7456.00	444.48	-203.44	72.24	531.18	60.75	8.83	PASS
8713.00†	7618.00	543.16	-709.57	8519.11	7456.00	544.48	-203.71	72.24	531.18	63.68	8.42	PASS
8813.00†	7618.00	643.16	-709.84	8619.11	7456.00	644.48	-203.97	72.24	531.18	67.03	8.00	PASS
8913.00†	7618.00	743.16	-710.10	8719.11	7456.00	744.48	-204.23	72.24	531.18	70.73	7.58	PASS
9013.00†	7618.00	843.16	-710.36	8819.11	7456.00	844.48	-204.49	72.24	531.18	74.73	7.17	PASS
9113.00†	7618.00	943.16	-710.62	8919.11	7456.00	944.48	-204.75	72.24	531.18	78.90	6.78	PASS
9213.00†	7618.00	1043.16	-710.88	9019.11	7456.00	1044.48	-205.01	72.24	531.18	83.47	6.41	PASS
9313.00†	7618.00	1143.16	-711.14	9119.11	7456.00	1144.48	-205.28	72.24	531.18	88.13	6.07	PASS
9413.00†	7618.00	1243.16	-711.41	9219.11	7456.00	1244.48	-205.54	72.24	531.18	92.94	5.75	PASS
9513.00†	7618.00	1343.16	-711.67	9319.11	7456.00	1344.48	-205.80	72.24	531.18	97.89	5.46	PASS
9613.00†	7618.00	1443.16	-711.93	9419.11	7456.00	1444.48	-206.06	72.24	531.18	102.95	5.19	PASS
9713.00†	7618.00	1543.16	-712.19	9519.11	7456.00	1544.48	-206.32	72.24	531.18	108.12	4.94	PASS
9813.00†	7618.00	1643.16	-712.45	9619.11	7456.00	1644.48	-206.58	72.24	531.18	113.35	4.71	PASS
9913.00†	7618.00	1743.16	-712.72	9719.11	7456.00	1744.48	-206.85	72.24	531.18	118.67	4.50	PASS
10013.00†	7618.00	1843.15	-712.98	9819.11	7456.00	1844.48	-207.11	72.24	531.18	124.05	4.30	PASS
10113.00†	7618.00	1943.15	-713.24	9919.11	7456.00	1944.48	-207.37	72.24	531.18	129.48	4.12	PASS
10213.00†	7618.00	2043.15	-713.50	10019.11	7456.00	2044.48	-207.63	72.24	531.18	134.96	3.95	PASS
10313.00†	7618.00	2143.15	-713.76	10119.11	7456.00	2144.48	-207.89	72.24	531.18	140.49	3.80	PASS
10413.00†	7618.00	2243.15	-714.02	10219.11	7456.00	2244.48	-208.15	72.24	531.18	146.05	3.65	PASS
10513.00†	7618.00	2343.15	-714.29	10319.11	7456.00	2344.48	-208.41	72.24	531.18	151.65	3.51	PASS
10613.00†	7618.00	2443.15	-714.55	10419.11	7456.00	2444.48	-208.68	72.24	531.18	157.27	3.39	PASS
10713.00†	7618.00	2543.15	-714.81	10519.11	7456.00	2544.48	-208.94	72.24	531.18	162.93	3.27	PASS
10813.00†	7618.00	2643.15	-715.07	10619.11	7456.00	2644.48	-209.20	72.24	531.18	168.61	3.16	PASS
10913.00†	7618.00	2743.15	-715.33	10719.11	7456.00	2744.48	-209.46	72.24	531.18	174.31	3.06	PASS
11013.00†	7618.00	2843.15	-715.60	10819.11	7456.00	2844.47	-209.72	72.24	531.18	180.03	2.96	PASS
11113.00†	7618.00	2943.15	-715.86	10919.11	7456.00	2944.47	-209.98	72.24	531.18	185.76	2.87	PASS
11213.00†	7618.00	3043.15	-716.12	11019.11	7456.00	3044.47	-210.25	72.24	531.18	191.52	2.78	PASS
11313.00†	7618.00	3143.15	-716.38	11119.11	7456.00	3144.47	-210.51	72.24	531.18	197.29	2.70	PASS
11413.00†	7618.00	3243.15	-716.64	11219.11	7456.00	3244.47	-210.77	72.24	531.18	203.07	2.62	PASS
11513.00†	7618.00	3343.15	-716.90	11319.11	7456.00	3344.47	-211.03	72.24	531.18	208.87	2.55	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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
11613.00†	7618.00	3443.15	-717.17	11419.11	7456.00	3444.47	-211.29	72.24	531.18	214.67	2.48	PASS
11713.00†	7618.00	3543.15	-717.43	11519.11	7456.00	3544.47	-211.55	72.24	531.18	220.49	2.41	PASS
11813.00†	7618.00	3643.15	-717.69	11619.11	7456.00	3644.47	-211.82	72.24	531.18	226.32	2.35	PASS
11913.00†	7618.00	3743.15	-717.95	11719.11	7456.00	3744.47	-212.08	72.24	531.18	232.15	2.29	PASS
12013.00†	7618.00	3843.15	-718.21	11819.11	7456.00	3844.47	-212.34	72.24	531.18	238.00	2.24	PASS
12113.00†	7618.00	3943.15	-718.48	11919.11	7456.00	3944.47	-212.60	72.24	531.18	243.85	2.18	PASS
12213.00†	7618.00	4043.15	-718.74	12019.11	7456.00	4044.47	-212.86	72.24	531.18	249.71	2.13	PASS
12313.00†	7618.00	4143.15	-719.00	12119.11	7456.00	4144.47	-213.12	72.24	531.18	255.58	2.08	PASS
12413.00†	7618.00	4243.15	-719.26	12219.11	7456.00	4244.47	-213.39	72.24	531.18	261.45	2.03	PASS
12513.00†	7618.00	4343.15	-719.52	12319.11	7456.00	4344.47	-213.65	72.24	531.18	267.33	1.99	PASS
12613.00†	7618.00	4443.15	-719.78	12419.11	7456.00	4444.47	-213.91	72.24	531.18	273.21	1.95	PASS
12713.00†	7618.00	4543.15	-720.05	12519.11	7456.00	4544.47	-214.17	72.24	531.18	279.10	1.91	PASS
12813.00†	7618.00	4643.15	-720.31	12619.11	7456.00	4644.47	-214.43	72.24	531.18	285.00	1.87	PASS
12913.00†	7618.00	4743.14	-720.57	12719.11	7456.00	4744.47	-214.69	72.24	531.18	290.89	1.83	PASS
13013.00†	7618.00	4843.14	-720.83	12819.11	7456.00	4844.47	-214.95	72.24	531.18	296.80	1.79	PASS
13113.00†	7618.00	4943.14	-721.09	12919.11	7456.00	4944.47	-215.22	72.24	531.19	302.70	1.76	PASS
13213.00†	7618.00	5043.14	-721.36	13019.11	7456.00	5044.47	-215.48	72.24	531.19	308.61	1.72	PASS
13313.00†	7618.00	5143.14	-721.62	13119.11	7456.00	5144.47	-215.74	72.24	531.19	314.53	1.69	PASS
13413.00†	7618.00	5243.14	-721.88	13219.11	7456.00	5244.47	-216.00	72.24	531.19	320.45	1.66	PASS
13513.00†	7618.00	5343.14	-722.14	13319.11	7456.00	5344.47	-216.26	72.24	531.19	326.37	1.63	PASS
13613.00†	7618.00	5443.14	-722.40	13419.11	7456.00	5444.47	-216.52	72.24	531.19	332.29	1.60	PASS
13713.00†	7618.00	5543.14	-722.66	13519.11	7456.00	5544.47	-216.79	72.24	531.19	338.22	1.57	PASS
13813.00†	7618.00	5643.14	-722.93	13619.11	7456.00	5644.47	-217.05	72.24	531.19	344.14	1.54	PASS
13913.00†	7618.00	5743.14	-723.19	13719.11	7456.00	5744.46	-217.31	72.24	531.19	350.08	1.52	PASS
14013.00†	7618.00	5843.14	-723.45	13819.11	7456.00	5844.46	-217.57	72.24	531.19	356.01	1.49	PASS
14113.00†	7618.00	5943.14	-723.71	13919.11	7456.00	5944.46	-217.83	72.24	531.19	361.95	1.47	PASS
14213.00†	7618.00	6043.14	-723.97	14019.11	7456.00	6044.46	-218.09	72.24	531.19	367.89	1.44	PASS
14313.00†	7618.00	6143.14	-724.24	14119.11	7456.00	6144.46	-218.36	72.24	531.19	373.83	1.42	PASS
14413.00†	7618.00	6243.14	-724.50	14219.11	7456.00	6244.46	-218.62	72.24	531.19	379.77	1.40	PASS
14513.00†	7618.00	6343.14	-724.76	14319.11	7456.00	6344.46	-218.88	72.24	531.19	385.71	1.38	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
Page 25 of 133



REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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
14613.00†	7618.00	6443.14	-725.02	14419.11	7456.00	6444.46	-219.14	72.24	531.19	391.66	1.36	PASS
14713.00†	7618.00	6543.14	-725.28	14519.11	7456.00	6544.46	-219.40	72.24	531.19	397.61	1.34	PASS
14813.00†	7618.00	6643.14	-725.54	14619.11	7456.00	6644.46	-219.66	72.24	531.19	403.56	1.32	PASS
14913.00†	7618.00	6743.14	-725.81	14719.11	7456.00	6744.46	-219.93	72.24	531.19	409.51	1.30	PASS
15013.00†	7618.00	6843.14	-726.07	14819.11	7456.00	6844.46	-220.19	72.24	531.19	415.46	1.28	PASS
15113.00†	7618.00	6943.14	-726.33	14919.11	7456.00	6944.46	-220.45	72.24	531.19	421.42	1.26	PASS
15213.00†	7618.00	7043.14	-726.59	15019.11	7456.00	7044.46	-220.71	72.24	531.19	427.37	1.24	PASS
15313.00†	7618.00	7143.14	-726.85	15119.11	7456.00	7144.46	-220.97	72.24	531.19	433.33	1.23	PASS
15413.00†	7618.00	7243.14	-727.12	15219.11	7456.00	7244.46	-221.23	72.24	531.19	439.29	1.21	PASS
15513.00†	7618.00	7343.14	-727.38	15319.11	7456.00	7344.46	-221.49	72.24	531.19	445.25	1.19	PASS
15613.00†	7618.00	7443.14	-727.64	15419.11	7456.00	7444.46	-221.76	72.24	531.19	451.21	1.18	PASS
15713.00†	7618.00	7543.14	-727.90	15519.11	7456.00	7544.46	-222.02	72.24	531.19	457.17	1.16	PASS
15813.00†	7618.00	7643.14	-728.16	15619.11	7456.00	7644.46	-222.28	72.24	531.19	463.13	1.15	PASS
15913.00†	7618.00	7743.13	-728.42	15719.11	7456.00	7744.46	-222.54	72.24	531.19	469.10	1.13	PASS
16013.00†	7618.00	7843.13	-728.69	15819.11	7456.00	7844.46	-222.80	72.24	531.19	475.06	1.12	PASS
16113.00†	7618.00	7943.13	-728.95	15919.11	7456.00	7944.46	-223.06	72.24	531.19	481.03	1.10	PASS
16213.00†	7618.00	8043.13	-729.21	16019.11	7456.00	8044.46	-223.33	72.24	531.19	486.99	1.09	PASS
16313.00†	7618.00	8143.13	-729.47	16119.11	7456.00	8144.46	-223.59	72.24	531.19	492.96	1.08	PASS
16413.00†	7618.00	8243.13	-729.73	16219.11	7456.00	8244.46	-223.85	72.24	531.19	498.93	1.06	PASS
16513.00†	7618.00	8343.13	-730.00	16319.11	7456.00	8344.46	-224.11	72.24	531.19	504.90	1.05	PASS
16613.00†	7618.00	8443.13	-730.26	16419.11	7456.00	8444.46	-224.37	72.24	531.19	510.87	1.04	PASS
16713.00†	7618.00	8543.13	-730.52	16519.11	7456.00	8544.46	-224.63	72.24	531.19	516.84	1.03	PASS
16813.00†	7618.00	8643.13	-730.78	16619.11	7456.00	8644.45	-224.90	72.24	531.19	522.81	1.02	PASS
16913.00†	7618.00	8743.13	-731.04	16719.11	7456.00	8744.45	-225.16	72.24	531.19	528.79	1.00	PASS
17013.00†	7618.00	8843.13	-731.30	16819.11	7456.00	8844.45	-225.42	72.24	531.19	534.76	0.99	FAIL
17113.00†	7618.00	8943.13	-731.57	16919.11	7456.00	8944.45	-225.68	72.24	531.19	540.73	0.98	FAIL
17213.00†	7618.00	9043.13	-731.83	17019.11	7456.00	9044.45	-225.94	72.24	531.19	546.71	0.97	FAIL
17313.00†	7618.00	9143.13	-732.09	17119.11	7456.00	9144.45	-226.20	72.24	531.19	552.68	0.96	FAIL
17413.00†	7618.00	9243.13	-732.35	17219.11	7456.00	9244.45	-226.46	72.24	531.19	558.66	0.95	FAIL
17513.00†	7618.00	9343.13	-732.61	17319.11	7456.00	9344.45	-226.73	72.24	531.19	564.63	0.94	FAIL

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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
17613.00†	7618.00	9443.13	-732.88	17419.11	7456.00	9444.45	-226.99	72.24	531.19	570.61	0.93	FAIL
17713.00†	7618.00	9543.13	-733.14	17519.11	7456.00	9544.45	-227.25	72.24	531.20	576.59	0.92	FAIL
17742.92†	7618.00	9573.05	-733.22	17530.54	7456.00	9555.88	-227.28	72.24	531.52	576.50	0.92	FAIL

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	0.04	18.28	-12.14	14.75
8.5in Open Hole	1800.00	17752.02	15952.02	1797.75	N/A	-12.14	14.75	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

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	-0.04	-29.97	-90.07	29.97	1.40	48.61	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	-0.04	-29.97	-90.07	29.97	1.72	31.65	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	-0.04	-29.97	-90.07	29.97	2.29	19.57	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	-0.04	-29.97	-90.07	29.97	2.90	13.93	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	-0.04	-29.97	-90.07	29.97	3.51	10.77	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	-0.04	-29.97	-90.07	29.97	4.13	8.76	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	-0.04	-29.97	-90.07	29.97	4.75	7.38	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	-0.04	-29.97	-90.07	29.97	5.38	6.37	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	-0.04	-29.97	-90.07	29.97	6.00	5.61	PASS
913.00†	913.00	0.00	0.00	912.88	912.88	-0.05	-29.99	-90.10	29.99	6.63	5.01	PASS
1013.00†	1013.00	0.00	0.00	1011.94	1011.91	-1.17	-31.84	-92.10	31.88	7.34	4.75	PASS
1100.00	1100.00	0.00	0.00	1097.91	1097.75	-3.57	-35.81	-95.69	36.06	8.17	4.79	PASS
1113.00†	1113.00	-0.02	-0.02	1110.73	1110.54	-4.04	-36.60	-91.96	36.88	8.30	4.81	PASS
1213.00†	1212.97	-1.66	-1.48	1209.21	1208.61	-8.66	-44.23	-38.83	43.54	9.27	5.05	PASS
1313.00†	1312.80	-5.90	-5.27	1307.44	1306.07	-14.99	-54.72	-37.55	50.73	10.35	5.23	PASS
1413.00†	1412.38	-12.74	-11.38	1405.40	1402.79	-23.03	-68.02	-37.48	58.37	11.35	5.46	PASS
1513.00†	1511.57	-22.17	-19.79	1503.09	1498.64	-32.74	-84.10	-38.18	66.44	12.30	5.71	PASS
1579.26	1577.03	-29.83	-26.64	1567.66	1561.63	-40.09	-96.25	-38.93	72.03	12.87	5.90	PASS
1613.00†	1610.30	-34.02	-30.38	1600.71	1593.75	-44.12	-102.93	-39.34	75.10	13.11	6.04	PASS
1713.00†	1708.90	-46.45	-41.47	1700.26	1690.42	-56.41	-123.27	-40.30	84.46	13.76	6.46	PASS
1813.00†	1807.50	-58.87	-52.56	1799.81	1787.09	-68.70	-143.62	-41.07	93.83	14.42	6.81	PASS
1913.00†	1906.11	-71.29	-63.65	1899.36	1883.77	-81.00	-163.96	-41.70	103.22	15.13	7.11	PASS
2013.00†	2004.71	-83.71	-74.74	1998.92	1980.44	-93.29	-184.30	-42.22	112.63	15.90	7.37	PASS
2113.00†	2103.32	-96.13	-85.83	2098.47	2077.11	-105.58	-204.64	-42.66	122.03	16.72	7.58	PASS
2213.00†	2201.92	-108.55	-96.92	2198.02	2173.79	-117.87	-224.99	-43.04	131.45	17.56	7.76	PASS
2313.00†	2300.52	-120.97	-108.01	2297.57	2270.46	-130.16	-245.33	-43.37	140.87	18.43	7.91	PASS
2413.00†	2399.13	-133.39	-119.10	2397.13	2367.13	-142.45	-265.67	-43.66	150.30	19.32	8.04	PASS
2513.00†	2497.73	-145.81	-130.19	2496.68	2463.81	-154.74	-286.01	-43.91	159.72	20.23	8.15	PASS
2613.00†	2596.34	-158.23	-141.28	2596.23	2560.48	-167.03	-306.36	-44.14	169.15	21.15	8.24	PASS
2713.00†	2694.94	-170.66	-152.37	2695.78	2657.15	-179.32	-326.70	-44.34	178.59	22.08	8.32	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	2793.54	-183.08	-163.46	2795.33	2753.83	-191.62	-347.04	44.52	188.02	23.02	8.39	PASS
2913.00†	2892.15	-195.50	-174.55	2894.89	2850.50	-203.91	-367.38	44.69	197.46	23.98	8.45	PASS
3013.00†	2990.75	-207.92	-185.64	2994.44	2947.17	-216.20	-387.73	44.84	206.90	24.94	8.51	PASS
3113.00†	3089.35	-220.34	-196.73	3093.99	3043.85	-228.49	-408.07	44.97	216.33	25.91	8.55	PASS
3213.00†	3187.96	-232.76	-207.82	3193.54	3140.52	-240.78	-428.41	45.10	225.77	26.89	8.60	PASS
3313.00†	3286.56	-245.18	-218.91	3293.10	3237.20	-253.07	-448.75	45.21	235.22	27.87	8.63	PASS
3413.00†	3385.17	-257.60	-230.00	3392.65	3333.87	-265.36	-469.10	45.32	244.66	28.86	8.66	PASS
3513.00†	3483.77	-270.02	-241.09	3492.20	3430.54	-277.65	-489.44	45.42	254.10	29.86	8.69	PASS
3613.00†	3582.37	-282.44	-252.18	3591.75	3527.22	-289.94	-509.78	45.51	263.54	30.86	8.72	PASS
3713.00†	3680.98	-294.87	-263.27	3691.30	3623.89	-302.23	-530.13	45.59	272.99	31.86	8.74	PASS
3813.00†	3779.58	-307.29	-274.36	3790.86	3720.56	-314.53	-550.47	45.67	282.43	32.86	8.76	PASS
3913.00†	3878.19	-319.71	-285.45	3890.41	3817.24	-326.82	-570.81	45.75	291.88	33.87	8.78	PASS
4013.00†	3976.79	-332.13	-296.54	3989.96	3913.91	-339.11	-591.15	45.82	301.32	34.89	8.80	PASS
4113.00†	4075.39	-344.55	-307.64	4089.51	4010.58	-351.40	-611.50	45.88	310.77	35.90	8.81	PASS
4213.00†	4174.00	-356.97	-318.73	4189.07	4107.26	-363.69	-631.84	45.94	320.22	36.92	8.82	PASS
4313.00†	4272.60	-369.39	-329.82	4288.62	4203.93	-375.98	-652.18	46.00	329.66	37.94	8.84	PASS
4413.00†	4371.21	-381.81	-340.91	4388.17	4300.60	-388.27	-672.52	46.05	339.11	38.96	8.85	PASS
4513.00†	4469.81	-394.23	-352.00	4487.72	4397.28	-400.56	-692.87	46.11	348.56	39.98	8.86	PASS
4613.00†	4568.41	-406.65	-363.09	4587.28	4493.95	-412.85	-713.21	46.15	358.01	41.01	8.87	PASS
4713.00†	4667.02	-419.08	-374.18	4686.83	4590.62	-425.14	-733.55	46.20	367.45	42.04	8.87	PASS
4813.00†	4765.62	-431.50	-385.27	4786.38	4687.30	-437.44	-753.89	46.24	376.90	43.06	8.88	PASS
4913.00†	4864.22	-443.92	-396.36	4885.93	4783.97	-449.73	-774.24	46.29	386.35	44.09	8.89	PASS
5013.00†	4962.83	-456.34	-407.45	4985.48	4880.64	-462.02	-794.58	46.33	395.80	45.13	8.89	PASS
5113.00†	5061.43	-468.76	-418.54	5085.04	4977.32	-474.31	-814.92	46.36	405.25	46.16	8.90	PASS
5213.00†	5160.04	-481.18	-429.63	5184.59	5073.99	-486.60	-835.26	46.40	414.70	47.19	8.91	PASS
5313.00†	5258.64	-493.60	-440.72	5284.14	5170.66	-498.89	-855.61	46.44	424.15	48.23	8.91	PASS
5413.00†	5357.24	-506.02	-451.81	5383.69	5267.34	-511.18	-875.95	46.47	433.60	49.26	8.92	PASS
5513.00†	5455.85	-518.44	-462.90	5483.25	5364.01	-523.47	-896.29	46.50	443.05	50.30	8.92	PASS
5613.00†	5554.45	-530.86	-473.99	5582.80	5460.68	-535.76	-916.63	46.53	452.49	51.34	8.92	PASS
5713.00†	5653.06	-543.29	-485.08	5682.35	5557.36	-548.06	-936.98	46.56	461.94	52.38	8.93	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	5751.66	-555.71	-496.17	5781.90	5654.03	-560.35	-957.32	46.59	471.39	53.42	8.93	PASS
5913.00†	5850.26	-568.13	-507.26	5881.45	5750.71	-572.64	-977.66	46.61	480.84	54.46	8.93	PASS
6013.00†	5948.87	-580.55	-518.35	5981.01	5847.38	-584.93	-998.00	46.64	490.29	55.50	8.94	PASS
6113.00†	6047.47	-592.97	-529.44	6080.56	5944.05	-597.22	-1018.35	46.67	499.74	56.54	8.94	PASS
6213.00†	6146.08	-605.39	-540.53	6180.11	6040.73	-609.51	-1038.69	46.69	509.19	57.58	8.94	PASS
6313.00†	6244.68	-617.81	-551.62	6279.66	6137.40	-621.80	-1059.03	46.71	518.64	58.62	8.94	PASS
6413.00†	6343.28	-630.23	-562.71	6379.22	6234.07	-634.09	-1079.37	46.73	528.09	59.67	8.95	PASS
6513.00†	6441.89	-642.65	-573.80	6478.77	6330.75	-646.38	-1099.72	46.76	537.54	60.71	8.95	PASS
6613.00†	6540.49	-655.07	-584.89	6578.32	6427.42	-658.67	-1120.06	46.78	547.00	61.75	8.95	PASS
6713.00†	6639.09	-667.50	-595.98	6677.87	6524.09	-670.97	-1140.40	46.80	556.45	62.80	8.95	PASS
6813.00†	6737.70	-679.92	-607.07	6777.42	6620.77	-683.26	-1160.75	46.82	565.90	63.84	8.95	PASS
6913.00†	6836.30	-692.34	-618.16	6876.98	6717.44	-695.55	-1181.09	46.84	575.35	64.89	8.95	PASS
7013.00†	6934.91	-704.76	-629.25	6976.53	6814.11	-707.84	-1201.43	46.85	584.80	65.94	8.95	PASS
7056.81	6978.10	-710.20	-634.11	7020.05	6856.40	-712.95	-1210.33	46.89	588.94	66.39	8.96	PASS
7113.00†	7033.76	-714.44	-640.38	7075.56	6910.64	-715.44	-1221.79	12.96	594.31	66.92	8.97	PASS
7213.00†	7132.82	-708.37	-651.57	7173.95	7006.37	-706.67	-1242.15	-51.51	603.97	65.86	9.26	PASS
7313.00†	7229.32	-685.08	-662.51	7271.90	7098.80	-681.45	-1261.97	-68.11	613.52	65.29	9.49	PASS
7413.00†	7320.33	-645.28	-672.88	7369.51	7185.35	-640.68	-1280.72	-73.29	622.66	66.90	9.40	PASS
7513.00†	7403.09	-590.18	-682.36	7466.88	7263.68	-585.65	-1297.87	-75.35	631.11	65.43	9.74	PASS
7613.00†	7475.08	-521.45	-690.66	7564.12	7331.66	-517.95	-1312.95	-76.22	638.61	63.64	10.14	PASS
7713.00†	7534.11	-441.18	-697.53	7661.30	7387.42	-439.51	-1325.56	-76.58	644.93	61.75	10.55	PASS
7813.00†	7578.39	-351.82	-702.76	7758.49	7429.42	-352.53	-1335.34	-76.71	649.88	60.00	10.95	PASS
7913.00†	7606.57	-256.06	-706.19	7855.77	7456.44	-259.44	-1342.02	-76.75	653.32	58.60	11.27	PASS
8013.00†	7617.81	-156.84	-707.72	7953.17	7467.69	-162.87	-1345.39	-76.76	655.13	57.68	11.49	PASS
8027.99	7618.00	-141.85	-707.78	7967.78	7467.98	-148.26	-1345.60	-76.77	655.25	57.58	11.51	PASS
8113.00†	7618.00	-56.84	-708.00	8052.68	7468.00	-63.37	-1346.47	-76.78	655.88	57.34	11.57	PASS
8213.00†	7618.00	43.16	-708.26	8152.67	7468.00	36.62	-1347.49	-76.79	656.62	57.66	11.52	PASS
8313.00†	7618.00	143.16	-708.53	8252.67	7468.00	136.61	-1348.52	-76.81	657.37	58.63	11.34	PASS
8413.00†	7618.00	243.16	-708.79	8352.67	7468.00	236.60	-1349.54	-76.83	658.11	60.22	11.05	PASS
8513.00†	7618.00	343.16	-709.05	8452.66	7468.00	336.60	-1350.56	-76.84	658.85	62.38	10.67	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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
8613.00†	7618.00	443.16	-709.31	8552.66	7468.00	436.59	-1351.58	-76.86	659.59	65.05	10.24	PASS
8713.00†	7618.00	543.16	-709.57	8652.66	7468.00	536.58	-1352.61	-76.87	660.33	65.05	10.25	PASS
8813.00†	7618.00	643.16	-709.84	8752.66	7468.00	636.57	-1353.63	-76.89	661.07	71.69	9.30	PASS
8913.00†	7618.00	743.16	-710.10	8852.65	7468.00	736.56	-1354.65	-76.90	661.81	75.54	8.83	PASS
9013.00†	7618.00	843.16	-710.36	8952.65	7468.00	836.56	-1355.68	-76.92	662.56	79.68	8.38	PASS
9113.00†	7618.00	943.16	-710.62	9052.65	7468.00	936.55	-1356.70	-76.93	663.30	84.07	7.95	PASS
9213.00†	7618.00	1043.16	-710.88	9152.64	7468.00	1036.54	-1357.72	-76.94	664.04	88.66	7.54	PASS
9313.00†	7618.00	1143.16	-711.14	9252.64	7468.00	1136.53	-1358.75	-76.96	664.78	93.43	7.16	PASS
9413.00†	7618.00	1243.16	-711.41	9352.64	7468.00	1236.52	-1359.77	-76.97	665.52	98.35	6.81	PASS
9513.00†	7618.00	1343.16	-711.67	9452.64	7468.00	1336.51	-1360.79	-76.99	666.26	103.40	6.48	PASS
9613.00†	7618.00	1443.16	-711.93	9552.63	7468.00	1436.51	-1361.82	-77.00	667.01	108.56	6.18	PASS
9713.00†	7618.00	1543.16	-712.19	9652.63	7468.00	1536.50	-1362.84	-77.02	667.75	113.82	5.90	PASS
9813.00†	7618.00	1643.16	-712.45	9752.63	7468.00	1636.49	-1363.86	-77.03	668.49	119.16	5.64	PASS
9913.00†	7618.00	1743.16	-712.72	9852.62	7468.00	1736.48	-1364.89	-77.05	669.23	124.57	5.40	PASS
10013.00†	7618.00	1843.15	-712.98	9952.62	7468.00	1836.47	-1365.91	-77.06	669.97	130.05	5.17	PASS
10113.00†	7618.00	1943.15	-713.24	10052.62	7468.00	1936.47	-1366.93	-77.08	670.71	135.58	4.97	PASS
10213.00†	7618.00	2043.15	-713.50	10152.62	7468.00	2036.46	-1367.95	-77.09	671.46	141.17	4.78	PASS
10313.00†	7618.00	2143.15	-713.76	10252.61	7468.00	2136.45	-1368.98	-77.11	672.20	146.80	4.60	PASS
10413.00†	7618.00	2243.15	-714.02	10352.61	7468.00	2236.44	-1370.00	-77.12	672.94	152.46	4.43	PASS
10513.00†	7618.00	2343.15	-714.29	10452.61	7468.00	2336.43	-1371.02	-77.14	673.68	158.16	4.27	PASS
10613.00†	7618.00	2443.15	-714.55	10552.60	7468.00	2436.43	-1372.05	-77.15	674.43	163.90	4.13	PASS
10713.00†	7618.00	2543.15	-714.81	10652.60	7468.00	2536.42	-1373.07	-77.16	675.17	169.66	3.99	PASS
10813.00†	7618.00	2643.15	-715.07	10752.60	7468.00	2636.41	-1374.09	-77.18	675.91	175.44	3.86	PASS
10913.00†	7618.00	2743.15	-715.33	10852.60	7468.00	2736.40	-1375.12	-77.19	676.65	181.26	3.74	PASS
11013.00†	7618.00	2843.15	-715.60	10952.59	7468.00	2836.39	-1376.14	-77.21	677.40	187.09	3.63	PASS
11113.00†	7618.00	2943.15	-715.86	11052.59	7468.00	2936.38	-1377.16	-77.22	678.14	192.94	3.52	PASS
11213.00†	7618.00	3043.15	-716.12	11152.59	7468.00	3036.38	-1378.19	-77.24	678.88	198.80	3.42	PASS
11313.00†	7618.00	3143.15	-716.38	11252.58	7468.00	3136.37	-1379.21	-77.25	679.62	204.69	3.33	PASS
11413.00†	7618.00	3243.15	-716.64	11352.58	7468.00	3236.36	-1380.23	-77.26	680.37	210.59	3.24	PASS
11513.00†	7618.00	3343.15	-716.90	11452.58	7468.00	3336.35	-1381.26	-77.28	681.11	216.50	3.15	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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
11613.00†	7618.00	3443.15	-717.17	11552.58	7468.00	3436.34	-1382.28	-77.29	681.85	222.42	3.07	PASS
11713.00†	7618.00	3543.15	-717.43	11652.57	7468.00	3536.34	-1383.30	-77.31	682.59	228.36	3.00	PASS
11813.00†	7618.00	3643.15	-717.69	11752.57	7468.00	3636.33	-1384.32	-77.32	683.34	234.31	2.92	PASS
11913.00†	7618.00	3743.15	-717.95	11852.57	7468.00	3736.32	-1385.35	-77.33	684.08	240.26	2.85	PASS
12013.00†	7618.00	3843.15	-718.21	11952.56	7468.00	3836.31	-1386.37	-77.35	684.82	246.23	2.79	PASS
12113.00†	7618.00	3943.15	-718.48	12052.56	7468.00	3936.30	-1387.39	-77.36	685.56	252.21	2.72	PASS
12213.00†	7618.00	4043.15	-718.74	12152.56	7468.00	4036.30	-1388.42	-77.38	686.31	258.24	2.66	PASS
12313.00†	7618.00	4143.15	-719.00	12252.55	7468.00	4136.29	-1389.44	-77.39	687.05	264.18	2.60	PASS
12413.00†	7618.00	4243.15	-719.26	12352.55	7468.00	4236.28	-1390.46	-77.40	687.79	270.18	2.55	PASS
12513.00†	7618.00	4343.15	-719.52	12452.55	7468.00	4336.27	-1391.49	-77.42	688.54	276.18	2.50	PASS
12613.00†	7618.00	4443.15	-719.78	12552.55	7468.00	4436.26	-1392.51	-77.43	689.28	282.19	2.45	PASS
12713.00†	7618.00	4543.15	-720.05	12652.54	7468.00	4536.25	-1393.53	-77.44	690.02	288.21	2.40	PASS
12813.00†	7618.00	4643.15	-720.31	12752.54	7468.00	4636.25	-1394.56	-77.46	690.77	294.23	2.35	PASS
12913.00†	7618.00	4743.14	-720.57	12852.54	7468.00	4736.24	-1395.58	-77.47	691.51	300.26	2.31	PASS
13013.00†	7618.00	4843.14	-720.83	12952.53	7468.00	4836.23	-1396.60	-77.49	692.25	306.29	2.26	PASS
13113.00†	7618.00	4943.14	-721.09	13052.53	7468.00	4936.22	-1397.62	-77.50	693.00	312.33	2.22	PASS
13213.00†	7618.00	5043.14	-721.36	13152.53	7468.00	5036.21	-1398.65	-77.51	693.74	318.37	2.18	PASS
13313.00†	7618.00	5143.14	-721.62	13252.53	7468.00	5136.21	-1399.67	-77.53	694.48	324.42	2.14	PASS
13413.00†	7618.00	5243.14	-721.88	13352.52	7468.00	5236.20	-1400.69	-77.54	695.23	330.47	2.11	PASS
13513.00†	7618.00	5343.14	-722.14	13452.52	7468.00	5336.19	-1401.72	-77.55	695.97	336.52	2.07	PASS
13613.00†	7618.00	5443.14	-722.40	13552.52	7468.00	5436.18	-1402.74	-77.57	696.71	342.58	2.04	PASS
13713.00†	7618.00	5543.14	-722.66	13652.51	7468.00	5536.17	-1403.76	-77.58	697.46	348.64	2.00	PASS
13813.00†	7618.00	5643.14	-722.93	13752.51	7468.00	5636.17	-1404.79	-77.59	698.20	354.71	1.97	PASS
13913.00†	7618.00	5743.14	-723.19	13852.51	7468.00	5736.16	-1405.81	-77.61	698.94	360.78	1.94	PASS
14013.00†	7618.00	5843.14	-723.45	13952.51	7468.00	5836.15	-1406.83	-77.62	699.69	366.85	1.91	PASS
14113.00†	7618.00	5943.14	-723.71	14052.50	7468.00	5936.14	-1407.86	-77.63	700.43	372.92	1.88	PASS
14213.00†	7618.00	6043.14	-723.97	14152.50	7468.00	6036.13	-1408.88	-77.65	701.17	379.00	1.85	PASS
14313.00†	7618.00	6143.14	-724.24	14252.50	7468.00	6136.12	-1409.90	-77.66	701.92	385.08	1.82	PASS
14413.00†	7618.00	6243.14	-724.50	14352.49	7468.00	6236.12	-1410.93	-77.67	702.66	391.16	1.80	PASS
14513.00†	7618.00	6343.14	-724.76	14452.49	7468.00	6336.11	-1411.95	-77.69	703.40	397.25	1.77	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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
14613.00†	7618.00	6443.14	-725.02	14552.49	7468.00	6436.10	-1412.97	-77.70	704.15	403.34	1.75	PASS
14713.00†	7618.00	6543.14	-725.28	14652.49	7468.00	6536.09	-1413.99	-77.71	704.89	409.43	1.72	PASS
14813.00†	7618.00	6643.14	-725.54	14752.48	7468.00	6636.08	-1415.02	-77.73	705.64	415.52	1.70	PASS
14913.00†	7618.00	6743.14	-725.81	14852.48	7468.00	6736.08	-1416.04	-77.74	706.38	421.61	1.68	PASS
15013.00†	7618.00	6843.14	-726.07	14952.48	7468.00	6836.07	-1417.06	-77.75	707.12	427.71	1.65	PASS
15113.00†	7618.00	6943.14	-726.33	15052.47	7468.00	6936.06	-1418.09	-77.77	707.87	433.81	1.63	PASS
15213.00†	7618.00	7043.14	-726.59	15152.47	7468.00	7036.05	-1419.11	-77.78	708.61	439.91	1.61	PASS
15313.00†	7618.00	7143.14	-726.85	15252.47	7468.00	7136.04	-1420.13	-77.79	709.36	446.01	1.59	PASS
15413.00†	7618.00	7243.14	-727.12	15352.46	7468.00	7236.04	-1421.16	-77.81	710.10	452.11	1.57	PASS
15513.00†	7618.00	7343.14	-727.38	15452.46	7468.00	7336.03	-1422.18	-77.82	710.84	458.22	1.55	PASS
15613.00†	7618.00	7443.14	-727.64	15552.46	7468.00	7436.02	-1423.20	-77.83	711.59	464.33	1.53	PASS
15713.00†	7618.00	7543.14	-727.90	15652.46	7468.00	7536.01	-1424.23	-77.84	712.33	470.44	1.51	PASS
15813.00†	7618.00	7643.14	-728.16	15752.45	7468.00	7636.00	-1425.25	-77.86	713.08	476.55	1.50	PASS
15913.00†	7618.00	7743.13	-728.42	15852.45	7468.00	7735.99	-1426.27	-77.87	713.82	482.66	1.48	PASS
16013.00†	7618.00	7843.13	-728.69	15952.45	7468.00	7835.99	-1427.29	-77.88	714.57	488.77	1.46	PASS
16113.00†	7618.00	7943.13	-728.95	16052.44	7468.00	7935.98	-1428.32	-77.90	715.31	494.89	1.45	PASS
16213.00†	7618.00	8043.13	-729.21	16152.44	7468.00	8035.97	-1429.34	-77.91	716.06	501.01	1.43	PASS
16313.00†	7618.00	8143.13	-729.47	16252.44	7468.00	8135.96	-1430.36	-77.92	716.80	507.13	1.41	PASS
16413.00†	7618.00	8243.13	-729.73	16352.44	7468.00	8235.95	-1431.39	-77.93	717.54	513.24	1.40	PASS
16513.00†	7618.00	8343.13	-730.00	16452.43	7468.00	8335.95	-1432.41	-77.95	718.29	519.37	1.38	PASS
16613.00†	7618.00	8443.13	-730.26	16552.43	7468.00	8435.94	-1433.43	-77.96	719.03	525.49	1.37	PASS
16713.00†	7618.00	8543.13	-730.52	16652.43	7468.00	8535.93	-1434.46	-77.97	719.78	531.61	1.35	PASS
16813.00†	7618.00	8643.13	-730.78	16752.42	7468.00	8635.92	-1435.48	-77.98	720.52	537.74	1.34	PASS
16913.00†	7618.00	8743.13	-731.04	16852.42	7468.00	8735.91	-1436.50	-78.00	721.27	543.86	1.33	PASS
17013.00†	7618.00	8843.13	-731.30	16952.42	7468.00	8835.90	-1437.53	-78.01	722.01	549.99	1.31	PASS
17113.00†	7618.00	8943.13	-731.57	17052.42	7468.00	8935.90	-1438.55	-78.02	722.76	556.12	1.30	PASS
17213.00†	7618.00	9043.13	-731.83	17152.41	7468.00	9035.89	-1439.57	-78.03	723.50	562.25	1.29	PASS
17313.00†	7618.00	9143.13	-732.09	17252.41	7468.00	9135.88	-1440.60	-78.05	724.25	568.38	1.27	PASS
17413.00†	7618.00	9243.13	-732.35	17352.41	7468.00	9235.87	-1441.62	-78.06	724.99	574.51	1.26	PASS
17513.00†	7618.00	9343.13	-732.61	17452.40	7468.00	9335.86	-1442.64	-78.07	725.74	580.65	1.25	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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
17613.00†	7618.00	9443.13	-732.88	17552.40	7468.00	9435.86	-1443.66	-78.08	726.48	586.78	1.24	PASS
17713.00†	7618.00	9543.13	-733.14	17652.40	7468.00	9535.85	-1444.69	-78.10	727.23	592.91	1.23	PASS
17742.92†	7618.00	9573.05	-733.22	17663.83	7468.00	9547.28	-1444.80	-78.10	727.68	595.56	1.22	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	-0.02	-18.27	-20.96	-52.92
8.5in Open Hole	1800.00	17683.47	15883.47	1787.28	7468.00	-20.96	-52.92	2915.99	-449.57

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

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	17683.47	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		ACKARD NORTH 2-35-1NAH PWB

OFFSET WELLPATH REFERENCE - Offset Wellbore: ACKARD NORTH 2-35-1NAH PWB Offset Wellpath: ACKARD NORTH 2-35-1NAH PWP (REV-A.0)

MD Reference: RIG (13'KB) (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	13.00ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	0.13	45.03	89.84	45.03	1.40	73.72	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.13	45.03	89.84	45.03	1.72	48.31	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.13	45.03	89.84	45.03	2.28	29.89	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.13	45.03	89.84	45.03	2.88	21.26	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.13	45.03	89.84	45.03	3.50	16.42	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.13	45.03	89.84	45.03	4.12	13.35	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.13	45.03	89.84	45.03	4.74	11.24	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.13	45.03	89.84	45.03	5.36	9.70	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.13	45.03	89.84	45.03	5.99	8.53	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.13	45.03	89.84	45.03	6.61	7.61	PASS
1013.00†	1013.00	0.00	0.00	1013.00	1013.00	0.13	45.03	89.84	45.03	7.24	6.87	PASS
1100.00	1100.00	0.00	0.00	1100.00	1100.00	0.13	45.03	89.84	45.03	7.78	6.34	PASS
1113.00†	1113.00	-0.02	-0.02	1113.00	1113.00	0.13	45.03	-131.95	45.05	7.86	6.27	PASS
1213.00†	1212.97	-1.66	-1.48	1212.97	1212.97	0.13	45.03	-133.94	46.55	8.54	5.91	PASS
1313.00†	1312.80	-5.90	-5.27	1312.80	1312.80	0.13	45.03	-138.52	50.66	9.37	5.82	PASS
1413.00†	1412.38	-12.74	-11.38	1412.41	1412.41	0.10	45.03	-144.43	57.85	10.24	6.04	PASS
1513.00†	1511.57	-22.17	-19.79	1512.19	1512.16	-2.06	45.20	-148.72	68.03	11.12	6.52	PASS
1579.26	1577.03	-29.83	-26.64	1578.32	1578.21	-5.40	45.46	-150.21	76.13	11.66	6.94	PASS
1613.00†	1610.30	-34.02	-30.38	1612.01	1611.81	-7.69	45.63	-150.62	80.46	11.90	7.18	PASS
1713.00†	1708.90	-46.45	-41.47	1712.02	1711.40	-16.80	46.33	-150.20	92.70	12.55	7.82	PASS
1813.00†	1807.50	-58.87	-52.56	1811.77	1810.39	-29.05	47.27	-148.17	104.23	13.12	8.34	PASS
1913.00†	1906.11	-71.29	-63.65	1911.03	1908.82	-41.85	48.25	-146.26	115.74	13.83	8.77	PASS
2013.00†	2004.71	-83.71	-74.74	2010.30	2007.26	-54.64	49.23	-144.69	127.36	14.58	9.13	PASS
2113.00†	2103.32	-96.13	-85.83	2109.57	2105.69	-67.44	50.21	-143.38	139.05	15.37	9.44	PASS
2213.00†	2201.92	-108.55	-96.92	2208.84	2204.12	-80.24	51.19	-142.28	150.81	16.19	9.69	PASS
2313.00†	2300.52	-120.97	-108.01	2308.11	2302.56	-93.04	52.17	-141.33	162.61	17.04	9.92	PASS
2413.00†	2399.13	-133.39	-119.10	2407.37	2400.99	-105.84	53.15	-140.52	174.45	17.90	10.10	PASS
2513.00†	2497.73	-145.81	-130.19	2506.64	2499.43	-118.64	54.13	-139.81	186.32	18.79	10.27	PASS
2613.00†	2596.34	-158.23	-141.28	2605.91	2597.86	-131.44	55.11	-139.18	198.22	19.69	10.41	PASS
2713.00†	2694.94	-170.66	-152.37	2705.18	2696.30	-144.24	56.09	-138.63	210.14	20.60	10.53	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	2793.54	-183.08	-163.46	2804.44	2794.73	-157.04	57.07	-138.13	222.07	21.52	10.64	PASS
2913.00†	2892.15	-195.50	-174.55	2903.71	2893.17	-169.84	58.05	-137.68	234.02	22.45	10.73	PASS
3013.00†	2990.75	-207.92	-185.64	3002.98	2991.60	-182.63	59.04	-137.28	245.98	23.39	10.81	PASS
3113.00†	3089.35	-220.34	-196.73	3102.25	3090.04	-195.43	60.02	-136.92	257.96	24.34	10.89	PASS
3213.00†	3187.96	-232.76	-207.82	3201.52	3188.47	-208.23	61.00	-136.58	269.94	25.29	10.95	PASS
3313.00†	3286.56	-245.18	-218.91	3300.78	3286.90	-221.03	61.98	-136.28	281.93	26.25	11.01	PASS
3413.00†	3385.17	-257.60	-230.00	3400.05	3385.34	-233.83	62.96	-136.00	293.92	27.22	11.06	PASS
3513.00†	3483.77	-270.02	-241.09	3499.32	3483.77	-246.63	63.94	-135.74	305.93	28.19	11.11	PASS
3613.00†	3582.37	-282.44	-252.18	3598.59	3582.21	-259.43	64.92	-135.51	317.94	29.16	11.15	PASS
3713.00†	3680.98	-294.87	-263.27	3697.86	3680.64	-272.23	65.90	-135.29	329.95	30.14	11.19	PASS
3813.00†	3779.58	-307.29	-274.36	3797.12	3779.08	-285.03	66.88	-135.08	341.97	31.12	11.22	PASS
3913.00†	3878.19	-319.71	-285.45	3896.39	3877.51	-297.83	67.86	-134.89	353.99	32.10	11.25	PASS
4013.00†	3976.79	-332.13	-296.54	3995.66	3975.95	-310.62	68.84	-134.71	366.02	33.08	11.28	PASS
4113.00†	4075.39	-344.55	-307.64	4094.93	4074.38	-323.42	69.82	-134.54	378.05	34.07	11.31	PASS
4213.00†	4174.00	-356.97	-318.73	4194.20	4172.81	-336.22	70.80	-134.39	390.08	35.06	11.33	PASS
4313.00†	4272.60	-369.39	-329.82	4293.46	4271.25	-349.02	71.79	-134.24	402.12	36.05	11.36	PASS
4413.00†	4371.21	-381.81	-340.91	4392.73	4369.68	-361.82	72.77	-134.10	414.16	37.05	11.38	PASS
4513.00†	4469.81	-394.23	-352.00	4492.00	4468.12	-374.62	73.75	-133.97	426.20	38.04	11.40	PASS
4613.00†	4568.41	-406.65	-363.09	4591.27	4566.55	-387.42	74.73	-133.84	438.24	39.04	11.41	PASS
4713.00†	4667.02	-419.08	-374.18	4690.54	4664.99	-400.22	75.71	-133.73	450.28	40.04	11.43	PASS
4813.00†	4765.62	-431.50	-385.27	4789.80	4763.42	-413.02	76.69	-133.62	462.33	41.04	11.45	PASS
4913.00†	4864.22	-443.92	-396.36	4889.07	4861.86	-425.82	77.67	-133.51	474.38	42.04	11.46	PASS
5013.00†	4962.83	-456.34	-407.45	4988.34	4960.29	-438.61	78.65	-133.41	486.43	43.04	11.47	PASS
5113.00†	5061.43	-468.76	-418.54	5087.61	5058.72	-451.41	79.63	-133.31	498.48	44.04	11.49	PASS
5213.00†	5160.04	-481.18	-429.63	5186.87	5157.16	-464.21	80.61	-133.22	510.53	45.05	11.50	PASS
5313.00†	5258.64	-493.60	-440.72	5286.14	5255.59	-477.01	81.59	-133.14	522.58	46.05	11.51	PASS
5413.00†	5357.24	-506.02	-451.81	5385.41	5354.03	-489.81	82.57	-133.05	534.64	47.06	11.52	PASS
5513.00†	5455.85	-518.44	-462.90	5484.68	5452.46	-502.61	83.55	-132.98	546.69	48.06	11.53	PASS
5613.00†	5554.45	-530.86	-473.99	5583.95	5550.90	-515.41	84.53	-132.90	558.75	49.07	11.54	PASS
5713.00†	5653.06	-543.29	-485.08	5683.21	5649.33	-528.21	85.52	-132.83	570.81	50.08	11.55	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-2NCH PWB Offset Wellpath: ACKARD NORTH 2-35-2NCH PWP (REV. A.0)												
Facility: SEC.02-T03S-R66W Slot: SLOT#07 ACKARD NORTH 2-35-2NCH (600'FSL & 2025'FWL, SEC.02) Well: ACKARD NORTH 2-35-2NCH Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5751.66	-555.71	-496.17	5782.48	5747.77	-541.01	86.50	-132.76	582.86	51.08	11.56	PASS
5913.00†	5850.26	-568.13	-507.26	5881.75	5846.20	-553.81	87.48	-132.69	594.92	52.09	11.56	PASS
6013.00†	5948.87	-580.55	-518.35	5981.02	5944.63	-566.60	88.46	-132.63	606.98	53.10	11.57	PASS
6113.00†	6047.47	-592.97	-529.44	6080.29	6043.07	-579.40	89.44	-132.56	619.04	54.11	11.58	PASS
6213.00†	6146.08	-605.39	-540.53	6179.55	6141.50	-592.20	90.42	-132.51	631.10	55.12	11.58	PASS
6313.00†	6244.68	-617.81	-551.62	6278.82	6239.94	-605.00	91.40	-132.45	643.17	56.14	11.59	PASS
6413.00†	6343.28	-630.23	-562.71	6378.09	6338.37	-617.80	92.38	-132.39	655.23	57.15	11.60	PASS
6513.00†	6441.89	-642.65	-573.80	6477.36	6436.81	-630.60	93.36	-132.34	667.29	58.16	11.60	PASS
6613.00†	6540.49	-655.07	-584.89	6576.63	6535.24	-643.40	94.34	-132.29	679.35	59.17	11.61	PASS
6713.00†	6639.09	-667.50	-595.98	6675.89	6633.68	-656.20	95.32	-132.24	691.42	60.19	11.61	PASS
6813.00†	6737.70	-679.92	-607.07	6775.16	6732.11	-669.00	96.30	-132.19	703.48	61.20	11.62	PASS
6913.00†	6836.30	-692.34	-618.16	6874.43	6830.54	-681.80	97.28	-132.15	715.55	62.21	11.62	PASS
7013.00†	6934.91	-704.76	-629.25	6973.70	6928.98	-694.59	98.27	-132.10	727.61	63.23	11.63	PASS
7056.81	6978.10	-710.20	-634.11	7017.18	6972.10	-700.20	98.69	-132.08	732.90	63.67	11.63	PASS
7113.00†	7033.76	-714.44	-640.38	7072.86	7027.31	-707.38	99.24	-167.16	739.68	64.23	11.63	PASS
7213.00†	7132.82	-708.37	-651.57	7171.60	7125.80	-712.29	100.21	126.76	751.82	65.53	11.59	PASS
7313.00†	7229.32	-685.08	-662.51	7272.28	7225.58	-699.84	101.13	108.63	763.80	67.60	11.41	PASS
7413.00†	7320.33	-645.28	-672.88	7375.12	7323.64	-669.33	102.00	102.04	775.26	68.23	11.47	PASS
7513.00†	7403.09	-590.18	-682.36	7480.21	7416.56	-620.58	102.76	98.73	785.83	66.80	11.88	PASS
7613.00†	7475.08	-521.45	-690.66	7587.52	7500.65	-554.17	103.40	96.79	795.15	64.88	12.38	PASS
7713.00†	7534.11	-441.18	-697.53	7696.91	7572.11	-471.56	103.87	95.57	802.88	62.68	12.94	PASS
7813.00†	7578.39	-351.82	-702.76	7808.08	7627.33	-375.28	104.15	94.82	808.73	60.46	13.52	PASS
7913.00†	7606.57	-256.06	-706.19	7920.58	7663.25	-268.86	104.22	94.39	812.49	58.56	14.03	PASS
8013.00†	7617.81	-156.84	-707.72	8033.83	7677.75	-156.73	104.06	94.23	813.99	57.19	14.40	PASS
8027.99	7618.00	-141.85	-707.78	8050.83	7678.00	-139.73	104.02	94.23	814.02	57.04	14.44	PASS
8113.00†	7618.00	-56.84	-708.00	8135.84	7678.00	-54.71	103.80	94.23	814.02	56.57	14.56	PASS
8213.00†	7618.00	43.16	-708.26	8235.84	7678.00	45.29	103.54	94.23	814.02	56.65	14.54	PASS
8313.00†	7618.00	143.16	-708.53	8335.84	7678.00	145.29	103.27	94.23	814.02	57.44	14.34	PASS
8413.00†	7618.00	243.16	-708.79	8435.84	7678.00	245.29	103.01	94.23	814.02	58.88	13.98	PASS
8513.00†	7618.00	343.16	-709.05	8535.84	7678.00	345.29	102.75	94.23	814.02	60.94	13.50	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
8613.00†	7618.00	443.16	-709.31	8635.84	7678.00	445.28	102.49	94.23	814.02	63.55	12.94	PASS
8713.00†	7618.00	543.16	-709.57	8735.84	7678.00	545.28	102.23	94.23	814.02	66.67	12.33	PASS
8813.00†	7618.00	643.16	-709.84	8835.84	7678.00	645.28	101.97	94.23	814.02	70.20	11.70	PASS
8913.00†	7618.00	743.16	-710.10	8935.84	7678.00	745.28	101.70	94.23	814.02	74.10	11.08	PASS
9013.00†	7618.00	843.16	-710.36	9035.84	7678.00	845.28	101.44	94.23	814.02	78.20	10.50	PASS
9113.00†	7618.00	943.16	-710.62	9135.84	7678.00	945.28	101.18	94.23	814.02	82.77	9.91	PASS
9213.00†	7618.00	1043.16	-710.88	9235.84	7678.00	1045.28	100.92	94.23	814.02	87.45	9.38	PASS
9313.00†	7618.00	1143.16	-711.14	9335.84	7678.00	1145.28	100.66	94.23	814.02	92.32	8.88	PASS
9413.00†	7618.00	1243.16	-711.41	9435.84	7678.00	1245.28	100.39	94.23	814.02	97.35	8.42	PASS
9513.00†	7618.00	1343.16	-711.67	9535.84	7678.00	1345.28	100.13	94.23	814.02	102.52	7.99	PASS
9613.00†	7618.00	1443.16	-711.93	9635.84	7678.00	1445.28	99.87	94.23	814.02	107.79	7.60	PASS
9713.00†	7618.00	1543.16	-712.19	9735.84	7678.00	1545.28	99.61	94.23	814.02	113.17	7.23	PASS
9813.00†	7618.00	1643.16	-712.45	9835.84	7678.00	1645.28	99.35	94.23	814.02	118.63	6.90	PASS
9913.00†	7618.00	1743.16	-712.72	9935.84	7678.00	1745.28	99.09	94.23	814.02	124.17	6.59	PASS
10013.00†	7618.00	1843.15	-712.98	10035.84	7678.00	1845.28	98.82	94.23	814.02	129.77	6.30	PASS
10113.00†	7618.00	1943.15	-713.24	10135.84	7678.00	1945.28	98.56	94.23	814.02	135.43	6.04	PASS
10213.00†	7618.00	2043.15	-713.50	10235.84	7678.00	2045.28	98.30	94.23	814.02	141.13	5.79	PASS
10313.00†	7618.00	2143.15	-713.76	10335.84	7678.00	2145.28	98.04	94.23	814.02	146.89	5.56	PASS
10413.00†	7618.00	2243.15	-714.02	10435.84	7678.00	2245.28	97.78	94.23	814.02	152.68	5.35	PASS
10513.00†	7618.00	2343.15	-714.29	10535.84	7678.00	2345.28	97.52	94.23	814.02	158.50	5.15	PASS
10613.00†	7618.00	2443.15	-714.55	10635.84	7678.00	2445.28	97.25	94.23	814.02	164.36	4.97	PASS
10713.00†	7618.00	2543.15	-714.81	10735.84	7678.00	2545.28	96.99	94.23	814.02	170.24	4.80	PASS
10813.00†	7618.00	2643.15	-715.07	10835.84	7678.00	2645.28	96.73	94.23	814.02	176.15	4.64	PASS
10913.00†	7618.00	2743.15	-715.33	10935.84	7678.00	2745.28	96.47	94.23	814.02	182.09	4.48	PASS
11013.00†	7618.00	2843.15	-715.60	11035.84	7678.00	2845.28	96.21	94.23	814.02	188.04	4.34	PASS
11113.00†	7618.00	2943.15	-715.86	11135.84	7678.00	2945.28	95.94	94.23	814.02	194.01	4.21	PASS
11213.00†	7618.00	3043.15	-716.12	11235.84	7678.00	3045.28	95.68	94.23	814.02	200.00	4.08	PASS
11313.00†	7618.00	3143.15	-716.38	11335.84	7678.00	3145.28	95.42	94.23	814.02	206.00	3.96	PASS
11413.00†	7618.00	3243.15	-716.64	11435.84	7678.00	3245.28	95.16	94.23	814.02	212.02	3.85	PASS
11513.00†	7618.00	3343.15	-716.90	11535.84	7678.00	3345.27	94.90	94.23	814.02	218.05	3.74	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11613.00†	7618.00	3443.15	-717.17	11635.84	7678.00	3445.27	94.64	94.23	814.02	224.09	3.64	PASS
11713.00†	7618.00	3543.15	-717.43	11735.84	7678.00	3545.27	94.37	94.23	814.02	230.14	3.54	PASS
11813.00†	7618.00	3643.15	-717.69	11835.84	7678.00	3645.27	94.11	94.23	814.02	236.20	3.45	PASS
11913.00†	7618.00	3743.15	-717.95	11935.84	7678.00	3745.27	93.85	94.23	814.02	242.28	3.37	PASS
12013.00†	7618.00	3843.15	-718.21	12035.84	7678.00	3845.27	93.59	94.23	814.02	248.36	3.28	PASS
12113.00†	7618.00	3943.15	-718.48	12135.84	7678.00	3945.27	93.33	94.23	814.02	254.45	3.21	PASS
12213.00†	7618.00	4043.15	-718.74	12235.84	7678.00	4045.27	93.06	94.23	814.02	260.54	3.13	PASS
12313.00†	7618.00	4143.15	-719.00	12335.84	7678.00	4145.27	92.80	94.23	814.02	266.65	3.06	PASS
12413.00†	7618.00	4243.15	-719.26	12435.84	7678.00	4245.27	92.54	94.23	814.02	272.76	2.99	PASS
12513.00†	7618.00	4343.15	-719.52	12535.84	7678.00	4345.27	92.28	94.23	814.02	278.87	2.92	PASS
12613.00†	7618.00	4443.15	-719.78	12635.84	7678.00	4445.27	92.02	94.23	814.02	284.99	2.86	PASS
12713.00†	7618.00	4543.15	-720.05	12735.84	7678.00	4545.27	91.76	94.23	814.02	291.12	2.80	PASS
12813.00†	7618.00	4643.15	-720.31	12835.84	7678.00	4645.27	91.49	94.23	814.02	297.25	2.74	PASS
12913.00†	7618.00	4743.14	-720.57	12935.84	7678.00	4745.27	91.23	94.23	814.02	303.39	2.69	PASS
13013.00†	7618.00	4843.14	-720.83	13035.84	7678.00	4845.27	90.97	94.23	814.02	309.53	2.63	PASS
13113.00†	7618.00	4943.14	-721.09	13135.84	7678.00	4945.27	90.71	94.23	814.02	315.67	2.58	PASS
13213.00†	7618.00	5043.14	-721.36	13235.84	7678.00	5045.27	90.45	94.23	814.02	321.82	2.53	PASS
13313.00†	7618.00	5143.14	-721.62	13335.84	7678.00	5145.27	90.19	94.23	814.02	327.97	2.49	PASS
13413.00†	7618.00	5243.14	-721.88	13435.84	7678.00	5245.27	89.92	94.23	814.02	334.13	2.44	PASS
13513.00†	7618.00	5343.14	-722.14	13535.84	7678.00	5345.27	89.66	94.23	814.02	340.29	2.40	PASS
13613.00†	7618.00	5443.14	-722.40	13635.84	7678.00	5445.27	89.40	94.23	814.02	346.45	2.35	PASS
13713.00†	7618.00	5543.14	-722.66	13735.84	7678.00	5545.27	89.14	94.23	814.02	352.62	2.31	PASS
13813.00†	7618.00	5643.14	-722.93	13835.84	7678.00	5645.27	88.88	94.23	814.02	358.78	2.27	PASS
13913.00†	7618.00	5743.14	-723.19	13935.84	7678.00	5745.27	88.61	94.23	814.02	364.95	2.23	PASS
14013.00†	7618.00	5843.14	-723.45	14035.84	7678.00	5845.27	88.35	94.23	814.02	371.13	2.20	PASS
14113.00†	7618.00	5943.14	-723.71	14135.84	7678.00	5945.27	88.09	94.23	814.02	377.30	2.16	PASS
14213.00†	7618.00	6043.14	-723.97	14235.84	7678.00	6045.27	87.83	94.23	814.02	383.48	2.12	PASS
14313.00†	7618.00	6143.14	-724.24	14335.84	7678.00	6145.27	87.57	94.23	814.02	389.66	2.09	PASS
14413.00†	7618.00	6243.14	-724.50	14435.84	7678.00	6245.26	87.31	94.23	814.02	395.84	2.06	PASS
14513.00†	7618.00	6343.14	-724.76	14535.84	7678.00	6345.26	87.04	94.23	814.02	402.03	2.03	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
14613.00†	7618.00	6443.14	-725.02	14635.84	7678.00	6445.26	86.78	94.23	814.02	408.21	2.00	PASS
14713.00†	7618.00	6543.14	-725.28	14735.84	7678.00	6545.26	86.52	94.23	814.02	414.40	1.97	PASS
14813.00†	7618.00	6643.14	-725.54	14835.84	7678.00	6645.26	86.26	94.23	814.02	420.59	1.94	PASS
14913.00†	7618.00	6743.14	-725.81	14935.84	7678.00	6745.26	86.00	94.23	814.02	426.78	1.91	PASS
15013.00†	7618.00	6843.14	-726.07	15035.84	7678.00	6845.26	85.73	94.23	814.02	432.97	1.88	PASS
15113.00†	7618.00	6943.14	-726.33	15135.84	7678.00	6945.26	85.47	94.23	814.02	439.17	1.85	PASS
15213.00†	7618.00	7043.14	-726.59	15235.84	7678.00	7045.26	85.21	94.23	814.02	445.36	1.83	PASS
15313.00†	7618.00	7143.14	-726.85	15335.84	7678.00	7145.26	84.95	94.23	814.02	451.56	1.80	PASS
15413.00†	7618.00	7243.14	-727.12	15435.84	7678.00	7245.26	84.69	94.23	814.02	457.76	1.78	PASS
15513.00†	7618.00	7343.14	-727.38	15535.84	7678.00	7345.26	84.43	94.23	814.02	463.96	1.76	PASS
15613.00†	7618.00	7443.14	-727.64	15635.84	7678.00	7445.26	84.16	94.23	814.02	470.16	1.73	PASS
15713.00†	7618.00	7543.14	-727.90	15735.84	7678.00	7545.26	83.90	94.23	814.02	476.36	1.71	PASS
15813.00†	7618.00	7643.14	-728.16	15835.84	7678.00	7645.26	83.64	94.23	814.02	482.56	1.69	PASS
15913.00†	7618.00	7743.13	-728.42	15935.84	7678.00	7745.26	83.38	94.23	814.02	488.77	1.67	PASS
16013.00†	7618.00	7843.13	-728.69	16035.84	7678.00	7845.26	83.12	94.23	814.02	494.97	1.65	PASS
16113.00†	7618.00	7943.13	-728.95	16135.84	7678.00	7945.26	82.86	94.23	814.02	501.18	1.63	PASS
16213.00†	7618.00	8043.13	-729.21	16235.84	7678.00	8045.26	82.59	94.23	814.02	507.39	1.61	PASS
16313.00†	7618.00	8143.13	-729.47	16335.84	7678.00	8145.26	82.33	94.23	814.02	513.60	1.59	PASS
16413.00†	7618.00	8243.13	-729.73	16435.84	7678.00	8245.26	82.07	94.23	814.02	519.80	1.57	PASS
16513.00†	7618.00	8343.13	-730.00	16535.84	7678.00	8345.26	81.81	94.23	814.02	526.01	1.55	PASS
16613.00†	7618.00	8443.13	-730.26	16635.84	7678.00	8445.26	81.55	94.23	814.02	532.22	1.53	PASS
16713.00†	7618.00	8543.13	-730.52	16735.84	7678.00	8545.26	81.28	94.23	814.02	538.44	1.51	PASS
16813.00†	7618.00	8643.13	-730.78	16835.84	7678.00	8645.26	81.02	94.23	814.02	544.65	1.50	PASS
16913.00†	7618.00	8743.13	-731.04	16935.84	7678.00	8745.26	80.76	94.23	814.02	550.86	1.48	PASS
17013.00†	7618.00	8843.13	-731.30	17035.84	7678.00	8845.26	80.50	94.23	814.02	557.08	1.46	PASS
17113.00†	7618.00	8943.13	-731.57	17135.84	7678.00	8945.26	80.24	94.23	814.02	563.29	1.45	PASS
17213.00†	7618.00	9043.13	-731.83	17235.84	7678.00	9045.26	79.98	94.23	814.02	569.51	1.43	PASS
17313.00†	7618.00	9143.13	-732.09	17335.84	7678.00	9145.26	79.71	94.23	814.02	575.72	1.41	PASS
17413.00†	7618.00	9243.13	-732.35	17435.84	7678.00	9245.26	79.45	94.23	814.02	581.94	1.40	PASS
17513.00†	7618.00	9343.13	-732.61	17535.84	7678.00	9345.26	79.19	94.23	814.02	588.15	1.38	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
17613.00†	7618.00	9443.13	-732.88	17635.84	7678.00	9445.25	78.93	94.23	814.02	594.37	1.37	PASS
17713.00†	7618.00	9543.13	-733.14	17735.84	7678.00	9545.25	78.67	94.23	814.02	600.59	1.36	PASS
17742.92†	7618.00	9573.05	-733.22	17747.27	7678.00	9556.68	78.64	94.23	814.23	601.25	1.35	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

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

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

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

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1798.72	0.08	27.45	-8.35	28.10
8.5in Open Hole	1800.00	17770.56	15970.56	1798.72	7678.00	-8.35	28.10	2920.01	37.68

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	7903.54	-1348.93	-9.69	8017.90	25.40	325.88	PASS
113.00†	113.00	0.00	0.00	53.00	113.00	7903.54	-1348.93	-9.69	8017.82	51.25	158.92	PASS
213.00†	213.00	0.00	0.00	153.00	213.00	7903.54	-1348.93	-9.69	8017.82	53.59	151.86	PASS
313.00†	313.00	0.00	0.00	253.00	313.00	7903.54	-1348.93	-9.69	8017.82	55.95	145.39	PASS
413.00†	413.00	0.00	0.00	353.00	413.00	7903.54	-1348.93	-9.69	8017.82	58.30	139.43	PASS
513.00†	513.00	0.00	0.00	453.00	513.00	7903.54	-1348.93	-9.69	8017.82	60.66	133.94	PASS
613.00†	613.00	0.00	0.00	553.00	613.00	7903.54	-1348.93	-9.69	8017.82	63.02	128.85	PASS
713.00†	713.00	0.00	0.00	653.00	713.00	7903.54	-1348.93	-9.69	8017.82	65.39	124.13	PASS
813.00†	813.00	0.00	0.00	753.00	813.00	7903.54	-1348.93	-9.69	8017.82	67.76	119.74	PASS
913.00†	913.00	0.00	0.00	853.00	913.00	7903.54	-1348.93	-9.69	8017.82	70.13	115.64	PASS
1013.00†	1013.00	0.00	0.00	953.00	1013.00	7903.54	-1348.93	-9.69	8017.82	72.51	111.80	PASS
1100.00	1100.00	0.00	0.00	1040.00	1100.00	7903.54	-1348.93	-9.69	8017.82	74.58	108.66	PASS
1113.00†	1113.00	-0.02	-0.02	1053.00	1113.00	7903.54	-1348.93	128.55	8017.84	74.89	108.21	PASS
1213.00†	1212.97	-1.66	-1.48	1152.97	1212.97	7903.54	-1348.93	128.54	8019.21	77.28	104.84	PASS
1313.00†	1312.80	-5.90	-5.27	1252.80	1312.80	7903.54	-1348.93	128.52	8022.76	79.69	101.68	PASS
1413.00†	1412.38	-12.74	-11.38	1352.38	1412.38	7903.54	-1348.93	128.48	8028.48	82.10	98.74	PASS
1513.00†	1511.57	-22.17	-19.79	1451.57	1511.57	7903.54	-1348.93	128.43	8036.38	84.51	95.99	PASS
1579.26	1577.03	-29.83	-26.64	1517.03	1577.03	7903.54	-1348.93	128.38	8042.81	86.11	94.27	PASS
1613.00†	1610.30	-34.02	-30.38	1550.30	1610.30	7903.54	-1348.93	128.42	8046.33	86.91	93.43	PASS
1713.00†	1708.90	-46.45	-41.47	1648.90	1708.90	7903.54	-1348.93	128.51	8056.78	89.31	91.02	PASS
1813.00†	1807.50	-58.87	-52.56	1747.50	1807.50	7903.54	-1348.93	128.60	8067.25	91.62	88.73	PASS
1913.00†	1906.11	-71.29	-63.65	1846.11	1906.11	7903.54	-1348.93	128.69	8077.73	94.03	86.55	PASS
2013.00†	2004.71	-83.71	-74.74	1944.71	2004.71	7903.54	-1348.93	128.78	8088.24	96.46	84.46	PASS
2113.00†	2103.32	-96.13	-85.83	2043.32	2103.32	7903.54	-1348.93	128.87	8098.77	98.89	82.48	PASS
2213.00†	2201.92	-108.55	-96.92	2141.92	2201.92	7903.54	-1348.93	128.96	8109.32	101.34	80.58	PASS
2313.00†	2300.52	-120.97	-108.01	2240.52	2300.52	7903.54	-1348.93	129.05	8119.89	103.79	78.76	PASS
2413.00†	2399.13	-133.39	-119.10	2339.13	2399.13	7903.54	-1348.93	129.15	8130.48	106.25	77.03	PASS
2513.00†	2497.73	-145.81	-130.19	2437.73	2497.73	7903.54	-1348.93	129.24	8141.09	108.73	75.36	PASS
2613.00†	2596.34	-158.23	-141.28	2536.34	2596.34	7903.54	-1348.93	129.32	8151.72	111.21	73.77	PASS
2713.00†	2694.94	-170.66	-152.37	2634.94	2694.94	7903.54	-1348.93	129.41	8162.37	113.70	72.23	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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
2813.00†	2793.54	-183.08	-163.46	2733.54	2793.54	7903.54	-1348.93	129.50	8173.04	116.19	70.77	PASS
2913.00†	2892.15	-195.50	-174.55	2832.15	2892.15	7903.54	-1348.93	129.59	8183.74	118.70	69.35	PASS
3013.00†	2990.75	-207.92	-185.64	2930.75	2990.75	7903.54	-1348.93	129.68	8194.45	121.21	68.00	PASS
3113.00†	3089.35	-220.34	-196.73	3029.35	3089.35	7903.54	-1348.93	129.77	8205.18	123.73	66.69	PASS
3213.00†	3187.96	-232.76	-207.82	3127.96	3187.96	7903.54	-1348.93	129.86	8215.93	126.26	65.43	PASS
3313.00†	3286.56	-245.18	-218.91	3226.56	3286.56	7903.54	-1348.93	129.95	8226.70	128.80	64.22	PASS
3413.00†	3385.17	-257.60	-230.00	3325.17	3385.17	7903.54	-1348.93	130.04	8237.49	131.34	63.05	PASS
3513.00†	3483.77	-270.02	-241.09	3423.77	3483.77	7903.54	-1348.93	130.12	8248.30	133.89	61.93	PASS
3613.00†	3582.37	-282.44	-252.18	3522.37	3582.37	7903.54	-1348.93	130.21	8259.13	136.45	60.84	PASS
3713.00†	3680.98	-294.87	-263.27	3620.98	3680.98	7903.54	-1348.93	130.30	8269.97	139.01	59.79	PASS
3813.00†	3779.58	-307.29	-274.36	3719.58	3779.58	7903.54	-1348.93	130.39	8280.84	141.58	58.78	PASS
3913.00†	3878.19	-319.71	-285.45	3818.19	3878.19	7903.54	-1348.93	130.47	8291.73	144.16	57.80	PASS
4013.00†	3976.79	-332.13	-296.54	3916.79	3976.79	7903.54	-1348.93	130.56	8302.63	146.74	56.85	PASS
4113.00†	4075.39	-344.55	-307.64	4015.39	4075.39	7903.54	-1348.93	130.65	8313.56	149.33	55.93	PASS
4213.00†	4174.00	-356.97	-318.73	4114.00	4174.00	7903.54	-1348.93	130.73	8324.50	151.92	55.05	PASS
4313.00†	4272.60	-369.39	-329.82	4212.60	4272.60	7903.54	-1348.93	130.82	8335.46	154.52	54.19	PASS
4413.00†	4371.21	-381.81	-340.91	4311.21	4371.21	7903.54	-1348.93	130.90	8346.44	157.12	53.36	PASS
4513.00†	4469.81	-394.23	-352.00	4409.81	4469.81	7903.54	-1348.93	130.99	8357.44	159.73	52.55	PASS
4613.00†	4568.41	-406.65	-363.09	4508.41	4568.41	7903.54	-1348.93	131.07	8368.46	162.34	51.77	PASS
4713.00†	4667.02	-419.08	-374.18	4607.02	4667.02	7903.54	-1348.93	131.16	8379.50	164.96	51.01	PASS
4813.00†	4765.62	-431.50	-385.27	4705.62	4765.62	7903.54	-1348.93	131.25	8390.56	167.58	50.28	PASS
4913.00†	4864.22	-443.92	-396.36	4804.22	4864.22	7903.54	-1348.93	131.33	8401.63	170.21	49.56	PASS
5013.00†	4962.83	-456.34	-407.45	4902.83	4962.83	7903.54	-1348.93	131.41	8412.72	172.84	48.87	PASS
5113.00†	5061.43	-468.76	-418.54	5001.43	5061.43	7903.54	-1348.93	131.50	8423.83	175.47	48.20	PASS
5213.00†	5160.04	-481.18	-429.63	5100.04	5160.04	7903.54	-1348.93	131.58	8434.96	178.11	47.54	PASS
5313.00†	5258.64	-493.60	-440.72	5198.64	5258.64	7903.54	-1348.93	131.67	8446.11	180.75	46.91	PASS
5413.00†	5357.24	-506.02	-451.81	5297.24	5357.24	7903.54	-1348.93	131.75	8457.28	183.40	46.29	PASS
5513.00†	5455.85	-518.44	-462.90	5395.85	5455.85	7903.54	-1348.93	131.83	8468.46	186.04	45.69	PASS
5613.00†	5554.45	-530.86	-473.99	5494.45	5554.45	7903.54	-1348.93	131.92	8479.66	188.70	45.10	PASS
5713.00†	5653.06	-543.29	-485.08	5593.06	5653.06	7903.54	-1348.93	132.00	8490.88	191.35	44.53	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	5751.66	-555.71	-496.17	5691.66	5751.66	7903.54	-1348.93	132.08	8502.12	194.01	43.98	PASS
5913.00†	5850.26	-568.13	-507.26	5790.26	5850.26	7903.54	-1348.93	132.17	8513.37	196.67	43.44	PASS
6013.00†	5948.87	-580.55	-518.35	5888.87	5948.87	7903.54	-1348.93	132.25	8524.65	199.33	42.91	PASS
6113.00†	6047.47	-592.97	-529.44	5987.47	6047.47	7903.54	-1348.93	132.33	8535.94	202.00	42.40	PASS
6213.00†	6146.08	-605.39	-540.53	6086.08	6146.08	7903.54	-1348.93	132.41	8547.24	204.67	41.90	PASS
6313.00†	6244.68	-617.81	-551.62	6184.68	6244.68	7903.54	-1348.93	132.49	8558.57	207.34	41.42	PASS
6413.00†	6343.28	-630.23	-562.71	6283.28	6343.28	7903.54	-1348.93	132.57	8569.91	210.02	40.94	PASS
6513.00†	6441.89	-642.65	-573.80	6381.89	6441.89	7903.54	-1348.93	132.66	8581.27	212.69	40.48	PASS
6613.00†	6540.49	-655.07	-584.89	6480.49	6540.49	7903.54	-1348.93	132.74	8592.65	215.37	40.03	PASS
6713.00†	6639.09	-667.50	-595.98	6579.09	6639.09	7903.54	-1348.93	132.82	8604.04	218.05	39.58	PASS
6813.00†	6737.70	-679.92	-607.07	6677.70	6737.70	7903.54	-1348.93	132.90	8615.45	220.74	39.15	PASS
6913.00†	6836.30	-692.34	-618.16	6776.30	6836.30	7903.54	-1348.93	132.98	8626.88	223.42	38.73	PASS
7013.00†	6934.91	-704.76	-629.25	6874.91	6934.91	7903.54	-1348.93	133.06	8638.33	226.11	38.32	PASS
7056.81	6978.10	-710.20	-634.11	6918.10	6978.10	7903.54	-1348.93	133.09	8643.35	227.29	38.14	PASS
7113.00†	7033.76	-714.44	-640.38	6973.76	7033.76	7903.54	-1348.93	98.53	8647.05	228.81	37.91	PASS
7213.00†	7132.82	-708.37	-651.57	7072.82	7132.82	7903.54	-1348.93	32.84	8640.09	231.78	37.39	PASS
7313.00†	7229.32	-685.08	-662.51	7169.32	7229.32	7903.54	-1348.93	14.93	8616.00	235.19	36.74	PASS
7413.00†	7320.33	-645.28	-672.88	7260.33	7320.33	7903.54	-1348.93	8.34	8575.51	238.31	36.09	PASS
7513.00†	7403.09	-590.18	-682.36	7343.09	7403.09	7903.54	-1348.93	4.73	8519.83	241.02	35.45	PASS
7613.00†	7475.08	-521.45	-690.66	7415.08	7475.08	7903.54	-1348.93	2.04	8450.66	243.26	34.84	PASS
7713.00†	7534.11	-441.18	-697.53	7474.11	7534.11	7903.54	-1348.93	-0.74	8370.11	245.00	34.26	PASS
7813.00†	7578.39	-351.82	-702.76	7518.39	7578.39	7903.54	-1348.93	-4.93	8280.60	246.21	33.73	PASS
7913.00†	7606.57	-256.06	-706.19	7546.57	7606.57	7903.54	-1348.93	-15.04	8184.88	246.89	33.24	PASS
8013.00†	7617.81	-156.84	-707.72	7557.81	7617.81	7903.54	-1348.93	-70.64	8085.84	247.08	32.82	PASS
8027.99	7618.00	-141.85	-707.78	7558.00	7618.00	7903.54	-1348.93	-90.00	8070.89	247.06	32.76	PASS
8113.00†	7618.00	-56.84	-708.00	7558.00	7618.00	7903.54	-1348.93	-90.00	7986.14	246.96	32.43	PASS
8213.00†	7618.00	43.16	-708.26	7558.00	7618.00	7903.54	-1348.93	-90.00	7886.44	246.84	32.04	PASS
8313.00†	7618.00	143.16	-708.53	7558.00	7618.00	7903.54	-1348.93	-90.00	7786.76	246.71	31.65	PASS
8413.00†	7618.00	243.16	-708.79	7558.00	7618.00	7903.54	-1348.93	-90.00	7687.08	246.59	31.26	PASS
8513.00†	7618.00	343.16	-709.05	7558.00	7618.00	7903.54	-1348.93	-90.00	7587.41	246.46	30.87	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	7618.00	443.16	-709.31	7558.00	7618.00	7903.54	-1348.93	-90.00	7487.75	246.34	30.48	PASS
8713.00†	7618.00	543.16	-709.57	7558.00	7618.00	7903.54	-1348.93	-90.00	7388.09	246.21	30.09	PASS
8813.00†	7618.00	643.16	-709.84	7558.00	7618.00	7903.54	-1348.93	-90.00	7288.45	246.08	29.70	PASS
8913.00†	7618.00	743.16	-710.10	7558.00	7618.00	7903.54	-1348.93	-90.00	7188.82	245.95	29.31	PASS
9013.00†	7618.00	843.16	-710.36	7558.00	7618.00	7903.54	-1348.93	-90.00	7089.20	245.83	28.92	PASS
9113.00†	7618.00	943.16	-710.62	7558.00	7618.00	7903.54	-1348.93	-90.00	6989.59	245.69	28.53	PASS
9213.00†	7618.00	1043.16	-710.88	7558.00	7618.00	7903.54	-1348.93	-90.00	6889.99	245.56	28.14	PASS
9313.00†	7618.00	1143.16	-711.14	7558.00	7618.00	7903.54	-1348.93	-90.00	6790.40	245.43	27.74	PASS
9413.00†	7618.00	1243.16	-711.41	7558.00	7618.00	7903.54	-1348.93	-90.00	6690.82	245.30	27.35	PASS
9513.00†	7618.00	1343.16	-711.67	7558.00	7618.00	7903.54	-1348.93	-90.00	6591.26	245.16	26.96	PASS
9613.00†	7618.00	1443.16	-711.93	7558.00	7618.00	7903.54	-1348.93	-90.00	6491.71	245.03	26.57	PASS
9713.00†	7618.00	1543.16	-712.19	7558.00	7618.00	7903.54	-1348.93	-90.00	6392.17	244.89	26.17	PASS
9813.00†	7618.00	1643.16	-712.45	7558.00	7618.00	7903.54	-1348.93	-90.00	6292.65	244.76	25.78	PASS
9913.00†	7618.00	1743.16	-712.72	7558.00	7618.00	7903.54	-1348.93	-90.00	6193.15	244.62	25.39	PASS
10013.00†	7618.00	1843.15	-712.98	7558.00	7618.00	7903.54	-1348.93	-90.00	6093.66	244.48	24.99	PASS
10113.00†	7618.00	1943.15	-713.24	7558.00	7618.00	7903.54	-1348.93	-90.00	5994.19	244.34	24.60	PASS
10213.00†	7618.00	2043.15	-713.50	7558.00	7618.00	7903.54	-1348.93	-90.00	5894.73	244.21	24.21	PASS
10313.00†	7618.00	2143.15	-713.76	7558.00	7618.00	7903.54	-1348.93	-90.00	5795.30	244.07	23.81	PASS
10413.00†	7618.00	2243.15	-714.02	7558.00	7618.00	7903.54	-1348.93	-90.00	5695.88	243.93	23.42	PASS
10513.00†	7618.00	2343.15	-714.29	7558.00	7618.00	7903.54	-1348.93	-90.00	5596.48	243.79	23.02	PASS
10613.00†	7618.00	2443.15	-714.55	7558.00	7618.00	7903.54	-1348.93	-90.00	5497.11	243.66	22.62	PASS
10713.00†	7618.00	2543.15	-714.81	7558.00	7618.00	7903.54	-1348.93	-90.00	5397.76	243.52	22.23	PASS
10813.00†	7618.00	2643.15	-715.07	7558.00	7618.00	7903.54	-1348.93	-90.00	5298.44	243.39	21.83	PASS
10913.00†	7618.00	2743.15	-715.33	7558.00	7618.00	7903.54	-1348.93	-90.00	5199.14	243.26	21.43	PASS
11013.00†	7618.00	2843.15	-715.60	7558.00	7618.00	7903.54	-1348.93	-90.00	5099.86	243.13	21.03	PASS
11113.00†	7618.00	2943.15	-715.86	7558.00	7618.00	7903.54	-1348.93	-90.00	5000.62	243.00	20.64	PASS
11213.00†	7618.00	3043.15	-716.12	7558.00	7618.00	7903.54	-1348.93	-90.00	4901.41	242.88	20.24	PASS
11313.00†	7618.00	3143.15	-716.38	7558.00	7618.00	7903.54	-1348.93	-90.00	4802.23	242.76	19.84	PASS
11413.00†	7618.00	3243.15	-716.64	7558.00	7618.00	7903.54	-1348.93	-90.00	4703.08	242.65	19.44	PASS
11513.00†	7618.00	3343.15	-716.90	7558.00	7618.00	7903.54	-1348.93	-90.00	4603.98	242.54	19.03	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	7618.00	3443.15	-717.17	7558.00	7618.00	7903.54	-1348.93	-90.00	4504.91	242.44	18.63	PASS
11713.00†	7618.00	3543.15	-717.43	7558.00	7618.00	7903.54	-1348.93	-90.00	4405.88	242.35	18.23	PASS
11813.00†	7618.00	3643.15	-717.69	7558.00	7618.00	7903.54	-1348.93	-90.00	4306.90	242.28	17.83	PASS
11913.00†	7618.00	3743.15	-717.95	7558.00	7618.00	7903.54	-1348.93	-90.00	4207.96	242.21	17.42	PASS
12013.00†	7618.00	3843.15	-718.21	7558.00	7618.00	7903.54	-1348.93	-90.00	4109.08	242.16	17.02	PASS
12113.00†	7618.00	3943.15	-718.48	7558.00	7618.00	7903.54	-1348.93	-90.00	4010.26	242.13	16.61	PASS
12213.00†	7618.00	4043.15	-718.74	7558.00	7618.00	7903.54	-1348.93	-90.00	3911.49	242.12	16.20	PASS
12313.00†	7618.00	4143.15	-719.00	7558.00	7618.00	7903.54	-1348.93	-90.00	3812.79	242.13	15.79	PASS
12413.00†	7618.00	4243.15	-719.26	7558.00	7618.00	7903.54	-1348.93	-90.00	3714.15	242.17	15.38	PASS
12513.00†	7618.00	4343.15	-719.52	7558.00	7618.00	7903.54	-1348.93	-90.00	3615.60	242.25	14.97	PASS
12613.00†	7618.00	4443.15	-719.78	7558.00	7618.00	7903.54	-1348.93	-90.00	3517.12	242.36	14.55	PASS
12713.00†	7618.00	4543.15	-720.05	7558.00	7618.00	7903.54	-1348.93	-90.00	3418.73	242.52	14.14	PASS
12813.00†	7618.00	4643.15	-720.31	7558.00	7618.00	7903.54	-1348.93	-90.00	3320.44	242.72	13.72	PASS
12913.00†	7618.00	4743.14	-720.57	7558.00	7618.00	7903.54	-1348.93	-90.00	3222.25	242.99	13.30	PASS
13013.00†	7618.00	4843.14	-720.83	7558.00	7618.00	7903.54	-1348.93	-90.00	3124.18	243.32	12.87	PASS
13113.00†	7618.00	4943.14	-721.09	7558.00	7618.00	7903.54	-1348.93	-90.00	3026.24	243.73	12.45	PASS
13213.00†	7618.00	5043.14	-721.36	7558.00	7618.00	7903.54	-1348.93	-90.00	2928.43	244.24	12.02	PASS
13313.00†	7618.00	5143.14	-721.62	7558.00	7618.00	7903.54	-1348.93	-90.00	2830.78	244.84	11.59	PASS
13413.00†	7618.00	5243.14	-721.88	7558.00	7618.00	7903.54	-1348.93	-90.00	2733.29	245.57	11.16	PASS
13513.00†	7618.00	5343.14	-722.14	7558.00	7618.00	7903.54	-1348.93	-90.00	2636.00	246.43	10.72	PASS
13613.00†	7618.00	5443.14	-722.40	7558.00	7618.00	7903.54	-1348.93	-90.00	2538.91	247.45	10.29	PASS
13713.00†	7618.00	5543.14	-722.66	7558.00	7618.00	7903.54	-1348.93	-90.00	2442.06	248.65	9.85	PASS
13813.00†	7618.00	5643.14	-722.93	7558.00	7618.00	7903.54	-1348.93	-90.00	2345.48	250.06	9.40	PASS
13913.00†	7618.00	5743.14	-723.19	7558.00	7618.00	7903.54	-1348.93	-90.00	2249.19	251.70	8.96	PASS
14013.00†	7618.00	5843.14	-723.45	7558.00	7618.00	7903.54	-1348.93	-90.00	2153.24	253.61	8.51	PASS
14113.00†	7618.00	5943.14	-723.71	7558.00	7618.00	7903.54	-1348.93	-90.00	2057.68	255.83	8.06	PASS
14213.00†	7618.00	6043.14	-723.97	7558.00	7618.00	7903.54	-1348.93	-90.00	1962.56	258.40	7.61	PASS
14313.00†	7618.00	6143.14	-724.24	7558.00	7618.00	7903.54	-1348.93	-90.00	1867.95	261.37	7.16	PASS
14413.00†	7618.00	6243.14	-724.50	7558.00	7618.00	7903.54	-1348.93	-90.00	1773.93	264.80	6.71	PASS
14513.00†	7618.00	6343.14	-724.76	7558.00	7618.00	7903.54	-1348.93	-90.00	1680.60	268.76	6.27	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	7618.00	6443.14	-725.02	7558.00	7618.00	7903.54	-1348.93	-90.00	1588.09	273.33	5.82	PASS
14713.00†	7618.00	6543.14	-725.28	7558.00	7618.00	7903.54	-1348.93	-90.00	1496.54	278.61	5.38	PASS
14813.00†	7618.00	6643.14	-725.54	7558.00	7618.00	7903.54	-1348.93	-90.00	1406.14	284.69	4.95	PASS
14913.00†	7618.00	6743.14	-725.81	7558.00	7618.00	7903.54	-1348.93	-90.00	1317.12	291.72	4.52	PASS
15013.00†	7618.00	6843.14	-726.07	7558.00	7618.00	7903.54	-1348.93	-90.00	1229.80	299.83	4.11	PASS
15113.00†	7618.00	6943.14	-726.33	7558.00	7618.00	7903.54	-1348.93	-90.00	1144.55	309.19	3.71	PASS
15213.00†	7618.00	7043.14	-726.59	7558.00	7618.00	7903.54	-1348.93	-90.00	1061.88	319.99	3.32	PASS
15313.00†	7618.00	7143.14	-726.85	7558.00	7618.00	7903.54	-1348.93	-90.00	982.44	332.40	2.96	PASS
15413.00†	7618.00	7243.14	-727.12	7558.00	7618.00	7903.54	-1348.93	-90.00	907.07	346.57	2.62	PASS
15513.00†	7618.00	7343.14	-727.38	7558.00	7618.00	7903.54	-1348.93	-90.00	836.89	362.54	2.31	PASS
15613.00†	7618.00	7443.14	-727.64	7558.00	7618.00	7903.54	-1348.93	-90.00	773.29	380.13	2.04	PASS
15713.00†	7618.00	7543.14	-727.90	7558.00	7618.00	7903.54	-1348.93	-90.00	718.03	398.79	1.80	PASS
15813.00†	7618.00	7643.14	-728.16	7558.00	7618.00	7903.54	-1348.93	-90.00	673.17	417.43	1.61	PASS
15913.00†	7618.00	7743.13	-728.42	7558.00	7618.00	7903.54	-1348.93	-90.00	640.90	434.31	1.48	PASS
16013.00†	7618.00	7843.13	-728.69	7558.00	7618.00	7903.54	-1348.93	-90.00	623.18	447.34	1.39	PASS
16075.50†	7618.00	7905.63	-728.85	7558.12	7618.12	7903.54	-1348.93	-90.01	620.09	452.72	1.37	PASS
16113.00†	7618.00	7943.13	-728.95	7558.00	7618.00	7903.54	-1348.93	-90.00	621.25	454.77	1.37	PASS
16213.00†	7618.00	8043.13	-729.21	7558.00	7618.00	7903.54	-1348.93	-90.00	635.25	455.90	1.39	PASS
16313.00†	7618.00	8143.13	-729.47	7558.00	7618.00	7903.54	-1348.93	-90.00	664.18	451.42	1.47	PASS
16413.00†	7618.00	8243.13	-729.73	7558.00	7618.00	7903.54	-1348.93	-90.00	706.21	442.92	1.60	PASS
16513.00†	7618.00	8343.13	-730.00	7558.00	7618.00	7903.54	-1348.93	-90.00	759.16	432.15	1.76	PASS
16613.00†	7618.00	8443.13	-730.26	7558.00	7618.00	7903.54	-1348.93	-90.00	820.93	420.53	1.95	PASS
16713.00†	7618.00	8543.13	-730.52	7558.00	7618.00	7903.54	-1348.93	-90.00	889.67	409.00	2.18	PASS
16813.00†	7618.00	8643.13	-730.78	7558.00	7618.00	7903.54	-1348.93	-90.00	963.90	398.09	2.42	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	13.00	13.00	-0.09	-44.98	-90.12	44.98	1.40	73.62	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	-0.09	-44.98	-90.12	44.98	1.72	47.92	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	-0.09	-44.98	-90.12	44.98	2.29	29.62	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	-0.09	-44.98	-90.12	44.98	2.90	21.09	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	-0.09	-44.98	-90.12	44.98	3.51	16.30	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	-0.09	-44.98	-90.12	44.98	4.13	13.27	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	-0.09	-44.98	-90.12	44.98	4.75	11.18	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	-0.09	-44.98	-90.12	44.98	5.38	9.65	PASS
813.00†	813.00	0.00	0.00	812.82	812.82	-0.10	-45.00	-90.13	45.00	6.00	8.50	PASS
913.00†	913.00	0.00	0.00	911.40	911.37	-1.11	-46.89	-91.36	46.93	6.73	7.78	PASS
1013.00†	1013.00	0.00	0.00	1009.71	1009.52	-3.70	-51.74	-94.09	51.99	7.71	7.41	PASS
1100.00	1100.00	0.00	0.00	1094.85	1094.33	-7.23	-58.35	-97.06	59.07	8.52	7.55	PASS
1113.00†	1113.00	-0.02	-0.02	1107.54	1106.95	-7.85	-59.53	40.72	60.32	8.64	7.59	PASS
1213.00†	1212.97	-1.66	-1.48	1204.90	1203.55	-13.54	-70.18	38.26	70.35	9.60	7.91	PASS
1313.00†	1312.80	-5.90	-5.27	1301.89	1299.33	-20.73	-83.66	37.17	80.91	10.63	8.15	PASS
1413.00†	1412.38	-12.74	-11.38	1398.49	1394.15	-29.41	-99.93	36.98	91.94	11.63	8.42	PASS
1513.00†	1511.57	-22.17	-19.79	1494.70	1487.91	-39.55	-118.93	37.40	103.39	12.54	8.74	PASS
1579.26	1577.03	-29.83	-26.64	1560.40	1551.66	-47.02	-132.93	38.05	110.62	13.03	8.98	PASS
1613.00†	1610.30	-34.02	-30.38	1593.95	1584.22	-50.84	-140.09	38.52	114.01	13.24	9.10	PASS
1713.00†	1708.90	-46.45	-41.47	1693.41	1680.73	-62.15	-161.29	39.74	124.09	13.88	9.42	PASS
1813.00†	1807.50	-58.87	-52.56	1792.87	1777.24	-73.47	-182.50	40.78	134.21	14.56	9.67	PASS
1913.00†	1906.11	-71.29	-63.65	1892.33	1873.75	-84.78	-203.70	41.67	144.38	15.24	9.89	PASS
2013.00†	2004.71	-83.71	-74.74	1991.78	1970.26	-96.10	-224.91	42.44	154.57	16.02	10.05	PASS
2113.00†	2103.32	-96.13	-85.83	2091.24	2066.77	-107.41	-246.12	43.12	164.79	16.84	10.17	PASS
2213.00†	2201.92	-108.55	-96.92	2190.70	2163.28	-118.73	-267.32	43.72	175.02	17.70	10.26	PASS
2313.00†	2300.52	-120.97	-108.01	2290.16	2259.79	-130.04	-288.53	44.26	185.28	18.57	10.33	PASS
2413.00†	2399.13	-133.39	-119.10	2389.62	2356.31	-141.36	-309.74	44.73	195.55	19.47	10.38	PASS
2513.00†	2497.73	-145.81	-130.19	2489.08	2452.82	-152.67	-330.94	45.16	205.83	20.39	10.42	PASS
2613.00†	2596.34	-158.23	-141.28	2588.54	2549.33	-163.98	-352.15	45.55	216.12	21.33	10.45	PASS
2713.00†	2694.94	-170.66	-152.37	2688.00	2645.84	-175.30	-373.36	45.91	226.42	22.28	10.46	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2793.54	-183.08	-163.46	2787.46	2742.35	-186.61	-394.56	46.23	236.73	23.25	10.47	PASS
2913.00†	2892.15	-195.50	-174.55	2886.91	2838.86	-197.93	-415.77	46.52	247.04	24.23	10.47	PASS
3013.00†	2990.75	-207.92	-185.64	2986.37	2935.37	-209.24	-436.97	46.80	257.36	25.21	10.47	PASS
3113.00†	3089.35	-220.34	-196.73	3085.83	3031.88	-220.56	-458.18	47.05	267.69	26.21	10.47	PASS
3213.00†	3187.96	-232.76	-207.82	3185.29	3128.39	-231.87	-479.39	47.28	278.02	27.21	10.46	PASS
3313.00†	3286.56	-245.18	-218.91	3284.75	3224.90	-243.19	-500.59	47.50	288.36	28.22	10.45	PASS
3413.00†	3385.17	-257.60	-230.00	3384.21	3321.41	-254.50	-521.80	47.70	298.70	29.24	10.44	PASS
3513.00†	3483.77	-270.02	-241.09	3483.67	3417.92	-265.82	-543.01	47.88	309.04	30.26	10.43	PASS
3613.00†	3582.37	-282.44	-252.18	3583.13	3514.43	-277.13	-564.21	48.06	319.38	31.29	10.42	PASS
3713.00†	3680.98	-294.87	-263.27	3682.58	3610.95	-288.45	-585.42	48.22	329.73	32.32	10.41	PASS
3813.00†	3779.58	-307.29	-274.36	3782.04	3707.46	-299.76	-606.63	48.38	340.08	33.36	10.39	PASS
3913.00†	3878.19	-319.71	-285.45	3881.50	3803.97	-311.08	-627.83	48.52	350.44	34.40	10.38	PASS
4013.00†	3976.79	-332.13	-296.54	3980.96	3900.48	-322.39	-649.04	48.66	360.79	35.45	10.37	PASS
4113.00†	4075.39	-344.55	-307.64	4080.42	3996.99	-333.71	-670.24	48.79	371.15	36.50	10.35	PASS
4213.00†	4174.00	-356.97	-318.73	4179.88	4093.50	-345.02	-691.45	48.91	381.51	37.55	10.34	PASS
4313.00†	4272.60	-369.39	-329.82	4279.34	4190.01	-356.34	-712.66	49.03	391.87	38.60	10.32	PASS
4413.00†	4371.21	-381.81	-340.91	4378.80	4286.52	-367.65	-733.86	49.14	402.23	39.66	10.31	PASS
4513.00†	4469.81	-394.23	-352.00	4478.26	4383.03	-378.96	-755.07	49.24	412.59	40.71	10.30	PASS
4613.00†	4568.41	-406.65	-363.09	4577.71	4479.54	-390.28	-776.28	49.34	422.96	41.77	10.28	PASS
4713.00†	4667.02	-419.08	-374.18	4677.17	4576.05	-401.59	-797.48	49.43	433.32	42.84	10.27	PASS
4813.00†	4765.62	-431.50	-385.27	4776.63	4672.56	-412.91	-818.69	49.52	443.69	43.90	10.26	PASS
4913.00†	4864.22	-443.92	-396.36	4876.09	4769.07	-424.22	-839.90	49.61	454.06	44.97	10.24	PASS
5013.00†	4962.83	-456.34	-407.45	4975.55	4865.59	-435.54	-861.10	49.69	464.43	46.03	10.23	PASS
5113.00†	5061.43	-468.76	-418.54	5075.01	4962.10	-446.85	-882.31	49.77	474.80	47.10	10.22	PASS
5213.00†	5160.04	-481.18	-429.63	5174.47	5058.61	-458.17	-903.51	49.85	485.17	48.17	10.21	PASS
5313.00†	5258.64	-493.60	-440.72	5273.93	5155.12	-469.48	-924.72	49.92	495.54	49.24	10.20	PASS
5413.00†	5357.24	-506.02	-451.81	5373.38	5251.63	-480.80	-945.93	49.99	505.91	50.32	10.18	PASS
5513.00†	5455.85	-518.44	-462.90	5472.84	5348.14	-492.11	-967.13	50.05	516.28	51.39	10.17	PASS
5613.00†	5554.45	-530.86	-473.99	5572.30	5444.65	-503.43	-988.34	50.12	526.66	52.47	10.16	PASS
5713.00†	5653.06	-543.29	-485.08	5671.76	5541.16	-514.74	-1009.55	50.18	537.03	53.54	10.15	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1CDH PWB Offset Wellpath: ACKARD NORTH 2-35-1CDH PWP (REV-A.0)												
Facility: SEC.02-T03S-R66W Slot: SLOT#01 ACKARD NORTH 2-35-1CDH (600'FSL & 1935'FWL, SEC.02) Well: ACKARD NORTH 2-35-1CDH Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5751.66	-555.71	-496.17	5771.22	5637.67	-526.06	-1030.75	50.24	547.41	54.62	10.14	PASS
5913.00†	5850.26	-568.13	-507.26	5870.68	5734.18	-537.37	-1051.96	50.29	557.78	55.70	10.13	PASS
6013.00†	5948.87	-580.55	-518.35	5970.14	5830.69	-548.69	-1073.17	50.35	568.16	56.77	10.12	PASS
6113.00†	6047.47	-592.97	-529.44	6069.60	5927.20	-560.00	-1094.37	50.40	578.53	57.85	10.11	PASS
6213.00†	6146.08	-605.39	-540.53	6169.06	6023.71	-571.31	-1115.58	50.45	588.91	58.93	10.10	PASS
6313.00†	6244.68	-617.81	-551.62	6268.51	6120.22	-582.63	-1136.79	50.50	599.29	60.01	10.09	PASS
6413.00†	6343.28	-630.23	-562.71	6367.97	6216.74	-593.94	-1157.99	50.55	609.66	61.10	10.08	PASS
6513.00†	6441.89	-642.65	-573.80	6467.43	6313.25	-605.26	-1179.20	50.59	620.04	62.18	10.08	PASS
6613.00†	6540.49	-655.07	-584.89	6566.89	6409.76	-616.57	-1200.40	50.64	630.42	63.26	10.07	PASS
6713.00†	6639.09	-667.50	-595.98	6666.35	6506.27	-627.89	-1221.61	50.68	640.80	64.34	10.06	PASS
6813.00†	6737.70	-679.92	-607.07	6765.81	6602.78	-639.20	-1242.82	50.72	651.18	65.43	10.05	PASS
6913.00†	6836.30	-692.34	-618.16	6865.27	6699.29	-650.52	-1264.02	50.76	661.56	66.51	10.04	PASS
7013.00†	6934.91	-704.76	-629.25	6964.73	6795.80	-661.83	-1285.23	50.80	671.94	67.60	10.04	PASS
7056.81	6978.10	-710.20	-634.11	7008.29	6838.08	-666.79	-1294.52	50.82	676.48	68.07	10.03	PASS
7113.00†	7033.76	-714.44	-640.38	7064.12	6892.25	-673.14	-1306.42	16.54	682.16	68.49	10.05	PASS
7213.00†	7132.82	-708.37	-651.57	7161.94	6987.17	-684.27	-1327.28	-49.68	691.65	68.42	10.20	PASS
7313.00†	7229.32	-685.08	-662.51	7255.27	7077.73	-694.89	-1347.18	-69.13	701.31	67.53	10.48	PASS
7413.00†	7320.33	-645.28	-672.88	7341.26	7161.18	-704.67	-1365.51	-77.69	713.16	65.41	11.01	PASS
7513.00†	7403.09	-590.18	-682.36	7418.13	7235.77	-713.40	-1381.90	-82.96	729.75	62.82	11.74	PASS
7613.00†	7475.08	-521.45	-690.66	7515.48	7330.71	-715.58	-1402.79	-87.72	752.10	60.98	12.47	PASS
7713.00†	7534.11	-441.18	-697.53	7634.46	7445.09	-695.92	-1428.01	-92.21	778.72	60.80	12.95	PASS
7813.00†	7578.39	-351.82	-702.76	7791.88	7585.76	-633.71	-1459.12	-97.16	807.22	61.05	13.37	PASS
7913.00†	7606.57	-256.06	-706.19	8016.76	7746.65	-482.86	-1494.92	-102.65	832.55	60.46	13.92	PASS
8013.00†	7617.81	-156.84	-707.72	8328.35	7852.79	-194.99	-1519.02	-106.20	845.51	57.98	14.75	PASS
8027.99	7618.00	-141.85	-707.78	8379.44	7855.00	-143.97	-1519.64	-106.27	845.75	57.58	14.86	PASS
8113.00†	7618.00	-56.84	-708.00	8464.45	7855.00	-58.95	-1519.86	-106.27	845.75	56.98	15.02	PASS
8213.00†	7618.00	43.16	-708.26	8564.45	7855.00	41.04	-1520.12	-106.27	845.75	56.85	15.05	PASS
8313.00†	7618.00	143.16	-708.53	8664.45	7855.00	141.04	-1520.39	-106.27	845.75	57.39	14.91	PASS
8413.00†	7618.00	243.16	-708.79	8764.45	7855.00	241.04	-1520.65	-106.27	845.75	58.55	14.61	PASS
8513.00†	7618.00	343.16	-709.05	8864.45	7855.00	341.04	-1520.91	-106.27	845.74	60.31	14.18	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
8613.00†	7618.00	443.16	-709.31	8964.45	7855.00	441.04	-1521.17	-106.27	845.74	83.16	10.25	PASS
8713.00†	7618.00	543.16	-709.57	9064.45	7855.00	541.04	-1521.43	-106.27	845.74	65.39	13.06	PASS
8813.00†	7618.00	643.16	-709.84	9164.45	7855.00	641.04	-1521.69	-106.27	845.74	68.60	12.45	PASS
8913.00†	7618.00	743.16	-710.10	9264.45	7855.00	741.04	-1521.95	-106.27	845.74	72.18	11.82	PASS
9013.00†	7618.00	843.16	-710.36	9364.45	7855.00	841.04	-1522.21	-106.27	845.74	76.07	11.21	PASS
9113.00†	7618.00	943.16	-710.62	9464.45	7855.00	941.04	-1522.47	-106.27	845.74	80.23	10.63	PASS
9213.00†	7618.00	1043.16	-710.88	9564.45	7855.00	1041.04	-1522.73	-106.27	845.74	84.62	10.07	PASS
9313.00†	7618.00	1143.16	-711.14	9664.45	7855.00	1141.04	-1522.99	-106.27	845.74	89.20	9.55	PASS
9413.00†	7618.00	1243.16	-711.41	9764.45	7855.00	1241.04	-1523.25	-106.27	845.74	93.95	9.06	PASS
9513.00†	7618.00	1343.16	-711.67	9864.45	7855.00	1341.04	-1523.51	-106.27	845.73	98.84	8.61	PASS
9613.00†	7618.00	1443.16	-711.93	9964.45	7855.00	1441.04	-1523.77	-106.27	845.73	103.86	8.19	PASS
9713.00†	7618.00	1543.16	-712.19	10064.45	7855.00	1541.04	-1524.03	-106.27	845.73	108.97	7.81	PASS
9813.00†	7618.00	1643.16	-712.45	10164.45	7855.00	1641.04	-1524.30	-106.27	845.73	114.18	7.45	PASS
9913.00†	7618.00	1743.16	-712.72	10264.45	7855.00	1741.04	-1524.56	-106.27	845.73	119.47	7.12	PASS
10013.00†	7618.00	1843.15	-712.98	10364.45	7855.00	1841.04	-1524.82	-106.27	845.73	124.83	6.81	PASS
10113.00†	7618.00	1943.15	-713.24	10464.45	7855.00	1941.04	-1525.08	-106.27	845.73	130.24	6.52	PASS
10213.00†	7618.00	2043.15	-713.50	10564.45	7855.00	2041.04	-1525.34	-106.27	845.73	135.71	6.26	PASS
10313.00†	7618.00	2143.15	-713.76	10664.45	7855.00	2141.04	-1525.60	-106.27	845.73	141.23	6.01	PASS
10413.00†	7618.00	2243.15	-714.02	10764.45	7855.00	2241.04	-1525.86	-106.27	845.72	146.79	5.78	PASS
10513.00†	7618.00	2343.15	-714.29	10864.45	7855.00	2341.04	-1526.12	-106.27	845.72	152.38	5.57	PASS
10613.00†	7618.00	2443.15	-714.55	10964.45	7855.00	2441.04	-1526.38	-106.27	845.72	158.01	5.37	PASS
10713.00†	7618.00	2543.15	-714.81	11064.45	7855.00	2541.04	-1526.64	-106.27	845.72	163.67	5.19	PASS
10813.00†	7618.00	2643.15	-715.07	11164.45	7855.00	2641.04	-1526.90	-106.27	845.72	169.35	5.01	PASS
10913.00†	7618.00	2743.15	-715.33	11264.45	7855.00	2741.04	-1527.16	-106.27	845.72	175.06	4.85	PASS
11013.00†	7618.00	2843.15	-715.60	11364.45	7855.00	2841.04	-1527.42	-106.27	845.72	180.79	4.69	PASS
11113.00†	7618.00	2943.15	-715.86	11464.45	7855.00	2941.03	-1527.68	-106.27	845.72	186.54	4.55	PASS
11213.00†	7618.00	3043.15	-716.12	11564.45	7855.00	3041.03	-1527.94	-106.27	845.72	192.31	4.41	PASS
11313.00†	7618.00	3143.15	-716.38	11664.45	7855.00	3141.03	-1528.21	-106.27	845.71	198.10	4.28	PASS
11413.00†	7618.00	3243.15	-716.64	11764.45	7855.00	3241.03	-1528.47	-106.27	845.71	203.89	4.16	PASS
11513.00†	7618.00	3343.15	-716.90	11864.45	7855.00	3341.03	-1528.73	-106.27	845.71	209.71	4.04	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11613.00†	7618.00	3443.15	-717.17	11964.45	7855.00	3441.03	-1528.99	-106.27	845.71	215.53	3.93	PASS
11713.00†	7618.00	3543.15	-717.43	12064.45	7855.00	3541.03	-1529.25	-106.27	845.71	221.37	3.83	PASS
11813.00†	7618.00	3643.15	-717.69	12164.45	7855.00	3641.03	-1529.51	-106.27	845.71	227.22	3.73	PASS
11913.00†	7618.00	3743.15	-717.95	12264.45	7855.00	3741.03	-1529.77	-106.27	845.71	233.08	3.64	PASS
12013.00†	7618.00	3843.15	-718.21	12364.45	7855.00	3841.03	-1530.03	-106.27	845.71	238.94	3.55	PASS
12113.00†	7618.00	3943.15	-718.48	12464.45	7855.00	3941.03	-1530.29	-106.27	845.71	244.82	3.46	PASS
12213.00†	7618.00	4043.15	-718.74	12564.45	7855.00	4041.03	-1530.55	-106.28	845.70	250.70	3.38	PASS
12313.00†	7618.00	4143.15	-719.00	12664.45	7855.00	4141.03	-1530.81	-106.28	845.70	256.59	3.30	PASS
12413.00†	7618.00	4243.15	-719.26	12764.45	7855.00	4241.03	-1531.07	-106.28	845.70	262.49	3.23	PASS
12513.00†	7618.00	4343.15	-719.52	12864.45	7855.00	4341.03	-1531.33	-106.28	845.70	268.30	3.16	PASS
12613.00†	7618.00	4443.15	-719.78	12964.45	7855.00	4441.03	-1531.59	-106.28	845.70	274.31	3.09	PASS
12713.00†	7618.00	4543.15	-720.05	13064.45	7855.00	4541.03	-1531.85	-106.28	845.70	280.22	3.02	PASS
12813.00†	7618.00	4643.15	-720.31	13164.45	7855.00	4641.03	-1532.12	-106.28	845.70	286.14	2.96	PASS
12913.00†	7618.00	4743.14	-720.57	13264.45	7855.00	4741.03	-1532.38	-106.28	845.70	292.07	2.90	PASS
13013.00†	7618.00	4843.14	-720.83	13364.45	7855.00	4841.03	-1532.64	-106.28	845.70	298.00	2.84	PASS
13113.00†	7618.00	4943.14	-721.09	13464.45	7855.00	4941.03	-1532.90	-106.28	845.69	303.94	2.79	PASS
13213.00†	7618.00	5043.14	-721.36	13564.45	7855.00	5041.03	-1533.16	-106.28	845.69	309.87	2.73	PASS
13313.00†	7618.00	5143.14	-721.62	13664.45	7855.00	5141.03	-1533.42	-106.28	845.69	315.82	2.68	PASS
13413.00†	7618.00	5243.14	-721.88	13764.45	7855.00	5241.03	-1533.68	-106.28	845.69	321.76	2.63	PASS
13513.00†	7618.00	5343.14	-722.14	13864.45	7855.00	5341.03	-1533.94	-106.28	845.69	327.71	2.58	PASS
13613.00†	7618.00	5443.14	-722.40	13964.45	7855.00	5441.03	-1534.20	-106.28	845.69	333.67	2.54	PASS
13713.00†	7618.00	5543.14	-722.66	14064.45	7855.00	5541.03	-1534.46	-106.28	845.69	339.63	2.49	PASS
13813.00†	7618.00	5643.14	-722.93	14164.45	7855.00	5641.03	-1534.72	-106.28	845.69	345.59	2.45	PASS
13913.00†	7618.00	5743.14	-723.19	14264.45	7855.00	5741.03	-1534.98	-106.28	845.69	351.55	2.41	PASS
14013.00†	7618.00	5843.14	-723.45	14364.45	7855.00	5841.03	-1535.24	-106.28	845.68	357.51	2.37	PASS
14113.00†	7618.00	5943.14	-723.71	14464.45	7855.00	5941.02	-1535.50	-106.28	845.68	363.48	2.33	PASS
14213.00†	7618.00	6043.14	-723.97	14564.45	7855.00	6041.02	-1535.77	-106.28	845.68	369.45	2.29	PASS
14313.00†	7618.00	6143.14	-724.24	14664.45	7855.00	6141.02	-1536.03	-106.28	845.68	375.42	2.25	PASS
14413.00†	7618.00	6243.14	-724.50	14764.45	7855.00	6241.02	-1536.29	-106.28	845.68	381.40	2.22	PASS
14513.00†	7618.00	6343.14	-724.76	14864.45	7855.00	6341.02	-1536.55	-106.28	845.68	387.37	2.19	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
14613.00†	7618.00	6443.14	-725.02	14964.45	7855.00	6441.02	-1536.81	-106.28	845.68	393.35	2.15	PASS
14713.00†	7618.00	6543.14	-725.28	15064.45	7855.00	6541.02	-1537.07	-106.28	845.68	399.33	2.12	PASS
14813.00†	7618.00	6643.14	-725.54	15164.45	7855.00	6641.02	-1537.33	-106.28	845.68	405.32	2.09	PASS
14913.00†	7618.00	6743.14	-725.81	15264.45	7855.00	6741.02	-1537.59	-106.28	845.67	411.30	2.06	PASS
15013.00†	7618.00	6843.14	-726.07	15364.45	7855.00	6841.02	-1537.85	-106.28	845.67	417.29	2.03	PASS
15113.00†	7618.00	6943.14	-726.33	15464.45	7855.00	6941.02	-1538.11	-106.28	845.67	423.27	2.00	PASS
15213.00†	7618.00	7043.14	-726.59	15564.45	7855.00	7041.02	-1538.37	-106.28	845.67	429.26	1.97	PASS
15313.00†	7618.00	7143.14	-726.85	15664.45	7855.00	7141.02	-1538.63	-106.28	845.67	435.25	1.94	PASS
15413.00†	7618.00	7243.14	-727.12	15764.45	7855.00	7241.02	-1538.89	-106.28	845.67	441.24	1.92	PASS
15513.00†	7618.00	7343.14	-727.38	15864.45	7855.00	7341.02	-1539.15	-106.28	845.67	447.24	1.89	PASS
15613.00†	7618.00	7443.14	-727.64	15964.45	7855.00	7441.02	-1539.41	-106.28	845.67	453.23	1.87	PASS
15713.00†	7618.00	7543.14	-727.90	16064.45	7855.00	7541.02	-1539.68	-106.28	845.67	459.23	1.84	PASS
15813.00†	7618.00	7643.14	-728.16	16164.45	7855.00	7641.02	-1539.94	-106.28	845.66	465.23	1.82	PASS
15913.00†	7618.00	7743.13	-728.42	16264.45	7855.00	7741.02	-1540.20	-106.28	845.66	471.22	1.80	PASS
16013.00†	7618.00	7843.13	-728.69	16364.45	7855.00	7841.02	-1540.46	-106.28	845.66	477.22	1.77	PASS
16113.00†	7618.00	7943.13	-728.95	16464.45	7855.00	7941.02	-1540.72	-106.28	845.66	483.22	1.75	PASS
16213.00†	7618.00	8043.13	-729.21	16564.45	7855.00	8041.02	-1540.98	-106.28	845.66	489.22	1.73	PASS
16313.00†	7618.00	8143.13	-729.47	16664.45	7855.00	8141.02	-1541.24	-106.28	845.66	495.23	1.71	PASS
16413.00†	7618.00	8243.13	-729.73	16764.45	7855.00	8241.02	-1541.50	-106.28	845.66	501.23	1.69	PASS
16513.00†	7618.00	8343.13	-730.00	16864.45	7855.00	8341.02	-1541.76	-106.28	845.66	507.23	1.67	PASS
16613.00†	7618.00	8443.13	-730.26	16964.45	7855.00	8441.02	-1542.02	-106.28	845.66	513.24	1.65	PASS
16713.00†	7618.00	8543.13	-730.52	17064.45	7855.00	8541.02	-1542.28	-106.28	845.65	519.24	1.63	PASS
16813.00†	7618.00	8643.13	-730.78	17164.45	7855.00	8641.02	-1542.54	-106.28	845.65	525.25	1.61	PASS
16913.00†	7618.00	8743.13	-731.04	17264.45	7855.00	8741.02	-1542.80	-106.28	845.65	531.26	1.59	PASS
17013.00†	7618.00	8843.13	-731.30	17364.45	7855.00	8841.01	-1543.06	-106.28	845.65	537.27	1.57	PASS
17113.00†	7618.00	8943.13	-731.57	17464.45	7855.00	8941.01	-1543.32	-106.28	845.65	543.28	1.56	PASS
17213.00†	7618.00	9043.13	-731.83	17564.45	7855.00	9041.01	-1543.59	-106.28	845.65	549.29	1.54	PASS
17313.00†	7618.00	9143.13	-732.09	17664.45	7855.00	9141.01	-1543.85	-106.28	845.65	555.30	1.52	PASS
17413.00†	7618.00	9243.13	-732.35	17764.45	7855.00	9241.01	-1544.11	-106.28	845.65	561.31	1.51	PASS
17513.00†	7618.00	9343.13	-732.61	17864.45	7855.00	9341.01	-1544.37	-106.28	845.65	567.32	1.49	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
17613.00†	7618.00	9443.13	-732.88	17964.45	7855.00	9441.01	-1544.63	-106.28	845.65	573.33	1.48	PASS
17713.00†	7618.00	9543.13	-733.14	18064.45	7855.00	9541.01	-1544.89	-106.28	845.64	579.34	1.46	PASS
17742.92†	7618.00	9573.05	-733.22	18075.88	7855.00	9552.44	-1544.92	-106.28	845.85	581.90	1.46	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

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

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

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

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1784.16	-0.06	-27.42	-22.67	-69.80
8.5in Open Hole	1800.00	18089.51	16289.51	1784.16	7855.00	-22.67	-69.80	2915.71	-484.61

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

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

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

MD Reference: RIG (13'KB) (RKB)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	13.00ft



Clearance Report

ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	9284.46	10.89	0.07	9284.61	25.40	377.37	PASS
113.00†	113.00	0.00	0.00	35.00	113.00	9284.46	10.89	0.07	9284.46	50.83	185.58	PASS
213.00†	213.00	0.00	0.00	135.00	213.00	9284.46	10.89	0.07	9284.46	53.17	177.27	PASS
313.00†	313.00	0.00	0.00	235.00	313.00	9284.46	10.89	0.07	9284.46	55.52	169.66	PASS
413.00†	413.00	0.00	0.00	335.00	413.00	9284.46	10.89	0.07	9284.46	57.87	162.66	PASS
513.00†	513.00	0.00	0.00	435.00	513.00	9284.46	10.89	0.07	9284.46	60.23	156.21	PASS
613.00†	613.00	0.00	0.00	535.00	613.00	9284.46	10.89	0.07	9284.46	62.59	150.24	PASS
713.00†	713.00	0.00	0.00	635.00	713.00	9284.46	10.89	0.07	9284.46	64.96	144.70	PASS
813.00†	813.00	0.00	0.00	735.00	813.00	9284.46	10.89	0.07	9284.46	67.33	139.55	PASS
913.00†	913.00	0.00	0.00	835.00	913.00	9284.46	10.89	0.07	9284.46	69.70	134.74	PASS
1013.00†	1013.00	0.00	0.00	935.00	1013.00	9284.46	10.89	0.07	9284.46	72.08	130.25	PASS
1100.00	1100.00	0.00	0.00	1022.00	1100.00	9284.46	10.89	0.07	9284.46	74.15	126.57	PASS
1113.00†	1113.00	-0.02	-0.02	1035.00	1113.00	9284.46	10.89	138.31	9284.49	74.46	126.04	PASS
1213.00†	1212.97	-1.66	-1.48	1134.97	1212.97	9284.46	10.89	138.29	9286.13	76.85	122.09	PASS
1313.00†	1312.80	-5.90	-5.27	1234.80	1312.80	9284.46	10.89	138.26	9290.38	79.27	118.38	PASS
1413.00†	1412.38	-12.74	-11.38	1334.38	1412.38	9284.46	10.89	138.21	9297.23	81.69	114.93	PASS
1513.00†	1511.57	-22.17	-19.79	1433.57	1511.57	9284.46	10.89	138.13	9306.68	84.11	111.70	PASS
1579.26	1577.03	-29.83	-26.64	1499.03	1577.03	9284.46	10.89	138.07	9314.37	85.71	109.70	PASS
1613.00†	1610.30	-34.02	-30.38	1532.30	1610.30	9284.46	10.89	138.09	9318.57	86.51	108.71	PASS
1713.00†	1708.90	-46.45	-41.47	1630.90	1708.90	9284.46	10.89	138.16	9331.05	88.90	105.91	PASS
1813.00†	1807.50	-58.87	-52.56	1729.50	1807.50	9284.46	10.89	138.23	9343.54	91.20	103.24	PASS
1913.00†	1906.11	-71.29	-63.65	1828.11	1906.11	9284.46	10.89	138.30	9356.04	93.61	100.70	PASS
2013.00†	2004.71	-83.71	-74.74	1926.71	2004.71	9284.46	10.89	138.36	9368.56	96.02	98.29	PASS
2113.00†	2103.32	-96.13	-85.83	2025.32	2103.32	9284.46	10.89	138.43	9381.09	98.44	95.98	PASS
2213.00†	2201.92	-108.55	-96.92	2123.92	2201.92	9284.46	10.89	138.50	9393.63	100.87	93.77	PASS
2313.00†	2300.52	-120.97	-108.01	2222.52	2300.52	9284.46	10.89	138.57	9406.18	103.31	91.67	PASS
2413.00†	2399.13	-133.39	-119.10	2321.13	2399.13	9284.46	10.89	138.63	9418.75	105.76	89.65	PASS
2513.00†	2497.73	-145.81	-130.19	2419.73	2497.73	9284.46	10.89	138.70	9431.33	108.21	87.72	PASS
2613.00†	2596.34	-158.23	-141.28	2518.34	2596.34	9284.46	10.89	138.76	9443.92	110.67	85.87	PASS
2713.00†	2694.94	-170.66	-152.37	2616.94	2694.94	9284.46	10.89	138.83	9456.52	113.14	84.10	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2793.54	-183.08	-163.46	2715.54	2793.54	9284.46	10.89	138.90	9469.14	115.62	82.40	PASS
2913.00†	2892.15	-195.50	-174.55	2814.15	2892.15	9284.46	10.89	138.96	9481.77	118.11	80.76	PASS
3013.00†	2990.75	-207.92	-185.64	2912.75	2990.75	9284.46	10.89	139.03	9494.41	120.60	79.19	PASS
3113.00†	3089.35	-220.34	-196.73	3011.35	3089.35	9284.46	10.89	139.09	9507.06	123.09	77.68	PASS
3213.00†	3187.96	-232.76	-207.82	3109.96	3187.96	9284.46	10.89	139.16	9519.73	125.60	76.22	PASS
3313.00†	3286.56	-245.18	-218.91	3208.56	3286.56	9284.46	10.89	139.22	9532.41	128.11	74.82	PASS
3413.00†	3385.17	-257.60	-230.00	3307.17	3385.17	9284.46	10.89	139.29	9545.10	130.63	73.46	PASS
3513.00†	3483.77	-270.02	-241.09	3405.77	3483.77	9284.46	10.89	139.35	9557.80	133.15	72.16	PASS
3613.00†	3582.37	-282.44	-252.18	3504.37	3582.37	9284.46	10.89	139.42	9570.52	135.68	70.90	PASS
3713.00†	3680.98	-294.87	-263.27	3602.98	3680.98	9284.46	10.89	139.48	9583.25	138.21	69.69	PASS
3813.00†	3779.58	-307.29	-274.36	3701.58	3779.58	9284.46	10.89	139.55	9595.98	140.75	68.51	PASS
3913.00†	3878.19	-319.71	-285.45	3800.19	3878.19	9284.46	10.89	139.61	9608.74	143.30	67.38	PASS
4013.00†	3976.79	-332.13	-296.54	3898.79	3976.79	9284.46	10.89	139.67	9621.50	145.85	66.28	PASS
4113.00†	4075.39	-344.55	-307.64	3997.39	4075.39	9284.46	10.89	139.74	9634.27	148.41	65.22	PASS
4213.00†	4174.00	-356.97	-318.73	4096.00	4174.00	9284.46	10.89	139.80	9647.06	150.97	64.20	PASS
4313.00†	4272.60	-369.39	-329.82	4194.60	4272.60	9284.46	10.89	139.86	9659.86	153.54	63.20	PASS
4413.00†	4371.21	-381.81	-340.91	4293.21	4371.21	9284.46	10.89	139.93	9672.67	156.11	62.24	PASS
4513.00†	4469.81	-394.23	-352.00	4391.81	4469.81	9284.46	10.89	139.99	9685.49	158.69	61.31	PASS
4613.00†	4568.41	-406.65	-363.09	4490.41	4568.41	9284.46	10.89	140.05	9698.33	161.27	60.40	PASS
4713.00†	4667.02	-419.08	-374.18	4589.02	4667.02	9284.46	10.89	140.12	9711.17	163.85	59.52	PASS
4813.00†	4765.62	-431.50	-385.27	4687.62	4765.62	9284.46	10.89	140.18	9724.03	166.44	58.67	PASS
4913.00†	4864.22	-443.92	-396.36	4786.22	4864.22	9284.46	10.89	140.24	9736.90	169.03	57.84	PASS
5013.00†	4962.83	-456.34	-407.45	4884.83	4962.83	9284.46	10.89	140.30	9749.78	171.63	57.04	PASS
5113.00†	5061.43	-468.76	-418.54	4983.43	5061.43	9284.46	10.89	140.37	9762.67	174.23	56.26	PASS
5213.00†	5160.04	-481.18	-429.63	5082.04	5160.04	9284.46	10.89	140.43	9775.57	176.83	55.50	PASS
5313.00†	5258.64	-493.60	-440.72	5180.64	5258.64	9284.46	10.89	140.49	9788.48	179.44	54.76	PASS
5413.00†	5357.24	-506.02	-451.81	5279.24	5357.24	9284.46	10.89	140.55	9801.41	182.05	54.04	PASS
5513.00†	5455.85	-518.44	-462.90	5377.85	5455.85	9284.46	10.89	140.61	9814.34	184.67	53.35	PASS
5613.00†	5554.45	-530.86	-473.99	5476.45	5554.45	9284.46	10.89	140.67	9827.29	187.29	52.67	PASS
5713.00†	5653.06	-543.29	-485.08	5575.06	5653.06	9284.46	10.89	140.73	9840.25	189.91	52.01	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5751.66	-555.71	-496.17	5673.66	5751.66	9284.46	10.89	140.79	9853.22	192.53	51.36	PASS
5913.00†	5850.26	-568.13	-507.26	5772.26	5850.26	9284.46	10.89	140.86	9866.20	195.16	50.74	PASS
6013.00†	5948.87	-580.55	-518.35	5870.87	5948.87	9284.46	10.89	140.92	9879.19	197.79	50.12	PASS
6113.00†	6047.47	-592.97	-529.44	5969.47	6047.47	9284.46	10.89	140.98	9892.20	200.42	49.53	PASS
6213.00†	6146.08	-605.39	-540.53	6068.08	6146.08	9284.46	10.89	141.04	9905.21	203.05	48.95	PASS
6313.00†	6244.68	-617.81	-551.62	6166.68	6244.68	9284.46	10.89	141.10	9918.23	205.69	48.38	PASS
6413.00†	6343.28	-630.23	-562.71	6265.28	6343.28	9284.46	10.89	141.16	9931.27	208.33	47.83	PASS
6513.00†	6441.89	-642.65	-573.80	6363.89	6441.89	9284.46	10.89	141.22	9944.32	210.97	47.29	PASS
6613.00†	6540.49	-655.07	-584.89	6462.49	6540.49	9284.46	10.89	141.28	9957.37	213.62	46.76	PASS
6713.00†	6639.09	-667.50	-595.98	6561.09	6639.09	9284.46	10.89	141.34	9970.44	216.27	46.25	PASS
6813.00†	6737.70	-679.92	-607.07	6659.70	6737.70	9284.46	10.89	141.40	9983.52	218.92	45.75	PASS
6913.00†	6836.30	-692.34	-618.16	6758.30	6836.30	9284.46	10.89	141.46	9996.61	221.57	45.26	PASS
7013.00†	6934.91	-704.76	-629.25	6856.91	6934.91	9284.46	10.89	141.51	10009.71	224.22	44.78	PASS
7056.81	6978.10	-710.20	-634.11	6900.10	6978.10	9284.46	10.89	141.54	10015.45	225.38	44.57	PASS
7113.00†	7033.76	-714.44	-640.38	6955.76	7033.76	9284.46	10.89	106.91	10020.08	226.89	44.30	PASS
7213.00†	7132.82	-708.37	-651.57	7054.82	7132.82	9284.46	10.89	41.30	10014.76	229.94	43.69	PASS
7313.00†	7229.32	-685.08	-662.51	7151.32	7229.32	9284.46	10.89	23.76	9992.25	233.59	42.90	PASS
7413.00†	7320.33	-645.28	-672.88	7242.33	7320.33	9284.46	10.89	17.90	9953.25	236.87	42.14	PASS
7513.00†	7403.09	-590.18	-682.36	7325.09	7403.09	9284.46	10.89	15.52	9898.94	239.72	41.41	PASS
7613.00†	7475.08	-521.45	-690.66	7397.08	7475.08	9284.46	10.89	14.85	9830.97	242.12	40.72	PASS
7713.00†	7534.11	-441.18	-697.53	7456.11	7534.11	9284.46	10.89	15.60	9751.41	244.03	40.07	PASS
7813.00†	7578.39	-351.82	-702.76	7500.39	7578.39	9284.46	10.89	18.42	9662.66	245.44	39.48	PASS
7913.00†	7606.57	-256.06	-706.19	7528.57	7606.57	9284.46	10.89	26.96	9567.43	246.34	38.95	PASS
8013.00†	7617.81	-156.84	-707.72	7539.81	7617.81	9284.46	10.89	72.35	9468.60	246.76	38.48	PASS
8027.99	7618.00	-141.85	-707.78	7540.00	7618.00	9284.46	10.89	90.00	9453.66	246.78	38.41	PASS
8113.00†	7618.00	-56.84	-708.00	7540.00	7618.00	9284.46	10.89	90.00	9368.92	246.88	38.05	PASS
8213.00†	7618.00	43.16	-708.26	7540.00	7618.00	9284.46	10.89	90.00	9269.24	247.01	37.63	PASS
8313.00†	7618.00	143.16	-708.53	7540.00	7618.00	9284.46	10.89	90.00	9169.56	247.14	37.21	PASS
8413.00†	7618.00	243.16	-708.79	7540.00	7618.00	9284.46	10.89	90.00	9069.89	247.27	36.78	PASS
8513.00†	7618.00	343.16	-709.05	7540.00	7618.00	9284.46	10.89	90.00	8970.23	247.41	36.36	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
8613.00†	7618.00	443.16	-709.31	7540.00	7618.00	9284.46	10.89	90.00	8870.58	247.55	35.93	PASS
8713.00†	7618.00	543.16	-709.57	7540.00	7618.00	9284.46	10.89	90.00	8770.94	247.70	35.51	PASS
8813.00†	7618.00	643.16	-709.84	7540.00	7618.00	9284.46	10.89	90.00	8671.30	247.86	35.08	PASS
8913.00†	7618.00	743.16	-710.10	7540.00	7618.00	9284.46	10.89	90.00	8571.67	248.02	34.66	PASS
9013.00†	7618.00	843.16	-710.36	7540.00	7618.00	9284.46	10.89	90.00	8472.06	248.19	34.23	PASS
9113.00†	7618.00	943.16	-710.62	7540.00	7618.00	9284.46	10.89	90.00	8372.45	248.36	33.80	PASS
9213.00†	7618.00	1043.16	-710.88	7540.00	7618.00	9284.46	10.89	90.00	8272.85	248.54	33.38	PASS
9313.00†	7618.00	1143.16	-711.14	7540.00	7618.00	9284.46	10.89	90.00	8173.26	248.73	32.95	PASS
9413.00†	7618.00	1243.16	-711.41	7540.00	7618.00	9284.46	10.89	90.00	8073.67	248.93	32.52	PASS
9513.00†	7618.00	1343.16	-711.67	7540.00	7618.00	9284.46	10.89	90.00	7974.10	249.13	32.10	PASS
9613.00†	7618.00	1443.16	-711.93	7540.00	7618.00	9284.46	10.89	90.00	7874.55	249.34	31.67	PASS
9713.00†	7618.00	1543.16	-712.19	7540.00	7618.00	9284.46	10.89	90.00	7775.00	249.55	31.24	PASS
9813.00†	7618.00	1643.16	-712.45	7540.00	7618.00	9284.46	10.89	90.00	7675.46	249.78	30.81	PASS
9913.00†	7618.00	1743.16	-712.72	7540.00	7618.00	9284.46	10.89	90.00	7575.94	250.01	30.39	PASS
10013.00†	7618.00	1843.15	-712.98	7540.00	7618.00	9284.46	10.89	90.00	7476.43	250.25	29.96	PASS
10113.00†	7618.00	1943.15	-713.24	7540.00	7618.00	9284.46	10.89	90.00	7376.93	250.50	29.53	PASS
10213.00†	7618.00	2043.15	-713.50	7540.00	7618.00	9284.46	10.89	90.00	7277.45	250.76	29.10	PASS
10313.00†	7618.00	2143.15	-713.76	7540.00	7618.00	9284.46	10.89	90.00	7177.98	251.03	28.67	PASS
10413.00†	7618.00	2243.15	-714.02	7540.00	7618.00	9284.46	10.89	90.00	7078.52	251.31	28.24	PASS
10513.00†	7618.00	2343.15	-714.29	7540.00	7618.00	9284.46	10.89	90.00	6979.08	251.60	27.81	PASS
10613.00†	7618.00	2443.15	-714.55	7540.00	7618.00	9284.46	10.89	90.00	6879.66	251.90	27.39	PASS
10713.00†	7618.00	2543.15	-714.81	7540.00	7618.00	9284.46	10.89	90.00	6780.25	252.21	26.96	PASS
10813.00†	7618.00	2643.15	-715.07	7540.00	7618.00	9284.46	10.89	90.00	6680.86	252.53	26.53	PASS
10913.00†	7618.00	2743.15	-715.33	7540.00	7618.00	9284.46	10.89	90.00	6581.50	252.87	26.10	PASS
11013.00†	7618.00	2843.15	-715.60	7540.00	7618.00	9284.46	10.89	90.00	6482.14	253.21	25.67	PASS
11113.00†	7618.00	2943.15	-715.86	7540.00	7618.00	9284.46	10.89	90.00	6382.81	253.58	25.24	PASS
11213.00†	7618.00	3043.15	-716.12	7540.00	7618.00	9284.46	10.89	90.00	6283.51	253.95	24.81	PASS
11313.00†	7618.00	3143.15	-716.38	7540.00	7618.00	9284.46	10.89	90.00	6184.22	254.34	24.38	PASS
11413.00†	7618.00	3243.15	-716.64	7540.00	7618.00	9284.46	10.89	90.00	6084.96	254.75	23.95	PASS
11513.00†	7618.00	3343.15	-716.90	7540.00	7618.00	9284.46	10.89	90.00	5985.72	255.17	23.52	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11613.00†	7618.00	3443.15	-717.17	7540.00	7618.00	9284.46	10.89	90.00	5886.51	255.61	23.09	PASS
11713.00†	7618.00	3543.15	-717.43	7540.00	7618.00	9284.46	10.89	90.00	5787.32	256.07	22.66	PASS
11813.00†	7618.00	3643.15	-717.69	7540.00	7618.00	9284.46	10.89	90.00	5688.16	256.55	22.23	PASS
11913.00†	7618.00	3743.15	-717.95	7540.00	7618.00	9284.46	10.89	90.00	5589.04	257.04	21.80	PASS
12013.00†	7618.00	3843.15	-718.21	7540.00	7618.00	9284.46	10.89	90.00	5489.94	257.56	21.37	PASS
12113.00†	7618.00	3943.15	-718.48	7540.00	7618.00	9284.46	10.89	90.00	5390.88	258.10	20.94	PASS
12213.00†	7618.00	4043.15	-718.74	7540.00	7618.00	9284.46	10.89	90.00	5291.85	258.67	20.51	PASS
12313.00†	7618.00	4143.15	-719.00	7540.00	7618.00	9284.46	10.89	90.00	5192.86	259.26	20.08	PASS
12413.00†	7618.00	4243.15	-719.26	7540.00	7618.00	9284.46	10.89	90.00	5093.91	259.88	19.65	PASS
12513.00†	7618.00	4343.15	-719.52	7540.00	7618.00	9284.46	10.89	90.00	4995.00	260.52	19.22	PASS
12613.00†	7618.00	4443.15	-719.78	7540.00	7618.00	9284.46	10.89	90.00	4896.14	261.20	18.79	PASS
12713.00†	7618.00	4543.15	-720.05	7540.00	7618.00	9284.46	10.89	90.00	4797.32	261.90	18.36	PASS
12813.00†	7618.00	4643.15	-720.31	7540.00	7618.00	9284.46	10.89	90.00	4698.56	262.64	17.94	PASS
12913.00†	7618.00	4743.14	-720.57	7540.00	7618.00	9284.46	10.89	90.00	4599.84	263.42	17.51	PASS
13013.00†	7618.00	4843.14	-720.83	7540.00	7618.00	9284.46	10.89	90.00	4501.19	264.24	17.08	PASS
13113.00†	7618.00	4943.14	-721.09	7540.00	7618.00	9284.46	10.89	90.00	4402.59	265.10	16.65	PASS
13213.00†	7618.00	5043.14	-721.36	7540.00	7618.00	9284.46	10.89	90.00	4304.06	266.00	16.22	PASS
13313.00†	7618.00	5143.14	-721.62	7540.00	7618.00	9284.46	10.89	90.00	4205.60	266.95	15.79	PASS
13413.00†	7618.00	5243.14	-721.88	7540.00	7618.00	9284.46	10.89	90.00	4107.21	267.95	15.37	PASS
13513.00†	7618.00	5343.14	-722.14	7540.00	7618.00	9284.46	10.89	90.00	4008.90	269.01	14.94	PASS
13613.00†	7618.00	5443.14	-722.40	7540.00	7618.00	9284.46	10.89	90.00	3910.68	270.12	14.51	PASS
13713.00†	7618.00	5543.14	-722.66	7540.00	7618.00	9284.46	10.89	90.00	3812.55	271.30	14.09	PASS
13813.00†	7618.00	5643.14	-722.93	7540.00	7618.00	9284.46	10.89	90.00	3714.52	272.55	13.66	PASS
13913.00†	7618.00	5743.14	-723.19	7540.00	7618.00	9284.46	10.89	90.00	3616.60	273.87	13.24	PASS
14013.00†	7618.00	5843.14	-723.45	7540.00	7618.00	9284.46	10.89	90.00	3518.79	275.27	12.81	PASS
14113.00†	7618.00	5943.14	-723.71	7540.00	7618.00	9284.46	10.89	90.00	3421.12	276.76	12.39	PASS
14213.00†	7618.00	6043.14	-723.97	7540.00	7618.00	9284.46	10.89	90.00	3323.58	278.35	11.97	PASS
14313.00†	7618.00	6143.14	-724.24	7540.00	7618.00	9284.46	10.89	90.00	3226.19	280.04	11.55	PASS
14413.00†	7618.00	6243.14	-724.50	7540.00	7618.00	9284.46	10.89	90.00	3128.96	281.84	11.13	PASS
14513.00†	7618.00	6343.14	-724.76	7540.00	7618.00	9284.46	10.89	90.00	3031.92	283.77	10.71	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
14613.00†	7618.00	6443.14	-725.02	7540.00	7618.00	9284.46	10.89	90.00	2935.07	285.84	10.29	PASS
14713.00†	7618.00	6543.14	-725.28	7540.00	7618.00	9284.46	10.89	90.00	2838.45	288.05	9.88	PASS
14813.00†	7618.00	6643.14	-725.54	7540.00	7618.00	9284.46	10.89	90.00	2742.06	290.43	9.46	PASS
14913.00†	7618.00	6743.14	-725.81	7540.00	7618.00	9284.46	10.89	90.00	2645.95	292.98	9.05	PASS
15013.00†	7618.00	6843.14	-726.07	7540.00	7618.00	9284.46	10.89	90.00	2550.13	295.74	8.64	PASS
15113.00†	7618.00	6943.14	-726.33	7540.00	7618.00	9284.46	10.89	90.00	2454.64	298.73	8.23	PASS
15213.00†	7618.00	7043.14	-726.59	7540.00	7618.00	9284.46	10.89	90.00	2359.53	301.95	7.83	PASS
15313.00†	7618.00	7143.14	-726.85	7540.00	7618.00	9284.46	10.89	90.00	2264.84	305.46	7.43	PASS
15413.00†	7618.00	7243.14	-727.12	7540.00	7618.00	9284.46	10.89	90.00	2170.63	309.27	7.03	PASS
15513.00†	7618.00	7343.14	-727.38	7540.00	7618.00	9284.46	10.89	90.00	2076.96	313.43	6.64	PASS
15613.00†	7618.00	7443.14	-727.64	7540.00	7618.00	9284.46	10.89	90.00	1983.91	317.97	6.25	PASS
15713.00†	7618.00	7543.14	-727.90	7540.00	7618.00	9284.46	10.89	90.00	1891.56	322.94	5.87	PASS
15813.00†	7618.00	7643.14	-728.16	7540.00	7618.00	9284.46	10.89	90.00	1800.04	328.40	5.49	PASS
15913.00†	7618.00	7743.13	-728.42	7540.00	7618.00	9284.46	10.89	90.00	1709.46	334.42	5.12	PASS
16013.00†	7618.00	7843.13	-728.69	7540.00	7618.00	9284.46	10.89	90.00	1620.00	341.05	4.76	PASS
16113.00†	7618.00	7943.13	-728.95	7540.00	7618.00	9284.46	10.89	90.00	1531.83	348.37	4.40	PASS
16213.00†	7618.00	8043.13	-729.21	7540.00	7618.00	9284.46	10.89	90.00	1445.21	356.47	4.06	PASS
16313.00†	7618.00	8143.13	-729.47	7540.00	7618.00	9284.46	10.89	90.00	1360.43	365.44	3.73	PASS
16413.00†	7618.00	8243.13	-729.73	7540.00	7618.00	9284.46	10.89	90.00	1277.84	375.36	3.41	PASS
16513.00†	7618.00	8343.13	-730.00	7540.00	7618.00	9284.46	10.89	90.00	1197.92	386.30	3.10	PASS
16613.00†	7618.00	8443.13	-730.26	7540.00	7618.00	9284.46	10.89	90.00	1121.22	398.31	2.82	PASS
16713.00†	7618.00	8543.13	-730.52	7540.00	7618.00	9284.46	10.89	90.00	1048.45	411.37	2.55	PASS
16813.00†	7618.00	8643.13	-730.78	7540.00	7618.00	9284.46	10.89	90.00	980.50	425.36	2.31	PASS
16913.00†	7618.00	8743.13	-731.04	7540.00	7618.00	9284.46	10.89	90.00	918.42	439.99	2.09	PASS
17013.00†	7618.00	8843.13	-731.30	7540.00	7618.00	9284.46	10.89	90.00	863.49	454.73	1.90	PASS
17113.00†	7618.00	8943.13	-731.57	7540.00	7618.00	9284.46	10.89	90.00	817.16	468.75	1.74	PASS
17213.00†	7618.00	9043.13	-731.83	7540.00	7618.00	9284.46	10.89	90.00	780.94	480.89	1.62	PASS
17313.00†	7618.00	9143.13	-732.09	7540.00	7618.00	9284.46	10.89	90.00	756.30	489.87	1.54	PASS
17413.00†	7618.00	9243.13	-732.35	7540.00	7618.00	9284.46	10.89	90.00	744.39	494.47	1.51	PASS
17452.49†	7618.00	9282.62	-732.46	7540.22	7618.22	9284.46	10.89	90.02	743.35	494.92	1.50	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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
17453.15†	7618.00	9283.28	-732.46	7540.00	7618.00	9284.46	10.89	90.00	743.35	494.92	1.50	PASS
17513.00†	7618.00	9343.13	-732.61	7540.00	7618.00	9284.46	10.89	90.00	745.82	494.04	1.51	PASS
17613.00†	7618.00	9443.13	-732.88	7540.00	7618.00	9284.46	10.89	90.00	760.50	488.63	1.56	PASS
17713.00†	7618.00	9543.13	-733.14	7540.00	7618.00	9284.46	10.89	90.00	787.71	479.08	1.65	PASS
17742.92	7618.00	9573.05	-733.22	7540.00	7618.00	9284.46	10.89	90.00	798.11	474.89	1.68	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	Wellbore
0.00	8308.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8308>	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 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	5296.75	-1294.35	-13.73	5452.67	25.40	221.61	PASS
113.00†	113.00	0.00	0.00	60.00	113.00	5296.75	-1294.35	-13.73	5452.60	51.41	107.72	PASS
213.00†	213.00	0.00	0.00	160.00	213.00	5296.75	-1294.35	-13.73	5452.60	53.76	102.95	PASS
313.00†	313.00	0.00	0.00	260.00	313.00	5296.75	-1294.35	-13.73	5452.60	56.11	98.57	PASS
413.00†	413.00	0.00	0.00	360.00	413.00	5296.75	-1294.35	-13.73	5452.60	58.46	94.55	PASS
513.00†	513.00	0.00	0.00	460.00	513.00	5296.75	-1294.35	-13.73	5452.60	60.82	90.83	PASS
613.00†	613.00	0.00	0.00	560.00	613.00	5296.75	-1294.35	-13.73	5452.60	63.19	87.39	PASS
713.00†	713.00	0.00	0.00	660.00	713.00	5296.75	-1294.35	-13.73	5452.60	65.55	84.20	PASS
813.00†	813.00	0.00	0.00	760.00	813.00	5296.75	-1294.35	-13.73	5452.60	67.92	81.22	PASS
913.00†	913.00	0.00	0.00	860.00	913.00	5296.75	-1294.35	-13.73	5452.60	70.30	78.45	PASS
1013.00†	1013.00	0.00	0.00	960.00	1013.00	5296.75	-1294.35	-13.73	5452.60	72.68	75.85	PASS
1100.00	1100.00	0.00	0.00	1047.00	1100.00	5296.75	-1294.35	-13.73	5452.60	74.75	73.73	PASS
1113.00†	1113.00	-0.02	-0.02	1060.00	1113.00	5296.75	-1294.35	124.51	5452.62	75.06	73.42	PASS
1213.00†	1212.97	-1.66	-1.48	1159.97	1212.97	5296.75	-1294.35	124.51	5453.86	77.45	71.14	PASS
1313.00†	1312.80	-5.90	-5.27	1259.80	1312.80	5296.75	-1294.35	124.50	5457.09	79.86	69.02	PASS
1413.00†	1412.38	-12.74	-11.38	1359.38	1412.38	5296.75	-1294.35	124.50	5462.29	82.26	67.04	PASS
1513.00†	1511.57	-22.17	-19.79	1458.57	1511.57	5296.75	-1294.35	124.49	5469.49	84.67	65.21	PASS
1579.26	1577.03	-29.83	-26.64	1524.03	1577.03	5296.75	-1294.35	124.48	5475.36	86.26	64.06	PASS
1613.00†	1610.30	-34.02	-30.38	1557.30	1610.30	5296.75	-1294.35	124.52	5478.57	87.07	63.50	PASS
1713.00†	1708.90	-46.45	-41.47	1655.90	1708.90	5296.75	-1294.35	124.67	5488.11	89.47	61.89	PASS
1813.00†	1807.50	-58.87	-52.56	1754.50	1807.50	5296.75	-1294.35	124.81	5497.69	91.78	60.36	PASS
1913.00†	1906.11	-71.29	-63.65	1853.11	1906.11	5296.75	-1294.35	124.95	5507.30	94.20	58.90	PASS
2013.00†	2004.71	-83.71	-74.74	1951.71	2004.71	5296.75	-1294.35	125.09	5516.95	96.63	57.51	PASS
2113.00†	2103.32	-96.13	-85.83	2050.32	2103.32	5296.75	-1294.35	125.23	5526.63	99.07	56.18	PASS
2213.00†	2201.92	-108.55	-96.92	2148.92	2201.92	5296.75	-1294.35	125.37	5536.34	101.52	54.91	PASS
2313.00†	2300.52	-120.97	-108.01	2247.52	2300.52	5296.75	-1294.35	125.51	5546.08	103.98	53.70	PASS
2413.00†	2399.13	-133.39	-119.10	2346.13	2399.13	5296.75	-1294.35	125.65	5555.86	106.44	52.54	PASS
2513.00†	2497.73	-145.81	-130.19	2444.73	2497.73	5296.75	-1294.35	125.78	5565.67	108.92	51.43	PASS
2613.00†	2596.34	-158.23	-141.28	2543.34	2596.34	5296.75	-1294.35	125.92	5575.51	111.41	50.36	PASS
2713.00†	2694.94	-170.66	-152.37	2641.94	2694.94	5296.75	-1294.35	126.06	5585.39	113.90	49.34	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2793.54	-183.08	-163.46	2740.54	2793.54	5296.75	-1294.35	126.19	5595.30	116.41	48.35	PASS
2913.00†	2892.15	-195.50	-174.55	2839.15	2892.15	5296.75	-1294.35	126.33	5605.24	118.92	47.41	PASS
3013.00†	2990.75	-207.92	-185.64	2937.75	2990.75	5296.75	-1294.35	126.47	5615.21	121.44	46.50	PASS
3113.00†	3089.35	-220.34	-196.73	3036.35	3089.35	5296.75	-1294.35	126.60	5625.21	123.97	45.63	PASS
3213.00†	3187.96	-232.76	-207.82	3134.96	3187.96	5296.75	-1294.35	126.74	5635.24	126.51	44.79	PASS
3313.00†	3286.56	-245.18	-218.91	3233.56	3286.56	5296.75	-1294.35	126.87	5645.31	129.05	43.98	PASS
3413.00†	3385.17	-257.60	-230.00	3332.17	3385.17	5296.75	-1294.35	127.00	5655.41	131.60	43.20	PASS
3513.00†	3483.77	-270.02	-241.09	3430.77	3483.77	5296.75	-1294.35	127.14	5665.53	134.16	42.45	PASS
3613.00†	3582.37	-282.44	-252.18	3529.37	3582.37	5296.75	-1294.35	127.27	5675.69	136.72	41.72	PASS
3713.00†	3680.98	-294.87	-263.27	3627.98	3680.98	5296.75	-1294.35	127.40	5685.88	139.29	41.02	PASS
3813.00†	3779.58	-307.29	-274.36	3726.58	3779.58	5296.75	-1294.35	127.53	5696.10	141.87	40.35	PASS
3913.00†	3878.19	-319.71	-285.45	3825.19	3878.19	5296.75	-1294.35	127.67	5706.35	144.45	39.69	PASS
4013.00†	3976.79	-332.13	-296.54	3923.79	3976.79	5296.75	-1294.35	127.80	5716.63	147.04	39.06	PASS
4113.00†	4075.39	-344.55	-307.64	4022.39	4075.39	5296.75	-1294.35	127.93	5726.94	149.64	38.45	PASS
4213.00†	4174.00	-356.97	-318.73	4121.00	4174.00	5296.75	-1294.35	128.06	5737.28	152.24	37.86	PASS
4313.00†	4272.60	-369.39	-329.82	4219.60	4272.60	5296.75	-1294.35	128.19	5747.65	154.84	37.29	PASS
4413.00†	4371.21	-381.81	-340.91	4318.21	4371.21	5296.75	-1294.35	128.32	5758.04	157.45	36.73	PASS
4513.00†	4469.81	-394.23	-352.00	4416.81	4469.81	5296.75	-1294.35	128.45	5768.47	160.07	36.19	PASS
4613.00†	4568.41	-406.65	-363.09	4515.41	4568.41	5296.75	-1294.35	128.57	5778.93	162.69	35.67	PASS
4713.00†	4667.02	-419.08	-374.18	4614.02	4667.02	5296.75	-1294.35	128.70	5789.41	165.31	35.17	PASS
4813.00†	4765.62	-431.50	-385.27	4712.62	4765.62	5296.75	-1294.35	128.83	5799.93	167.94	34.68	PASS
4913.00†	4864.22	-443.92	-396.36	4811.22	4864.22	5296.75	-1294.35	128.96	5810.47	170.57	34.20	PASS
5013.00†	4962.83	-456.34	-407.45	4909.83	4962.83	5296.75	-1294.35	129.08	5821.05	173.21	33.74	PASS
5113.00†	5061.43	-468.76	-418.54	5008.43	5061.43	5296.75	-1294.35	129.21	5831.65	175.85	33.29	PASS
5213.00†	5160.04	-481.18	-429.63	5107.04	5160.04	5296.75	-1294.35	129.33	5842.27	178.49	32.86	PASS
5313.00†	5258.64	-493.60	-440.72	5205.64	5258.64	5296.75	-1294.35	129.46	5852.93	181.14	32.44	PASS
5413.00†	5357.24	-506.02	-451.81	5304.24	5357.24	5296.75	-1294.35	129.58	5863.62	183.79	32.02	PASS
5513.00†	5455.85	-518.44	-462.90	5402.85	5455.85	5296.75	-1294.35	129.71	5874.33	186.44	31.62	PASS
5613.00†	5554.45	-530.86	-473.99	5501.45	5554.45	5296.75	-1294.35	129.83	5885.07	189.10	31.24	PASS
5713.00†	5653.06	-543.29	-485.08	5600.06	5653.06	5296.75	-1294.35	129.95	5895.84	191.76	30.86	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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
5813.00†	5751.66	-555.71	-496.17	5698.66	5751.66	5296.75	-1294.35	130.08	5906.63	194.42	30.49	PASS
5913.00†	5850.26	-568.13	-507.26	5797.26	5850.26	5296.75	-1294.35	130.20	5917.45	197.08	30.13	PASS
6013.00†	5948.87	-580.55	-518.35	5895.87	5948.87	5296.75	-1294.35	130.32	5928.30	199.75	29.78	PASS
6113.00†	6047.47	-592.97	-529.44	5994.47	6047.47	5296.75	-1294.35	130.44	5939.18	202.42	29.44	PASS
6213.00†	6146.08	-605.39	-540.53	6093.08	6146.08	5296.75	-1294.35	130.56	5950.08	205.09	29.11	PASS
6313.00†	6244.68	-617.81	-551.62	6191.68	6244.68	5296.75	-1294.35	130.68	5961.01	207.77	28.79	PASS
6413.00†	6343.28	-630.23	-562.71	6290.28	6343.28	5296.75	-1294.35	130.80	5971.96	210.44	28.47	PASS
6513.00†	6441.89	-642.65	-573.80	6388.89	6441.89	5296.75	-1294.35	130.92	5982.95	213.12	28.16	PASS
6613.00†	6540.49	-655.07	-584.89	6487.49	6540.49	5296.75	-1294.35	131.04	5993.95	215.80	27.86	PASS
6713.00†	6639.09	-667.50	-595.98	6586.09	6639.09	5296.75	-1294.35	131.16	6004.99	218.49	27.57	PASS
6813.00†	6737.70	-679.92	-607.07	6684.70	6737.70	5296.75	-1294.35	131.28	6016.05	221.17	27.28	PASS
6913.00†	6836.30	-692.34	-618.16	6783.30	6836.30	5296.75	-1294.35	131.40	6027.13	223.86	27.01	PASS
7013.00†	6934.91	-704.76	-629.25	6881.91	6934.91	5296.75	-1294.35	131.52	6038.25	226.55	26.73	PASS
7056.81	6978.10	-710.20	-634.11	6925.10	6978.10	5296.75	-1294.35	131.57	6043.12	227.72	26.62	PASS
7113.00†	7033.76	-714.44	-640.38	6980.76	7033.76	5296.75	-1294.35	97.03	6046.65	229.25	26.45	PASS
7213.00†	7132.82	-708.37	-651.57	7079.82	7132.82	5296.75	-1294.35	31.35	6039.42	232.19	26.09	PASS
7313.00†	7229.32	-685.08	-662.51	7176.32	7229.32	5296.75	-1294.35	13.39	6015.10	235.56	25.61	PASS
7413.00†	7320.33	-645.28	-672.88	7267.33	7320.33	5296.75	-1294.35	6.68	5974.44	238.65	25.11	PASS
7513.00†	7403.09	-590.18	-682.36	7350.09	7403.09	5296.75	-1294.35	2.87	5918.65	241.33	24.59	PASS
7613.00†	7475.08	-521.45	-690.66	7422.08	7475.08	5296.75	-1294.35	-0.17	5849.43	243.54	24.09	PASS
7713.00†	7534.11	-441.18	-697.53	7481.11	7534.11	5296.75	-1294.35	-3.58	5768.88	245.24	23.59	PASS
7813.00†	7578.39	-351.82	-702.76	7525.39	7578.39	5296.75	-1294.35	-9.00	5679.46	246.41	23.11	PASS
7913.00†	7606.57	-256.06	-706.19	7553.57	7606.57	5296.75	-1294.35	-22.06	5583.87	247.05	22.66	PASS
8013.00†	7617.81	-156.84	-707.72	7564.81	7617.81	5296.75	-1294.35	-75.70	5485.04	247.19	22.25	PASS
8027.99	7618.00	-141.85	-707.78	7565.00	7618.00	5296.75	-1294.35	-90.00	5470.13	247.17	22.19	PASS
8113.00†	7618.00	-56.84	-708.00	7565.00	7618.00	5296.75	-1294.35	-90.00	5385.60	247.03	21.86	PASS
8213.00†	7618.00	43.16	-708.26	7565.00	7618.00	5296.75	-1294.35	-90.00	5286.17	246.86	21.47	PASS
8313.00†	7618.00	143.16	-708.53	7565.00	7618.00	5296.75	-1294.35	-90.00	5186.77	246.68	21.08	PASS
8413.00†	7618.00	243.16	-708.79	7565.00	7618.00	5296.75	-1294.35	-90.00	5087.40	246.50	20.70	PASS
8513.00†	7618.00	343.16	-709.05	7565.00	7618.00	5296.75	-1294.35	-90.00	4988.04	246.32	20.31	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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 MASH [ft]	Sep Ratio	ACR Status
8613.00†	7618.00	443.16	-709.31	7565.00	7618.00	5296.75	-1294.35	-90.00	4888.72	246.13	19.92	PASS
8713.00†	7618.00	543.16	-709.57	7565.00	7618.00	5296.75	-1294.35	-90.00	4789.42	245.94	19.53	PASS
8813.00†	7618.00	643.16	-709.84	7565.00	7618.00	5296.75	-1294.35	-90.00	4690.15	245.74	19.14	PASS
8913.00†	7618.00	743.16	-710.10	7565.00	7618.00	5296.75	-1294.35	-90.00	4590.91	245.55	18.75	PASS
9013.00†	7618.00	843.16	-710.36	7565.00	7618.00	5296.75	-1294.35	-90.00	4491.71	245.34	18.36	PASS
9113.00†	7618.00	943.16	-710.62	7565.00	7618.00	5296.75	-1294.35	-90.00	4392.55	245.14	17.97	PASS
9213.00†	7618.00	1043.16	-710.88	7565.00	7618.00	5296.75	-1294.35	-90.00	4293.42	244.93	17.58	PASS
9313.00†	7618.00	1143.16	-711.14	7565.00	7618.00	5296.75	-1294.35	-90.00	4194.33	244.71	17.19	PASS
9413.00†	7618.00	1243.16	-711.41	7565.00	7618.00	5296.75	-1294.35	-90.00	4095.29	244.49	16.80	PASS
9513.00†	7618.00	1343.16	-711.67	7565.00	7618.00	5296.75	-1294.35	-90.00	3996.30	244.27	16.40	PASS
9613.00†	7618.00	1443.16	-711.93	7565.00	7618.00	5296.75	-1294.35	-90.00	3897.35	244.05	16.01	PASS
9713.00†	7618.00	1543.16	-712.19	7565.00	7618.00	5296.75	-1294.35	-90.00	3798.47	243.82	15.62	PASS
9813.00†	7618.00	1643.16	-712.45	7565.00	7618.00	5296.75	-1294.35	-90.00	3699.64	243.59	15.23	PASS
9913.00†	7618.00	1743.16	-712.72	7565.00	7618.00	5296.75	-1294.35	-90.00	3600.87	243.36	14.84	PASS
10013.00†	7618.00	1843.15	-712.98	7565.00	7618.00	5296.75	-1294.35	-90.00	3502.18	243.13	14.44	PASS
10113.00†	7618.00	1943.15	-713.24	7565.00	7618.00	5296.75	-1294.35	-90.00	3403.57	242.90	14.05	PASS
10213.00†	7618.00	2043.15	-713.50	7565.00	7618.00	5296.75	-1294.35	-90.00	3305.03	242.67	13.66	PASS
10313.00†	7618.00	2143.15	-713.76	7565.00	7618.00	5296.75	-1294.35	-90.00	3206.59	242.45	13.26	PASS
10413.00†	7618.00	2243.15	-714.02	7565.00	7618.00	5296.75	-1294.35	-90.00	3108.25	242.23	12.87	PASS
10513.00†	7618.00	2343.15	-714.29	7565.00	7618.00	5296.75	-1294.35	-90.00	3010.01	242.03	12.47	PASS
10613.00†	7618.00	2443.15	-714.55	7565.00	7618.00	5296.75	-1294.35	-90.00	2911.90	241.84	12.07	PASS
10713.00†	7618.00	2543.15	-714.81	7565.00	7618.00	5296.75	-1294.35	-90.00	2813.92	241.66	11.68	PASS
10813.00†	7618.00	2643.15	-715.07	7565.00	7618.00	5296.75	-1294.35	-90.00	2716.08	241.52	11.28	PASS
10913.00†	7618.00	2743.15	-715.33	7565.00	7618.00	5296.75	-1294.35	-90.00	2618.41	241.40	10.88	PASS
11013.00†	7618.00	2843.15	-715.60	7565.00	7618.00	5296.75	-1294.35	-90.00	2520.93	241.33	10.47	PASS
11113.00†	7618.00	2943.15	-715.86	7565.00	7618.00	5296.75	-1294.35	-90.00	2423.64	241.32	10.07	PASS
11213.00†	7618.00	3043.15	-716.12	7565.00	7618.00	5296.75	-1294.35	-90.00	2326.59	241.37	9.66	PASS
11313.00†	7618.00	3143.15	-716.38	7565.00	7618.00	5296.75	-1294.35	-90.00	2229.80	241.51	9.26	PASS
11413.00†	7618.00	3243.15	-716.64	7565.00	7618.00	5296.75	-1294.35	-90.00	2133.31	241.77	8.85	PASS
11513.00†	7618.00	3343.15	-716.90	7565.00	7618.00	5296.75	-1294.35	-90.00	2037.15	242.16	8.43	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	7618.00	3443.15	-717.17	7565.00	7618.00	5296.75	-1294.35	-90.00	1941.38	242.73	8.02	PASS
11713.00†	7618.00	3543.15	-717.43	7565.00	7618.00	5296.75	-1294.35	-90.00	1846.06	243.51	7.60	PASS
11813.00†	7618.00	3643.15	-717.69	7565.00	7618.00	5296.75	-1294.35	-90.00	1751.26	244.57	7.18	PASS
11913.00†	7618.00	3743.15	-717.95	7565.00	7618.00	5296.75	-1294.35	-90.00	1657.07	245.95	6.75	PASS
12013.00†	7618.00	3843.15	-718.21	7565.00	7618.00	5296.75	-1294.35	-90.00	1563.61	247.72	6.33	PASS
12113.00†	7618.00	3943.15	-718.48	7565.00	7618.00	5296.75	-1294.35	-90.00	1471.00	249.99	5.90	PASS
12213.00†	7618.00	4043.15	-718.74	7565.00	7618.00	5296.75	-1294.35	-90.00	1379.43	252.84	5.47	PASS
12313.00†	7618.00	4143.15	-719.00	7565.00	7618.00	5296.75	-1294.35	-90.00	1289.11	256.38	5.04	PASS
12413.00†	7618.00	4243.15	-719.26	7565.00	7618.00	5296.75	-1294.35	-90.00	1200.33	260.76	4.61	PASS
12513.00†	7618.00	4343.15	-719.52	7565.00	7618.00	5296.75	-1294.35	-90.00	1113.45	266.13	4.19	PASS
12613.00†	7618.00	4443.15	-719.78	7565.00	7618.00	5296.75	-1294.35	-90.00	1028.96	272.66	3.78	PASS
12713.00†	7618.00	4543.15	-720.05	7565.00	7618.00	5296.75	-1294.35	-90.00	947.49	280.54	3.38	PASS
12813.00†	7618.00	4643.15	-720.31	7565.00	7618.00	5296.75	-1294.35	-90.00	869.89	289.95	3.01	PASS
12913.00†	7618.00	4743.14	-720.57	7565.00	7618.00	5296.75	-1294.35	-90.00	797.30	301.02	2.65	PASS
13013.00†	7618.00	4843.14	-720.83	7565.00	7618.00	5296.75	-1294.35	-90.00	731.21	313.75	2.33	PASS
13113.00†	7618.00	4943.14	-721.09	7565.00	7618.00	5296.75	-1294.35	-90.00	673.54	327.85	2.06	PASS
13213.00†	7618.00	5043.14	-721.36	7565.00	7618.00	5296.75	-1294.35	-90.00	626.60	342.58	1.83	PASS
13313.00†	7618.00	5143.14	-721.62	7565.00	7618.00	5296.75	-1294.35	-90.00	592.97	356.57	1.66	PASS
13413.00†	7618.00	5243.14	-721.88	7565.00	7618.00	5296.75	-1294.35	-90.00	574.97	367.98	1.56	PASS
13466.76†	7618.00	5296.90	-722.02	7565.56	7618.56	5296.75	-1294.35	-90.06	572.33	372.44	1.54	PASS
13513.00†	7618.00	5343.14	-722.14	7565.00	7618.00	5296.75	-1294.35	-90.00	574.08	375.15	1.53	PASS
13613.00†	7618.00	5443.14	-722.40	7565.00	7618.00	5296.75	-1294.35	-90.00	590.38	377.39	1.57	PASS
13713.00†	7618.00	5543.14	-722.66	7565.00	7618.00	5296.75	-1294.35	-90.00	622.52	375.25	1.66	PASS
13813.00†	7618.00	5643.14	-722.93	7565.00	7618.00	5296.75	-1294.35	-90.00	668.21	370.05	1.81	PASS
13913.00†	7618.00	5743.14	-723.19	7565.00	7618.00	5296.75	-1294.35	-90.00	724.91	363.21	2.00	PASS
14013.00†	7618.00	5843.14	-723.45	7565.00	7618.00	5296.75	-1294.35	-90.00	790.23	355.81	2.22	PASS
14113.00†	7618.00	5943.14	-723.71	7565.00	7618.00	5296.75	-1294.35	-90.00	862.24	348.51	2.48	PASS
14213.00†	7618.00	6043.14	-723.97	7565.00	7618.00	5296.75	-1294.35	-90.00	939.38	341.67	2.75	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	6610.19	13.18	0.11	6610.21	25.40	268.66	PASS
113.00†	113.00	0.00	0.00	79.00	113.00	6610.19	13.18	0.11	6610.20	51.86	129.46	PASS
213.00†	213.00	0.00	0.00	179.00	213.00	6610.19	13.18	0.11	6610.20	54.20	123.77	PASS
313.00†	313.00	0.00	0.00	279.00	313.00	6610.19	13.18	0.11	6610.20	56.56	118.55	PASS
413.00†	413.00	0.00	0.00	379.00	413.00	6610.19	13.18	0.11	6610.20	58.91	113.74	PASS
513.00†	513.00	0.00	0.00	479.00	513.00	6610.19	13.18	0.11	6610.20	61.27	109.31	PASS
613.00†	613.00	0.00	0.00	579.00	613.00	6610.19	13.18	0.11	6610.20	63.63	105.19	PASS
713.00†	713.00	0.00	0.00	679.00	713.00	6610.19	13.18	0.11	6610.20	66.00	101.38	PASS
813.00†	813.00	0.00	0.00	779.00	813.00	6610.19	13.18	0.11	6610.20	68.37	97.82	PASS
913.00†	913.00	0.00	0.00	879.00	913.00	6610.19	13.18	0.11	6610.20	70.75	94.50	PASS
1013.00†	1013.00	0.00	0.00	979.00	1013.00	6610.19	13.18	0.11	6610.20	73.12	91.39	PASS
1100.00	1100.00	0.00	0.00	1066.00	1100.00	6610.19	13.18	0.11	6610.20	75.20	88.84	PASS
1113.00†	1113.00	-0.02	-0.02	1079.00	1113.00	6610.19	13.18	138.35	6610.23	75.51	88.47	PASS
1213.00†	1212.97	-1.66	-1.48	1178.97	1212.97	6610.19	13.18	138.35	6611.87	77.90	85.75	PASS
1313.00†	1312.80	-5.90	-5.27	1278.80	1312.80	6610.19	13.18	138.32	6616.12	80.32	83.19	PASS
1413.00†	1412.38	-12.74	-11.38	1378.38	1412.38	6610.19	13.18	138.28	6622.98	82.74	80.82	PASS
1513.00†	1511.57	-22.17	-19.79	1477.57	1511.57	6610.19	13.18	138.23	6632.44	85.16	78.61	PASS
1579.26	1577.03	-29.83	-26.64	1543.03	1577.03	6610.19	13.18	138.18	6640.15	86.76	77.24	PASS
1613.00†	1610.30	-34.02	-30.38	1576.30	1610.30	6610.19	13.18	138.22	6644.36	87.57	76.57	PASS
1713.00†	1708.90	-46.45	-41.47	1674.90	1708.90	6610.19	13.18	138.31	6656.86	89.96	74.66	PASS
1813.00†	1807.50	-58.87	-52.56	1773.50	1807.50	6610.19	13.18	138.41	6669.38	92.26	72.84	PASS
1913.00†	1906.11	-71.29	-63.65	1872.11	1906.11	6610.19	13.18	138.50	6681.92	94.67	71.11	PASS
2013.00†	2004.71	-83.71	-74.74	1970.71	2004.71	6610.19	13.18	138.59	6694.48	97.08	69.46	PASS
2113.00†	2103.32	-96.13	-85.83	2069.32	2103.32	6610.19	13.18	138.69	6707.05	99.51	67.88	PASS
2213.00†	2201.92	-108.55	-96.92	2167.92	2201.92	6610.19	13.18	138.78	6719.64	101.94	66.37	PASS
2313.00†	2300.52	-120.97	-108.01	2266.52	2300.52	6610.19	13.18	138.87	6732.25	104.38	64.93	PASS
2413.00†	2399.13	-133.39	-119.10	2365.13	2399.13	6610.19	13.18	138.97	6744.88	106.82	63.55	PASS
2513.00†	2497.73	-145.81	-130.19	2463.73	2497.73	6610.19	13.18	139.06	6757.53	109.28	62.23	PASS
2613.00†	2596.34	-158.23	-141.28	2562.34	2596.34	6610.19	13.18	139.15	6770.19	111.74	60.97	PASS
2713.00†	2694.94	-170.66	-152.37	2660.94	2694.94	6610.19	13.18	139.24	6782.87	114.21	59.75	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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
2813.00†	2793.54	-183.08	-163.46	2759.54	2793.54	6610.19	13.18	139.33	6795.56	116.69	58.59	PASS
2913.00†	2892.15	-195.50	-174.55	2858.15	2892.15	6610.19	13.18	139.42	6808.28	119.17	57.46	PASS
3013.00†	2990.75	-207.92	-185.64	2956.75	2990.75	6610.19	13.18	139.51	6821.01	121.66	56.39	PASS
3113.00†	3089.35	-220.34	-196.73	3055.35	3089.35	6610.19	13.18	139.60	6833.76	124.16	55.35	PASS
3213.00†	3187.96	-232.76	-207.82	3153.96	3187.96	6610.19	13.18	139.69	6846.52	126.67	54.35	PASS
3313.00†	3286.56	-245.18	-218.91	3252.56	3286.56	6610.19	13.18	139.78	6859.30	129.18	53.39	PASS
3413.00†	3385.17	-257.60	-230.00	3351.17	3385.17	6610.19	13.18	139.87	6872.10	131.69	52.46	PASS
3513.00†	3483.77	-270.02	-241.09	3449.77	3483.77	6610.19	13.18	139.96	6884.91	134.22	51.56	PASS
3613.00†	3582.37	-282.44	-252.18	3548.37	3582.37	6610.19	13.18	140.05	6897.74	136.74	50.70	PASS
3713.00†	3680.98	-294.87	-263.27	3646.98	3680.98	6610.19	13.18	140.14	6910.59	139.28	49.87	PASS
3813.00†	3779.58	-307.29	-274.36	3745.58	3779.58	6610.19	13.18	140.22	6923.45	141.82	49.06	PASS
3913.00†	3878.19	-319.71	-285.45	3844.19	3878.19	6610.19	13.18	140.31	6936.33	144.36	48.28	PASS
4013.00†	3976.79	-332.13	-296.54	3942.79	3976.79	6610.19	13.18	140.40	6949.23	146.91	47.53	PASS
4113.00†	4075.39	-344.55	-307.64	4041.39	4075.39	6610.19	13.18	140.49	6962.14	149.47	46.80	PASS
4213.00†	4174.00	-356.97	-318.73	4140.00	4174.00	6610.19	13.18	140.57	6975.06	152.03	46.09	PASS
4313.00†	4272.60	-369.39	-329.82	4238.60	4272.60	6610.19	13.18	140.66	6988.01	154.59	45.41	PASS
4413.00†	4371.21	-381.81	-340.91	4337.21	4371.21	6610.19	13.18	140.74	7000.96	157.16	44.74	PASS
4513.00†	4469.81	-394.23	-352.00	4435.81	4469.81	6610.19	13.18	140.83	7013.94	159.73	44.10	PASS
4613.00†	4568.41	-406.65	-363.09	4534.41	4568.41	6610.19	13.18	140.92	7026.93	162.31	43.48	PASS
4713.00†	4667.02	-419.08	-374.18	4633.02	4667.02	6610.19	13.18	141.00	7039.93	164.89	42.87	PASS
4813.00†	4765.62	-431.50	-385.27	4731.62	4765.62	6610.19	13.18	141.09	7052.95	167.48	42.29	PASS
4913.00†	4864.22	-443.92	-396.36	4830.22	4864.22	6610.19	13.18	141.17	7065.99	170.07	41.72	PASS
5013.00†	4962.83	-456.34	-407.45	4928.83	4962.83	6610.19	13.18	141.25	7079.04	172.66	41.16	PASS
5113.00†	5061.43	-468.76	-418.54	5027.43	5061.43	6610.19	13.18	141.34	7092.10	175.26	40.63	PASS
5213.00†	5160.04	-481.18	-429.63	5126.04	5160.04	6610.19	13.18	141.42	7105.18	177.86	40.10	PASS
5313.00†	5258.64	-493.60	-440.72	5224.64	5258.64	6610.19	13.18	141.50	7118.28	180.46	39.60	PASS
5413.00†	5357.24	-506.02	-451.81	5323.24	5357.24	6610.19	13.18	141.59	7131.39	183.07	39.10	PASS
5513.00†	5455.85	-518.44	-462.90	5421.85	5455.85	6610.19	13.18	141.67	7144.51	185.68	38.62	PASS
5613.00†	5554.45	-530.86	-473.99	5520.45	5554.45	6610.19	13.18	141.75	7157.65	188.29	38.15	PASS
5713.00†	5653.06	-543.29	-485.08	5619.06	5653.06	6610.19	13.18	141.83	7170.81	190.91	37.70	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5751.66	-555.71	-496.17	5717.66	5751.66	6610.19	13.18	141.92	7183.98	193.53	37.25	PASS
5913.00†	5850.26	-568.13	-507.26	5816.26	5850.26	6610.19	13.18	142.00	7197.16	196.15	36.82	PASS
6013.00†	5948.87	-580.55	-518.35	5914.87	5948.87	6610.19	13.18	142.08	7210.36	198.77	36.40	PASS
6113.00†	6047.47	-592.97	-529.44	6013.47	6047.47	6610.19	13.18	142.16	7223.57	201.40	35.99	PASS
6213.00†	6146.08	-605.39	-540.53	6112.08	6146.08	6610.19	13.18	142.24	7236.80	204.03	35.59	PASS
6313.00†	6244.68	-617.81	-551.62	6210.68	6244.68	6610.19	13.18	142.32	7250.04	206.66	35.20	PASS
6413.00†	6343.28	-630.23	-562.71	6309.28	6343.28	6610.19	13.18	142.40	7263.29	209.29	34.82	PASS
6513.00†	6441.89	-642.65	-573.80	6407.89	6441.89	6610.19	13.18	142.48	7276.56	211.93	34.45	PASS
6613.00†	6540.49	-655.07	-584.89	6506.49	6540.49	6610.19	13.18	142.56	7289.84	214.57	34.08	PASS
6713.00†	6639.09	-667.50	-595.98	6605.09	6639.09	6610.19	13.18	142.64	7303.14	217.21	33.73	PASS
6813.00†	6737.70	-679.92	-607.07	6703.70	6737.70	6610.19	13.18	142.72	7316.45	219.85	33.38	PASS
6913.00†	6836.30	-692.34	-618.16	6802.30	6836.30	6610.19	13.18	142.79	7329.77	222.49	33.05	PASS
7013.00†	6934.91	-704.76	-629.25	6900.91	6934.91	6610.19	13.18	142.87	7343.11	225.14	32.72	PASS
7056.81	6978.10	-710.20	-634.11	6944.10	6978.10	6610.19	13.18	142.91	7348.95	226.30	32.57	PASS
7113.00†	7033.76	-714.44	-640.38	6999.76	7033.76	6610.19	13.18	108.28	7353.73	227.81	32.38	PASS
7213.00†	7132.82	-708.37	-651.57	7098.82	7132.82	6610.19	13.18	42.70	7348.69	230.86	31.93	PASS
7313.00†	7229.32	-685.08	-662.51	7195.32	7229.32	6610.19	13.18	25.25	7326.49	234.55	31.33	PASS
7413.00†	7320.33	-645.28	-672.88	7286.33	7320.33	6610.19	13.18	19.54	7287.84	237.85	30.73	PASS
7513.00†	7403.09	-590.18	-682.36	7369.09	7403.09	6610.19	13.18	17.39	7233.89	240.71	30.14	PASS
7613.00†	7475.08	-521.45	-690.66	7441.08	7475.08	6610.19	13.18	17.10	7166.29	243.13	29.56	PASS
7713.00†	7534.11	-441.18	-697.53	7500.11	7534.11	6610.19	13.18	18.46	7087.10	245.06	29.00	PASS
7813.00†	7578.39	-351.82	-702.76	7544.39	7578.39	6610.19	13.18	22.43	6998.72	246.50	28.47	PASS
7913.00†	7606.57	-256.06	-706.19	7572.57	7606.57	6610.19	13.18	33.38	6903.84	247.44	27.98	PASS
8013.00†	7617.81	-156.84	-707.72	7583.81	7617.81	6610.19	13.18	76.95	6805.32	247.90	27.53	PASS
8027.99	7618.00	-141.85	-707.78	7584.00	7618.00	6610.19	13.18	90.00	6790.42	247.93	27.46	PASS
8113.00†	7618.00	-56.84	-708.00	7584.00	7618.00	6610.19	13.18	90.00	6705.92	248.07	27.11	PASS
8213.00†	7618.00	43.16	-708.26	7584.00	7618.00	6610.19	13.18	90.00	6606.54	248.24	26.69	PASS
8313.00†	7618.00	143.16	-708.53	7584.00	7618.00	6610.19	13.18	90.00	6507.18	248.42	26.27	PASS
8413.00†	7618.00	243.16	-708.79	7584.00	7618.00	6610.19	13.18	90.00	6407.83	248.61	25.85	PASS
8513.00†	7618.00	343.16	-709.05	7584.00	7618.00	6610.19	13.18	90.00	6308.51	248.81	25.42	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
8613.00†	7618.00	443.16	-709.31	7584.00	7618.00	6610.19	13.18	90.00	6209.21	249.02	25.00	PASS
8713.00†	7618.00	543.16	-709.57	7584.00	7618.00	6610.19	13.18	90.00	6109.93	249.23	24.58	PASS
8813.00†	7618.00	643.16	-709.84	7584.00	7618.00	6610.19	13.18	90.00	6010.68	249.46	24.16	PASS
8913.00†	7618.00	743.16	-710.10	7584.00	7618.00	6610.19	13.18	90.00	5911.45	249.70	23.74	PASS
9013.00†	7618.00	843.16	-710.36	7584.00	7618.00	6610.19	13.18	90.00	5812.24	249.95	23.32	PASS
9113.00†	7618.00	943.16	-710.62	7584.00	7618.00	6610.19	13.18	90.00	5713.07	250.22	22.89	PASS
9213.00†	7618.00	1043.16	-710.88	7584.00	7618.00	6610.19	13.18	90.00	5613.92	250.49	22.47	PASS
9313.00†	7618.00	1143.16	-711.14	7584.00	7618.00	6610.19	13.18	90.00	5514.81	250.78	22.05	PASS
9413.00†	7618.00	1243.16	-711.41	7584.00	7618.00	6610.19	13.18	90.00	5415.73	251.09	21.63	PASS
9513.00†	7618.00	1343.16	-711.67	7584.00	7618.00	6610.19	13.18	90.00	5316.68	251.41	21.20	PASS
9613.00†	7618.00	1443.16	-711.93	7584.00	7618.00	6610.19	13.18	90.00	5217.67	251.74	20.78	PASS
9713.00†	7618.00	1543.16	-712.19	7584.00	7618.00	6610.19	13.18	90.00	5118.69	252.10	20.36	PASS
9813.00†	7618.00	1643.16	-712.45	7584.00	7618.00	6610.19	13.18	90.00	5019.76	252.47	19.94	PASS
9913.00†	7618.00	1743.16	-712.72	7584.00	7618.00	6610.19	13.18	90.00	4920.87	252.86	19.51	PASS
10013.00†	7618.00	1843.15	-712.98	7584.00	7618.00	6610.19	13.18	90.00	4822.03	253.27	19.09	PASS
10113.00†	7618.00	1943.15	-713.24	7584.00	7618.00	6610.19	13.18	90.00	4723.23	253.71	18.67	PASS
10213.00†	7618.00	2043.15	-713.50	7584.00	7618.00	6610.19	13.18	90.00	4624.49	254.17	18.24	PASS
10313.00†	7618.00	2143.15	-713.76	7584.00	7618.00	6610.19	13.18	90.00	4525.80	254.65	17.82	PASS
10413.00†	7618.00	2243.15	-714.02	7584.00	7618.00	6610.19	13.18	90.00	4427.17	255.16	17.40	PASS
10513.00†	7618.00	2343.15	-714.29	7584.00	7618.00	6610.19	13.18	90.00	4328.61	255.70	16.97	PASS
10613.00†	7618.00	2443.15	-714.55	7584.00	7618.00	6610.19	13.18	90.00	4230.11	256.27	16.55	PASS
10713.00†	7618.00	2543.15	-714.81	7584.00	7618.00	6610.19	13.18	90.00	4131.68	256.88	16.13	PASS
10813.00†	7618.00	2643.15	-715.07	7584.00	7618.00	6610.19	13.18	90.00	4033.33	257.51	15.70	PASS
10913.00†	7618.00	2743.15	-715.33	7584.00	7618.00	6610.19	13.18	90.00	3935.06	258.19	15.28	PASS
11013.00†	7618.00	2843.15	-715.60	7584.00	7618.00	6610.19	13.18	90.00	3836.89	258.91	14.86	PASS
11113.00†	7618.00	2943.15	-715.86	7584.00	7618.00	6610.19	13.18	90.00	3738.81	259.68	14.43	PASS
11213.00†	7618.00	3043.15	-716.12	7584.00	7618.00	6610.19	13.18	90.00	3640.83	260.50	14.01	PASS
11313.00†	7618.00	3143.15	-716.38	7584.00	7618.00	6610.19	13.18	90.00	3542.97	261.36	13.59	PASS
11413.00†	7618.00	3243.15	-716.64	7584.00	7618.00	6610.19	13.18	90.00	3445.23	262.29	13.17	PASS
11513.00†	7618.00	3343.15	-716.90	7584.00	7618.00	6610.19	13.18	90.00	3347.62	263.28	12.75	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11613.00†	7618.00	3443.15	-717.17	7584.00	7618.00	6610.19	13.18	90.00	3250.16	264.34	12.33	PASS
11713.00†	7618.00	3543.15	-717.43	7584.00	7618.00	6610.19	13.18	90.00	3152.86	265.47	11.91	PASS
11813.00†	7618.00	3643.15	-717.69	7584.00	7618.00	6610.19	13.18	90.00	3055.73	266.69	11.49	PASS
11913.00†	7618.00	3743.15	-717.95	7584.00	7618.00	6610.19	13.18	90.00	2958.80	268.00	11.07	PASS
12013.00†	7618.00	3843.15	-718.21	7584.00	7618.00	6610.19	13.18	90.00	2862.07	269.40	10.65	PASS
12113.00†	7618.00	3943.15	-718.48	7584.00	7618.00	6610.19	13.18	90.00	2765.58	270.92	10.23	PASS
12213.00†	7618.00	4043.15	-718.74	7584.00	7618.00	6610.19	13.18	90.00	2669.35	272.56	9.82	PASS
12313.00†	7618.00	4143.15	-719.00	7584.00	7618.00	6610.19	13.18	90.00	2573.40	274.34	9.40	PASS
12413.00†	7618.00	4243.15	-719.26	7584.00	7618.00	6610.19	13.18	90.00	2477.78	276.26	8.99	PASS
12513.00†	7618.00	4343.15	-719.52	7584.00	7618.00	6610.19	13.18	90.00	2382.51	278.35	8.58	PASS
12613.00†	7618.00	4443.15	-719.78	7584.00	7618.00	6610.19	13.18	90.00	2287.65	280.63	8.17	PASS
12713.00†	7618.00	4543.15	-720.05	7584.00	7618.00	6610.19	13.18	90.00	2193.24	283.12	7.76	PASS
12813.00†	7618.00	4643.15	-720.31	7584.00	7618.00	6610.19	13.18	90.00	2099.35	285.84	7.36	PASS
12913.00†	7618.00	4743.14	-720.57	7584.00	7618.00	6610.19	13.18	90.00	2006.05	288.82	6.96	PASS
13013.00†	7618.00	4843.14	-720.83	7584.00	7618.00	6610.19	13.18	90.00	1913.43	292.10	6.56	PASS
13113.00†	7618.00	4943.14	-721.09	7584.00	7618.00	6610.19	13.18	90.00	1821.59	295.71	6.17	PASS
13213.00†	7618.00	5043.14	-721.36	7584.00	7618.00	6610.19	13.18	90.00	1730.66	299.70	5.79	PASS
13313.00†	7618.00	5143.14	-721.62	7584.00	7618.00	6610.19	13.18	90.00	1640.78	304.11	5.41	PASS
13413.00†	7618.00	5243.14	-721.88	7584.00	7618.00	6610.19	13.18	90.00	1552.14	309.01	5.03	PASS
13513.00†	7618.00	5343.14	-722.14	7584.00	7618.00	6610.19	13.18	90.00	1464.96	314.44	4.67	PASS
13613.00†	7618.00	5443.14	-722.40	7584.00	7618.00	6610.19	13.18	90.00	1379.52	320.47	4.31	PASS
13713.00†	7618.00	5543.14	-722.66	7584.00	7618.00	6610.19	13.18	90.00	1296.17	327.17	3.97	PASS
13813.00†	7618.00	5643.14	-722.93	7584.00	7618.00	6610.19	13.18	90.00	1215.33	334.59	3.64	PASS
13913.00†	7618.00	5743.14	-723.19	7584.00	7618.00	6610.19	13.18	90.00	1137.55	342.77	3.32	PASS
14013.00†	7618.00	5843.14	-723.45	7584.00	7618.00	6610.19	13.18	90.00	1063.48	351.73	3.03	PASS
14113.00†	7618.00	5943.14	-723.71	7584.00	7618.00	6610.19	13.18	90.00	993.96	361.40	2.75	PASS
14213.00†	7618.00	6043.14	-723.97	7584.00	7618.00	6610.19	13.18	90.00	930.02	371.61	2.51	PASS
14313.00†	7618.00	6143.14	-724.24	7584.00	7618.00	6610.19	13.18	90.00	872.88	382.06	2.29	PASS
14413.00†	7618.00	6243.14	-724.50	7584.00	7618.00	6610.19	13.18	90.00	823.95	392.18	2.10	PASS
14513.00†	7618.00	6343.14	-724.76	7584.00	7618.00	6610.19	13.18	90.00	784.77	401.24	1.96	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
14613.00†	7618.00	6443.14	-725.02	7584.00	7618.00	6610.19	13.18	90.00	756.87	408.29	1.86	PASS
14713.00†	7618.00	6543.14	-725.28	7584.00	7618.00	6610.19	13.18	90.00	741.50	412.43	1.80	PASS
14778.05†	7618.00	6608.19	-725.45	7584.47	7618.47	6610.19	13.18	90.04	738.63	413.26	1.79	PASS
14778.66†	7618.00	6608.80	-725.45	7584.00	7618.00	6610.19	13.18	90.00	738.63	413.25	1.79	PASS
14813.00†	7618.00	6643.14	-725.54	7584.00	7618.00	6610.19	13.18	90.00	739.46	413.04	1.79	PASS
14913.00†	7618.00	6743.14	-725.81	7584.00	7618.00	6610.19	13.18	90.00	750.85	410.05	1.83	PASS
15013.00†	7618.00	6843.14	-726.07	7584.00	7618.00	6610.19	13.18	90.00	775.08	403.91	1.92	PASS
15113.00†	7618.00	6943.14	-726.33	7584.00	7618.00	6610.19	13.18	90.00	811.00	395.47	2.05	PASS
15213.00†	7618.00	7043.14	-726.59	7584.00	7618.00	6610.19	13.18	90.00	857.15	385.69	2.22	PASS
15313.00†	7618.00	7143.14	-726.85	7584.00	7618.00	6610.19	13.18	90.00	911.96	375.38	2.43	PASS
15413.00†	7618.00	7243.14	-727.12	7584.00	7618.00	6610.19	13.18	90.00	973.99	365.15	2.67	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	Vertical	1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical	3.000ft

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

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

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	2689.77	-1304.84	-25.88	2989.56	50.10	60.63	PASS
113.00†	113.00	0.00	0.00	104.00	113.00	2689.77	-1304.84	-25.88	2989.56	52.44	57.88	PASS
213.00†	213.00	0.00	0.00	204.00	213.00	2689.77	-1304.84	-25.88	2989.56	54.79	55.36	PASS
313.00†	313.00	0.00	0.00	304.00	313.00	2689.77	-1304.84	-25.88	2989.56	57.14	53.05	PASS
413.00†	413.00	0.00	0.00	404.00	413.00	2689.77	-1304.84	-25.88	2989.56	59.50	50.92	PASS
513.00†	513.00	0.00	0.00	504.00	513.00	2689.77	-1304.84	-25.88	2989.56	61.86	48.95	PASS
613.00†	613.00	0.00	0.00	604.00	613.00	2689.77	-1304.84	-25.88	2989.56	64.22	47.12	PASS
713.00†	713.00	0.00	0.00	704.00	713.00	2689.77	-1304.84	-25.88	2989.56	66.59	45.43	PASS
813.00†	813.00	0.00	0.00	804.00	813.00	2689.77	-1304.84	-25.88	2989.56	68.97	43.85	PASS
913.00†	913.00	0.00	0.00	904.00	913.00	2689.77	-1304.84	-25.88	2989.56	71.34	42.37	PASS
1013.00†	1013.00	0.00	0.00	1004.00	1013.00	2689.77	-1304.84	-25.88	2989.56	73.72	40.99	PASS
1100.00	1100.00	0.00	0.00	1091.00	1100.00	2689.77	-1304.84	-25.88	2989.56	75.80	39.85	PASS
1113.00†	1113.00	-0.02	-0.02	1104.00	1113.00	2689.77	-1304.84	112.36	2989.57	76.11	39.69	PASS
1213.00†	1212.97	-1.66	-1.48	1203.97	1212.97	2689.77	-1304.84	112.39	2990.41	78.49	38.48	PASS
1313.00†	1312.80	-5.90	-5.27	1303.80	1312.80	2689.77	-1304.84	112.45	2992.58	80.89	37.35	PASS
1413.00†	1412.38	-12.74	-11.38	1403.38	1412.38	2689.77	-1304.84	112.54	2996.10	83.29	36.31	PASS
1513.00†	1511.57	-22.17	-19.79	1502.57	1511.57	2689.77	-1304.84	112.67	3000.99	85.69	35.34	PASS
1579.26	1577.03	-29.83	-26.64	1568.03	1577.03	2689.77	-1304.84	112.78	3005.00	87.28	34.74	PASS
1613.00†	1610.30	-34.02	-30.38	1601.30	1610.30	2689.77	-1304.84	112.88	3007.21	88.09	34.44	PASS
1713.00†	1708.90	-46.45	-41.47	1699.90	1708.90	2689.77	-1304.84	113.16	3013.80	90.49	33.59	PASS
1813.00†	1807.50	-58.87	-52.56	1798.50	1807.50	2689.77	-1304.84	113.45	3020.46	92.82	32.78	PASS
1913.00†	1906.11	-71.29	-63.65	1897.11	1906.11	2689.77	-1304.84	113.74	3027.21	95.25	32.01	PASS
2013.00†	2004.71	-83.71	-74.74	1995.71	2004.71	2689.77	-1304.84	114.02	3034.03	97.69	31.28	PASS
2113.00†	2103.32	-96.13	-85.83	2094.32	2103.32	2689.77	-1304.84	114.30	3040.92	100.14	30.58	PASS
2213.00†	2201.92	-108.55	-96.92	2192.92	2201.92	2689.77	-1304.84	114.59	3047.89	102.60	29.91	PASS
2313.00†	2300.52	-120.97	-108.01	2291.52	2300.52	2689.77	-1304.84	114.87	3054.94	105.08	29.26	PASS
2413.00†	2399.13	-133.39	-119.10	2390.13	2399.13	2689.77	-1304.84	115.15	3062.06	107.56	28.65	PASS
2513.00†	2497.73	-145.81	-130.19	2488.73	2497.73	2689.77	-1304.84	115.42	3069.25	110.06	28.06	PASS
2613.00†	2596.34	-158.23	-141.28	2587.34	2596.34	2689.77	-1304.84	115.70	3076.52	112.56	27.50	PASS
2713.00†	2694.94	-170.66	-152.37	2685.94	2694.94	2689.77	-1304.84	115.98	3083.86	115.08	26.96	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	2793.54	-183.08	-163.46	2784.54	2793.54	2689.77	-1304.84	116.25	3091.28	117.60	26.44	PASS
2913.00†	2892.15	-195.50	-174.55	2883.15	2892.15	2689.77	-1304.84	116.52	3098.76	120.13	25.94	PASS
3013.00†	2990.75	-207.92	-185.64	2981.75	2990.75	2689.77	-1304.84	116.80	3106.31	122.67	25.46	PASS
3113.00†	3089.35	-220.34	-196.73	3080.35	3089.35	2689.77	-1304.84	117.07	3113.94	125.22	25.00	PASS
3213.00†	3187.96	-232.76	-207.82	3178.96	3187.96	2689.77	-1304.84	117.34	3121.64	127.78	24.56	PASS
3313.00†	3286.56	-245.18	-218.91	3277.56	3286.56	2689.77	-1304.84	117.60	3129.40	130.35	24.13	PASS
3413.00†	3385.17	-257.60	-230.00	3376.17	3385.17	2689.77	-1304.84	117.87	3137.24	132.92	23.72	PASS
3513.00†	3483.77	-270.02	-241.09	3474.77	3483.77	2689.77	-1304.84	118.14	3145.14	135.50	23.33	PASS
3613.00†	3582.37	-282.44	-252.18	3573.37	3582.37	2689.77	-1304.84	118.40	3153.12	138.09	22.95	PASS
3713.00†	3680.98	-294.87	-263.27	3671.98	3680.98	2689.77	-1304.84	118.66	3161.15	140.68	22.58	PASS
3813.00†	3779.58	-307.29	-274.36	3770.58	3779.58	2689.77	-1304.84	118.92	3169.26	143.28	22.22	PASS
3913.00†	3878.19	-319.71	-285.45	3869.19	3878.19	2689.77	-1304.84	119.18	3177.43	145.88	21.88	PASS
4013.00†	3976.79	-332.13	-296.54	3967.79	3976.79	2689.77	-1304.84	119.44	3185.67	148.49	21.55	PASS
4113.00†	4075.39	-344.55	-307.64	4066.39	4075.39	2689.77	-1304.84	119.70	3193.98	151.11	21.23	PASS
4213.00†	4174.00	-356.97	-318.73	4165.00	4174.00	2689.77	-1304.84	119.96	3202.35	153.73	20.92	PASS
4313.00†	4272.60	-369.39	-329.82	4263.60	4272.60	2689.77	-1304.84	120.21	3210.78	156.36	20.62	PASS
4413.00†	4371.21	-381.81	-340.91	4362.21	4371.21	2689.77	-1304.84	120.46	3219.28	158.99	20.33	PASS
4513.00†	4469.81	-394.23	-352.00	4460.81	4469.81	2689.77	-1304.84	120.72	3227.84	161.63	20.05	PASS
4613.00†	4568.41	-406.65	-363.09	4559.41	4568.41	2689.77	-1304.84	120.97	3236.47	164.27	19.78	PASS
4713.00†	4667.02	-419.08	-374.18	4658.02	4667.02	2689.77	-1304.84	121.22	3245.16	166.91	19.52	PASS
4813.00†	4765.62	-431.50	-385.27	4756.62	4765.62	2689.77	-1304.84	121.46	3253.91	169.56	19.27	PASS
4913.00†	4864.22	-443.92	-396.36	4855.22	4864.22	2689.77	-1304.84	121.71	3262.72	172.21	19.02	PASS
5013.00†	4962.83	-456.34	-407.45	4953.83	4962.83	2689.77	-1304.84	121.96	3271.59	174.87	18.78	PASS
5113.00†	5061.43	-468.76	-418.54	5052.43	5061.43	2689.77	-1304.84	122.20	3280.52	177.52	18.55	PASS
5213.00†	5160.04	-481.18	-429.63	5151.04	5160.04	2689.77	-1304.84	122.44	3289.52	180.19	18.32	PASS
5313.00†	5258.64	-493.60	-440.72	5249.64	5258.64	2689.77	-1304.84	122.69	3298.57	182.85	18.11	PASS
5413.00†	5357.24	-506.02	-451.81	5348.24	5357.24	2689.77	-1304.84	122.93	3307.68	185.52	17.89	PASS
5513.00†	5455.85	-518.44	-462.90	5446.85	5455.85	2689.77	-1304.84	123.17	3316.85	188.19	17.69	PASS
5613.00†	5554.45	-530.86	-473.99	5545.45	5554.45	2689.77	-1304.84	123.40	3326.08	190.86	17.49	PASS
5713.00†	5653.06	-543.29	-485.08	5644.06	5653.06	2689.77	-1304.84	123.64	3335.36	193.53	17.29	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	5751.66	-555.71	-496.17	5742.66	5751.66	2689.77	-1304.84	123.87	3344.71	196.21	17.10	PASS
5913.00†	5850.26	-568.13	-507.26	5841.26	5850.26	2689.77	-1304.84	124.11	3354.11	198.89	16.92	PASS
6013.00†	5948.87	-580.55	-518.35	5939.87	5948.87	2689.77	-1304.84	124.34	3363.56	201.57	16.74	PASS
6113.00†	6047.47	-592.97	-529.44	6038.47	6047.47	2689.77	-1304.84	124.57	3373.07	204.25	16.57	PASS
6213.00†	6146.08	-605.39	-540.53	6137.08	6146.08	2689.77	-1304.84	124.80	3382.64	206.94	16.40	PASS
6313.00†	6244.68	-617.81	-551.62	6235.68	6244.68	2689.77	-1304.84	125.03	3392.26	209.62	16.23	PASS
6413.00†	6343.28	-630.23	-562.71	6334.28	6343.28	2689.77	-1304.84	125.26	3401.94	212.31	16.07	PASS
6513.00†	6441.89	-642.65	-573.80	6432.89	6441.89	2689.77	-1304.84	125.49	3411.67	215.00	15.92	PASS
6613.00†	6540.49	-655.07	-584.89	6531.49	6540.49	2689.77	-1304.84	125.71	3421.45	217.69	15.76	PASS
6713.00†	6639.09	-667.50	-595.98	6630.09	6639.09	2689.77	-1304.84	125.93	3431.28	220.38	15.62	PASS
6813.00†	6737.70	-679.92	-607.07	6728.70	6737.70	2689.77	-1304.84	126.16	3441.17	223.08	15.47	PASS
6913.00†	6836.30	-692.34	-618.16	6827.30	6836.30	2689.77	-1304.84	126.38	3451.11	225.77	15.33	PASS
7013.00†	6934.91	-704.76	-629.25	6925.91	6934.91	2689.77	-1304.84	126.60	3461.10	228.47	15.19	PASS
7056.81	6978.10	-710.20	-634.11	6969.10	6978.10	2689.77	-1304.84	126.69	3465.50	229.65	15.13	PASS
7113.00†	7033.76	-714.44	-640.38	7024.76	7033.76	2689.77	-1304.84	92.23	3468.45	231.17	15.05	PASS
7213.00†	7132.82	-708.37	-651.57	7123.82	7132.82	2689.77	-1304.84	26.53	3460.36	234.06	14.83	PASS
7313.00†	7229.32	-685.08	-662.51	7220.32	7229.32	2689.77	-1304.84	8.37	3435.43	237.27	14.52	PASS
7413.00†	7320.33	-645.28	-672.88	7311.33	7320.33	2689.77	-1304.84	1.24	3394.39	240.25	14.17	PASS
7513.00†	7403.09	-590.18	-682.36	7394.09	7403.09	2689.77	-1304.84	-3.31	3338.49	242.83	13.79	PASS
7613.00†	7475.08	-521.45	-690.66	7466.08	7475.08	2689.77	-1304.84	-7.59	3269.43	244.93	13.38	PASS
7713.00†	7534.11	-441.18	-697.53	7525.11	7534.11	2689.77	-1304.84	-13.12	3189.31	246.51	12.97	PASS
7813.00†	7578.39	-351.82	-702.76	7569.39	7578.39	2689.77	-1304.84	-22.36	3100.60	247.54	12.56	PASS
7913.00†	7606.57	-256.06	-706.19	7597.57	7606.57	2689.77	-1304.84	-41.76	3006.05	248.02	12.15	PASS
8013.00†	7617.81	-156.84	-707.72	7608.81	7617.81	2689.77	-1304.84	-82.74	2908.56	247.99	11.76	PASS
8027.99	7618.00	-141.85	-707.78	7609.00	7618.00	2689.77	-1304.84	-90.00	2893.88	247.95	11.70	PASS
8113.00†	7618.00	-56.84	-708.00	7609.00	7618.00	2689.77	-1304.84	-90.00	2810.71	247.64	11.38	PASS
8213.00†	7618.00	43.16	-708.26	7609.00	7618.00	2689.77	-1304.84	-90.00	2713.01	247.27	11.00	PASS
8313.00†	7618.00	143.16	-708.53	7609.00	7618.00	2689.77	-1304.84	-90.00	2615.49	246.87	10.62	PASS
8413.00†	7618.00	243.16	-708.79	7609.00	7618.00	2689.77	-1304.84	-90.00	2518.17	246.46	10.24	PASS
8513.00†	7618.00	343.16	-709.05	7609.00	7618.00	2689.77	-1304.84	-90.00	2421.06	246.03	9.87	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	7618.00	443.16	-709.31	7609.00	7618.00	2689.77	-1304.84	-90.00	2324.20	245.58	9.49	PASS
8713.00†	7618.00	543.16	-709.57	7609.00	7618.00	2689.77	-1304.84	-90.00	2227.62	245.10	9.11	PASS
8813.00†	7618.00	643.16	-709.84	7609.00	7618.00	2689.77	-1304.84	-90.00	2131.35	244.61	8.74	PASS
8913.00†	7618.00	743.16	-710.10	7609.00	7618.00	2689.77	-1304.84	-90.00	2035.44	244.10	8.36	PASS
9013.00†	7618.00	843.16	-710.36	7609.00	7618.00	2689.77	-1304.84	-90.00	1939.94	243.58	7.98	PASS
9113.00†	7618.00	943.16	-710.62	7609.00	7618.00	2689.77	-1304.84	-90.00	1844.92	243.06	7.61	PASS
9213.00†	7618.00	1043.16	-710.88	7609.00	7618.00	2689.77	-1304.84	-90.00	1750.46	242.53	7.24	PASS
9313.00†	7618.00	1143.16	-711.14	7609.00	7618.00	2689.77	-1304.84	-90.00	1656.65	242.03	6.86	PASS
9413.00†	7618.00	1243.16	-711.41	7609.00	7618.00	2689.77	-1304.84	-90.00	1563.60	241.56	6.49	PASS
9513.00†	7618.00	1343.16	-711.67	7609.00	7618.00	2689.77	-1304.84	-90.00	1471.47	241.18	6.12	PASS
9613.00†	7618.00	1443.16	-711.93	7609.00	7618.00	2689.77	-1304.84	-90.00	1380.43	240.93	5.74	PASS
9713.00†	7618.00	1543.16	-712.19	7609.00	7618.00	2689.77	-1304.84	-90.00	1290.72	240.88	5.37	PASS
9813.00†	7618.00	1643.16	-712.45	7609.00	7618.00	2689.77	-1304.84	-90.00	1202.63	241.14	5.00	PASS
9913.00†	7618.00	1743.16	-712.72	7609.00	7618.00	2689.77	-1304.84	-90.00	1116.55	241.85	4.63	PASS
10013.00†	7618.00	1843.15	-712.98	7609.00	7618.00	2689.77	-1304.84	-90.00	1032.98	243.19	4.26	PASS
10113.00†	7618.00	1943.15	-713.24	7609.00	7618.00	2689.77	-1304.84	-90.00	952.59	245.39	3.89	PASS
10213.00†	7618.00	2043.15	-713.50	7609.00	7618.00	2689.77	-1304.84	-90.00	876.24	248.67	3.53	PASS
10313.00†	7618.00	2143.15	-713.76	7609.00	7618.00	2689.77	-1304.84	-90.00	805.08	253.26	3.18	PASS
10413.00†	7618.00	2243.15	-714.02	7609.00	7618.00	2689.77	-1304.84	-90.00	740.63	259.28	2.86	PASS
10513.00†	7618.00	2343.15	-714.29	7609.00	7618.00	2689.77	-1304.84	-90.00	684.76	266.69	2.57	PASS
10613.00†	7618.00	2443.15	-714.55	7609.00	7618.00	2689.77	-1304.84	-90.00	639.74	275.16	2.33	PASS
10713.00†	7618.00	2543.15	-714.81	7609.00	7618.00	2689.77	-1304.84	-90.00	607.97	284.00	2.14	PASS
10813.00†	7618.00	2643.15	-715.07	7609.00	7618.00	2689.77	-1304.84	-90.00	591.61	292.20	2.03	PASS
10861.00†	7618.00	2691.15	-715.20	7608.83	7617.83	2689.77	-1304.84	-89.98	589.64	295.58	2.00	PASS
10913.00†	7618.00	2743.15	-715.33	7609.00	7618.00	2689.77	-1304.84	-90.00	591.92	298.70	1.98	PASS
10922.20†	7618.00	2752.35	-715.36	7609.00	7618.00	2689.77	-1304.84	-90.00	592.79	299.19	1.98	PASS
11013.00†	7618.00	2843.15	-715.60	7609.00	7618.00	2689.77	-1304.84	-90.00	608.88	302.90	2.01	PASS
11113.00†	7618.00	2943.15	-715.86	7609.00	7618.00	2689.77	-1304.84	-90.00	641.17	304.75	2.11	PASS
11213.00†	7618.00	3043.15	-716.12	7609.00	7618.00	2689.77	-1304.84	-90.00	686.64	304.73	2.26	PASS
11313.00†	7618.00	3143.15	-716.38	7609.00	7618.00	2689.77	-1304.84	-90.00	742.86	303.45	2.45	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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
11413.00†	7618.00	3243.15	-716.64	7609.00	7618.00	2689.77	-1304.84	-90.00	807.59	301.48	2.68	PASS
11513.00†	7618.00	3343.15	-716.90	7609.00	7618.00	2689.77	-1304.84	-90.00	878.96	299.19	2.94	PASS
11613.00†	7618.00	3443.15	-717.17	7609.00	7618.00	2689.77	-1304.84	-90.00	955.48	296.84	3.22	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	Log Name/Comment	Wellbore
0.00	8400.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8400>	HSR ACKARD #5-2 AWB

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	0.18	60.01	89.83	60.01	1.40	98.69	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.18	60.01	89.83	60.01	1.72	64.68	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.18	60.01	89.83	60.01	2.28	40.02	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.18	60.01	89.83	60.01	2.88	28.46	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.18	60.01	89.83	60.01	3.50	21.98	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.18	60.01	89.83	60.01	4.12	17.87	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.18	60.01	89.83	60.01	4.74	15.05	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.18	60.01	89.83	60.01	5.36	12.99	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.18	60.01	89.83	60.01	5.99	11.42	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.18	60.01	89.83	60.01	6.61	10.19	PASS
1013.00†	1013.00	0.00	0.00	1013.00	1013.00	0.18	60.01	89.83	60.01	7.24	9.20	PASS
1100.00	1100.00	0.00	0.00	1100.00	1100.00	0.18	60.01	89.83	60.01	7.78	8.48	PASS
1113.00†	1113.00	-0.02	-0.02	1113.00	1113.00	0.18	60.01	-131.96	60.03	7.86	8.39	PASS
1213.00†	1212.97	-1.66	-1.48	1212.97	1212.97	0.18	60.01	-133.46	61.53	8.54	7.85	PASS
1313.00†	1312.80	-5.90	-5.27	1312.80	1312.80	0.18	60.01	-137.01	65.57	9.36	7.57	PASS
1413.00†	1412.38	-12.74	-11.38	1412.38	1412.38	0.18	60.01	-141.86	72.55	10.22	7.62	PASS
1513.00†	1511.57	-22.17	-19.79	1511.49	1511.49	0.16	60.02	-147.11	82.88	11.09	7.98	PASS
1579.26	1577.03	-29.83	-26.64	1576.57	1576.56	-0.71	60.52	-149.87	91.90	11.63	8.41	PASS
1613.00†	1610.30	-34.02	-30.38	1609.67	1609.64	-1.64	61.05	-150.89	97.00	11.87	8.69	PASS
1713.00†	1708.90	-46.45	-41.47	1707.83	1707.65	-6.37	63.74	-152.23	112.59	12.51	9.55	PASS
1813.00†	1807.50	-58.87	-52.56	1805.87	1805.29	-14.00	68.08	-151.75	128.73	13.06	10.36	PASS
1913.00†	1906.11	-71.29	-63.65	1903.56	1902.23	-24.48	74.04	-150.06	145.48	13.75	11.10	PASS
2013.00†	2004.71	-83.71	-74.74	2001.45	1998.99	-37.32	81.34	-147.77	162.93	14.49	11.77	PASS
2113.00†	2103.32	-96.13	-85.83	2099.70	2096.08	-50.43	88.80	-145.84	180.65	15.27	12.36	PASS
2213.00†	2201.92	-108.55	-96.92	2197.95	2193.17	-63.53	96.25	-144.25	198.54	16.08	12.87	PASS
2313.00†	2300.52	-120.97	-108.01	2296.20	2290.26	-76.63	103.70	-142.93	216.55	16.93	13.31	PASS
2413.00†	2399.13	-133.39	-119.10	2394.46	2387.35	-89.73	111.15	-141.81	234.65	17.80	13.69	PASS
2513.00†	2497.73	-145.81	-130.19	2492.71	2484.44	-102.83	118.60	-140.85	252.83	18.69	14.02	PASS
2613.00†	2596.34	-158.23	-141.28	2590.96	2581.53	-115.93	126.05	-140.02	271.06	19.58	14.33	PASS
2713.00†	2694.94	-170.66	-152.37	2689.21	2678.62	-129.03	133.50	-139.29	289.35	20.49	14.59	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	2793.54	-183.08	-163.46	2787.46	2775.71	-142.14	140.95	-138.65	307.67	21.42	14.82	PASS
2913.00†	2892.15	-195.50	-174.55	2885.72	2872.80	-155.24	148.40	-138.09	326.03	22.36	15.03	PASS
3013.00†	2990.75	-207.92	-185.64	2983.97	2969.88	-168.34	155.85	-137.58	344.41	23.30	15.21	PASS
3113.00†	3089.35	-220.34	-196.73	3082.22	3066.97	-181.44	163.30	-137.12	362.82	24.25	15.38	PASS
3213.00†	3187.96	-232.76	-207.82	3180.47	3164.06	-194.54	170.75	-136.71	381.25	25.21	15.53	PASS
3313.00†	3286.56	-245.18	-218.91	3278.73	3261.15	-207.64	178.21	-136.34	399.70	26.18	15.67	PASS
3413.00†	3385.17	-257.60	-230.00	3376.98	3358.24	-220.74	185.66	-136.00	418.16	27.15	15.79	PASS
3513.00†	3483.77	-270.02	-241.09	3475.23	3455.33	-233.85	193.11	-135.68	436.63	28.12	15.90	PASS
3613.00†	3582.37	-282.44	-252.18	3573.48	3552.42	-246.95	200.56	-135.40	455.12	29.10	16.01	PASS
3713.00†	3680.98	-294.87	-263.27	3671.73	3649.51	-260.05	208.01	-135.13	473.61	30.08	16.10	PASS
3813.00†	3779.58	-307.29	-274.36	3769.99	3746.60	-273.15	215.46	-134.89	492.12	31.07	16.19	PASS
3913.00†	3878.19	-319.71	-285.45	3868.24	3843.69	-286.25	222.91	-134.66	510.63	32.05	16.27	PASS
4013.00†	3976.79	-332.13	-296.54	3966.49	3940.78	-299.35	230.36	-134.45	529.15	33.05	16.34	PASS
4113.00†	4075.39	-344.55	-307.64	4064.74	4037.87	-312.45	237.81	-134.25	547.68	34.04	16.41	PASS
4213.00†	4174.00	-356.97	-318.73	4162.99	4134.96	-325.56	245.26	-134.07	566.21	35.03	16.47	PASS
4313.00†	4272.60	-369.39	-329.82	4261.25	4232.04	-338.66	252.71	-133.90	584.75	36.03	16.53	PASS
4413.00†	4371.21	-381.81	-340.91	4359.50	4329.13	-351.76	260.16	-133.74	603.29	37.03	16.59	PASS
4513.00†	4469.81	-394.23	-352.00	4457.75	4426.22	-364.86	267.62	-133.58	621.84	38.03	16.64	PASS
4613.00†	4568.41	-406.65	-363.09	4556.00	4523.31	-377.96	275.07	-133.44	640.39	39.04	16.69	PASS
4713.00†	4667.02	-419.08	-374.18	4654.25	4620.40	-391.06	282.52	-133.31	658.94	40.04	16.74	PASS
4813.00†	4765.62	-431.50	-385.27	4752.51	4717.49	-404.16	289.97	-133.18	677.50	41.05	16.78	PASS
4913.00†	4864.22	-443.92	-396.36	4850.76	4814.58	-417.27	297.42	-133.06	696.06	42.05	16.82	PASS
5013.00†	4962.83	-456.34	-407.45	4949.01	4911.67	-430.37	304.87	-132.94	714.62	43.06	16.86	PASS
5113.00†	5061.43	-468.76	-418.54	5047.26	5008.76	-443.47	312.32	-132.83	733.19	44.07	16.89	PASS
5213.00†	5160.04	-481.18	-429.63	5145.51	5105.85	-456.57	319.77	-132.73	751.76	45.08	16.93	PASS
5313.00†	5258.64	-493.60	-440.72	5243.77	5202.94	-469.67	327.22	-132.63	770.33	46.09	16.96	PASS
5413.00†	5357.24	-506.02	-451.81	5342.02	5300.03	-482.77	334.67	-132.54	788.90	47.10	16.99	PASS
5513.00†	5455.85	-518.44	-462.90	5440.27	5397.11	-495.87	342.12	-132.45	807.48	48.12	17.02	PASS
5613.00†	5554.45	-530.86	-473.99	5538.52	5494.20	-508.98	349.57	-132.36	826.05	49.13	17.05	PASS
5713.00†	5653.06	-543.29	-485.08	5636.78	5591.29	-522.08	357.02	-132.28	844.63	50.14	17.07	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5751.66	-555.71	-496.17	5735.03	5688.38	-535.18	364.48	-132.20	863.21	51.16	17.10	PASS
5913.00†	5850.26	-568.13	-507.26	5833.28	5785.47	-548.28	371.93	-132.13	881.79	52.17	17.12	PASS
6013.00†	5948.87	-580.55	-518.35	5931.53	5882.56	-561.38	379.38	-132.06	900.38	53.19	17.14	PASS
6113.00†	6047.47	-592.97	-529.44	6029.78	5979.65	-574.48	386.83	-131.99	918.96	54.21	17.16	PASS
6213.00†	6146.08	-605.39	-540.53	6128.04	6076.74	-587.58	394.28	-131.92	937.55	55.23	17.18	PASS
6313.00†	6244.68	-617.81	-551.62	6226.29	6173.83	-600.68	401.73	-131.86	956.13	56.24	17.20	PASS
6413.00†	6343.28	-630.23	-562.71	6324.54	6270.92	-613.79	409.18	-131.80	974.72	57.26	17.22	PASS
6513.00†	6441.89	-642.65	-573.80	6422.79	6368.01	-626.89	416.63	-131.74	993.31	58.28	17.24	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

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	0.11	36.58	-4.05	38.95
8.5in Open Hole	1800.00	17719.12	15919.12	1799.45	N/A	-4.05	38.95	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



Clearance Report
ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	27.00	13.00	4042.38	67.86	0.96	4042.95	50.64	81.11	PASS
113.00†	113.00	0.00	0.00	127.00	113.00	4042.38	67.86	0.96	4042.95	52.98	77.47	PASS
213.00†	213.00	0.00	0.00	227.00	213.00	4042.38	67.86	0.96	4042.95	55.33	74.13	PASS
313.00†	313.00	0.00	0.00	327.00	313.00	4042.38	67.86	0.96	4042.95	57.68	71.06	PASS
413.00†	413.00	0.00	0.00	427.00	413.00	4042.38	67.86	0.96	4042.95	60.04	68.24	PASS
513.00†	513.00	0.00	0.00	527.00	513.00	4042.38	67.86	0.96	4042.95	62.40	65.62	PASS
613.00†	613.00	0.00	0.00	627.00	613.00	4042.38	67.86	0.96	4042.95	64.76	63.20	PASS
713.00†	713.00	0.00	0.00	727.00	713.00	4042.38	67.86	0.96	4042.95	67.13	60.94	PASS
813.00†	813.00	0.00	0.00	827.00	813.00	4042.38	67.86	0.96	4042.95	69.50	58.84	PASS
913.00†	913.00	0.00	0.00	927.00	913.00	4042.38	67.86	0.96	4042.95	71.88	56.87	PASS
1013.00†	1013.00	0.00	0.00	1027.00	1013.00	4042.38	67.86	0.96	4042.95	74.26	55.03	PASS
1100.00	1100.00	0.00	0.00	1114.00	1100.00	4042.38	67.86	0.96	4042.95	76.33	53.52	PASS
1113.00†	1113.00	-0.02	-0.02	1127.00	1113.00	4042.38	67.86	139.20	4042.97	76.64	53.30	PASS
1213.00†	1212.97	-1.66	-1.48	1226.97	1212.97	4042.38	67.86	139.20	4044.64	79.04	51.69	PASS
1313.00†	1312.80	-5.90	-5.27	1326.80	1312.80	4042.38	67.86	139.20	4048.95	81.46	50.19	PASS
1413.00†	1412.38	-12.74	-11.38	1426.38	1412.38	4042.38	67.86	139.19	4055.90	83.89	48.81	PASS
1513.00†	1511.57	-22.17	-19.79	1525.57	1511.57	4042.38	67.86	139.18	4065.50	86.31	47.54	PASS
1579.26	1577.03	-29.83	-26.64	1591.03	1577.03	4042.38	67.86	139.17	4073.31	87.91	46.75	PASS
1613.00†	1610.30	-34.02	-30.38	1624.30	1610.30	4042.38	67.86	139.22	4077.59	88.71	46.37	PASS
1713.00†	1708.90	-46.45	-41.47	1722.90	1708.90	4042.38	67.86	139.37	4090.29	91.10	45.29	PASS
1813.00†	1807.50	-58.87	-52.56	1821.50	1807.50	4042.38	67.86	139.52	4103.02	93.41	44.25	PASS
1913.00†	1906.11	-71.29	-63.65	1920.11	1906.11	4042.38	67.86	139.67	4115.77	95.82	43.27	PASS
2013.00†	2004.71	-83.71	-74.74	2018.71	2004.71	4042.38	67.86	139.82	4128.55	98.23	42.33	PASS
2113.00†	2103.32	-96.13	-85.83	2117.32	2103.32	4042.38	67.86	139.97	4141.37	100.65	41.43	PASS
2213.00†	2201.92	-108.55	-96.92	2215.92	2201.92	4042.38	67.86	140.12	4154.20	103.08	40.57	PASS
2313.00†	2300.52	-120.97	-108.01	2314.52	2300.52	4042.38	67.86	140.26	4167.07	105.52	39.75	PASS
2413.00†	2399.13	-133.39	-119.10	2413.13	2399.13	4042.38	67.86	140.41	4179.96	107.97	38.96	PASS
2513.00†	2497.73	-145.81	-130.19	2511.73	2497.73	4042.38	67.86	140.55	4192.88	110.42	38.21	PASS
2613.00†	2596.34	-158.23	-141.28	2610.34	2596.34	4042.38	67.86	140.70	4205.82	112.88	37.49	PASS
2713.00†	2694.94	-170.66	-152.37	2708.94	2694.94	4042.38	67.86	140.84	4218.79	115.35	36.79	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2793.54	-183.08	-163.46	2807.54	2793.54	4042.38	67.86	140.98	4231.79	117.83	36.13	PASS
2913.00†	2892.15	-195.50	-174.55	2906.15	2892.15	4042.38	67.86	141.12	4244.81	120.31	35.49	PASS
3013.00†	2990.75	-207.92	-185.64	3004.75	2990.75	4042.38	67.86	141.26	4257.85	122.80	34.87	PASS
3113.00†	3089.35	-220.34	-196.73	3103.35	3089.35	4042.38	67.86	141.40	4270.93	125.29	34.28	PASS
3213.00†	3187.96	-232.76	-207.82	3201.96	3187.96	4042.38	67.86	141.54	4284.02	127.79	33.71	PASS
3313.00†	3286.56	-245.18	-218.91	3300.56	3286.56	4042.38	67.86	141.68	4297.14	130.29	33.16	PASS
3413.00†	3385.17	-257.60	-230.00	3399.17	3385.17	4042.38	67.86	141.81	4310.29	132.81	32.62	PASS
3513.00†	3483.77	-270.02	-241.09	3497.77	3483.77	4042.38	67.86	141.95	4323.46	135.32	32.11	PASS
3613.00†	3582.37	-282.44	-252.18	3596.37	3582.37	4042.38	67.86	142.08	4336.65	137.84	31.62	PASS
3713.00†	3680.98	-294.87	-263.27	3694.98	3680.98	4042.38	67.86	142.22	4349.87	140.37	31.14	PASS
3813.00†	3779.58	-307.29	-274.36	3793.58	3779.58	4042.38	67.86	142.35	4363.11	142.90	30.68	PASS
3913.00†	3878.19	-319.71	-285.45	3892.19	3878.19	4042.38	67.86	142.48	4376.38	145.44	30.23	PASS
4013.00†	3976.79	-332.13	-296.54	3990.79	3976.79	4042.38	67.86	142.61	4389.66	147.98	29.80	PASS
4113.00†	4075.39	-344.55	-307.64	4089.39	4075.39	4042.38	67.86	142.74	4402.97	150.53	29.38	PASS
4213.00†	4174.00	-356.97	-318.73	4188.00	4174.00	4042.38	67.86	142.88	4416.31	153.08	28.98	PASS
4313.00†	4272.60	-369.39	-329.82	4286.60	4272.60	4042.38	67.86	143.00	4429.66	155.64	28.59	PASS
4413.00†	4371.21	-381.81	-340.91	4385.21	4371.21	4042.38	67.86	143.13	4443.04	158.20	28.21	PASS
4513.00†	4469.81	-394.23	-352.00	4483.81	4469.81	4042.38	67.86	143.26	4456.44	160.76	27.84	PASS
4613.00†	4568.41	-406.65	-363.09	4582.41	4568.41	4042.38	67.86	143.39	4469.86	163.33	27.48	PASS
4713.00†	4667.02	-419.08	-374.18	4681.02	4667.02	4042.38	67.86	143.51	4483.30	165.90	27.14	PASS
4813.00†	4765.62	-431.50	-385.27	4779.62	4765.62	4042.38	67.86	143.64	4496.77	168.47	26.80	PASS
4913.00†	4864.22	-443.92	-396.36	4878.22	4864.22	4042.38	67.86	143.76	4510.25	171.05	26.47	PASS
5013.00†	4962.83	-456.34	-407.45	4976.83	4962.83	4042.38	67.86	143.89	4523.76	173.63	26.16	PASS
5113.00†	5061.43	-468.76	-418.54	5075.43	5061.43	4042.38	67.86	144.01	4537.29	176.22	25.85	PASS
5213.00†	5160.04	-481.18	-429.63	5174.04	5160.04	4042.38	67.86	144.13	4550.84	178.81	25.55	PASS
5313.00†	5258.64	-493.60	-440.72	5272.64	5258.64	4042.38	67.86	144.26	4564.41	181.40	25.26	PASS
5413.00†	5357.24	-506.02	-451.81	5371.24	5357.24	4042.38	67.86	144.38	4578.00	183.99	24.97	PASS
5513.00†	5455.85	-518.44	-462.90	5469.85	5455.85	4042.38	67.86	144.50	4591.61	186.59	24.70	PASS
5613.00†	5554.45	-530.86	-473.99	5568.45	5554.45	4042.38	67.86	144.62	4605.24	189.19	24.43	PASS
5713.00†	5653.06	-543.29	-485.08	5667.06	5653.06	4042.38	67.86	144.74	4618.88	191.79	24.17	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5751.66	-555.71	-496.17	5765.66	5751.66	4042.38	67.86	144.85	4632.55	194.39	23.91	PASS
5913.00†	5850.26	-568.13	-507.26	5864.26	5850.26	4042.38	67.86	144.97	4646.24	197.00	23.67	PASS
6013.00†	5948.87	-580.55	-518.35	5962.87	5948.87	4042.38	67.86	145.09	4659.95	199.61	23.43	PASS
6113.00†	6047.47	-592.97	-529.44	6061.47	6047.47	4042.38	67.86	145.21	4673.68	202.22	23.19	PASS
6213.00†	6146.08	-605.39	-540.53	6160.08	6146.08	4042.38	67.86	145.32	4687.42	204.83	22.96	PASS
6313.00†	6244.68	-617.81	-551.62	6258.68	6244.68	4042.38	67.86	145.44	4701.19	207.45	22.74	PASS
6413.00†	6343.28	-630.23	-562.71	6357.28	6343.28	4042.38	67.86	145.55	4714.97	210.07	22.52	PASS
6513.00†	6441.89	-642.65	-573.80	6455.89	6441.89	4042.38	67.86	145.66	4728.77	212.69	22.30	PASS
6613.00†	6540.49	-655.07	-584.89	6554.49	6540.49	4042.38	67.86	145.78	4742.59	215.31	22.10	PASS
6713.00†	6639.09	-667.50	-595.98	6653.09	6639.09	4042.38	67.86	145.89	4756.43	217.93	21.89	PASS
6813.00†	6737.70	-679.92	-607.07	6751.70	6737.70	4042.38	67.86	146.00	4770.29	220.56	21.69	PASS
6913.00†	6836.30	-692.34	-618.16	6850.30	6836.30	4042.38	67.86	146.11	4784.16	223.18	21.50	PASS
7013.00†	6934.91	-704.76	-629.25	6948.91	6934.91	4042.38	67.86	146.22	4798.05	225.81	21.31	PASS
7056.81	6978.10	-710.20	-634.11	6992.10	6978.10	4042.38	67.86	146.27	4804.14	226.96	21.23	PASS
7113.00†	7033.76	-714.44	-640.38	7047.76	7033.76	4042.38	67.86	111.63	4809.25	228.46	21.11	PASS
7213.00†	7132.82	-708.37	-651.57	7146.82	7132.82	4042.38	67.86	46.13	4804.91	231.54	20.81	PASS
7313.00†	7229.32	-685.08	-662.51	7243.32	7229.32	4042.38	67.86	28.87	4783.55	235.30	20.39	PASS
7413.00†	7320.33	-645.28	-672.88	7334.33	7320.33	4042.38	67.86	23.50	4745.83	238.63	19.94	PASS
7513.00†	7403.09	-590.18	-682.36	7417.09	7403.09	4042.38	67.86	21.91	4692.92	241.52	19.48	PASS
7613.00†	7475.08	-521.45	-690.66	7489.08	7475.08	4042.38	67.86	22.49	4626.44	243.98	19.01	PASS
7713.00†	7534.11	-441.18	-697.53	7548.11	7534.11	4042.38	67.86	25.26	4548.43	245.96	18.54	PASS
7813.00†	7578.39	-351.82	-702.76	7592.39	7578.39	4042.38	67.86	31.59	4461.26	247.47	18.08	PASS
7913.00†	7606.57	-256.06	-706.19	7620.57	7606.57	4042.38	67.86	46.18	4367.58	248.48	17.62	PASS
8013.00†	7617.81	-156.84	-707.72	7631.81	7617.81	4042.38	67.86	82.23	4270.24	249.04	17.19	PASS
8027.99	7618.00	-141.85	-707.78	7632.00	7618.00	4042.38	67.86	90.00	4255.52	249.08	17.13	PASS
8113.00†	7618.00	-56.84	-708.00	7632.00	7618.00	4042.38	67.86	90.00	4172.00	249.31	16.78	PASS
8213.00†	7618.00	43.16	-708.26	7632.00	7618.00	4042.38	67.86	90.00	4073.84	249.60	16.37	PASS
8313.00†	7618.00	143.16	-708.53	7632.00	7618.00	4042.38	67.86	90.00	3975.76	249.90	15.95	PASS
8413.00†	7618.00	243.16	-708.79	7632.00	7618.00	4042.38	67.86	90.00	3877.79	250.23	15.54	PASS
8513.00†	7618.00	343.16	-709.05	7632.00	7618.00	4042.38	67.86	90.00	3779.93	250.59	15.12	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
8613.00†	7618.00	443.16	-709.31	7632.00	7618.00	4042.38	67.86	90.00	3682.17	250.97	14.71	PASS
8713.00†	7618.00	543.16	-709.57	7632.00	7618.00	4042.38	67.86	90.00	3584.55	251.38	14.30	PASS
8813.00†	7618.00	643.16	-709.84	7632.00	7618.00	4042.38	67.86	90.00	3487.05	251.82	13.88	PASS
8913.00†	7618.00	743.16	-710.10	7632.00	7618.00	4042.38	67.86	90.00	3389.70	252.29	13.47	PASS
9013.00†	7618.00	843.16	-710.36	7632.00	7618.00	4042.38	67.86	90.00	3292.52	252.80	13.06	PASS
9113.00†	7618.00	943.16	-710.62	7632.00	7618.00	4042.38	67.86	90.00	3195.50	253.36	12.65	PASS
9213.00†	7618.00	1043.16	-710.88	7632.00	7618.00	4042.38	67.86	90.00	3098.68	253.96	12.23	PASS
9313.00†	7618.00	1143.16	-711.14	7632.00	7618.00	4042.38	67.86	90.00	3002.06	254.61	11.82	PASS
9413.00†	7618.00	1243.16	-711.41	7632.00	7618.00	4042.38	67.86	90.00	2905.67	255.31	11.41	PASS
9513.00†	7618.00	1343.16	-711.67	7632.00	7618.00	4042.38	67.86	90.00	2809.53	256.08	11.00	PASS
9613.00†	7618.00	1443.16	-711.93	7632.00	7618.00	4042.38	67.86	90.00	2713.68	256.91	10.59	PASS
9713.00†	7618.00	1543.16	-712.19	7632.00	7618.00	4042.38	67.86	90.00	2618.13	257.83	10.18	PASS
9813.00†	7618.00	1643.16	-712.45	7632.00	7618.00	4042.38	67.86	90.00	2522.93	258.82	9.77	PASS
9913.00†	7618.00	1743.16	-712.72	7632.00	7618.00	4042.38	67.86	90.00	2428.11	259.91	9.36	PASS
10013.00†	7618.00	1843.15	-712.98	7632.00	7618.00	4042.38	67.86	90.00	2333.73	261.11	8.96	PASS
10113.00†	7618.00	1943.15	-713.24	7632.00	7618.00	4042.38	67.86	90.00	2239.84	262.42	8.56	PASS
10213.00†	7618.00	2043.15	-713.50	7632.00	7618.00	4042.38	67.86	90.00	2146.49	263.87	8.15	PASS
10313.00†	7618.00	2143.15	-713.76	7632.00	7618.00	4042.38	67.86	90.00	2053.78	265.46	7.75	PASS
10413.00†	7618.00	2243.15	-714.02	7632.00	7618.00	4042.38	67.86	90.00	1961.78	267.23	7.36	PASS
10513.00†	7618.00	2343.15	-714.29	7632.00	7618.00	4042.38	67.86	90.00	1870.60	269.18	6.96	PASS
10613.00†	7618.00	2443.15	-714.55	7632.00	7618.00	4042.38	67.86	90.00	1780.36	271.35	6.58	PASS
10713.00†	7618.00	2543.15	-714.81	7632.00	7618.00	4042.38	67.86	90.00	1691.23	273.77	6.19	PASS
10813.00†	7618.00	2643.15	-715.07	7632.00	7618.00	4042.38	67.86	90.00	1603.38	276.45	5.81	PASS
10913.00†	7618.00	2743.15	-715.33	7632.00	7618.00	4042.38	67.86	90.00	1517.03	279.44	5.44	PASS
11013.00†	7618.00	2843.15	-715.60	7632.00	7618.00	4042.38	67.86	90.00	1432.46	282.77	5.08	PASS
11113.00†	7618.00	2943.15	-715.86	7632.00	7618.00	4042.38	67.86	90.00	1350.01	286.47	4.72	PASS
11213.00†	7618.00	3043.15	-716.12	7632.00	7618.00	4042.38	67.86	90.00	1270.07	290.58	4.38	PASS
11313.00†	7618.00	3143.15	-716.38	7632.00	7618.00	4042.38	67.86	90.00	1193.17	295.11	4.05	PASS
11413.00†	7618.00	3243.15	-716.64	7632.00	7618.00	4042.38	67.86	90.00	1119.92	300.07	3.74	PASS
11513.00†	7618.00	3343.15	-716.90	7632.00	7618.00	4042.38	67.86	90.00	1051.08	305.43	3.45	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11613.00†	7618.00	3443.15	-717.17	7632.00	7618.00	4042.38	67.86	90.00	987.59	311.09	3.18	PASS
11713.00†	7618.00	3543.15	-717.43	7632.00	7618.00	4042.38	67.86	90.00	930.54	316.90	2.94	PASS
11813.00†	7618.00	3643.15	-717.69	7632.00	7618.00	4042.38	67.86	90.00	881.18	322.60	2.74	PASS
11913.00†	7618.00	3743.15	-717.95	7632.00	7618.00	4042.38	67.86	90.00	840.85	327.81	2.57	PASS
12013.00†	7618.00	3843.15	-718.21	7632.00	7618.00	4042.38	67.86	90.00	810.93	332.07	2.45	PASS
12113.00†	7618.00	3943.15	-718.48	7632.00	7618.00	4042.38	67.86	90.00	792.57	334.93	2.37	PASS
12213.00†	7618.00	4043.15	-718.74	7632.00	7618.00	4042.38	67.86	90.00	786.59	336.01	2.34	PASS
12313.00†	7618.00	4143.15	-719.00	7632.00	7618.00	4042.38	67.86	90.00	793.28	335.18	2.37	PASS
12413.00†	7618.00	4243.15	-719.26	7632.00	7618.00	4042.38	67.86	90.00	812.32	332.59	2.45	PASS
12513.00†	7618.00	4343.15	-719.52	7632.00	7618.00	4042.38	67.86	90.00	842.87	328.58	2.57	PASS
12613.00†	7618.00	4443.15	-719.78	7632.00	7618.00	4042.38	67.86	90.00	883.74	323.62	2.73	PASS
12713.00†	7618.00	4543.15	-720.05	7632.00	7618.00	4042.38	67.86	90.00	933.57	318.16	2.94	PASS
12813.00†	7618.00	4643.15	-720.31	7632.00	7618.00	4042.38	67.86	90.00	991.02	312.57	3.18	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	Log Name/Comment	Wellbore
0.00	8400.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8400>	MARTIN #1 AWB



Clearance Report
ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	0.20	75.00	89.85	75.00	1.40	123.66	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.20	75.00	89.85	75.00	1.72	81.05	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.20	75.00	89.85	75.00	2.28	50.15	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.20	75.00	89.85	75.00	2.88	35.66	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.20	75.00	89.85	75.00	3.50	27.54	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.20	75.00	89.85	75.00	4.12	22.39	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.20	75.00	89.85	75.00	4.74	18.85	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.20	75.00	89.85	75.00	5.36	16.27	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.20	75.00	89.85	75.00	5.99	14.31	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.20	75.00	89.85	75.00	6.61	12.77	PASS
1013.00†	1013.00	0.00	0.00	1013.00	1013.00	0.20	75.00	89.85	75.00	7.24	11.53	PASS
1100.00	1100.00	0.00	0.00	1100.00	1100.00	0.20	75.00	89.85	75.00	7.78	10.63	PASS
1113.00†	1113.00	-0.02	-0.02	1113.00	1113.00	0.20	75.00	-131.93	75.02	7.86	10.51	PASS
1213.00†	1212.97	-1.66	-1.48	1212.97	1212.97	0.20	75.00	-133.13	76.50	8.54	9.79	PASS
1313.00†	1312.80	-5.90	-5.27	1312.80	1312.80	0.20	75.00	-136.03	80.50	9.36	9.32	PASS
1413.00†	1412.38	-12.74	-11.38	1412.38	1412.38	0.20	75.00	-140.11	87.34	10.20	9.21	PASS
1513.00†	1511.57	-22.17	-19.79	1511.57	1511.57	0.20	75.00	-144.76	97.39	11.06	9.42	PASS
1579.26	1577.03	-29.83	-26.64	1577.03	1577.03	0.20	75.00	-147.86	105.98	11.61	9.73	PASS
1613.00†	1610.30	-34.02	-30.38	1610.13	1610.13	0.19	75.01	-149.39	110.80	11.85	9.96	PASS
1713.00†	1708.90	-46.45	-41.47	1707.17	1707.14	-1.27	76.36	-152.35	126.21	12.51	10.71	PASS
1813.00†	1807.50	-58.87	-52.56	1804.06	1803.88	-5.12	79.94	-153.41	143.03	13.06	11.52	PASS
1913.00†	1906.11	-71.29	-63.65	1900.59	1900.04	-11.35	85.71	-153.14	161.06	13.75	12.30	PASS
2013.00†	2004.71	-83.71	-74.74	1996.54	1995.27	-19.88	93.63	-151.95	180.31	14.45	13.07	PASS
2113.00†	2103.32	-96.13	-85.83	2091.71	2089.30	-30.65	103.63	-150.15	200.94	15.20	13.81	PASS
2213.00†	2201.92	-108.55	-96.92	2187.84	2183.84	-43.42	115.48	-148.03	222.89	15.99	14.54	PASS
2313.00†	2300.52	-120.97	-108.01	2285.06	2279.40	-56.51	127.63	-146.23	245.21	16.81	15.19	PASS
2413.00†	2399.13	-133.39	-119.10	2382.27	2374.96	-69.60	139.77	-144.72	267.71	17.66	15.75	PASS
2513.00†	2497.73	-145.81	-130.19	2479.48	2470.52	-82.69	151.92	-143.45	290.36	18.53	16.25	PASS
2613.00†	2596.34	-158.23	-141.28	2576.69	2566.07	-95.78	164.07	-142.36	313.14	19.45	16.67	PASS
2713.00†	2694.94	-170.66	-152.37	2673.91	2661.63	-108.87	176.21	-141.42	336.00	20.32	17.10	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	2793.54	-183.08	-163.46	2771.12	2757.19	-121.96	188.36	-140.60	358.94	21.24	17.45	PASS
2913.00†	2892.15	-195.50	-174.55	2868.33	2852.75	-135.05	200.51	-139.88	381.94	22.17	17.77	PASS
3013.00†	2990.75	-207.92	-185.64	2965.54	2948.31	-148.14	212.66	-139.24	404.99	23.10	18.05	PASS
3113.00†	3089.35	-220.34	-196.73	3062.76	3043.87	-161.23	224.80	-138.67	428.08	24.05	18.31	PASS
3213.00†	3187.96	-232.76	-207.82	3159.97	3139.42	-174.32	236.95	-138.15	451.22	25.01	18.54	PASS
3313.00†	3286.56	-245.18	-218.91	3257.18	3234.98	-187.41	249.10	-137.69	474.38	25.97	18.75	PASS
3413.00†	3385.17	-257.60	-230.00	3354.40	3330.54	-200.50	261.25	-137.27	497.57	26.93	18.95	PASS
3513.00†	3483.77	-270.02	-241.09	3451.61	3426.10	-213.59	273.39	-136.89	520.78	27.91	19.12	PASS
3613.00†	3582.37	-282.44	-252.18	3548.82	3521.66	-226.68	285.54	-136.54	544.01	28.88	19.28	PASS
3713.00†	3680.98	-294.87	-263.27	3646.03	3617.21	-239.77	297.69	-136.22	567.26	29.86	19.43	PASS
3813.00†	3779.58	-307.29	-274.36	3743.25	3712.77	-252.86	309.84	-135.92	590.52	30.85	19.57	PASS
3913.00†	3878.19	-319.71	-285.45	3840.46	3808.33	-265.95	321.98	-135.65	613.80	31.83	19.70	PASS
4013.00†	3976.79	-332.13	-296.54	3937.67	3903.89	-279.04	334.13	-135.39	637.09	32.82	19.82	PASS
4113.00†	4075.39	-344.55	-307.64	4034.88	3999.45	-292.13	346.28	-135.16	660.39	33.82	19.92	PASS
4213.00†	4174.00	-356.97	-318.73	4132.10	4095.01	-305.22	358.43	-134.94	683.70	34.81	20.03	PASS
4313.00†	4272.60	-369.39	-329.82	4229.31	4190.56	-318.32	370.57	-134.73	707.02	35.81	20.12	PASS
4413.00†	4371.21	-381.81	-340.91	4326.52	4286.12	-331.41	382.72	-134.54	730.35	36.81	20.21	PASS
4513.00†	4469.81	-394.23	-352.00	4423.73	4381.68	-344.50	394.87	-134.36	753.69	37.81	20.29	PASS
4613.00†	4568.41	-406.65	-363.09	4520.95	4477.24	-357.59	407.02	-134.19	777.03	38.82	20.37	PASS
4713.00†	4667.02	-419.08	-374.18	4618.16	4572.80	-370.68	419.16	-134.03	800.38	39.82	20.44	PASS
4813.00†	4765.62	-431.50	-385.27	4715.37	4668.36	-383.77	431.31	-133.88	823.73	40.83	20.51	PASS
4913.00†	4864.22	-443.92	-396.36	4812.58	4763.91	-396.86	443.46	-133.74	847.09	41.84	20.58	PASS
5013.00†	4962.83	-456.34	-407.45	4909.80	4859.47	-409.95	455.61	-133.60	870.46	42.85	20.64	PASS
5113.00†	5061.43	-468.76	-418.54	5007.01	4955.03	-423.04	467.75	-133.48	893.82	43.86	20.70	PASS
5213.00†	5160.04	-481.18	-429.63	5104.22	5050.59	-436.13	479.90	-133.35	917.20	44.87	20.75	PASS
5313.00†	5258.64	-493.60	-440.72	5201.43	5146.15	-449.22	492.05	-133.24	940.57	45.88	20.81	PASS
5413.00†	5357.24	-506.02	-451.81	5298.65	5241.70	-462.31	504.20	-133.13	963.95	46.90	20.85	PASS
5513.00†	5455.85	-518.44	-462.90	5395.86	5337.26	-475.40	516.34	-133.03	987.33	47.91	20.90	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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	0.12	45.72	-1.44	47.16
8.5in Open Hole	1800.00	17807.10	16007.10	1799.84	7663.00	-1.44	47.16	2921.91	267.28

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 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	1349.36	49.26	2.09	1350.26	50.22	27.31	PASS
113.00†	113.00	0.00	0.00	109.00	113.00	1349.36	49.26	2.09	1350.26	52.56	26.07	PASS
213.00†	213.00	0.00	0.00	209.00	213.00	1349.36	49.26	2.09	1350.26	54.91	24.94	PASS
313.00†	313.00	0.00	0.00	309.00	313.00	1349.36	49.26	2.09	1350.26	57.26	23.90	PASS
413.00†	413.00	0.00	0.00	409.00	413.00	1349.36	49.26	2.09	1350.26	59.62	22.94	PASS
513.00†	513.00	0.00	0.00	509.00	513.00	1349.36	49.26	2.09	1350.26	61.98	22.06	PASS
613.00†	613.00	0.00	0.00	609.00	613.00	1349.36	49.26	2.09	1350.26	64.34	21.24	PASS
713.00†	713.00	0.00	0.00	709.00	713.00	1349.36	49.26	2.09	1350.26	66.71	20.48	PASS
813.00†	813.00	0.00	0.00	809.00	813.00	1349.36	49.26	2.09	1350.26	69.08	19.76	PASS
913.00†	913.00	0.00	0.00	909.00	913.00	1349.36	49.26	2.09	1350.26	71.46	19.10	PASS
1013.00†	1013.00	0.00	0.00	1009.00	1013.00	1349.36	49.26	2.09	1350.26	73.84	18.48	PASS
1100.00	1100.00	0.00	0.00	1096.00	1100.00	1349.36	49.26	2.09	1350.26	75.91	17.97	PASS
1113.00†	1113.00	-0.02	-0.02	1109.00	1113.00	1349.36	49.26	140.33	1350.28	76.22	17.89	PASS
1213.00†	1212.97	-1.66	-1.48	1208.97	1212.97	1349.36	49.26	140.37	1351.98	78.62	17.36	PASS
1313.00†	1312.80	-5.90	-5.27	1308.80	1312.80	1349.36	49.26	140.47	1356.36	81.04	16.89	PASS
1413.00†	1412.38	-12.74	-11.38	1408.38	1412.38	1349.36	49.26	140.62	1363.45	83.46	16.48	PASS
1513.00†	1511.57	-22.17	-19.79	1507.57	1511.57	1349.36	49.26	140.83	1373.27	85.89	16.13	PASS
1579.26	1577.03	-29.83	-26.64	1573.03	1577.03	1349.36	49.26	141.00	1381.28	87.49	15.93	PASS
1613.00†	1610.30	-34.02	-30.38	1606.30	1610.30	1349.36	49.26	141.14	1385.68	88.29	15.83	PASS
1713.00†	1708.90	-46.45	-41.47	1704.90	1708.90	1349.36	49.26	141.57	1398.75	90.68	15.55	PASS
1813.00†	1807.50	-58.87	-52.56	1803.50	1807.50	1349.36	49.26	141.99	1411.91	92.99	15.29	PASS
1913.00†	1906.11	-71.29	-63.65	1902.11	1906.11	1349.36	49.26	142.40	1425.13	95.39	15.04	PASS
2013.00†	2004.71	-83.71	-74.74	2000.71	2004.71	1349.36	49.26	142.80	1438.43	97.80	14.81	PASS
2113.00†	2103.32	-96.13	-85.83	2099.32	2103.32	1349.36	49.26	143.19	1451.79	100.22	14.58	PASS
2213.00†	2201.92	-108.55	-96.92	2197.92	2201.92	1349.36	49.26	143.58	1465.22	102.65	14.37	PASS
2313.00†	2300.52	-120.97	-108.01	2296.52	2300.52	1349.36	49.26	143.96	1478.72	105.08	14.16	PASS
2413.00†	2399.13	-133.39	-119.10	2395.13	2399.13	1349.36	49.26	144.34	1492.28	107.52	13.96	PASS
2513.00†	2497.73	-145.81	-130.19	2493.73	2497.73	1349.36	49.26	144.70	1505.91	109.97	13.78	PASS
2613.00†	2596.34	-158.23	-141.28	2592.34	2596.34	1349.36	49.26	145.07	1519.59	112.42	13.60	PASS
2713.00†	2694.94	-170.66	-152.37	2690.94	2694.94	1349.36	49.26	145.42	1533.33	114.87	13.42	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2793.54	-183.08	-163.46	2789.54	2793.54	1349.36	49.26	145.77	1547.13	117.34	13.26	PASS
2913.00†	2892.15	-195.50	-174.55	2888.15	2892.15	1349.36	49.26	146.11	1560.99	119.80	13.10	PASS
3013.00†	2990.75	-207.92	-185.64	2986.75	2990.75	1349.36	49.26	146.45	1574.90	122.28	12.95	PASS
3113.00†	3089.35	-220.34	-196.73	3085.35	3089.35	1349.36	49.26	146.78	1588.86	124.75	12.80	PASS
3213.00†	3187.96	-232.76	-207.82	3183.96	3187.96	1349.36	49.26	147.10	1602.87	127.24	12.66	PASS
3313.00†	3286.56	-245.18	-218.91	3282.56	3286.56	1349.36	49.26	147.42	1616.94	129.72	12.53	PASS
3413.00†	3385.17	-257.60	-230.00	3381.17	3385.17	1349.36	49.26	147.74	1631.05	132.22	12.40	PASS
3513.00†	3483.77	-270.02	-241.09	3479.77	3483.77	1349.36	49.26	148.04	1645.21	134.71	12.27	PASS
3613.00†	3582.37	-282.44	-252.18	3578.37	3582.37	1349.36	49.26	148.35	1659.42	137.21	12.15	PASS
3713.00†	3680.98	-294.87	-263.27	3676.98	3680.98	1349.36	49.26	148.65	1673.67	139.72	12.04	PASS
3813.00†	3779.58	-307.29	-274.36	3775.58	3779.58	1349.36	49.26	148.94	1687.96	142.22	11.92	PASS
3913.00†	3878.19	-319.71	-285.45	3874.19	3878.19	1349.36	49.26	149.23	1702.30	144.73	11.81	PASS
4013.00†	3976.79	-332.13	-296.54	3972.79	3976.79	1349.36	49.26	149.51	1716.68	147.25	11.71	PASS
4113.00†	4075.39	-344.55	-307.64	4071.39	4075.39	1349.36	49.26	149.79	1731.10	149.77	11.61	PASS
4213.00†	4174.00	-356.97	-318.73	4170.00	4174.00	1349.36	49.26	150.06	1745.56	152.29	11.51	PASS
4313.00†	4272.60	-369.39	-329.82	4268.60	4272.60	1349.36	49.26	150.33	1760.06	154.82	11.42	PASS
4413.00†	4371.21	-381.81	-340.91	4367.21	4371.21	1349.36	49.26	150.60	1774.60	157.34	11.32	PASS
4513.00†	4469.81	-394.23	-352.00	4465.81	4469.81	1349.36	49.26	150.86	1789.17	159.88	11.24	PASS
4613.00†	4568.41	-406.65	-363.09	4564.41	4568.41	1349.36	49.26	151.12	1803.78	162.41	11.15	PASS
4713.00†	4667.02	-419.08	-374.18	4663.02	4667.02	1349.36	49.26	151.37	1818.43	164.95	11.07	PASS
4813.00†	4765.62	-431.50	-385.27	4761.62	4765.62	1349.36	49.26	151.62	1833.11	167.49	10.99	PASS
4913.00†	4864.22	-443.92	-396.36	4860.22	4864.22	1349.36	49.26	151.86	1847.82	170.03	10.91	PASS
5013.00†	4962.83	-456.34	-407.45	4958.83	4962.83	1349.36	49.26	152.10	1862.56	172.57	10.83	PASS
5113.00†	5061.43	-468.76	-418.54	5057.43	5061.43	1349.36	49.26	152.34	1877.34	175.12	10.76	PASS
5213.00†	5160.04	-481.18	-429.63	5156.04	5160.04	1349.36	49.26	152.57	1892.15	177.67	10.69	PASS
5313.00†	5258.64	-493.60	-440.72	5254.64	5258.64	1349.36	49.26	152.80	1906.99	180.22	10.62	PASS
5413.00†	5357.24	-506.02	-451.81	5353.24	5357.24	1349.36	49.26	153.03	1921.85	182.78	10.55	PASS
5513.00†	5455.85	-518.44	-462.90	5451.85	5455.85	1349.36	49.26	153.25	1936.75	185.33	10.49	PASS
5613.00†	5554.45	-530.86	-473.99	5550.45	5554.45	1349.36	49.26	153.47	1951.68	187.89	10.42	PASS
5713.00†	5653.06	-543.29	-485.08	5649.06	5653.06	1349.36	49.26	153.69	1966.63	190.45	10.36	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5751.66	-555.71	-496.17	5747.66	5751.66	1349.36	49.26	153.90	1981.61	193.02	10.30	PASS
5913.00†	5850.26	-568.13	-507.26	5846.26	5850.26	1349.36	49.26	154.11	1996.62	195.58	10.24	PASS
6013.00†	5948.87	-580.55	-518.35	5944.87	5948.87	1349.36	49.26	154.32	2011.65	198.15	10.19	PASS
6113.00†	6047.47	-592.97	-529.44	6043.47	6047.47	1349.36	49.26	154.52	2026.71	200.72	10.13	PASS
6213.00†	6146.08	-605.39	-540.53	6142.08	6146.08	1349.36	49.26	154.72	2041.79	203.29	10.08	PASS
6313.00†	6244.68	-617.81	-551.62	6240.68	6244.68	1349.36	49.26	154.92	2056.90	205.86	10.02	PASS
6413.00†	6343.28	-630.23	-562.71	6339.28	6343.28	1349.36	49.26	155.11	2072.03	208.43	9.97	PASS
6513.00†	6441.89	-642.65	-573.80	6437.89	6441.89	1349.36	49.26	155.30	2087.18	211.01	9.92	PASS
6613.00†	6540.49	-655.07	-584.89	6536.49	6540.49	1349.36	49.26	155.49	2102.36	213.59	9.87	PASS
6713.00†	6639.09	-667.50	-595.98	6635.09	6639.09	1349.36	49.26	155.68	2117.56	216.17	9.82	PASS
6813.00†	6737.70	-679.92	-607.07	6733.70	6737.70	1349.36	49.26	155.86	2132.78	218.75	9.78	PASS
6913.00†	6836.30	-692.34	-618.16	6832.30	6836.30	1349.36	49.26	156.04	2148.02	221.33	9.73	PASS
7013.00†	6934.91	-704.76	-629.25	6930.91	6934.91	1349.36	49.26	156.22	2163.28	223.91	9.69	PASS
7056.81	6978.10	-710.20	-634.11	6974.10	6978.10	1349.36	49.26	156.30	2169.98	225.04	9.67	PASS
7113.00†	7033.76	-714.44	-640.38	7029.76	7033.76	1349.36	49.26	121.60	2175.98	226.52	9.63	PASS
7213.00†	7132.82	-708.37	-651.57	7128.82	7132.82	1349.36	49.26	56.29	2173.80	229.63	9.49	PASS
7313.00†	7229.32	-685.08	-662.51	7225.32	7229.32	1349.36	49.26	39.61	2155.36	233.55	9.25	PASS
7413.00†	7320.33	-645.28	-672.88	7316.33	7320.33	1349.36	49.26	35.29	2121.34	236.89	8.98	PASS
7513.00†	7403.09	-590.18	-682.36	7399.09	7403.09	1349.36	49.26	35.30	2072.94	239.76	8.67	PASS
7613.00†	7475.08	-521.45	-690.66	7471.08	7475.08	1349.36	49.26	38.20	2011.82	242.20	8.33	PASS
7713.00†	7534.11	-441.18	-697.53	7530.11	7534.11	1349.36	49.26	44.11	1940.04	244.19	7.96	PASS
7813.00†	7578.39	-351.82	-702.76	7574.39	7578.39	1349.36	49.26	53.89	1859.99	245.74	7.59	PASS
7913.00†	7606.57	-256.06	-706.19	7602.57	7606.57	1349.36	49.26	68.47	1774.29	246.84	7.21	PASS
8013.00†	7617.81	-156.84	-707.72	7613.81	7617.81	1349.36	49.26	87.08	1685.72	247.53	6.83	PASS
8027.99	7618.00	-141.85	-707.78	7614.00	7618.00	1349.36	49.26	90.00	1672.37	247.60	6.77	PASS
8113.00†	7618.00	-56.84	-708.00	7614.00	7618.00	1349.36	49.26	90.00	1597.14	247.97	6.46	PASS
8213.00†	7618.00	43.16	-708.26	7614.00	7618.00	1349.36	49.26	90.00	1509.97	248.48	6.09	PASS
8313.00†	7618.00	143.16	-708.53	7614.00	7618.00	1349.36	49.26	90.00	1424.49	249.05	5.73	PASS
8413.00†	7618.00	243.16	-708.79	7614.00	7618.00	1349.36	49.26	90.00	1341.01	249.71	5.38	PASS
8513.00†	7618.00	343.16	-709.05	7614.00	7618.00	1349.36	49.26	90.00	1259.95	250.46	5.04	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
8613.00†	7618.00	443.16	-709.31	7614.00	7618.00	1349.36	49.26	90.00	1181.79	251.31	4.71	PASS
8713.00†	7618.00	543.16	-709.57	7614.00	7618.00	1349.36	49.26	90.00	1107.16	252.26	4.40	PASS
8813.00†	7618.00	643.16	-709.84	7614.00	7618.00	1349.36	49.26	90.00	1036.80	253.33	4.10	PASS
8913.00†	7618.00	743.16	-710.10	7614.00	7618.00	1349.36	49.26	90.00	971.65	254.48	3.83	PASS
9013.00†	7618.00	843.16	-710.36	7614.00	7618.00	1349.36	49.26	90.00	912.83	255.69	3.58	PASS
9113.00†	7618.00	943.16	-710.62	7614.00	7618.00	1349.36	49.26	90.00	861.64	256.90	3.36	PASS
9213.00†	7618.00	1043.16	-710.88	7614.00	7618.00	1349.36	49.26	90.00	819.50	258.00	3.18	PASS
9313.00†	7618.00	1143.16	-711.14	7614.00	7618.00	1349.36	49.26	90.00	787.87	258.89	3.05	PASS
9413.00†	7618.00	1243.16	-711.41	7614.00	7618.00	1349.36	49.26	90.00	768.04	259.43	2.97	PASS
9513.00†	7618.00	1343.16	-711.67	7614.00	7618.00	1349.36	49.26	90.00	760.95	259.53	2.94	PASS
9519.29†	7618.00	1349.45	-711.68	7613.27	7617.27	1349.36	49.26	89.95	760.94	259.49	2.94	PASS
9613.00†	7618.00	1443.16	-711.93	7614.00	7618.00	1349.36	49.26	90.00	766.95	259.14	2.96	PASS
9713.00†	7618.00	1543.16	-712.19	7614.00	7618.00	1349.36	49.26	90.00	785.73	258.33	3.05	PASS
9813.00†	7618.00	1643.16	-712.45	7614.00	7618.00	1349.36	49.26	90.00	816.41	257.21	3.18	PASS
9913.00†	7618.00	1743.16	-712.72	7614.00	7618.00	1349.36	49.26	90.00	857.72	255.92	3.36	PASS
10013.00†	7618.00	1843.15	-712.98	7614.00	7618.00	1349.36	49.26	90.00	908.20	254.58	3.57	PASS
10113.00†	7618.00	1943.15	-713.24	7614.00	7618.00	1349.36	49.26	90.00	966.43	253.29	3.82	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	Wellbore
0.00	8390.00	Drift Indicator - Inclination Only (Actual Survey)	ASUMED VERTICAL <8390>	OTTER#1 AWB



Clearance Report

ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	10591.90	9.30	0.05	10592.02	25.40	430.51	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

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

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

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

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

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

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	0.22	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	97.44	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.22	90.01	89.86	90.01	2.28	60.29	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.22	90.01	89.86	90.01	2.88	42.87	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.22	90.01	89.86	90.01	3.50	33.11	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.22	90.01	89.86	90.01	4.12	26.92	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.22	90.01	89.86	90.01	4.74	22.67	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.22	90.01	89.86	90.01	5.36	19.57	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.22	90.01	89.86	90.01	5.99	17.21	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.22	90.01	89.86	90.01	6.61	15.35	PASS
1013.00†	1013.00	0.00	0.00	1013.00	1013.00	0.22	90.01	89.86	90.01	7.24	13.86	PASS
1100.00	1100.00	0.00	0.00	1100.00	1100.00	0.22	90.01	89.86	90.01	7.78	12.78	PASS
1113.00†	1113.00	-0.02	-0.02	1113.00	1113.00	0.22	90.01	-131.91	90.03	7.86	12.63	PASS
1213.00†	1212.97	-1.66	-1.48	1212.97	1212.97	0.22	90.01	-132.92	91.51	8.54	11.73	PASS
1313.00†	1312.80	-5.90	-5.27	1312.80	1312.80	0.22	90.01	-135.36	95.47	9.35	11.08	PASS
1413.00†	1412.38	-12.74	-11.38	1412.38	1412.38	0.22	90.01	-138.88	102.21	10.18	10.81	PASS
1513.00†	1511.57	-22.17	-19.79	1511.27	1511.27	0.21	90.02	-142.98	112.07	11.03	10.87	PASS
1579.26	1577.03	-29.83	-26.64	1574.97	1574.96	-0.34	90.81	-145.39	121.11	11.59	11.15	PASS
1613.00†	1610.30	-34.02	-30.38	1607.29	1607.27	-0.94	91.65	-146.44	126.47	11.83	11.39	PASS
1713.00†	1708.90	-46.45	-41.47	1702.84	1702.67	-3.91	95.88	-148.39	143.92	12.57	12.17	PASS
1813.00†	1807.50	-58.87	-52.56	1797.80	1797.27	-8.67	102.66	-149.02	163.45	13.23	13.05	PASS
1913.00†	1906.11	-71.29	-63.65	1892.00	1890.77	-15.18	111.91	-148.71	184.95	13.92	13.94	PASS
2013.00†	2004.71	-83.71	-74.74	1985.22	1982.90	-23.35	123.55	-147.79	208.41	14.68	14.86	PASS
2113.00†	2103.32	-96.13	-85.83	2077.30	2073.40	-33.11	137.44	-146.47	233.91	15.46	15.81	PASS
2213.00†	2201.92	-108.55	-96.92	2168.07	2162.03	-44.37	153.45	-144.91	261.53	16.26	16.77	PASS
2313.00†	2300.52	-120.97	-108.01	2263.16	2254.51	-57.11	171.58	-143.32	290.46	17.09	17.68	PASS
2413.00†	2399.13	-133.39	-119.10	2358.60	2347.32	-69.90	189.77	-142.02	319.56	17.95	18.49	PASS
2513.00†	2497.73	-145.81	-130.19	2454.04	2440.13	-82.69	207.97	-140.93	348.79	18.87	19.17	PASS
2613.00†	2596.34	-158.23	-141.28	2549.48	2532.94	-95.47	226.17	-140.01	378.12	19.70	19.87	PASS
2713.00†	2694.94	-170.66	-152.37	2644.92	2625.75	-108.26	244.37	-139.22	407.53	20.60	20.45	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	2793.54	-183.08	-163.46	2740.36	2718.56	-121.05	262.56	-138.54	437.00	21.51	20.97	PASS
2913.00†	2892.15	-195.50	-174.55	2835.79	2811.37	-133.84	280.76	-137.94	466.51	22.44	21.43	PASS
3013.00†	2990.75	-207.92	-185.64	2931.23	2904.18	-146.63	298.96	-137.42	496.07	23.38	21.85	PASS
3113.00†	3089.35	-220.34	-196.73	3026.67	2996.99	-159.42	317.15	-136.95	525.66	24.32	22.23	PASS
3213.00†	3187.96	-232.76	-207.82	3122.11	3089.80	-172.21	335.35	-136.53	555.28	25.27	22.57	PASS
3313.00†	3286.56	-245.18	-218.91	3217.55	3182.62	-185.00	353.55	-136.16	584.93	26.23	22.89	PASS
3413.00†	3385.17	-257.60	-230.00	3312.99	3275.43	-197.79	371.74	-135.82	614.59	27.20	23.17	PASS
3513.00†	3483.77	-270.02	-241.09	3408.43	3368.24	-210.58	389.94	-135.51	644.27	28.17	23.43	PASS
3613.00†	3582.37	-282.44	-252.18	3503.87	3461.05	-223.36	408.14	-135.23	673.97	29.15	23.67	PASS
3713.00†	3680.98	-294.87	-263.27	3599.30	3553.86	-236.15	426.34	-134.98	703.68	30.13	23.89	PASS
3813.00†	3779.58	-307.29	-274.36	3694.74	3646.67	-248.94	444.53	-134.74	733.41	31.11	24.10	PASS
3913.00†	3878.19	-319.71	-285.45	3790.18	3739.48	-261.73	462.73	-134.52	763.14	32.10	24.29	PASS
4013.00†	3976.79	-332.13	-296.54	3885.62	3832.29	-274.52	480.93	-134.32	792.88	33.09	24.46	PASS
4113.00†	4075.39	-344.55	-307.64	3981.06	3925.10	-287.31	499.12	-134.13	822.63	34.09	24.62	PASS
4213.00†	4174.00	-356.97	-318.73	4076.50	4017.91	-300.10	517.32	-133.96	852.39	35.08	24.78	PASS
4313.00†	4272.60	-369.39	-329.82	4171.94	4110.72	-312.89	535.52	-133.80	882.16	36.08	24.92	PASS
4413.00†	4371.21	-381.81	-340.91	4267.38	4203.54	-325.68	553.72	-133.65	911.93	37.09	25.05	PASS
4513.00†	4469.81	-394.23	-352.00	4362.81	4296.35	-338.46	571.91	-133.51	941.70	38.09	25.17	PASS
4613.00†	4568.41	-406.65	-363.09	4458.25	4389.16	-351.25	590.11	-133.37	971.49	39.10	25.29	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



Clearance Report

ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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	0.13	54.87	-2.62	58.78
8.5in Open Hole	1800.00	17798.06	15998.06	1799.45	7591.00	-2.62	58.78	2922.88	395.57

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

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	-1206.88	-1281.14	-133.29	1760.41	25.40	71.53	PASS
113.00†	113.00	0.00	0.00	53.00	113.00	-1206.88	-1281.14	-133.29	1760.08	51.25	34.87	PASS
213.00†	213.00	0.00	0.00	153.00	213.00	-1206.88	-1281.14	-133.29	1760.08	53.60	33.32	PASS
313.00†	313.00	0.00	0.00	253.00	313.00	-1206.88	-1281.14	-133.29	1760.08	55.95	31.90	PASS
413.00†	413.00	0.00	0.00	353.00	413.00	-1206.88	-1281.14	-133.29	1760.08	58.30	30.60	PASS
513.00†	513.00	0.00	0.00	453.00	513.00	-1206.88	-1281.14	-133.29	1760.08	60.66	29.39	PASS
613.00†	613.00	0.00	0.00	553.00	613.00	-1206.88	-1281.14	-133.29	1760.08	63.03	28.27	PASS
713.00†	713.00	0.00	0.00	653.00	713.00	-1206.88	-1281.14	-133.29	1760.08	65.39	27.24	PASS
813.00†	813.00	0.00	0.00	753.00	813.00	-1206.88	-1281.14	-133.29	1760.08	67.77	26.27	PASS
913.00†	913.00	0.00	0.00	853.00	913.00	-1206.88	-1281.14	-133.29	1760.08	70.14	25.37	PASS
1013.00†	1013.00	0.00	0.00	953.00	1013.00	-1206.88	-1281.14	-133.29	1760.08	72.52	24.53	PASS
1100.00	1100.00	0.00	0.00	1040.00	1100.00	-1206.88	-1281.14	-133.29	1760.08	74.59	23.84	PASS
1113.00†	1113.00	-0.02	-0.02	1053.00	1113.00	-1206.88	-1281.14	4.95	1760.05	74.90	23.74	PASS
1213.00†	1212.97	-1.66	-1.48	1152.97	1212.97	-1206.88	-1281.14	4.96	1757.86	77.30	22.97	PASS
1313.00†	1312.80	-5.90	-5.27	1252.80	1312.80	-1206.88	-1281.14	4.99	1752.20	79.75	22.18	PASS
1413.00†	1412.38	-12.74	-11.38	1352.38	1412.38	-1206.88	-1281.14	5.03	1743.06	82.20	21.40	PASS
1513.00†	1511.57	-22.17	-19.79	1451.57	1511.57	-1206.88	-1281.14	5.09	1730.48	84.64	20.63	PASS
1579.26	1577.03	-29.83	-26.64	1517.03	1577.03	-1206.88	-1281.14	5.14	1720.24	86.24	20.12	PASS
1613.00†	1610.30	-34.02	-30.38	1550.30	1610.30	-1206.88	-1281.14	5.15	1714.64	87.05	19.87	PASS
1713.00†	1708.90	-46.45	-41.47	1648.90	1708.90	-1206.88	-1281.14	5.20	1698.06	89.43	19.15	PASS
1813.00†	1807.50	-58.87	-52.56	1747.50	1807.50	-1206.88	-1281.14	5.25	1681.47	91.71	18.47	PASS
1913.00†	1906.11	-71.29	-63.65	1846.11	1906.11	-1206.88	-1281.14	5.31	1664.89	94.10	17.82	PASS
2013.00†	2004.71	-83.71	-74.74	1944.71	2004.71	-1206.88	-1281.14	5.36	1648.31	96.49	17.20	PASS
2113.00†	2103.32	-96.13	-85.83	2043.32	2103.32	-1206.88	-1281.14	5.42	1631.73	98.88	16.61	PASS
2213.00†	2201.92	-108.55	-96.92	2141.92	2201.92	-1206.88	-1281.14	5.47	1615.15	101.28	16.05	PASS
2313.00†	2300.52	-120.97	-108.01	2240.52	2300.52	-1206.88	-1281.14	5.53	1598.57	103.69	15.52	PASS
2413.00†	2399.13	-133.39	-119.10	2339.13	2399.13	-1206.88	-1281.14	5.59	1582.00	106.10	15.00	PASS
2513.00†	2497.73	-145.81	-130.19	2437.73	2497.73	-1206.88	-1281.14	5.65	1565.42	108.52	14.51	PASS
2613.00†	2596.34	-158.23	-141.28	2536.34	2596.34	-1206.88	-1281.14	5.71	1548.85	110.93	14.05	PASS
2713.00†	2694.94	-170.66	-152.37	2634.94	2694.94	-1206.88	-1281.14	5.77	1532.28	113.36	13.60	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	2793.54	-183.08	-163.46	2733.54	2793.54	-1206.88	-1281.14	5.83	1515.71	115.79	13.16	PASS
2913.00†	2892.15	-195.50	-174.55	2832.15	2892.15	-1206.88	-1281.14	5.90	1499.15	118.22	12.75	PASS
3013.00†	2990.75	-207.92	-185.64	2930.75	2990.75	-1206.88	-1281.14	5.96	1482.58	120.66	12.35	PASS
3113.00†	3089.35	-220.34	-196.73	3029.35	3089.35	-1206.88	-1281.14	6.03	1466.02	123.10	11.97	PASS
3213.00†	3187.96	-232.76	-207.82	3127.96	3187.96	-1206.88	-1281.14	6.10	1449.46	125.55	11.61	PASS
3313.00†	3286.56	-245.18	-218.91	3226.56	3286.56	-1206.88	-1281.14	6.17	1432.90	128.00	11.25	PASS
3413.00†	3385.17	-257.60	-230.00	3325.17	3385.17	-1206.88	-1281.14	6.24	1416.34	130.45	10.91	PASS
3513.00†	3483.77	-270.02	-241.09	3423.77	3483.77	-1206.88	-1281.14	6.32	1399.79	132.91	10.58	PASS
3613.00†	3582.37	-282.44	-252.18	3522.37	3582.37	-1206.88	-1281.14	6.39	1383.23	135.37	10.27	PASS
3713.00†	3680.98	-294.87	-263.27	3620.98	3680.98	-1206.88	-1281.14	6.47	1366.68	137.84	9.96	PASS
3813.00†	3779.58	-307.29	-274.36	3719.58	3779.58	-1206.88	-1281.14	6.55	1350.14	140.31	9.67	PASS
3913.00†	3878.19	-319.71	-285.45	3818.19	3878.19	-1206.88	-1281.14	6.63	1333.59	142.79	9.38	PASS
4013.00†	3976.79	-332.13	-296.54	3916.79	3976.79	-1206.88	-1281.14	6.71	1317.05	145.27	9.11	PASS
4113.00†	4075.39	-344.55	-307.64	4015.39	4075.39	-1206.88	-1281.14	6.80	1300.51	147.75	8.84	PASS
4213.00†	4174.00	-356.97	-318.73	4114.00	4174.00	-1206.88	-1281.14	6.89	1283.98	150.24	8.58	PASS
4313.00†	4272.60	-369.39	-329.82	4212.60	4272.60	-1206.88	-1281.14	6.98	1267.44	152.73	8.33	PASS
4413.00†	4371.21	-381.81	-340.91	4311.21	4371.21	-1206.88	-1281.14	7.07	1250.91	155.22	8.09	PASS
4513.00†	4469.81	-394.23	-352.00	4409.81	4469.81	-1206.88	-1281.14	7.17	1234.39	157.72	7.86	PASS
4613.00†	4568.41	-406.65	-363.09	4508.41	4568.41	-1206.88	-1281.14	7.26	1217.86	160.22	7.63	PASS
4713.00†	4667.02	-419.08	-374.18	4607.02	4667.02	-1206.88	-1281.14	7.36	1201.34	162.73	7.41	PASS
4813.00†	4765.62	-431.50	-385.27	4705.62	4765.62	-1206.88	-1281.14	7.47	1184.83	165.24	7.20	PASS
4913.00†	4864.22	-443.92	-396.36	4804.22	4864.22	-1206.88	-1281.14	7.57	1168.31	167.75	6.99	PASS
5013.00†	4962.83	-456.34	-407.45	4902.83	4962.83	-1206.88	-1281.14	7.68	1151.81	170.27	6.79	PASS
5113.00†	5061.43	-468.76	-418.54	5001.43	5061.43	-1206.88	-1281.14	7.79	1135.30	172.79	6.59	PASS
5213.00†	5160.04	-481.18	-429.63	5100.04	5160.04	-1206.88	-1281.14	7.91	1118.80	175.31	6.40	PASS
5313.00†	5258.64	-493.60	-440.72	5198.64	5258.64	-1206.88	-1281.14	8.03	1102.31	177.84	6.22	PASS
5413.00†	5357.24	-506.02	-451.81	5297.24	5357.24	-1206.88	-1281.14	8.15	1085.82	180.37	6.04	PASS
5513.00†	5455.85	-518.44	-462.90	5395.85	5455.85	-1206.88	-1281.14	8.28	1069.33	182.90	5.87	PASS
5613.00†	5554.45	-530.86	-473.99	5494.45	5554.45	-1206.88	-1281.14	8.41	1052.85	185.44	5.70	PASS
5713.00†	5653.06	-543.29	-485.08	5593.06	5653.06	-1206.88	-1281.14	8.54	1036.38	187.98	5.53	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

Facility: SEC.11-T02S-R66W Slot: SLOT#01 EX HSR-VAN SCHAACK #4-11 (623'FNL & 696'FWL, SEC.11, 8374, PR) Well: HSR-VAN SCHAACK #4-11 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5751.66	-555.71	-496.17	5691.66	5751.66	-1206.88	-1281.14	8.68	1019.91	190.52	5.37	PASS
5913.00†	5850.26	-568.13	-507.26	5790.26	5850.26	-1206.88	-1281.14	8.82	1003.44	193.07	5.21	PASS
6013.00†	5948.87	-580.55	-518.35	5888.87	5948.87	-1206.88	-1281.14	8.97	986.99	195.62	5.06	PASS
6113.00†	6047.47	-592.97	-529.44	5987.47	6047.47	-1206.88	-1281.14	9.13	970.54	198.17	4.91	PASS
6213.00†	6146.08	-605.39	-540.53	6086.08	6146.08	-1206.88	-1281.14	9.29	954.09	200.72	4.77	PASS
6313.00†	6244.68	-617.81	-551.62	6184.68	6244.68	-1206.88	-1281.14	9.45	937.66	203.28	4.63	PASS
6413.00†	6343.28	-630.23	-562.71	6283.28	6343.28	-1206.88	-1281.14	9.62	921.23	205.85	4.49	PASS
6513.00†	6441.89	-642.65	-573.80	6381.89	6441.89	-1206.88	-1281.14	9.80	904.81	208.41	4.35	PASS
6613.00†	6540.49	-655.07	-584.89	6480.49	6540.49	-1206.88	-1281.14	9.98	888.40	210.98	4.22	PASS
6713.00†	6639.09	-667.50	-595.98	6579.09	6639.09	-1206.88	-1281.14	10.17	872.00	213.56	4.09	PASS
6813.00†	6737.70	-679.92	-607.07	6677.70	6737.70	-1206.88	-1281.14	10.36	855.61	216.13	3.97	PASS
6913.00†	6836.30	-692.34	-618.16	6776.30	6836.30	-1206.88	-1281.14	10.57	839.22	218.71	3.85	PASS
7013.00†	6934.91	-704.76	-629.25	6874.91	6934.91	-1206.88	-1281.14	10.78	822.85	221.30	3.73	PASS
7056.81	6978.10	-710.20	-634.11	6918.10	6978.10	-1206.88	-1281.14	10.88	815.68	222.43	3.68	PASS
7113.00†	7033.76	-714.44	-640.38	6973.76	7033.76	-1206.88	-1281.14	-24.40	808.13	223.88	3.62	PASS
7208.00†	7127.90	-709.08	-651.01	7065.56	7125.56	-1206.88	-1281.14	-89.56	803.04	226.61	3.55	PASS
7213.00†	7132.82	-708.37	-651.57	7072.82	7132.82	-1206.88	-1281.14	-91.33	803.04	226.82	3.55	PASS
7313.00†	7229.32	-685.08	-662.51	7169.32	7229.32	-1206.88	-1281.14	-110.34	809.31	230.49	3.52	PASS
7363.04†	7275.73	-667.16	-667.80	7215.73	7275.73	-1206.88	-1281.14	-114.66	817.00	239.10	3.42	PASS
7413.00†	7320.33	-645.28	-672.88	7260.33	7320.33	-1206.88	-1281.14	-117.60	827.87	233.43	3.55	PASS
7513.00†	7403.09	-590.18	-682.36	7343.09	7403.09	-1206.88	-1281.14	-120.98	859.57	236.11	3.65	PASS
7613.00†	7475.08	-521.45	-690.66	7415.08	7475.08	-1206.88	-1281.14	-121.95	904.70	238.69	3.80	PASS
7713.00†	7534.11	-441.18	-697.53	7474.11	7534.11	-1206.88	-1281.14	-120.50	962.75	241.07	4.00	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

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

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



Clearance Report

ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	10587.74	-1339.66	-7.21	10672.36	25.40	433.78	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

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

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

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

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

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

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	0.27	104.96	89.85	104.96	1.40	173.60	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.27	104.96	89.85	104.96	1.72	113.78	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.27	104.96	89.85	104.96	2.28	70.40	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.27	104.96	89.85	104.96	2.88	50.06	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.27	104.96	89.85	104.96	3.50	38.66	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.27	104.96	89.85	104.96	4.12	31.44	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.27	104.96	89.85	104.96	4.74	26.47	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.27	104.96	89.85	104.96	5.36	22.85	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.27	104.96	89.85	104.96	5.99	20.09	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.27	104.96	89.85	104.96	6.61	17.93	PASS
1013.00†	1013.00	0.00	0.00	1013.00	1013.00	0.27	104.96	89.85	104.96	7.24	16.18	PASS
1100.00	1100.00	0.00	0.00	1100.00	1100.00	0.27	104.96	89.85	104.96	7.78	14.92	PASS
1113.00†	1113.00	-0.02	-0.02	1113.00	1113.00	0.27	104.96	-131.92	104.98	7.86	14.75	PASS
1213.00†	1212.97	-1.66	-1.48	1212.97	1212.97	0.27	104.96	-132.78	106.46	8.54	13.66	PASS
1313.00†	1312.80	-5.90	-5.27	1312.80	1312.80	0.27	104.96	-134.89	110.41	9.35	12.83	PASS
1413.00†	1412.38	-12.74	-11.38	1411.99	1411.99	0.26	104.98	-137.95	117.08	10.17	12.41	PASS
1513.00†	1511.57	-22.17	-19.79	1507.91	1507.88	-0.76	106.71	-140.92	128.35	11.04	12.46	PASS
1579.26	1577.03	-29.83	-26.64	1570.98	1570.88	-2.33	109.35	-142.55	138.88	11.67	12.70	PASS
1613.00†	1610.30	-34.02	-30.38	1602.94	1602.77	-3.39	111.14	-143.29	145.00	11.95	12.94	PASS
1713.00†	1708.90	-46.45	-41.47	1697.19	1696.66	-7.58	118.21	-144.65	164.80	12.67	13.82	PASS
1813.00†	1807.50	-58.87	-52.56	1790.61	1789.40	-13.28	127.84	-145.03	186.95	13.40	14.73	PASS
1913.00†	1906.11	-71.29	-63.65	1883.00	1880.71	-20.43	139.91	-144.74	211.35	14.11	15.72	PASS
2013.00†	2004.71	-83.71	-74.74	1974.18	1970.35	-28.96	154.30	-144.00	237.99	14.92	16.70	PASS
2113.00†	2103.32	-96.13	-85.83	2064.02	2058.09	-38.77	170.87	-142.98	266.89	15.69	17.76	PASS
2213.00†	2201.92	-108.55	-96.92	2152.35	2143.73	-49.79	189.47	-141.78	298.09	16.50	18.83	PASS
2313.00†	2300.52	-120.97	-108.01	2245.39	2233.46	-62.33	210.63	-140.53	330.86	17.34	19.86	PASS
2413.00†	2399.13	-133.39	-119.10	2339.62	2324.33	-75.04	232.09	-139.49	363.78	18.23	20.72	PASS
2513.00†	2497.73	-145.81	-130.19	2433.86	2415.20	-87.76	253.56	-138.61	396.80	19.05	21.60	PASS
2613.00†	2596.34	-158.23	-141.28	2528.09	2506.07	-100.48	275.03	-137.88	429.88	19.93	22.33	PASS
2713.00†	2694.94	-170.66	-152.37	2622.33	2596.95	-113.20	296.49	-137.24	463.02	20.83	22.97	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	2793.54	-183.08	-163.46	2716.56	2687.82	-125.91	317.96	-136.69	496.20	21.75	23.55	PASS
2913.00†	2892.15	-195.50	-174.55	2810.80	2778.69	-138.63	339.43	-136.21	529.42	22.67	24.07	PASS
3013.00†	2990.75	-207.92	-185.64	2905.03	2869.56	-151.35	360.89	-135.79	562.66	23.61	24.54	PASS
3113.00†	3089.35	-220.34	-196.73	2999.27	2960.43	-164.07	382.36	-135.41	595.93	24.56	24.96	PASS
3213.00†	3187.96	-232.76	-207.82	3093.50	3051.30	-176.78	403.83	-135.08	629.22	25.51	25.34	PASS
3313.00†	3286.56	-245.18	-218.91	3187.74	3142.18	-189.50	425.29	-134.77	662.53	26.48	25.68	PASS
3413.00†	3385.17	-257.60	-230.00	3281.97	3233.05	-202.22	446.76	-134.50	695.85	27.44	26.00	PASS
3513.00†	3483.77	-270.02	-241.09	3376.21	3323.92	-214.94	468.22	-134.25	729.19	28.42	26.29	PASS
3613.00†	3582.37	-282.44	-252.18	3470.44	3414.79	-227.65	489.69	-134.03	762.54	29.40	26.55	PASS
3713.00†	3680.98	-294.87	-263.27	3564.67	3505.66	-240.37	511.16	-133.82	795.89	30.38	26.80	PASS
3813.00†	3779.58	-307.29	-274.36	3658.91	3596.53	-253.09	532.62	-133.63	829.26	31.37	27.02	PASS
3913.00†	3878.19	-319.71	-285.45	3753.14	3687.41	-265.81	554.09	-133.45	862.63	32.36	27.23	PASS
4013.00†	3976.79	-332.13	-296.54	3847.38	3778.28	-278.52	575.56	-133.29	896.01	33.36	27.42	PASS
4113.00†	4075.39	-344.55	-307.64	3941.61	3869.15	-291.24	597.02	-133.13	929.40	34.36	27.60	PASS
4213.00†	4174.00	-356.97	-318.73	4035.85	3960.02	-303.96	618.49	-132.99	962.79	35.36	27.77	PASS
4313.00†	4272.60	-369.39	-329.82	4130.08	4050.89	-316.67	639.96	-132.86	996.19	36.36	27.92	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	0.17	63.98	-4.16	71.30
8.5in Open Hole	1800.00	17693.67	15893.67	1798.70	7440.00	-4.16	71.30	2923.60	493.37



Clearance Report

ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	0.33	119.97	89.84	119.97	1.40	198.62	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.33	119.97	89.84	119.97	1.72	130.18	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.33	119.97	89.84	119.97	2.28	80.55	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.33	119.97	89.84	119.97	2.88	57.27	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.33	119.97	89.84	119.97	3.50	44.23	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.33	119.97	89.84	119.97	4.12	35.97	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.33	119.97	89.84	119.97	4.74	30.28	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.33	119.97	89.84	119.97	5.36	26.14	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.33	119.97	89.84	119.97	5.99	22.99	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.33	119.97	89.84	119.97	6.61	20.51	PASS
1013.00†	1013.00	0.00	0.00	1013.00	1013.00	0.33	119.97	89.84	119.97	7.24	18.52	PASS
1100.00	1100.00	0.00	0.00	1100.00	1100.00	0.33	119.97	89.84	119.97	7.78	17.07	PASS
1113.00†	1113.00	-0.02	-0.02	1113.00	1113.00	0.33	119.97	-131.93	119.99	7.86	16.88	PASS
1213.00†	1212.97	-1.66	-1.48	1212.97	1212.97	0.33	119.97	-132.68	121.47	8.54	15.60	PASS
1313.00†	1312.80	-5.90	-5.27	1312.34	1312.34	0.32	119.99	-134.51	125.42	9.34	14.59	PASS
1413.00†	1412.38	-12.74	-11.38	1408.16	1408.13	-0.62	121.78	-136.66	133.78	10.20	14.15	PASS
1513.00†	1511.57	-22.17	-19.79	1503.17	1503.00	-3.00	126.36	-138.62	147.65	11.20	14.13	PASS
1579.26	1577.03	-29.83	-26.64	1565.49	1565.11	-5.36	130.87	-139.73	159.84	11.77	14.50	PASS
1613.00†	1610.30	-34.02	-30.38	1597.01	1596.48	-6.79	133.61	-140.29	166.81	12.08	14.72	PASS
1713.00†	1708.90	-46.45	-41.47	1689.84	1688.64	-11.92	143.45	-141.30	189.21	12.88	15.60	PASS
1813.00†	1807.50	-58.87	-52.56	1781.60	1779.34	-18.35	155.78	-141.58	214.10	13.58	16.64	PASS
1913.00†	1906.11	-71.29	-63.65	1872.13	1868.33	-26.01	170.46	-141.37	241.42	14.36	17.64	PASS
2013.00†	2004.71	-83.71	-74.74	1961.27	1955.42	-34.81	187.34	-140.81	271.12	15.10	18.78	PASS
2113.00†	2103.32	-96.13	-85.83	2048.90	2040.40	-44.69	206.27	-140.04	303.19	15.90	19.91	PASS
2213.00†	2201.92	-108.55	-96.92	2140.87	2129.08	-55.97	227.90	-139.17	337.01	16.70	21.03	PASS
2313.00†	2300.52	-120.97	-108.01	2234.83	2219.64	-67.54	250.08	-138.42	370.98	17.55	21.98	PASS
2413.00†	2399.13	-133.39	-119.10	2328.78	2310.20	-79.12	272.26	-137.80	404.99	18.34	22.93	PASS
2513.00†	2497.73	-145.81	-130.19	2422.74	2400.77	-90.69	294.45	-137.28	439.04	19.19	23.71	PASS
2613.00†	2596.34	-158.23	-141.28	2516.69	2491.33	-102.26	316.63	-136.83	473.12	20.07	24.40	PASS
2713.00†	2694.94	-170.66	-152.37	2610.65	2581.89	-113.83	338.81	-136.44	507.22	20.95	25.02	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	2793.54	-183.08	-163.46	2704.60	2672.45	-125.40	360.99	-136.10	541.33	21.86	25.56	PASS
2913.00†	2892.15	-195.50	-174.55	2798.56	2763.02	-136.97	383.17	-135.81	575.46	22.77	26.05	PASS
3013.00†	2990.75	-207.92	-185.64	2892.52	2853.58	-148.55	405.36	-135.54	609.61	23.69	26.49	PASS
3113.00†	3089.35	-220.34	-196.73	2986.47	2944.14	-160.12	427.54	-135.30	643.76	24.62	26.89	PASS
3213.00†	3187.96	-232.76	-207.82	3080.43	3034.71	-171.69	449.72	-135.09	677.92	25.56	27.25	PASS
3313.00†	3286.56	-245.18	-218.91	3174.38	3125.27	-183.26	471.90	-134.90	712.09	26.51	27.57	PASS
3413.00†	3385.17	-257.60	-230.00	3268.34	3215.83	-194.83	494.09	-134.72	746.27	27.46	27.87	PASS
3513.00†	3483.77	-270.02	-241.09	3362.29	3306.39	-206.40	516.27	-134.56	780.45	28.42	28.14	PASS
3613.00†	3582.37	-282.44	-252.18	3456.25	3396.96	-217.97	538.45	-134.42	814.64	29.38	28.38	PASS
3713.00†	3680.98	-294.87	-263.27	3550.20	3487.52	-229.55	560.63	-134.28	848.83	30.35	28.61	PASS
3813.00†	3779.58	-307.29	-274.36	3644.16	3578.08	-241.12	582.81	-134.16	883.03	31.32	28.82	PASS
3913.00†	3878.19	-319.71	-285.45	3738.11	3668.65	-252.69	605.00	-134.04	917.22	32.30	29.01	PASS
4013.00†	3976.79	-332.13	-296.54	3832.07	3759.21	-264.26	627.18	-133.93	951.43	33.28	29.19	PASS
4113.00†	4075.39	-344.55	-307.64	3926.02	3849.77	-275.83	649.36	-133.84	985.63	34.26	29.35	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	0.20	73.13	-5.93	84.90
8.5in Open Hole	1800.00	18103.54	16303.54	1797.47	7828.00	-5.93	84.90	2923.88	528.41



Clearance Report

ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	7976.19	1323.20	9.42	8085.20	25.40	328.61	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 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	0.35	135.01	89.85	135.01	1.40	223.68	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.35	135.01	89.85	135.01	1.72	146.60	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.35	135.01	89.85	135.01	2.28	90.71	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.35	135.01	89.85	135.01	2.88	64.50	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.35	135.01	89.85	135.01	3.50	49.81	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.35	135.01	89.85	135.01	4.12	40.50	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.35	135.01	89.85	135.01	4.74	34.10	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.35	135.01	89.85	135.01	5.36	29.44	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.35	135.01	89.85	135.01	5.99	25.89	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.35	135.01	89.85	135.01	6.61	23.10	PASS
1013.00†	1013.00	0.00	0.00	1013.00	1013.00	0.35	135.01	89.85	135.01	7.24	20.85	PASS
1100.00	1100.00	0.00	0.00	1100.00	1100.00	0.35	135.01	89.85	135.01	7.78	19.23	PASS
1113.00†	1113.00	-0.02	-0.02	1113.00	1113.00	0.35	135.01	-131.92	135.03	7.86	19.01	PASS
1213.00†	1212.97	-1.66	-1.48	1212.43	1212.43	0.34	135.03	-132.57	136.53	8.53	17.56	PASS
1313.00†	1312.80	-5.90	-5.27	1307.96	1307.93	-0.43	136.89	-133.78	142.35	9.40	16.47	PASS
1413.00†	1412.38	-12.74	-11.38	1402.80	1402.63	-2.40	141.64	-135.18	153.68	10.42	15.89	PASS
1513.00†	1511.57	-22.17	-19.79	1496.54	1496.01	-5.51	149.18	-136.57	170.50	11.42	15.98	PASS
1579.26	1577.03	-29.83	-26.64	1557.85	1556.92	-8.19	155.64	-137.42	184.65	12.01	16.40	PASS
1613.00†	1610.30	-34.02	-30.38	1588.82	1587.62	-9.72	159.35	-137.90	192.62	12.29	16.70	PASS
1713.00†	1708.90	-46.45	-41.47	1679.82	1677.58	-14.98	172.05	-138.83	218.09	13.09	17.68	PASS
1813.00†	1807.50	-58.87	-52.56	1769.52	1765.78	-21.22	187.15	-139.21	246.21	13.87	18.71	PASS
1913.00†	1906.11	-71.29	-63.65	1857.79	1852.03	-28.40	204.49	-139.20	276.88	14.53	19.98	PASS
2013.00†	2004.71	-83.71	-74.74	1944.50	1936.15	-36.43	223.90	-138.93	310.03	15.32	21.17	PASS
2113.00†	2103.32	-96.13	-85.83	2029.52	2017.98	-45.25	245.21	-138.48	345.63	16.11	22.39	PASS
2213.00†	2201.92	-108.55	-96.92	2112.77	2097.40	-54.78	268.24	-137.92	383.61	16.91	23.63	PASS
2313.00†	2300.52	-120.97	-108.01	2200.36	2180.33	-65.57	294.32	-137.27	423.54	17.71	24.87	PASS
2413.00†	2399.13	-133.39	-119.10	2291.85	2266.87	-76.91	321.74	-136.70	463.70	18.53	25.98	PASS
2513.00†	2497.73	-145.81	-130.19	2383.35	2353.42	-88.26	349.16	-136.22	503.90	19.37	26.97	PASS
2613.00†	2596.34	-158.23	-141.28	2474.84	2439.96	-99.60	376.57	-135.81	544.12	20.23	27.83	PASS
2713.00†	2694.94	-170.66	-152.37	2566.33	2526.51	-110.95	403.99	-135.46	584.36	21.11	28.60	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	2793.54	-183.08	-163.46	2657.82	2613.05	-122.29	431.41	-135.15	624.62	22.01	29.29	PASS
2913.00†	2892.15	-195.50	-174.55	2749.31	2699.60	-133.63	458.83	-134.88	664.88	22.92	29.90	PASS
3013.00†	2990.75	-207.92	-185.64	2840.80	2786.15	-144.98	486.25	-134.64	705.17	23.84	30.45	PASS
3113.00†	3089.35	-220.34	-196.73	2932.29	2872.69	-156.32	513.66	-134.42	745.46	24.77	30.95	PASS
3213.00†	3187.96	-232.76	-207.82	3023.78	2959.24	-167.67	541.08	-134.23	785.75	25.71	31.39	PASS
3313.00†	3286.56	-245.18	-218.91	3115.27	3045.78	-179.01	568.50	-134.06	826.06	26.66	31.80	PASS
3413.00†	3385.17	-257.60	-230.00	3206.76	3132.33	-190.36	595.92	-133.90	866.37	27.62	32.17	PASS
3513.00†	3483.77	-270.02	-241.09	3298.25	3218.87	-201.70	623.33	-133.76	906.68	28.58	32.50	PASS
3613.00†	3582.37	-282.44	-252.18	3389.74	3305.42	-213.04	650.75	-133.63	947.00	29.55	32.81	PASS
3713.00†	3680.98	-294.87	-263.27	3481.24	3391.96	-224.39	678.17	-133.51	987.33	30.53	33.08	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	0.21	82.30	-7.08	99.93
8.5in Open Hole	1800.00	18043.25	16243.25	1795.62	7658.00	-7.08	99.93	2924.86	656.73

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 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	0.44	149.96	89.83	149.96	1.40	248.60	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.44	149.96	89.83	149.96	1.72	162.94	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.44	149.96	89.83	149.96	2.28	100.82	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.44	149.96	89.83	149.96	2.88	71.69	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.44	149.96	89.83	149.96	3.50	55.36	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.44	149.96	89.83	149.96	4.12	45.02	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.44	149.96	89.83	149.96	4.74	37.90	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.44	149.96	89.83	149.96	5.36	32.72	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.44	149.96	89.83	149.96	5.99	28.77	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.44	149.96	89.83	149.96	6.61	25.67	PASS
1013.00†	1013.00	0.00	0.00	1013.00	1013.00	0.44	149.96	89.83	149.96	7.24	23.18	PASS
1100.00	1100.00	0.00	0.00	1100.00	1100.00	0.44	149.96	89.83	149.96	7.78	21.37	PASS
1113.00†	1113.00	-0.02	-0.02	1112.39	1112.39	0.43	149.99	-131.93	150.01	7.86	21.14	PASS
1213.00†	1212.97	-1.66	-1.48	1207.56	1207.54	-0.21	151.87	-132.22	153.46	8.60	19.57	PASS
1313.00†	1312.80	-5.90	-5.27	1302.23	1302.06	-1.87	156.71	-132.90	162.39	9.66	18.24	PASS
1413.00†	1412.38	-12.74	-11.38	1395.94	1395.41	-4.50	164.41	-133.84	176.80	10.69	17.80	PASS
1513.00†	1511.57	-22.17	-19.79	1488.27	1487.08	-8.06	174.82	-134.87	196.66	11.62	18.11	PASS
1579.26	1577.03	-29.83	-26.64	1548.50	1546.67	-10.90	183.11	-135.55	212.78	12.23	18.55	PASS
1613.00†	1610.30	-34.02	-30.38	1578.88	1576.65	-12.48	187.75	-135.97	221.75	12.51	18.88	PASS
1713.00†	1708.90	-46.45	-41.47	1668.00	1664.28	-17.73	203.07	-136.87	250.23	13.23	20.08	PASS
1813.00†	1807.50	-58.87	-52.56	1755.64	1749.94	-23.74	220.64	-137.33	281.40	14.01	21.18	PASS
1913.00†	1906.11	-71.29	-63.65	1841.70	1833.44	-30.46	240.30	-137.47	315.17	14.73	22.42	PASS
2013.00†	2004.71	-83.71	-74.74	1926.05	1914.65	-37.84	261.87	-137.40	351.46	15.51	23.70	PASS
2113.00†	2103.32	-96.13	-85.83	2008.60	1993.44	-45.80	285.16	-137.17	390.17	16.28	25.00	PASS
2213.00†	2201.92	-108.55	-96.92	2089.28	2069.74	-54.30	309.98	-136.84	431.26	17.08	26.30	PASS
2313.00†	2300.52	-120.97	-108.01	2168.03	2143.46	-63.25	336.17	-136.44	474.65	17.91	27.55	PASS
2413.00†	2399.13	-133.39	-119.10	2250.70	2220.12	-73.26	365.44	-135.98	520.04	18.64	28.95	PASS
2513.00†	2497.73	-145.81	-130.19	2339.56	2302.41	-84.12	397.19	-135.56	565.76	19.47	30.12	PASS
2613.00†	2596.34	-158.23	-141.28	2428.42	2384.69	-94.98	428.93	-135.19	611.50	20.32	31.15	PASS
2713.00†	2694.94	-170.66	-152.37	2517.28	2466.97	-105.84	460.68	-134.87	657.27	21.19	32.06	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	2793.54	-183.08	-163.46	2606.15	2549.26	-116.70	492.42	-134.60	703.04	22.07	32.87	PASS
2913.00†	2892.15	-195.50	-174.55	2695.01	2631.54	-127.56	524.17	-134.36	748.83	22.98	33.60	PASS
3013.00†	2990.75	-207.92	-185.64	2783.87	2713.82	-138.42	555.91	-134.15	794.62	23.89	34.25	PASS
3113.00†	3089.35	-220.34	-196.73	2872.73	2796.11	-149.27	587.66	-133.96	840.43	24.82	34.83	PASS
3213.00†	3187.96	-232.76	-207.82	2961.59	2878.39	-160.13	619.41	-133.79	886.24	25.76	35.35	PASS
3313.00†	3286.56	-245.18	-218.91	3050.45	2960.68	-170.99	651.15	-133.64	932.05	26.70	35.83	PASS
3413.00†	3385.17	-257.60	-230.00	3139.31	3042.96	-181.85	682.90	-133.50	977.87	27.66	36.26	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

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

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

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

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1793.06	0.27	91.42	-8.13	115.96
8.5in Open Hole	1800.00	18099.99	16299.99	1793.06	7586.00	-8.13	115.96	2925.86	785.00

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

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



Clearance Report

ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	10830.54	1504.89	7.91	10934.73	25.40	444.44	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

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

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

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

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

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

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	5342.72	1324.72	13.93	5504.50	50.38	111.01	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 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	0.46	164.97	89.84	164.98	1.40	273.62	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.46	164.97	89.84	164.98	1.72	179.34	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.46	164.97	89.84	164.98	2.28	110.96	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.46	164.97	89.84	164.98	2.88	78.90	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.46	164.97	89.84	164.98	3.50	60.93	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.46	164.97	89.84	164.98	4.12	49.55	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.46	164.97	89.84	164.98	4.74	41.72	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.46	164.97	89.84	164.98	5.36	36.01	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.46	164.97	89.84	164.98	5.99	31.67	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.46	164.97	89.84	164.98	6.61	28.26	PASS
1013.00†	1013.00	0.00	0.00	1012.33	1012.33	0.45	165.00	89.84	165.00	7.24	25.52	PASS
1100.00	1100.00	0.00	0.00	1094.78	1094.76	-0.03	166.47	90.01	166.55	7.85	23.53	PASS
1113.00†	1113.00	-0.02	-0.02	1107.09	1107.06	-0.16	166.88	-131.71	167.00	7.94	23.29	PASS
1213.00†	1212.97	-1.66	-1.48	1201.53	1201.36	-1.73	171.71	-131.60	173.59	8.90	21.35	PASS
1313.00†	1312.80	-5.90	-5.27	1295.21	1294.69	-4.24	179.43	-131.89	185.59	9.93	20.24	PASS
1413.00†	1412.38	-12.74	-11.38	1387.71	1386.53	-7.63	189.89	-132.45	202.98	10.89	20.04	PASS
1513.00†	1511.57	-22.17	-19.79	1478.61	1476.39	-11.86	202.91	-133.16	225.70	11.83	20.39	PASS
1579.26	1577.03	-29.83	-26.64	1537.78	1534.63	-15.09	212.84	-133.65	243.65	12.44	20.87	PASS
1613.00†	1610.30	-34.02	-30.38	1567.59	1563.88	-16.86	218.28	-134.02	253.53	12.64	21.36	PASS
1713.00†	1708.90	-46.45	-41.47	1654.93	1649.24	-22.57	235.87	-134.82	284.68	13.46	22.42	PASS
1813.00†	1807.50	-58.87	-52.56	1740.68	1732.45	-28.96	255.53	-135.26	318.51	14.19	23.66	PASS
1913.00†	1906.11	-71.29	-63.65	1824.72	1813.38	-35.96	277.10	-135.45	354.91	14.91	24.94	PASS
2013.00†	2004.71	-83.71	-74.74	1906.97	1891.89	-43.52	300.39	-135.46	393.78	15.68	26.26	PASS
2113.00†	2103.32	-96.13	-85.83	1987.35	1967.92	-51.58	325.20	-135.33	435.05	16.46	27.57	PASS
2213.00†	2201.92	-108.55	-96.92	2065.81	2041.39	-60.08	351.37	-135.11	478.63	17.30	28.81	PASS
2313.00†	2300.52	-120.97	-108.01	2142.29	2112.26	-68.97	378.72	-134.84	524.45	17.98	30.32	PASS
2413.00†	2399.13	-133.39	-119.10	2226.74	2189.87	-79.25	410.37	-134.50	571.89	18.78	31.61	PASS
2513.00†	2497.73	-145.81	-130.19	2314.68	2270.67	-89.97	443.40	-134.20	619.42	19.61	32.74	PASS
2613.00†	2596.34	-158.23	-141.28	2402.62	2351.46	-100.70	476.42	-133.95	666.96	20.46	33.73	PASS
2713.00†	2694.94	-170.66	-152.37	2490.56	2432.25	-111.43	509.45	-133.73	714.51	21.33	34.61	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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†	2793.54	-183.08	-163.46	2578.50	2513.05	-122.15	542.48	-133.53	762.06	22.22	35.39	PASS
2913.00†	2892.15	-195.50	-174.55	2666.44	2593.84	-132.88	575.51	-133.36	809.63	23.13	36.08	PASS
3013.00†	2990.75	-207.92	-185.64	2754.38	2674.63	-143.61	608.54	-133.21	857.20	24.05	36.70	PASS
3113.00†	3089.35	-220.34	-196.73	2842.32	2755.43	-154.34	641.56	-133.07	904.77	24.98	37.25	PASS
3213.00†	3187.96	-232.76	-207.82	2930.26	2836.22	-165.06	674.59	-132.95	952.34	25.92	37.75	PASS
3313.00†	3286.56	-245.18	-218.91	3018.20	2917.01	-175.79	707.62	-132.84	999.92	26.86	38.20	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	0.28	100.57	-10.17	132.74
8.5in Open Hole	1800.00	17994.78	16194.78	1789.64	7436.00	-10.17	132.74	2926.57	882.81

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

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



Clearance Report

ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	0.51	179.98	89.84	179.99	1.40	298.64	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.51	179.98	89.84	179.99	1.72	195.73	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.51	179.98	89.84	179.99	2.28	121.11	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.51	179.98	89.84	179.99	2.88	86.12	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.51	179.98	89.84	179.99	3.50	66.50	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.51	179.98	89.84	179.99	4.12	54.08	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.51	179.98	89.84	179.99	4.74	45.53	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.51	179.98	89.84	179.99	5.36	39.30	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.51	179.98	89.84	179.99	5.99	34.56	PASS
913.00†	913.00	0.00	0.00	912.26	912.26	0.50	180.01	89.84	180.01	6.61	30.86	PASS
1013.00†	1013.00	0.00	0.00	1006.53	1006.50	-0.04	181.89	90.01	182.00	7.32	27.79	PASS
1100.00	1100.00	0.00	0.00	1088.36	1088.22	-1.22	185.93	90.38	186.31	8.14	25.29	PASS
1113.00†	1113.00	-0.02	-0.02	1100.56	1100.40	-1.45	186.72	-131.31	187.17	8.26	24.99	PASS
1213.00†	1212.97	-1.66	-1.48	1194.05	1193.53	-3.70	194.46	-130.97	196.92	9.20	23.36	PASS
1313.00†	1312.80	-5.90	-5.27	1286.54	1285.36	-6.76	204.99	-131.03	212.04	10.22	22.42	PASS
1413.00†	1412.38	-12.74	-11.38	1377.61	1375.40	-10.58	218.12	-131.37	232.47	11.13	22.42	PASS
1513.00†	1511.57	-22.17	-19.79	1466.86	1463.17	-15.10	233.66	-131.88	258.13	12.09	22.80	PASS
1579.26	1577.03	-29.83	-26.64	1524.84	1519.90	-18.45	245.16	-132.26	277.97	12.63	23.44	PASS
1613.00†	1610.30	-34.02	-30.38	1554.00	1548.34	-20.25	251.35	-132.60	288.79	12.90	23.80	PASS
1713.00†	1708.90	-46.45	-41.47	1639.37	1631.19	-25.99	271.09	-133.37	322.73	13.65	25.05	PASS
1813.00†	1807.50	-58.87	-52.56	1723.02	1711.74	-32.28	292.72	-133.84	359.30	14.37	26.34	PASS
1913.00†	1906.11	-71.29	-63.65	1804.87	1789.90	-39.07	316.06	-134.10	398.40	15.08	27.67	PASS
2013.00†	2004.71	-83.71	-74.74	1884.85	1865.57	-46.31	340.94	-134.20	439.94	15.85	29.01	PASS
2113.00†	2103.32	-96.13	-85.83	1962.90	1938.69	-53.94	367.16	-134.19	483.82	16.68	30.25	PASS
2213.00†	2201.92	-108.55	-96.92	2038.99	2009.22	-61.91	394.54	-134.08	529.95	17.35	31.80	PASS
2313.00†	2300.52	-120.97	-108.01	2118.66	2082.32	-70.75	424.95	-133.92	578.09	18.11	33.18	PASS
2413.00†	2399.13	-133.39	-119.10	2206.08	2162.39	-80.56	458.66	-133.75	626.61	18.91	34.38	PASS
2513.00†	2497.73	-145.81	-130.19	2293.50	2242.45	-90.36	492.36	-133.60	675.14	19.74	35.43	PASS
2613.00†	2596.34	-158.23	-141.28	2380.93	2322.52	-100.17	526.07	-133.48	723.67	20.59	36.35	PASS
2713.00†	2694.94	-170.66	-152.37	2468.35	2402.59	-109.97	559.77	-133.37	772.20	21.46	37.17	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2793.54	-183.08	-163.46	2555.78	2482.66	-119.78	593.48	-133.27	820.74	22.35	37.90	PASS
2913.00†	2892.15	-195.50	-174.55	2643.20	2562.72	-129.58	627.18	-133.19	869.28	23.25	38.54	PASS
3013.00†	2990.75	-207.92	-185.64	2730.62	2642.79	-139.39	660.89	-133.11	917.81	24.16	39.11	PASS
3113.00†	3089.35	-220.34	-196.73	2818.05	2722.86	-149.19	694.59	-133.04	966.35	25.08	39.62	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

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

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

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

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1785.27	0.31	109.72	-11.63	150.75
8.5in Open Hole	1800.00	18444.07	16644.07	1785.27	7823.00	-11.63	150.75	2926.82	917.86

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



Clearance Report

ACKARD NORTH 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	2427.61	-2628.21	-47.27	3577.92	25.40	145.40	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 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	10621.67	2634.11	13.93	10943.50	25.40	444.80	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 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	6610.70	2624.64	21.66	7112.67	50.08	144.33	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
Facility Surface Uncertainty @1SD		Horizontal	8.200ft
		Vertical	1.000ft
		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	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 2-35-1NBH PWP (REV. A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	56.68	-2641.67	-88.77	2642.58	25.40	107.39	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: HSR-TR RANCH #16-3 AWB Offset Wellpath: HSR-TR RANCH #16-3 AWP				
Slot Surface Uncertainty @1SD		Horizontal	0.100ft	Vertical 1.000ft
Facility Surface Uncertainty @1SD		Horizontal	8.200ft	Vertical 3.000ft

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

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



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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	-1196.76	1363.32	131.28	1814.08	25.40	73.71	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: HSR-VAN SCHAACK #2-11 AWB Offset Wellpath: HSR-VAN SCHAACK #2-11 AWP

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

WELLPATH COMPOSITION - Offset Wellbore: HSR-VAN SCHAACK #2-11 AWB Offset Wellpath: HSR-VAN SCHAACK #2-11 AWP

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

OFFSET WELLPATH REFERENCE - Offset Wellbore: HSR-VAN SCHAACK #2-11 AWB Offset Wellpath: HSR-VAN SCHAACK #2-11 AWP

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



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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH 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	4031.75	2654.44	33.36	4827.12	50.94	96.26	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



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

Operator	PETROSHARE	Slot	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NBH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NBH PWB
Facility	SEC.02-T03S-R66W		

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

Facility: SEC.01-T02S-R66W Slot: SLOT#01 EX CHAMPLIN 117 AMOCO C#4 (1980'FNL & 660'FWL, SEC.01, PR, 8410) Well: CHAMPLIN 117 AMOCO C#4 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	39.00	13.00	2694.92	3934.02	55.59	4768.56	50.92	95.13	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

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

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

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

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

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

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