

PETROSHARE

Location: COLORADO	Slot: SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)	
Field: ADAMS COUNTY (NAD83/ GRID NORTH)	Well: ACKARD NORTH 2-35-1NCH	
Facility: SEC.02-T03S-R66W	Wellbore: ACKARD NORTH 2-35-1NCH PWB	

Plot reference wellpath is ACKARD NORTH 2-35-1NCH PWP (REV-A.0)

True vertical depths are referenced to RIG (13XB) (RKB)

Measured depths are referenced to RIG (13XB) (RKB)

RIG (13XB) (RKB) to Mean Sea Level: 5213 feet

Mean Sea Level to Ground level (At Slot: SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)): 0 feet

Coordinates are in feet referenced to Slot

Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet

* - Wellpath was transformed from a different geodetic datum

North Reference: Grid north

Scale: True distance

Depths are in feet

Created by: cantryat on 2017-10-24

Database: WellArchitectDB

Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.02-T03S-R66W			3211634.960	1207893.832	39°54'05.673"N	104°14'44.357"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)	0.04	30.02	3211664.982	1207893.873	39°54'05.671"N	104°14'43.972"W

RIG (13XB) (RKB) to Ground level (At Slot: SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02))

5213ft

Mean Sea Level to Ground level (At Slot: SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02))

0ft

RIG (13XB) (RKB) to Mean Sea Level

5213ft

Hole and Casing Sections

Name	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start Local N (ft)	Start Local E (ft)	End Local N (ft)	End Local E (ft)	Wellbore
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1791.29	0.00	0.00	-60.74	-84.40	ACKARD NORTH 2-35-1NCH PWB
8.5in Open Hole	1800.00	17864.18	16064.18	1791.29	7690.00	-60.74	-84.40	9569.56	-1124.13	ACKARD NORTH 2-35-1NCH PWB

Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
13.00	17864.18	BHI NavTrak	Custom BHI NavTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		ACKARD NORTH 2-35-1NCH PWB

True Vertical Depth (ft)

Scale 1 inch = 1500'

N

GRID

True North

Magnetic North

Grid North

To correct azimuth from True to Grid subtract 0.49 degrees

To correct azimuth from Magnetic to Grid add 7.84 degrees

End of Tangent (XS) : 11.94° Inc, 7182.54ft MD, 7057.33ft TVD, -591.20ft VS

ACKARD NORTH 2-35-1NCH EP (460'FSL & 866'FWL, SEC.02)

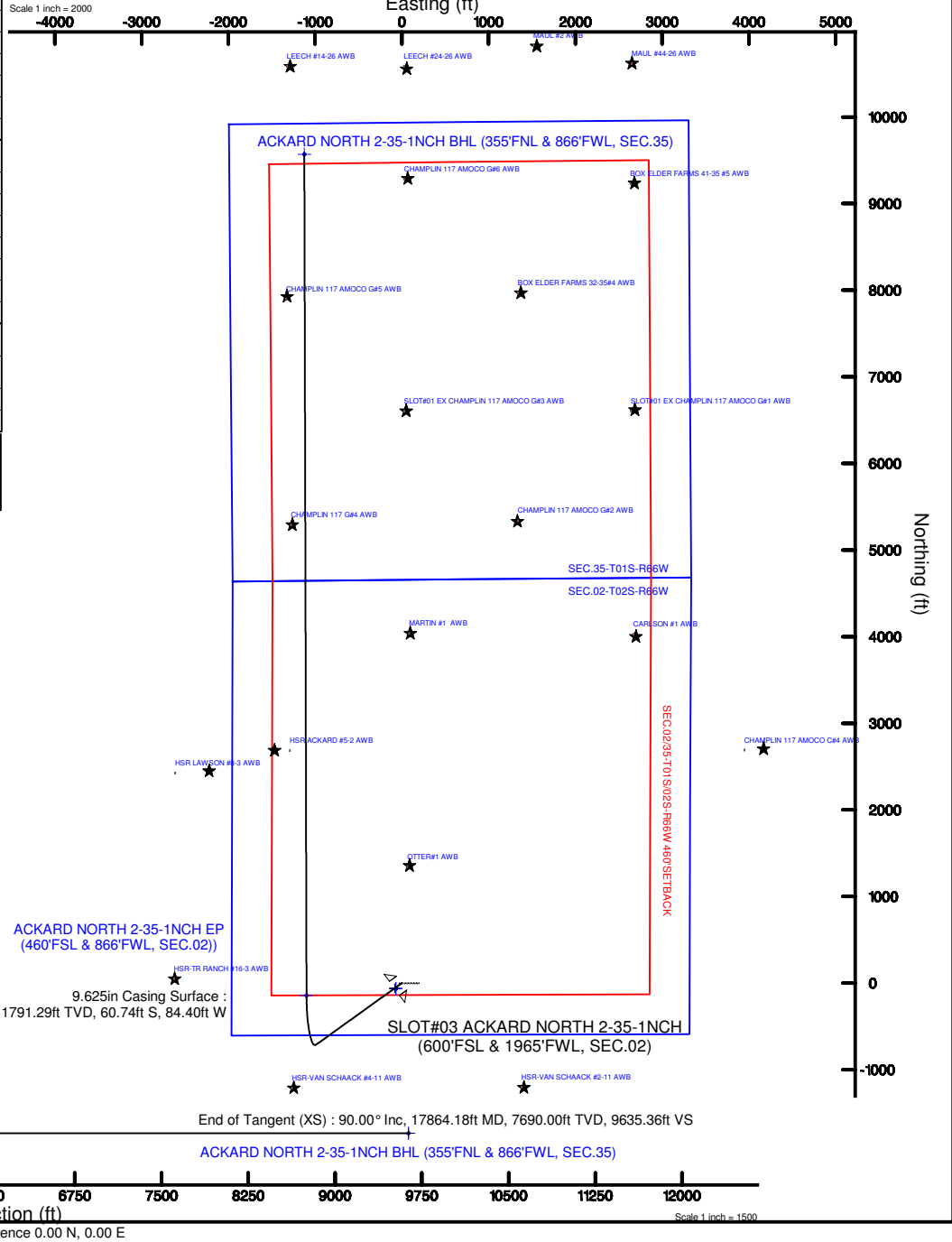
10.00°/100ft

End of 3D Arc (XS) : 90.00° Inc, 8151.71ft MD, 7690.00ft TVD, -13.71ft VS

-750
0
750
1500
2250
3000
3750
4500
5250
6000

Vertical Section

Azimuth 353.30° with reference to Grid North





Planned Wellpath Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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 10:01:05 AM
Convergence at slot	0.49° East	Database/Source file	WellArchitectDB/ACKARD_NORTH_2-35-1NCH_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	0.04	30.02	3211664.98	1207893.87	39°54'05.671"N	104°44'43.972"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#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'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	353.30°



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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH DATA (192 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	234.258	0.00	0.00	0.00	0.00	39°54'05.671"N	104°44'43.972"W	0.00	
13.00	0.000	234.258	13.00	0.00	0.00	0.00	39°54'05.671"N	104°44'43.972"W	0.00	Tie On
113.00†	0.000	234.258	113.00	0.00	0.00	0.00	39°54'05.671"N	104°44'43.972"W	0.00	
213.00†	0.000	234.258	213.00	0.00	0.00	0.00	39°54'05.671"N	104°44'43.972"W	0.00	
313.00†	0.000	234.258	313.00	0.00	0.00	0.00	39°54'05.671"N	104°44'43.972"W	0.00	
413.00†	0.000	234.258	413.00	0.00	0.00	0.00	39°54'05.671"N	104°44'43.972"W	0.00	
500.00†	0.000	234.258	500.00	0.00	0.00	0.00	39°54'05.671"N	104°44'43.972"W	0.00	Fox Hills
513.00†	0.000	234.258	513.00	0.00	0.00	0.00	39°54'05.671"N	104°44'43.972"W	0.00	
613.00†	0.000	234.258	613.00	0.00	0.00	0.00	39°54'05.671"N	104°44'43.972"W	0.00	
713.00†	0.000	234.258	713.00	0.00	0.00	0.00	39°54'05.671"N	104°44'43.972"W	0.00	
813.00†	0.000	234.258	813.00	0.00	0.00	0.00	39°54'05.671"N	104°44'43.972"W	0.00	
913.00†	0.000	234.258	913.00	0.00	0.00	0.00	39°54'05.671"N	104°44'43.972"W	0.00	
1000.00	0.000	234.258	1000.00	0.00	0.00	0.00	39°54'05.671"N	104°44'43.972"W	0.00	End of Tangent
1013.00†	0.260	234.258	1013.00	-0.01	-0.02	-0.02	39°54'05.671"N	104°44'43.972"W	2.00	
1113.00†	2.260	234.258	1112.97	-1.08	-1.30	-1.81	39°54'05.658"N	104°44'43.995"W	2.00	
1213.00†	4.260	234.258	1212.80	-3.84	-4.62	-6.42	39°54'05.626"N	104°44'44.055"W	2.00	
1313.00†	6.260	234.258	1312.38	-8.29	-9.98	-13.86	39°54'05.574"N	104°44'44.151"W	2.00	
1413.00†	8.260	234.258	1411.57	-14.43	-17.36	-24.12	39°54'05.502"N	104°44'44.283"W	2.00	
1513.00†	10.260	234.258	1510.26	-22.24	-26.76	-37.18	39°54'05.410"N	104°44'44.452"W	2.00	
1597.14	11.943	234.258	1592.83	-30.10	-36.22	-50.33	39°54'05.317"N	104°44'44.622"W	2.00	End of Build (XS)
1613.00†	11.943	234.258	1608.34	-31.70	-38.14	-52.99	39°54'05.299"N	104°44'44.656"W	0.00	
1713.00†	11.943	234.258	1706.18	-41.74	-50.23	-69.79	39°54'05.181"N	104°44'44.873"W	0.00	
1813.00†	11.943	234.258	1804.01	-51.79	-62.31	-86.59	39°54'05.063"N	104°44'45.090"W	0.00	
1913.00†	11.943	234.258	1901.85	-61.83	-74.40	-103.38	39°54'04.945"N	104°44'45.307"W	0.00	
2013.00†	11.943	234.258	1999.68	-71.88	-86.49	-120.18	39°54'04.826"N	104°44'45.523"W	0.00	
2113.00†	11.943	234.258	2097.52	-81.92	-98.58	-136.97	39°54'04.708"N	104°44'45.740"W	0.00	
2213.00†	11.943	234.258	2195.35	-91.97	-110.67	-153.77	39°54'04.590"N	104°44'45.957"W	0.00	
2313.00†	11.943	234.258	2293.19	-102.02	-122.75	-170.57	39°54'04.472"N	104°44'46.174"W	0.00	
2413.00†	11.943	234.258	2391.03	-112.06	-134.84	-187.36	39°54'04.354"N	104°44'46.391"W	0.00	
2513.00†	11.943	234.258	2488.86	-122.11	-146.93	-204.16	39°54'04.236"N	104°44'46.608"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH DATA (192 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2613.00†	11.943	234.258	2586.70	-132.15	-159.02	-220.95	39°54'04.118"N	104°44'46.824"W	0.00	
2713.00†	11.943	234.258	2684.53	-142.20	-171.11	-237.75	39°54'04.000"N	104°44'47.041"W	0.00	
2813.00†	11.943	234.258	2782.37	-152.24	-183.19	-254.55	39°54'03.882"N	104°44'47.258"W	0.00	
2913.00†	11.943	234.258	2880.20	-162.29	-195.28	-271.34	39°54'03.764"N	104°44'47.475"W	0.00	
3013.00†	11.943	234.258	2978.04	-172.34	-207.37	-288.14	39°54'03.646"N	104°44'47.692"W	0.00	
3113.00†	11.943	234.258	3075.87	-182.38	-219.46	-304.93	39°54'03.528"N	104°44'47.909"W	0.00	
3213.00†	11.943	234.258	3173.71	-192.43	-231.54	-321.73	39°54'03.410"N	104°44'48.125"W	0.00	
3313.00†	11.943	234.258	3271.54	-202.47	-243.63	-338.53	39°54'03.292"N	104°44'48.342"W	0.00	
3413.00†	11.943	234.258	3369.38	-212.52	-255.72	-355.32	39°54'03.174"N	104°44'48.559"W	0.00	
3513.00†	11.943	234.258	3467.22	-222.56	-267.81	-372.12	39°54'03.056"N	104°44'48.776"W	0.00	
3613.00†	11.943	234.258	3565.05	-232.61	-279.90	-388.91	39°54'02.938"N	104°44'48.993"W	0.00	
3713.00†	11.943	234.258	3662.89	-242.66	-291.98	-405.71	39°54'02.820"N	104°44'49.209"W	0.00	
3813.00†	11.943	234.258	3760.72	-252.70	-304.07	-422.51	39°54'02.702"N	104°44'49.426"W	0.00	
3913.00†	11.943	234.258	3858.56	-262.75	-316.16	-439.30	39°54'02.584"N	104°44'49.643"W	0.00	
4013.00†	11.943	234.258	3956.39	-272.79	-328.25	-456.10	39°54'02.466"N	104°44'49.860"W	0.00	
4113.00†	11.943	234.258	4054.23	-282.84	-340.33	-472.89	39°54'02.348"N	104°44'50.077"W	0.00	
4213.00†	11.943	234.258	4152.06	-292.89	-352.42	-489.69	39°54'02.230"N	104°44'50.294"W	0.00	
4313.00†	11.943	234.258	4249.90	-302.93	-364.51	-506.49	39°54'02.111"N	104°44'50.510"W	0.00	
4413.00†	11.943	234.258	4347.74	-312.98	-376.60	-523.28	39°54'01.993"N	104°44'50.727"W	0.00	
4513.00†	11.943	234.258	4445.57	-323.02	-388.69	-540.08	39°54'01.875"N	104°44'50.944"W	0.00	
4613.00†	11.943	234.258	4543.41	-333.07	-400.77	-556.87	39°54'01.757"N	104°44'51.161"W	0.00	
4713.00†	11.943	234.258	4641.24	-343.11	-412.86	-573.67	39°54'01.639"N	104°44'51.378"W	0.00	
4813.00†	11.943	234.258	4739.08	-353.16	-424.95	-590.47	39°54'01.521"N	104°44'51.594"W	0.00	
4913.00†	11.943	234.258	4836.91	-363.21	-437.04	-607.26	39°54'01.403"N	104°44'51.811"W	0.00	
5013.00†	11.943	234.258	4934.75	-373.25	-449.13	-624.06	39°54'01.285"N	104°44'52.028"W	0.00	
5113.00†	11.943	234.258	5032.58	-383.30	-461.21	-640.85	39°54'01.167"N	104°44'52.245"W	0.00	
5130.80†	11.943	234.258	5050.00	-385.09	-463.36	-643.84	39°54'01.146"N	104°44'52.284"W	0.00	Sussex / Shannon
5213.00†	11.943	234.258	5130.42	-393.34	-473.30	-657.65	39°54'01.049"N	104°44'52.462"W	0.00	
5313.00†	11.943	234.258	5228.25	-403.39	-485.39	-674.45	39°54'00.931"N	104°44'52.679"W	0.00	
5413.00†	11.943	234.258	5326.09	-413.43	-497.48	-691.24	39°54'00.813"N	104°44'52.895"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH DATA (192 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5513.00†	11.943	234.258	5423.93	-423.48	-509.56	-708.04	39°54'00.695"N	104°44'53.112"W	0.00	
5613.00†	11.943	234.258	5521.76	-433.53	-521.65	-724.83	39°54'00.577"N	104°44'53.329"W	0.00	
5713.00†	11.943	234.258	5619.60	-443.57	-533.74	-741.63	39°54'00.459"N	104°44'53.546"W	0.00	
5813.00†	11.943	234.258	5717.43	-453.62	-545.83	-758.43	39°54'00.341"N	104°44'53.763"W	0.00	
5913.00†	11.943	234.258	5815.27	-463.66	-557.92	-775.22	39°54'00.223"N	104°44'53.979"W	0.00	
6013.00†	11.943	234.258	5913.10	-473.71	-570.00	-792.02	39°54'00.105"N	104°44'54.196"W	0.00	
6113.00†	11.943	234.258	6010.94	-483.75	-582.09	-808.81	39°53'59.987"N	104°44'54.413"W	0.00	
6213.00†	11.943	234.258	6108.77	-493.80	-594.18	-825.61	39°53'59.869"N	104°44'54.630"W	0.00	
6313.00†	11.943	234.258	6206.61	-503.85	-606.27	-842.41	39°53'59.751"N	104°44'54.847"W	0.00	
6413.00†	11.943	234.258	6304.44	-513.89	-618.35	-859.20	39°53'59.633"N	104°44'55.064"W	0.00	
6513.00†	11.943	234.258	6402.28	-523.94	-630.44	-876.00	39°53'59.514"N	104°44'55.280"W	0.00	
6613.00†	11.943	234.258	6500.12	-533.98	-642.53	-892.79	39°53'59.396"N	104°44'55.497"W	0.00	
6713.00†	11.943	234.258	6597.95	-544.03	-654.62	-909.59	39°53'59.278"N	104°44'55.714"W	0.00	
6813.00†	11.943	234.258	6695.79	-554.07	-666.71	-926.39	39°53'59.160"N	104°44'55.931"W	0.00	
6913.00†	11.943	234.258	6793.62	-564.12	-678.79	-943.18	39°53'59.042"N	104°44'56.148"W	0.00	
7013.00†	11.943	234.258	6891.46	-574.17	-690.88	-959.98	39°53'58.924"N	104°44'56.364"W	0.00	
7113.00†	11.943	234.258	6989.29	-584.21	-702.97	-976.77	39°53'58.806"N	104°44'56.581"W	0.00	
7182.54	11.943	234.258	7057.33	-591.20	-711.38	-988.45	39°53'58.724"N	104°44'56.732"W	0.00	End of Tangent (XS)
7213.00†	10.492	248.088	7087.21	-593.46	-714.25	-993.59	39°53'58.696"N	104°44'56.798"W	10.00	
7313.00†	11.508	302.203	7185.62	-589.57	-712.33	-1010.52	39°53'58.717"N	104°44'57.015"W	10.00	
7413.00†	18.784	329.473	7282.20	-568.52	-693.10	-1027.18	39°53'58.908"N	104°44'57.227"W	10.00	
7513.00†	27.771	340.787	7374.01	-530.96	-657.14	-1043.06	39°53'59.265"N	104°44'57.427"W	10.00	
7613.00†	37.250	346.777	7458.26	-478.01	-605.54	-1057.69	39°53'59.776"N	104°44'57.609"W	10.00	
7622.78†	38.190	347.220	7466.00	-472.06	-599.71	-1059.04	39°53'59.833"N	104°44'57.625"W	10.00	Niobrara A Chalk
7650.00†	40.813	348.362	7487.00	-454.83	-582.79	-1062.69	39°54'00.001"N	104°44'57.671"W	10.00	Niobrara A Marl
7713.00†	46.921	350.595	7532.40	-411.29	-539.89	-1070.61	39°54'00.426"N	104°44'57.768"W	10.00	
7813.00†	56.683	353.359	7594.17	-332.83	-462.16	-1081.44	39°54'01.195"N	104°44'57.898"W	10.00	
7861.29†	61.417	354.473	7619.00	-291.43	-420.99	-1085.82	39°54'01.602"N	104°44'57.950"W	10.00	Niobrara B Chalk
7913.00†	66.495	355.560	7641.70	-245.01	-374.72	-1089.84	39°54'02.059"N	104°44'57.996"W	10.00	
7913.76†	66.570	355.576	7642.00	-244.31	-374.02	-1089.90	39°54'02.066"N	104°44'57.997"W	10.00	Niobrara B Marl



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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH DATA (192 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8013.00†	76.333	357.453	7673.53	-150.50	-280.23	-1095.57	39°54'02.994"N	104°44'58.059"W	10.00	
8113.00†	86.185	359.193	7688.71	-52.17	-181.56	-1098.44	39°54'03.969"N	104°44'58.086"W	10.00	
8151.71	90.000	359.850	7690.00†	-13.71	-142.87	-1098.76	39°54'04.351"N	104°44'58.086"W	10.00	End of 3D Arc (XS)
8213.00†	90.000	359.850	7690.00	47.18	-81.59	-1098.92	39°54'04.957"N	104°44'58.081"W	0.00	
8313.00†	90.000	359.850	7690.00	146.52	18.41	-1099.18	39°54'05.945"N	104°44'58.073"W	0.00	
8413.00†	90.000	359.850	7690.00	245.87	118.41	-1099.44	39°54'06.933"N	104°44'58.066"W	0.00	
8513.00†	90.000	359.850	7690.00	345.22	218.41	-1099.70	39°54'07.922"N	104°44'58.058"W	0.00	
8613.00†	90.000	359.850	7690.00	444.57	318.41	-1099.96	39°54'08.910"N	104°44'58.051"W	0.00	
8713.00†	90.000	359.850	7690.00	543.91	418.41	-1100.22	39°54'09.898"N	104°44'58.043"W	0.00	
8813.00†	90.000	359.850	7690.00	643.26	518.41	-1100.49	39°54'10.886"N	104°44'58.036"W	0.00	
8913.00†	90.000	359.850	7690.00	742.61	618.41	-1100.75	39°54'11.875"N	104°44'58.028"W	0.00	
9013.00†	90.000	359.850	7690.00	841.96	718.41	-1101.01	39°54'12.863"N	104°44'58.021"W	0.00	
9113.00†	90.000	359.850	7690.00	941.30	818.41	-1101.27	39°54'13.851"N	104°44'58.013"W	0.00	
9213.00†	90.000	359.850	7690.00	1040.65	918.41	-1101.53	39°54'14.839"N	104°44'58.006"W	0.00	
9313.00†	90.000	359.850	7690.00	1140.00	1018.41	-1101.79	39°54'15.828"N	104°44'57.998"W	0.00	
9413.00†	90.000	359.850	7690.00	1239.34	1118.41	-1102.05	39°54'16.816"N	104°44'57.991"W	0.00	
9513.00†	90.000	359.850	7690.00	1338.69	1218.41	-1102.31	39°54'17.804"N	104°44'57.983"W	0.00	
9613.00†	90.000	359.850	7690.00	1438.04	1318.41	-1102.58	39°54'18.792"N	104°44'57.976"W	0.00	
9713.00†	90.000	359.850	7690.00	1537.39	1418.41	-1102.84	39°54'19.780"N	104°44'57.968"W	0.00	
9813.00†	90.000	359.850	7690.00	1636.73	1518.41	-1103.10	39°54'20.769"N	104°44'57.961"W	0.00	
9913.00†	90.000	359.850	7690.00	1736.08	1618.41	-1103.36	39°54'21.757"N	104°44'57.953"W	0.00	
10013.00†	90.000	359.850	7690.00	1835.43	1718.41	-1103.62	39°54'22.745"N	104°44'57.946"W	0.00	
10113.00†	90.000	359.850	7690.00	1934.78	1818.41	-1103.88	39°54'23.733"N	104°44'57.938"W	0.00	
10213.00†	90.000	359.850	7690.00	2034.12	1918.41	-1104.14	39°54'24.722"N	104°44'57.931"W	0.00	
10313.00†	90.000	359.850	7690.00	2133.47	2018.41	-1104.40	39°54'25.710"N	104°44'57.923"W	0.00	
10413.00†	90.000	359.850	7690.00	2232.82	2118.41	-1104.67	39°54'26.698"N	104°44'57.916"W	0.00	
10513.00†	90.000	359.850	7690.00	2332.16	2218.40	-1104.93	39°54'27.686"N	104°44'57.908"W	0.00	
10613.00†	90.000	359.850	7690.00	2431.51	2318.40	-1105.19	39°54'28.675"N	104°44'57.901"W	0.00	
10713.00†	90.000	359.850	7690.00	2530.86	2418.40	-1105.45	39°54'29.663"N	104°44'57.893"W	0.00	
10813.00†	90.000	359.850	7690.00	2630.21	2518.40	-1105.71	39°54'30.651"N	104°44'57.886"W	0.00	



Planned Wellpath Report

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

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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH DATA (192 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10913.00†	90.000	359.850	7690.00	2729.55	2618.40	-1105.97	39°54'31.639"N	104°44'57.878"W	0.00	
11013.00†	90.000	359.850	7690.00	2828.90	2718.40	-1106.23	39°54'32.627"N	104°44'57.871"W	0.00	
11113.00†	90.000	359.850	7690.00	2928.25	2818.40	-1106.49	39°54'33.616"N	104°44'57.863"W	0.00	
11213.00†	90.000	359.850	7690.00	3027.59	2918.40	-1106.76	39°54'34.604"N	104°44'57.856"W	0.00	
11313.00†	90.000	359.850	7690.00	3126.94	3018.40	-1107.02	39°54'35.592"N	104°44'57.848"W	0.00	
11413.00†	90.000	359.850	7690.00	3226.29	3118.40	-1107.28	39°54'36.580"N	104°44'57.841"W	0.00	
11513.00†	90.000	359.850	7690.00	3325.64	3218.40	-1107.54	39°54'37.569"N	104°44'57.833"W	0.00	
11613.00†	90.000	359.850	7690.00	3424.98	3318.40	-1107.80	39°54'38.557"N	104°44'57.826"W	0.00	
11713.00†	90.000	359.850	7690.00	3524.33	3418.40	-1108.06	39°54'39.545"N	104°44'57.818"W	0.00	
11813.00†	90.000	359.850	7690.00	3623.68	3518.40	-1108.32	39°54'40.533"N	104°44'57.811"W	0.00	
11913.00†	90.000	359.850	7690.00	3723.03	3618.40	-1108.58	39°54'41.522"N	104°44'57.803"W	0.00	
12013.00†	90.000	359.850	7690.00	3822.37	3718.40	-1108.85	39°54'42.510"N	104°44'57.796"W	0.00	
12113.00†	90.000	359.850	7690.00	3921.72	3818.40	-1109.11	39°54'43.498"N	104°44'57.788"W	0.00	
12213.00†	90.000	359.850	7690.00	4021.07	3918.40	-1109.37	39°54'44.486"N	104°44'57.781"W	0.00	
12313.00†	90.000	359.850	7690.00	4120.41	4018.40	-1109.63	39°54'45.474"N	104°44'57.773"W	0.00	
12413.00†	90.000	359.850	7690.00	4219.76	4118.40	-1109.89	39°54'46.463"N	104°44'57.766"W	0.00	
12513.00†	90.000	359.850	7690.00	4319.11	4218.40	-1110.15	39°54'47.451"N	104°44'57.758"W	0.00	
12613.00†	90.000	359.850	7690.00	4418.46	4318.40	-1110.41	39°54'48.439"N	104°44'57.750"W	0.00	
12713.00†	90.000	359.850	7690.00	4517.80	4418.40	-1110.67	39°54'49.427"N	104°44'57.743"W	0.00	
12813.00†	90.000	359.850	7690.00	4617.15	4518.40	-1110.94	39°54'50.416"N	104°44'57.735"W	0.00	
12913.00†	90.000	359.850	7690.00	4716.50	4618.40	-1111.20	39°54'51.404"N	104°44'57.728"W	0.00	
13013.00†	90.000	359.850	7690.00	4815.85	4718.40	-1111.46	39°54'52.392"N	104°44'57.720"W	0.00	
13113.00†	90.000	359.850	7690.00	4915.19	4818.40	-1111.72	39°54'53.380"N	104°44'57.713"W	0.00	
13213.00†	90.000	359.850	7690.00	5014.54	4918.40	-1111.98	39°54'54.369"N	104°44'57.705"W	0.00	
13313.00†	90.000	359.850	7690.00	5113.89	5018.40	-1112.24	39°54'55.357"N	104°44'57.698"W	0.00	
13413.00†	90.000	359.850	7690.00	5213.23	5118.39	-1112.50	39°54'56.345"N	104°44'57.690"W	0.00	
13513.00†	90.000	359.850	7690.00	5312.58	5218.39	-1112.76	39°54'57.333"N	104°44'57.683"W	0.00	
13613.00†	90.000	359.850	7690.00	5411.93	5318.39	-1113.03	39°54'58.321"N	104°44'57.675"W	0.00	
13713.00†	90.000	359.850	7690.00	5511.28	5418.39	-1113.29	39°54'59.310"N	104°44'57.668"W	0.00	
13813.00†	90.000	359.850	7690.00	5610.62	5518.39	-1113.55	39°55'00.298"N	104°44'57.660"W	0.00	



Planned Wellpath Report

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

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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH DATA (192 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13913.00†	90.000	359.850	7690.00	5709.97	5618.39	-1113.81	39°55'01.286"N	104°44'57.653"W	0.00	
14013.00†	90.000	359.850	7690.00	5809.32	5718.39	-1114.07	39°55'02.274"N	104°44'57.645"W	0.00	
14113.00†	90.000	359.850	7690.00	5908.66	5818.39	-1114.33	39°55'03.263"N	104°44'57.638"W	0.00	
14213.00†	90.000	359.850	7690.00	6008.01	5918.39	-1114.59	39°55'04.251"N	104°44'57.630"W	0.00	
14313.00†	90.000	359.850	7690.00	6107.36	6018.39	-1114.85	39°55'05.239"N	104°44'57.623"W	0.00	
14413.00†	90.000	359.850	7690.00	6206.71	6118.39	-1115.11	39°55'06.227"N	104°44'57.615"W	0.00	
14513.00†	90.000	359.850	7690.00	6306.05	6218.39	-1115.38	39°55'07.216"N	104°44'57.608"W	0.00	
14613.00†	90.000	359.850	7690.00	6405.40	6318.39	-1115.64	39°55'08.204"N	104°44'57.600"W	0.00	
14713.00†	90.000	359.850	7690.00	6504.75	6418.39	-1115.90	39°55'09.192"N	104°44'57.593"W	0.00	
14813.00†	90.000	359.850	7690.00	6604.10	6518.39	-1116.16	39°55'10.180"N	104°44'57.585"W	0.00	
14913.00†	90.000	359.850	7690.00	6703.44	6618.39	-1116.42	39°55'11.168"N	104°44'57.578"W	0.00	
15013.00†	90.000	359.850	7690.00	6802.79	6718.39	-1116.68	39°55'12.157"N	104°44'57.570"W	0.00	
15113.00†	90.000	359.850	7690.00	6902.14	6818.39	-1116.94	39°55'13.145"N	104°44'57.563"W	0.00	
15213.00†	90.000	359.850	7690.00	7001.48	6918.39	-1117.20	39°55'14.133"N	104°44'57.555"W	0.00	
15313.00†	90.000	359.850	7690.00	7100.83	7018.39	-1117.47	39°55'15.121"N	104°44'57.548"W	0.00	
15413.00†	90.000	359.850	7690.00	7200.18	7118.39	-1117.73	39°55'16.110"N	104°44'57.540"W	0.00	
15513.00†	90.000	359.850	7690.00	7299.53	7218.39	-1117.99	39°55'17.098"N	104°44'57.533"W	0.00	
15613.00†	90.000	359.850	7690.00	7398.87	7318.39	-1118.25	39°55'18.086"N	104°44'57.525"W	0.00	
15713.00†	90.000	359.850	7690.00	7498.22	7418.39	-1118.51	39°55'19.074"N	104°44'57.518"W	0.00	
15813.00†	90.000	359.850	7690.00	7597.57	7518.39	-1118.77	39°55'20.063"N	104°44'57.510"W	0.00	
15913.00†	90.000	359.850	7690.00	7696.92	7618.39	-1119.03	39°55'21.051"N	104°44'57.503"W	0.00	
16013.00†	90.000	359.850	7690.00	7796.26	7718.39	-1119.29	39°55'22.039"N	104°44'57.495"W	0.00	
16113.00†	90.000	359.850	7690.00	7895.61	7818.39	-1119.56	39°55'23.027"N	104°44'57.488"W	0.00	
16213.00†	90.000	359.850	7690.00	7994.96	7918.39	-1119.82	39°55'24.015"N	104°44'57.480"W	0.00	
16313.00†	90.000	359.850	7690.00	8094.30	8018.39	-1120.08	39°55'25.004"N	104°44'57.473"W	0.00	
16413.00†	90.000	359.850	7690.00	8193.65	8118.38	-1120.34	39°55'25.992"N	104°44'57.465"W	0.00	
16513.00†	90.000	359.850	7690.00	8293.00	8218.38	-1120.60	39°55'26.980"N	104°44'57.458"W	0.00	
16613.00†	90.000	359.850	7690.00	8392.35	8318.38	-1120.86	39°55'27.968"N	104°44'57.450"W	0.00	
16713.00†	90.000	359.850	7690.00	8491.69	8418.38	-1121.12	39°55'28.957"N	104°44'57.442"W	0.00	
16813.00†	90.000	359.850	7690.00	8591.04	8518.38	-1121.38	39°55'29.945"N	104°44'57.435"W	0.00	



Planned Wellpath Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

WELLPATH DATA (192 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16913.00†	90.000	359.850	7690.00	8690.39	8618.38	-1121.65	39°55'30.933"N	104°44'57.427"W	0.00	
17013.00†	90.000	359.850	7690.00	8789.74	8718.38	-1121.91	39°55'31.921"N	104°44'57.420"W	0.00	
17113.00†	90.000	359.850	7690.00	8889.08	8818.38	-1122.17	39°55'32.910"N	104°44'57.412"W	0.00	
17213.00†	90.000	359.850	7690.00	8988.43	8918.38	-1122.43	39°55'33.898"N	104°44'57.405"W	0.00	
17313.00†	90.000	359.850	7690.00	9087.78	9018.38	-1122.69	39°55'34.886"N	104°44'57.397"W	0.00	
17413.00†	90.000	359.850	7690.00	9187.12	9118.38	-1122.95	39°55'35.874"N	104°44'57.390"W	0.00	
17513.00†	90.000	359.850	7690.00	9286.47	9218.38	-1123.21	39°55'36.862"N	104°44'57.382"W	0.00	
17613.00†	90.000	359.850	7690.00	9385.82	9318.38	-1123.47	39°55'37.851"N	104°44'57.375"W	0.00	
17713.00†	90.000	359.850	7690.00	9485.17	9418.38	-1123.74	39°55'38.839"N	104°44'57.367"W	0.00	
17813.00†	90.000	359.850	7690.00	9584.51	9518.38	-1124.00	39°55'39.827"N	104°44'57.360"W	0.00	
17864.18†	90.000	359.850	7690.00	9635.36	9569.56	-1124.13	39°55'40.333"N	104°44'57.356"W	0.00	Niobrara C Chalk
17864.18	90.000	359.850	7690.00 ²	9635.36	9569.56	-1124.13	39°55'40.333"N	104°44'57.356"W	0.00	End of Tangent (XS)

HOLE & CASING SECTIONS

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

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1791.29	0.00	0.00	-60.74	-84.40
8.5in Open Hole	1800.00	17864.18	16064.18	1791.29	7690.00	-60.74	-84.40	9569.56	-1124.13



Planned Wellpath Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	-64.46	-70.21	3211594.77	1207829.42	39°54'05.040"N	104°44'44.880"W	polygon
SEC.35-T01S-R66W		0.00	-64.46	-70.21	3211594.77	1207829.42	39°54'05.040"N	104°44'44.880"W	polygon
2) ACKARD NORTH 2-35-1NCH BHL (355'FNL & 866'FWL, SEC.35)	17864.18	7690.00	9569.56	-1124.13	3210540.88	1217463.18	39°55'40.333"N	104°44'57.356"W	point
1) ACKARD NORTH 2-35-1NCH EP (460'FSL & 866'FWL, SEC.02))		7690.00	-142.91	-1098.80	3210566.22	1207750.97	39°54'04.351"N	104°44'58.086"W	point
SEC.02/35-T01S/02S-R66W 460'SETBACK		7855.00	-64.46	-70.21	3211594.77	1207829.42	39°54'05.040"N	104°44'44.880"W	polygon

SURVEY PROGRAM -

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

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	17864.18	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		ACKARD NORTH 2-35- 1NCH PWB



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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 8:04:16 AM
Convergence at slot	0.49° East	Database/Source file	Denver/ACKARD_NORTH_2-35-1NCH_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	0.04	30.02	3211664.98	1207893.87	39°54'05.671"N	104°44'43.972"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#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'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 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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 2-35-1NCH PWB Ref Wellpath: ACKARD NORTH 2-35-1NCH PWP (REV-A.0)

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1791.29	0.00	0.00	-60.74	-84.40
8.5in Open Hole	1800.00	17864.18	16064.18	1791.29	7690.00	-60.74	-84.40	9569.56	-1124.13

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

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	17864.18	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		ACKARD NORTH 2-35-1NCH PWB



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

CALCULATION RANGE & CUTOFF

From: 13.00ft MD	To: 17864.18ft 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	17525.50	3757.04	17525.50	17513.00	0.36	17613.00	FAIL
SEC.35-T01S-R66W	SLOT#04 EX CHAMPLIN 117 G#4 (660'FSL & 660'FWL, SEC.35,8350, PR)	CHAMPLIN 117 G#4	CHAMPLIN 117 G#4 AWB	CHAMPLIN 117 G#4 AWP	13591.97	166.42	13591.97	13603.84	0.44	13603.84	FAIL
SEC.35-T01S-R66W	SLOT#02 EX CHAMPLIN 117 AMOCO G #5 (1980'FNL & 660'FWL, SEC.35,8340,PR)	CHAMPLIN 117 AMOCO G#5	CHAMPLIN 117 AMOCO G#5 AWB	CHAMPLIN 117 AMOCO G#5 AWP	16198.43	214.20	16198.43	16213.00	0.47	16213.00	FAIL
SEC.02-T02S-R66W	SLOT#02 EX HSR ACKARD #5-2 (1980'FNL & 656'FWL, SEC.02,8400, PR)	HSR ACKARD #5-2	HSR ACKARD #5-2 AWB	HSR ACKARD #5-2 AWP	10985.18	183.73	10985.18	11003.24	0.61	11003.24	FAIL
SEC.02-T03S-R66W	SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)	ACKARD NORTH 2-35-1NBH	ACKARD NORTH 2-35-1NBH PWB	ACKARD NORTH 2-35-1NBH PWP (REV. A.0)	13.00	14.95	17864.18	17864.18	0.69	17864.18	FAIL
SEC.02-T03S-R66W	SLOT#02 ACKARD NORTH 2-35-1NAH (600'FSL & 1950'FWL, SEC.02)	ACKARD NORTH 2-35-1NAH	ACKARD NORTH 2-35-1NAH PWB	ACKARD NORTH 2-35-1NAH PWP (REV-A.0)	13.00	15.01	813.00	17864.18	0.73	17864.18	FAIL
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	30.02	17813.00	17864.18	0.78	17864.18	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	29.96	17864.18	17864.18	1.39	17864.18	PASS
SEC.02-T03S-R66W	SLOT#06 ACKARD NORTH 2-35-2NAH (600'FSL & 2010'FWL, SEC.02)	ACKARD NORTH 2-35-2NAH	ACKARD NORTH 2-35-2NAH PWB	ACKARD NORTH 2-35-2NAH PWP (REV. A.0)	13.00	44.95	17864.18	17864.18	1.61	17864.18	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	59.99	17864.18	17864.18	2.02	17864.18	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	17575.50	1149.23	17575.50	17578.60	2.32	17578.60	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	7302.01	556.59	7302.01	7464.25	2.34	7464.25	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	74.97	17864.18	17864.18	2.70	17864.18	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	14900.50	1144.53	14900.50	14900.50	2.76	14900.50	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	89.95	1000.00	17864.18	3.22	17864.18	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	17864.18	1537.55	17864.18	17864.18	3.39	17864.18	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	12331.74	1192.50	12331.74	12339.88	3.53	12339.88	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	104.96	1000.00	17864.18	3.90	17864.18	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	17864.18	1037.80	17864.18	17864.18	4.09	17864.18	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	119.92	1000.00	17864.18	4.44	17864.18	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	9641.67	1166.87	9641.67	9638.13	4.46	9638.13	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	134.93	1000.00	17864.18	4.57	17864.18	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	10726.67	1507.78	10726.67	11029.98	5.08	11029.98	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	149.96	1000.00	17864.18	5.23	17864.18	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	16263.90	2458.12	16263.90	16413.00	5.37	16413.00	PASS



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

CALCULATION RANGE & CUTOFF

From: 13.00ft MD	To: 17864.18ft 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.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	164.92	1000.00	17864.18	5.90	17864.18	PASS
SEC.26-T01S-R66W	SLOT#02 EX MAUL #2 (859'FSL & 1800'FEL, SEC.26,8280, PR)	MAUL #2	MAUL #2 AWB	MAUL #2 AWP	17864.18	2929.30	17864.18	17864.18	5.96	17864.18	PASS
SEC.03-T02S-R66W	SLOT#02 EX HSR-TR RANCH #16-3 (660'FSL & 660'FEL, SEC.03,8362, PR)	HSR-TR RANCH #16-3	HSR-TR RANCH #16-3 AWB	HSR-TR RANCH #16-3 AWP	8356.76	1527.43	8356.76	8864.57	6.20	8864.57	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	179.93	1000.00	17864.18	6.45	17864.18	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	13635.50	2452.76	13635.50	13813.00	6.49	13813.00	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	194.94	813.00	17864.18	6.58	17864.18	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	17864.18	3917.15	17864.18	17864.18	7.78	17864.18	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	14900.50	3755.99	14900.50	15384.41	8.94	15384.41	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	1825.31	1000.00	7461.43	9.98	7461.43	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	12313.00	3779.04	12318.00	12959.33	10.98	12959.33	PASS
SEC.01-T02S-R66W	SLOT#01 EX CHAMPLIN 117 AMOCO C#4 (1980'FNL & 660'FWL, SEC.01, PR, 8410)	CHAMPLIN 117 AMOCO C#4	CHAMPLIN 117 AMOCO C#4 AWB	CHAMPLIN 117 AMOCO C#4 AWP	13.00	4780.93	11013.00	12413.00	16.10	12413.00	PASS



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	9237.27	2633.79	15.91	9605.42	25.40	390.40	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 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	5296.80	-1279.39	-13.58	5449.19	25.40	221.46	PASS
113.00†	113.00	0.00	0.00	60.00	113.00	5296.80	-1279.39	-13.58	5449.12	51.41	107.65	PASS
213.00†	213.00	0.00	0.00	160.00	213.00	5296.80	-1279.39	-13.58	5449.12	53.76	102.88	PASS
313.00†	313.00	0.00	0.00	260.00	313.00	5296.80	-1279.39	-13.58	5449.12	56.11	98.51	PASS
413.00†	413.00	0.00	0.00	360.00	413.00	5296.80	-1279.39	-13.58	5449.12	58.46	94.49	PASS
513.00†	513.00	0.00	0.00	460.00	513.00	5296.80	-1279.39	-13.58	5449.12	60.82	90.77	PASS
613.00†	613.00	0.00	0.00	560.00	613.00	5296.80	-1279.39	-13.58	5449.12	63.19	87.34	PASS
713.00†	713.00	0.00	0.00	660.00	713.00	5296.80	-1279.39	-13.58	5449.12	65.55	84.14	PASS
813.00†	813.00	0.00	0.00	760.00	813.00	5296.80	-1279.39	-13.58	5449.12	67.92	81.17	PASS
913.00†	913.00	0.00	0.00	860.00	913.00	5296.80	-1279.39	-13.58	5449.12	70.30	78.40	PASS
1000.00	1000.00	0.00	0.00	947.00	1000.00	5296.80	-1279.39	-13.58	5449.12	72.37	76.13	PASS
1013.00†	1013.00	-0.02	-0.02	960.00	1013.00	5296.80	-1279.39	112.16	5449.13	72.68	75.80	PASS
1113.00†	1112.97	-1.30	-1.81	1059.97	1112.97	5296.80	-1279.39	112.17	5449.96	75.06	73.38	PASS
1213.00†	1212.80	-4.62	-6.42	1159.80	1212.80	5296.80	-1279.39	112.18	5452.11	77.45	71.12	PASS
1313.00†	1312.38	-9.98	-13.86	1259.38	1312.38	5296.80	-1279.39	112.21	5455.59	79.85	69.01	PASS
1413.00†	1411.57	-17.36	-24.12	1358.57	1411.57	5296.80	-1279.39	112.24	5460.40	82.24	67.04	PASS
1513.00†	1510.26	-26.76	-37.18	1457.26	1510.26	5296.80	-1279.39	112.28	5466.57	84.64	65.20	PASS
1597.14	1592.83	-36.22	-50.33	1539.83	1592.83	5296.80	-1279.39	112.32	5472.82	86.66	63.74	PASS
1613.00†	1608.34	-38.14	-52.99	1555.34	1608.34	5296.80	-1279.39	112.35	5474.09	87.04	63.47	PASS
1713.00†	1706.18	-50.23	-69.79	1653.18	1706.18	5296.80	-1279.39	112.55	5482.14	89.44	61.84	PASS
1813.00†	1804.01	-62.31	-86.59	1751.01	1804.01	5296.80	-1279.39	112.74	5490.25	91.77	60.28	PASS
1913.00†	1901.85	-74.40	-103.38	1848.85	1901.85	5296.80	-1279.39	112.94	5498.44	94.22	58.79	PASS
2013.00†	1999.68	-86.49	-120.18	1946.68	1999.68	5296.80	-1279.39	113.13	5506.69	96.67	57.38	PASS
2113.00†	2097.52	-98.58	-136.97	2044.52	2097.52	5296.80	-1279.39	113.33	5515.00	99.15	56.02	PASS
2213.00†	2195.35	-110.67	-153.77	2142.35	2195.35	5296.80	-1279.39	113.52	5523.38	101.63	54.72	PASS
2313.00†	2293.19	-122.75	-170.57	2240.19	2293.19	5296.80	-1279.39	113.71	5531.82	104.14	53.48	PASS
2413.00†	2391.03	-134.84	-187.36	2338.03	2391.03	5296.80	-1279.39	113.91	5540.33	106.66	52.29	PASS
2513.00†	2488.86	-146.93	-204.16	2435.86	2488.86	5296.80	-1279.39	114.10	5548.90	109.19	51.15	PASS
2613.00†	2586.70	-159.02	-220.95	2533.70	2586.70	5296.80	-1279.39	114.29	5557.54	111.73	50.05	PASS
2713.00†	2684.53	-171.11	-237.75	2631.53	2684.53	5296.80	-1279.39	114.48	5566.24	114.29	49.00	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2782.37	-183.19	-254.55	2729.37	2782.37	5296.80	-1279.39	114.67	5575.00	116.86	47.99	PASS
2913.00†	2880.20	-195.28	-271.34	2827.20	2880.20	5296.80	-1279.39	114.86	5583.83	119.45	47.02	PASS
3013.00†	2978.04	-207.37	-288.14	2925.04	2978.04	5296.80	-1279.39	115.05	5592.71	122.04	46.09	PASS
3113.00†	3075.87	-219.46	-304.93	3022.87	3075.87	5296.80	-1279.39	115.24	5601.66	124.65	45.19	PASS
3213.00†	3173.71	-231.54	-321.73	3120.71	3173.71	5296.80	-1279.39	115.43	5610.68	127.26	44.33	PASS
3313.00†	3271.54	-243.63	-338.53	3218.54	3271.54	5296.80	-1279.39	115.61	5619.75	129.89	43.50	PASS
3413.00†	3369.38	-255.72	-355.32	3316.38	3369.38	5296.80	-1279.39	115.80	5628.89	132.53	42.70	PASS
3513.00†	3467.22	-267.81	-372.12	3414.22	3467.22	5296.80	-1279.39	115.99	5638.08	135.17	41.92	PASS
3613.00†	3565.05	-279.90	-388.91	3512.05	3565.05	5296.80	-1279.39	116.17	5647.34	137.83	41.18	PASS
3713.00†	3662.89	-291.98	-405.71	3609.89	3662.89	5296.80	-1279.39	116.36	5656.66	140.49	40.46	PASS
3813.00†	3760.72	-304.07	-422.51	3707.72	3760.72	5296.80	-1279.39	116.54	5666.04	143.16	39.77	PASS
3913.00†	3858.56	-316.16	-439.30	3805.56	3858.56	5296.80	-1279.39	116.72	5675.48	145.84	39.10	PASS
4013.00†	3956.39	-328.25	-456.10	3903.39	3956.39	5296.80	-1279.39	116.91	5684.98	148.53	38.45	PASS
4113.00†	4054.23	-340.33	-472.89	4001.23	4054.23	5296.80	-1279.39	117.09	5694.53	151.22	37.83	PASS
4213.00†	4152.06	-352.42	-489.69	4099.06	4152.06	5296.80	-1279.39	117.27	5704.15	153.92	37.23	PASS
4313.00†	4249.90	-364.51	-506.49	4196.90	4249.90	5296.80	-1279.39	117.45	5713.83	156.63	36.64	PASS
4413.00†	4347.74	-376.60	-523.28	4294.74	4347.74	5296.80	-1279.39	117.63	5723.56	159.34	36.08	PASS
4513.00†	4445.57	-388.69	-540.08	4392.57	4445.57	5296.80	-1279.39	117.81	5733.35	162.05	35.53	PASS
4613.00†	4543.41	-400.77	-556.87	4490.41	4543.41	5296.80	-1279.39	117.99	5743.20	164.78	35.00	PASS
4713.00†	4641.24	-412.86	-573.67	4588.24	4641.24	5296.80	-1279.39	118.17	5753.11	167.51	34.49	PASS
4813.00†	4739.08	-424.95	-590.47	4686.08	4739.08	5296.80	-1279.39	118.35	5763.07	170.24	33.99	PASS
4913.00†	4836.91	-437.04	-607.26	4783.91	4836.91	5296.80	-1279.39	118.53	5773.10	172.98	33.51	PASS
5013.00†	4934.75	-449.13	-624.06	4881.75	4934.75	5296.80	-1279.39	118.70	5783.18	175.72	33.04	PASS
5113.00†	5032.58	-461.21	-640.85	4979.58	5032.58	5296.80	-1279.39	118.88	5793.31	178.46	32.59	PASS
5213.00†	5130.42	-473.30	-657.65	5077.42	5130.42	5296.80	-1279.39	119.06	5803.50	181.21	32.15	PASS
5313.00†	5228.25	-485.39	-674.45	5175.25	5228.25	5296.80	-1279.39	119.23	5813.75	183.97	31.72	PASS
5413.00†	5326.09	-497.48	-691.24	5273.09	5326.09	5296.80	-1279.39	119.41	5824.05	186.72	31.31	PASS
5513.00†	5423.93	-509.56	-708.04	5370.93	5423.93	5296.80	-1279.39	119.58	5834.41	189.48	30.90	PASS
5613.00†	5521.76	-521.65	-724.83	5468.76	5521.76	5296.80	-1279.39	119.75	5844.82	192.24	30.51	PASS
5713.00†	5619.60	-533.74	-741.63	5566.60	5619.60	5296.80	-1279.39	119.93	5855.29	195.01	30.13	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5717.43	-545.83	-758.43	5664.43	5717.43	5296.80	-1279.39	120.10	5865.81	197.78	29.76	PASS
5913.00†	5815.27	-557.92	-775.22	5762.27	5815.27	5296.80	-1279.39	120.27	5876.38	200.55	29.40	PASS
6013.00†	5913.10	-570.00	-792.02	5860.10	5913.10	5296.80	-1279.39	120.44	5887.01	203.32	29.05	PASS
6113.00†	6010.94	-582.09	-808.81	5957.94	6010.94	5296.80	-1279.39	120.61	5897.69	206.10	28.71	PASS
6213.00†	6108.77	-594.18	-825.61	6055.77	6108.77	5296.80	-1279.39	120.78	5908.43	208.87	28.38	PASS
6313.00†	6206.61	-606.27	-842.41	6153.61	6206.61	5296.80	-1279.39	120.95	5919.22	211.65	28.06	PASS
6413.00†	6304.44	-618.35	-859.20	6251.44	6304.44	5296.80	-1279.39	121.12	5930.06	214.43	27.74	PASS
6513.00†	6402.28	-630.44	-876.00	6349.28	6402.28	5296.80	-1279.39	121.29	5940.95	217.22	27.44	PASS
6613.00†	6500.12	-642.53	-892.79	6447.12	6500.12	5296.80	-1279.39	121.46	5951.90	220.00	27.14	PASS
6713.00†	6597.95	-654.62	-909.59	6544.95	6597.95	5296.80	-1279.39	121.62	5962.90	222.78	26.85	PASS
6813.00†	6695.79	-666.71	-926.39	6642.79	6695.79	5296.80	-1279.39	121.79	5973.94	225.57	26.56	PASS
6913.00†	6793.62	-678.79	-943.18	6740.62	6793.62	5296.80	-1279.39	121.96	5985.04	228.36	26.29	PASS
7013.00†	6891.46	-690.88	-959.98	6838.46	6891.46	5296.80	-1279.39	122.12	5996.19	231.15	26.02	PASS
7113.00†	6989.29	-702.97	-976.77	6936.29	6989.29	5296.80	-1279.39	122.29	6007.40	233.94	25.75	PASS
7182.54	7057.33	-711.38	-988.45	7004.33	7057.33	5296.80	-1279.39	122.40	6015.21	235.88	25.57	PASS
7213.00†	7087.21	-714.25	-993.59	7034.21	7087.21	5296.80	-1279.39	108.89	6017.84	236.73	25.49	PASS
7313.00†	7185.62	-712.33	-1010.52	7132.62	7185.62	5296.80	-1279.39	55.78	6015.14	239.71	25.17	PASS
7413.00†	7282.20	-693.10	-1027.18	7229.20	7282.20	5296.80	-1279.39	29.44	5995.20	243.13	24.73	PASS
7513.00†	7374.01	-657.14	-1043.06	7321.01	7374.01	5296.80	-1279.39	19.00	5958.62	246.41	24.25	PASS
7613.00†	7458.26	-605.54	-1057.69	7405.26	7458.26	5296.80	-1279.39	13.81	5906.51	249.28	23.76	PASS
7713.00†	7532.40	-539.89	-1070.61	7479.40	7532.40	5296.80	-1279.39	10.70	5840.42	251.71	23.27	PASS
7813.00†	7594.17	-462.16	-1081.44	7541.17	7594.17	5296.80	-1279.39	8.46	5762.36	253.65	22.78	PASS
7913.00†	7641.70	-374.72	-1089.84	7588.70	7641.70	5296.80	-1279.39	6.31	5674.68	255.07	22.31	PASS
8013.00†	7673.53	-280.23	-1095.57	7620.53	7673.53	5296.80	-1279.39	2.79	5580.06	255.97	21.86	PASS
8113.00†	7688.71	-181.56	-1098.44	7635.71	7688.71	5296.80	-1279.39	-15.89	5481.34	256.34	21.44	PASS
8151.71	7690.00	-142.87	-1098.76	7637.00	7690.00	5296.80	-1279.39	-90.00	5442.67	256.36	21.29	PASS
8213.00†	7690.00	-81.59	-1098.92	7637.00	7690.00	5296.80	-1279.39	-90.00	5381.41	256.32	21.05	PASS
8313.00†	7690.00	18.41	-1099.18	7637.00	7690.00	5296.80	-1279.39	-90.00	5281.46	256.26	20.66	PASS
8413.00†	7690.00	118.41	-1099.44	7637.00	7690.00	5296.80	-1279.39	-90.00	5181.51	256.19	20.28	PASS
8513.00†	7690.00	218.41	-1099.70	7637.00	7690.00	5296.80	-1279.39	-90.00	5081.57	256.12	19.89	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
8613.00†	7690.00	318.41	-1099.96	7637.00	7690.00	5296.80	-1279.39	-90.00	4981.62	256.05	19.51	PASS
8713.00†	7690.00	418.41	-1100.22	7637.00	7690.00	5296.80	-1279.39	-90.00	4881.68	255.98	19.12	PASS
8813.00†	7690.00	518.41	-1100.49	7637.00	7690.00	5296.80	-1279.39	-90.00	4781.74	255.91	18.73	PASS
8913.00†	7690.00	618.41	-1100.75	7637.00	7690.00	5296.80	-1279.39	-90.00	4681.80	255.84	18.35	PASS
9013.00†	7690.00	718.41	-1101.01	7637.00	7690.00	5296.80	-1279.39	-90.00	4581.86	255.76	17.96	PASS
9113.00†	7690.00	818.41	-1101.27	7637.00	7690.00	5296.80	-1279.39	-90.00	4481.93	255.68	17.58	PASS
9213.00†	7690.00	918.41	-1101.53	7637.00	7690.00	5296.80	-1279.39	-90.00	4382.00	255.60	17.19	PASS
9313.00†	7690.00	1018.41	-1101.79	7637.00	7690.00	5296.80	-1279.39	-90.00	4282.08	255.52	16.80	PASS
9413.00†	7690.00	1118.41	-1102.05	7637.00	7690.00	5296.80	-1279.39	-90.00	4182.15	255.43	16.42	PASS
9513.00†	7690.00	1218.41	-1102.31	7637.00	7690.00	5296.80	-1279.39	-90.00	4082.23	255.34	16.03	PASS
9613.00†	7690.00	1318.41	-1102.58	7637.00	7690.00	5296.80	-1279.39	-90.00	3982.32	255.25	15.64	PASS
9713.00†	7690.00	1418.41	-1102.84	7637.00	7690.00	5296.80	-1279.39	-90.00	3882.41	255.15	15.26	PASS
9813.00†	7690.00	1518.41	-1103.10	7637.00	7690.00	5296.80	-1279.39	-90.00	3782.50	255.04	14.87	PASS
9913.00†	7690.00	1618.41	-1103.36	7637.00	7690.00	5296.80	-1279.39	-90.00	3682.60	254.94	14.48	PASS
10013.00†	7690.00	1718.41	-1103.62	7637.00	7690.00	5296.80	-1279.39	-90.00	3582.71	254.82	14.10	PASS
10113.00†	7690.00	1818.41	-1103.88	7637.00	7690.00	5296.80	-1279.39	-90.00	3482.82	254.70	13.71	PASS
10213.00†	7690.00	1918.41	-1104.14	7637.00	7690.00	5296.80	-1279.39	-90.00	3382.94	254.58	13.32	PASS
10313.00†	7690.00	2018.41	-1104.40	7637.00	7690.00	5296.80	-1279.39	-90.00	3283.06	254.44	12.94	PASS
10413.00†	7690.00	2118.41	-1104.67	7637.00	7690.00	5296.80	-1279.39	-90.00	3183.19	254.30	12.55	PASS
10513.00†	7690.00	2218.40	-1104.93	7637.00	7690.00	5296.80	-1279.39	-90.00	3083.33	254.15	12.16	PASS
10613.00†	7690.00	2318.40	-1105.19	7637.00	7690.00	5296.80	-1279.39	-90.00	2983.49	253.99	11.78	PASS
10713.00†	7690.00	2418.40	-1105.45	7637.00	7690.00	5296.80	-1279.39	-90.00	2883.65	253.83	11.39	PASS
10813.00†	7690.00	2518.40	-1105.71	7637.00	7690.00	5296.80	-1279.39	-90.00	2783.82	253.64	11.00	PASS
10913.00†	7690.00	2618.40	-1105.97	7637.00	7690.00	5296.80	-1279.39	-90.00	2684.00	253.45	10.62	PASS
11013.00†	7690.00	2718.40	-1106.23	7637.00	7690.00	5296.80	-1279.39	-90.00	2584.20	253.24	10.23	PASS
11113.00†	7690.00	2818.40	-1106.49	7637.00	7690.00	5296.80	-1279.39	-90.00	2484.42	253.02	9.84	PASS
11213.00†	7690.00	2918.40	-1106.76	7637.00	7690.00	5296.80	-1279.39	-90.00	2384.65	252.78	9.46	PASS
11313.00†	7690.00	3018.40	-1107.02	7637.00	7690.00	5296.80	-1279.39	-90.00	2284.91	252.52	9.07	PASS
11413.00†	7690.00	3118.40	-1107.28	7637.00	7690.00	5296.80	-1279.39	-90.00	2185.19	252.24	8.68	PASS
11513.00†	7690.00	3218.40	-1107.54	7637.00	7690.00	5296.80	-1279.39	-90.00	2085.49	251.94	8.30	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	7690.00	3318.40	-1107.80	7637.00	7690.00	5296.80	-1279.39	-90.00	1985.83	251.61	7.91	PASS
11713.00†	7690.00	3418.40	-1108.06	7637.00	7690.00	5296.80	-1279.39	-90.00	1886.20	251.25	7.53	PASS
11813.00†	7690.00	3518.40	-1108.32	7637.00	7690.00	5296.80	-1279.39	-90.00	1786.61	250.85	7.14	PASS
11913.00†	7690.00	3618.40	-1108.58	7637.00	7690.00	5296.80	-1279.39	-90.00	1687.07	250.42	6.75	PASS
12013.00†	7690.00	3718.40	-1108.85	7637.00	7690.00	5296.80	-1279.39	-90.00	1587.59	249.95	6.37	PASS
12113.00†	7690.00	3818.40	-1109.11	7637.00	7690.00	5296.80	-1279.39	-90.00	1488.17	249.43	5.98	PASS
12213.00†	7690.00	3918.40	-1109.37	7637.00	7690.00	5296.80	-1279.39	-90.00	1388.85	248.86	5.59	PASS
12313.00†	7690.00	4018.40	-1109.63	7637.00	7690.00	5296.80	-1279.39	-90.00	1289.62	248.24	5.21	PASS
12413.00†	7690.00	4118.40	-1109.89	7637.00	7690.00	5296.80	-1279.39	-90.00	1190.53	247.57	4.82	PASS
12513.00†	7690.00	4218.40	-1110.15	7637.00	7690.00	5296.80	-1279.39	-90.00	1091.60	246.85	4.43	PASS
12613.00†	7690.00	4318.40	-1110.41	7637.00	7690.00	5296.80	-1279.39	-90.00	992.89	246.11	4.04	PASS
12713.00†	7690.00	4418.40	-1110.67	7637.00	7690.00	5296.80	-1279.39	-90.00	894.46	245.41	3.65	PASS
12813.00†	7690.00	4518.40	-1110.94	7637.00	7690.00	5296.80	-1279.39	-90.00	796.42	244.84	3.26	PASS
12913.00†	7690.00	4618.40	-1111.20	7637.00	7690.00	5296.80	-1279.39	-90.00	698.94	244.66	2.86	PASS
13013.00†	7690.00	4718.40	-1111.46	7637.00	7690.00	5296.80	-1279.39	-90.00	602.29	245.37	2.46	PASS
13113.00†	7690.00	4818.40	-1111.72	7637.00	7690.00	5296.80	-1279.39	-90.00	506.94	248.03	2.05	PASS
13213.00†	7690.00	4918.40	-1111.98	7637.00	7690.00	5296.80	-1279.39	-90.00	413.78	254.67	1.63	PASS
13313.00†	7690.00	5018.40	-1112.24	7637.00	7690.00	5296.80	-1279.39	-90.00	324.73	269.01	1.21	PASS
13413.00†	7690.00	5118.39	-1112.50	7637.00	7690.00	5296.80	-1279.39	-90.00	244.30	297.03	0.82	FAIL
13513.00†	7690.00	5218.39	-1112.76	7637.00	7690.00	5296.80	-1279.39	-90.00	184.15	342.73	0.54	FAIL
13591.97†	7690.00	5297.37	-1112.97	7637.30	7690.30	5296.80	-1279.39	-90.10	166.42	374.64	0.44	FAIL
13603.84†	7690.00	5309.23	-1113.00	7637.00	7690.00	5296.80	-1279.39	-90.00	166.85	377.00	0.44	FAIL
13613.00†	7690.00	5318.39	-1113.03	7637.00	7690.00	5296.80	-1279.39	-90.00	167.76	378.24	0.44	FAIL
13713.00†	7690.00	5418.39	-1113.29	7637.00	7690.00	5296.80	-1279.39	-90.00	205.85	366.73	0.56	FAIL
13813.00†	7690.00	5518.39	-1113.55	7637.00	7690.00	5296.80	-1279.39	-90.00	276.78	341.88	0.81	FAIL
13913.00†	7690.00	5618.39	-1113.81	7637.00	7690.00	5296.80	-1279.39	-90.00	361.72	323.14	1.12	PASS
14013.00†	7690.00	5718.39	-1114.07	7637.00	7690.00	5296.80	-1279.39	-90.00	452.85	310.49	1.46	PASS
14113.00†	7690.00	5818.39	-1114.33	7637.00	7690.00	5296.80	-1279.39	-90.00	547.09	301.77	1.81	PASS
14213.00†	7690.00	5918.39	-1114.59	7637.00	7690.00	5296.80	-1279.39	-90.00	643.07	295.54	2.18	PASS
14313.00†	7690.00	6018.39	-1114.85	7637.00	7690.00	5296.80	-1279.39	-90.00	740.11	290.91	2.55	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: CHAMPLIN 117 G#4 AWB Offset Wellpath: CHAMPLIN 117 G#4 AWP												
Facility: SEC.35-T01S-R66W Slot: SLOT#04 EX CHAMPLIN 117 G#4 (660'FSL & 660'FWL, SEC.35,8350, PR) Well: CHAMPLIN 117 G#4 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
14413.00†	7690.00	6118.39	-1115.11	7637.00	7690.00	5296.80	-1279.39	-90.00	837.85	287.37	2.92	PASS
14513.00†	7690.00	6218.39	-1115.38	7637.00	7690.00	5296.80	-1279.39	-90.00	936.07	284.59	3.29	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

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

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	7903.59	-1333.98	-9.58	8015.45	25.40	325.78	PASS
113.00†	113.00	0.00	0.00	53.00	113.00	7903.59	-1333.98	-9.58	8015.38	51.25	158.87	PASS
213.00†	213.00	0.00	0.00	153.00	213.00	7903.59	-1333.98	-9.58	8015.38	53.59	151.81	PASS
313.00†	313.00	0.00	0.00	253.00	313.00	7903.59	-1333.98	-9.58	8015.38	55.95	145.34	PASS
413.00†	413.00	0.00	0.00	353.00	413.00	7903.59	-1333.98	-9.58	8015.38	58.30	139.39	PASS
513.00†	513.00	0.00	0.00	453.00	513.00	7903.59	-1333.98	-9.58	8015.38	60.66	133.90	PASS
613.00†	613.00	0.00	0.00	553.00	613.00	7903.59	-1333.98	-9.58	8015.38	63.02	128.81	PASS
713.00†	713.00	0.00	0.00	653.00	713.00	7903.59	-1333.98	-9.58	8015.38	65.39	124.09	PASS
813.00†	813.00	0.00	0.00	753.00	813.00	7903.59	-1333.98	-9.58	8015.38	67.76	119.70	PASS
913.00†	913.00	0.00	0.00	853.00	913.00	7903.59	-1333.98	-9.58	8015.38	70.13	115.60	PASS
1000.00	1000.00	0.00	0.00	940.00	1000.00	7903.59	-1333.98	-9.58	8015.38	72.20	112.25	PASS
1013.00†	1013.00	-0.02	-0.02	953.00	1013.00	7903.59	-1333.98	116.16	8015.39	72.51	111.77	PASS
1113.00†	1112.97	-1.30	-1.81	1052.97	1112.97	7903.59	-1333.98	116.16	8016.36	74.89	108.18	PASS
1213.00†	1212.80	-4.62	-6.42	1152.80	1212.80	7903.59	-1333.98	116.15	8018.87	77.29	104.83	PASS
1313.00†	1312.38	-9.98	-13.86	1252.38	1312.38	7903.59	-1333.98	116.14	8022.92	79.69	101.70	PASS
1413.00†	1411.57	-17.36	-24.12	1351.57	1411.57	7903.59	-1333.98	116.12	8028.52	82.08	98.77	PASS
1513.00†	1510.26	-26.76	-37.18	1450.26	1510.26	7903.59	-1333.98	116.09	8035.68	84.48	96.02	PASS
1597.14	1592.83	-36.22	-50.33	1532.83	1592.83	7903.59	-1333.98	116.06	8042.91	86.50	93.84	PASS
1613.00†	1608.34	-38.14	-52.99	1548.34	1608.34	7903.59	-1333.98	116.08	8044.38	86.88	93.44	PASS
1713.00†	1706.18	-50.23	-69.79	1646.18	1706.18	7903.59	-1333.98	116.21	8053.66	89.28	91.01	PASS
1813.00†	1804.01	-62.31	-86.59	1744.01	1804.01	7903.59	-1333.98	116.34	8062.98	91.61	88.69	PASS
1913.00†	1901.85	-74.40	-103.38	1841.85	1901.85	7903.59	-1333.98	116.47	8072.34	94.05	86.48	PASS
2013.00†	1999.68	-86.49	-120.18	1939.68	1999.68	7903.59	-1333.98	116.60	8081.75	96.50	84.36	PASS
2113.00†	2097.52	-98.58	-136.97	2037.52	2097.52	7903.59	-1333.98	116.73	8091.20	98.97	82.34	PASS
2213.00†	2195.35	-110.67	-153.77	2135.35	2195.35	7903.59	-1333.98	116.86	8100.69	101.45	80.40	PASS
2313.00†	2293.19	-122.75	-170.57	2233.19	2293.19	7903.59	-1333.98	116.98	8110.22	103.95	78.55	PASS
2413.00†	2391.03	-134.84	-187.36	2331.03	2391.03	7903.59	-1333.98	117.11	8119.80	106.46	76.78	PASS
2513.00†	2488.86	-146.93	-204.16	2428.86	2488.86	7903.59	-1333.98	117.24	8129.41	108.98	75.08	PASS
2613.00†	2586.70	-159.02	-220.95	2526.70	2586.70	7903.59	-1333.98	117.37	8139.07	111.52	73.44	PASS
2713.00†	2684.53	-171.11	-237.75	2624.53	2684.53	7903.59	-1333.98	117.49	8148.77	114.07	71.88	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	2782.37	-183.19	-254.55	2722.37	2782.37	7903.59	-1333.98	117.62	8158.51	116.64	70.37	PASS
2913.00†	2880.20	-195.28	-271.34	2820.20	2880.20	7903.59	-1333.98	117.75	8168.29	119.21	68.92	PASS
3013.00†	2978.04	-207.37	-288.14	2918.04	2978.04	7903.59	-1333.98	117.87	8178.11	121.80	67.53	PASS
3113.00†	3075.87	-219.46	-304.93	3015.87	3075.87	7903.59	-1333.98	118.00	8187.97	124.40	66.19	PASS
3213.00†	3173.71	-231.54	-321.73	3113.71	3173.71	7903.59	-1333.98	118.13	8197.87	127.01	64.90	PASS
3313.00†	3271.54	-243.63	-338.53	3211.54	3271.54	7903.59	-1333.98	118.25	8207.81	129.63	63.66	PASS
3413.00†	3369.38	-255.72	-355.32	3309.38	3369.38	7903.59	-1333.98	118.38	8217.79	132.26	62.47	PASS
3513.00†	3467.22	-267.81	-372.12	3407.22	3467.22	7903.59	-1333.98	118.50	8227.81	134.89	61.31	PASS
3613.00†	3565.05	-279.90	-388.91	3505.05	3565.05	7903.59	-1333.98	118.62	8237.88	137.54	60.20	PASS
3713.00†	3662.89	-291.98	-405.71	3602.89	3662.89	7903.59	-1333.98	118.75	8247.98	140.20	59.12	PASS
3813.00†	3760.72	-304.07	-422.51	3700.72	3760.72	7903.59	-1333.98	118.87	8258.12	142.86	58.09	PASS
3913.00†	3858.56	-316.16	-439.30	3798.56	3858.56	7903.59	-1333.98	119.00	8268.30	145.54	57.09	PASS
4013.00†	3956.39	-328.25	-456.10	3896.39	3956.39	7903.59	-1333.98	119.12	8278.52	148.22	56.12	PASS
4113.00†	4054.23	-340.33	-472.89	3994.23	4054.23	7903.59	-1333.98	119.24	8288.77	150.90	55.18	PASS
4213.00†	4152.06	-352.42	-489.69	4092.06	4152.06	7903.59	-1333.98	119.36	8299.07	153.60	54.28	PASS
4313.00†	4249.90	-364.51	-506.49	4189.90	4249.90	7903.59	-1333.98	119.49	8309.41	156.30	53.40	PASS
4413.00†	4347.74	-376.60	-523.28	4287.74	4347.74	7903.59	-1333.98	119.61	8319.78	159.01	52.55	PASS
4513.00†	4445.57	-388.69	-540.08	4385.57	4445.57	7903.59	-1333.98	119.73	8330.19	161.72	51.73	PASS
4613.00†	4543.41	-400.77	-556.87	4483.41	4543.41	7903.59	-1333.98	119.85	8340.65	164.44	50.94	PASS
4713.00†	4641.24	-412.86	-573.67	4581.24	4641.24	7903.59	-1333.98	119.97	8351.14	167.16	50.17	PASS
4813.00†	4739.08	-424.95	-590.47	4679.08	4739.08	7903.59	-1333.98	120.09	8361.66	169.89	49.42	PASS
4913.00†	4836.91	-437.04	-607.26	4776.91	4836.91	7903.59	-1333.98	120.21	8372.23	172.63	48.69	PASS
5013.00†	4934.75	-449.13	-624.06	4874.75	4934.75	7903.59	-1333.98	120.33	8382.83	175.37	47.99	PASS
5113.00†	5032.58	-461.21	-640.85	4972.58	5032.58	7903.59	-1333.98	120.45	8393.47	178.11	47.31	PASS
5213.00†	5130.42	-473.30	-657.65	5070.42	5130.42	7903.59	-1333.98	120.57	8404.15	180.86	46.65	PASS
5313.00†	5228.25	-485.39	-674.45	5168.25	5228.25	7903.59	-1333.98	120.69	8414.87	183.61	46.00	PASS
5413.00†	5326.09	-497.48	-691.24	5266.09	5326.09	7903.59	-1333.98	120.81	8425.62	186.36	45.38	PASS
5513.00†	5423.93	-509.56	-708.04	5363.93	5423.93	7903.59	-1333.98	120.93	8436.41	189.12	44.77	PASS
5613.00†	5521.76	-521.65	-724.83	5461.76	5521.76	7903.59	-1333.98	121.05	8447.24	191.89	44.18	PASS
5713.00†	5619.60	-533.74	-741.63	5559.60	5619.60	7903.59	-1333.98	121.17	8458.10	194.65	43.61	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

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

Facility: SEC.35-T01S-R66W Slot: SLOT#02 EX CHAMPLIN 117 AMOCO G #5 (1980'FNL & 660'FWL, SEC.35,8340,PR) Well: CHAMPLIN 117 AMOCO G#5 Threshold Value=1.00 † = interpolated/extrapolated station

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5717.43	-545.83	-758.43	5657.43	5717.43	7903.59	-1333.98	121.29	8469.00	197.42	43.05	PASS
5913.00†	5815.27	-557.92	-775.22	5755.27	5815.27	7903.59	-1333.98	121.40	8479.94	200.19	42.51	PASS
6013.00†	5913.10	-570.00	-792.02	5853.10	5913.10	7903.59	-1333.98	121.52	8490.91	202.97	41.98	PASS
6113.00†	6010.94	-582.09	-808.81	5950.94	6010.94	7903.59	-1333.98	121.64	8501.92	205.75	41.46	PASS
6213.00†	6108.77	-594.18	-825.61	6048.77	6108.77	7903.59	-1333.98	121.76	8512.96	208.53	40.96	PASS
6313.00†	6206.61	-606.27	-842.41	6146.61	6206.61	7903.59	-1333.98	121.87	8524.04	211.31	40.47	PASS
6413.00†	6304.44	-618.35	-859.20	6244.44	6304.44	7903.59	-1333.98	121.99	8535.16	214.10	40.00	PASS
6513.00†	6402.28	-630.44	-876.00	6342.28	6402.28	7903.59	-1333.98	122.10	8546.31	216.88	39.53	PASS
6613.00†	6500.12	-642.53	-892.79	6440.12	6500.12	7903.59	-1333.98	122.22	8557.50	219.67	39.08	PASS
6713.00†	6597.95	-654.62	-909.59	6537.95	6597.95	7903.59	-1333.98	122.33	8568.73	222.46	38.64	PASS
6813.00†	6695.79	-666.71	-926.39	6635.79	6695.79	7903.59	-1333.98	122.45	8579.98	225.26	38.21	PASS
6913.00†	6793.62	-678.79	-943.18	6733.62	6793.62	7903.59	-1333.98	122.56	8591.28	228.05	37.79	PASS
7013.00†	6891.46	-690.88	-959.98	6831.46	6891.46	7903.59	-1333.98	122.68	8602.61	230.85	37.38	PASS
7113.00†	6989.29	-702.97	-976.77	6929.29	6989.29	7903.59	-1333.98	122.79	8613.97	233.64	36.98	PASS
7182.54	7057.33	-711.38	-988.45	6997.33	7057.33	7903.59	-1333.98	122.87	8621.89	235.59	36.70	PASS
7213.00†	7087.21	-714.25	-993.59	7027.21	7087.21	7903.59	-1333.98	109.35	8624.56	236.44	36.58	PASS
7313.00†	7185.62	-712.33	-1010.52	7125.62	7185.62	7903.59	-1333.98	56.19	8621.99	239.43	36.11	PASS
7413.00†	7282.20	-693.10	-1027.18	7222.20	7282.20	7903.59	-1333.98	29.82	8602.16	242.87	35.52	PASS
7513.00†	7374.01	-657.14	-1043.06	7314.01	7374.01	7903.59	-1333.98	19.36	8565.67	246.16	34.89	PASS
7613.00†	7458.26	-605.54	-1057.69	7398.26	7458.26	7903.59	-1333.98	14.17	8513.62	249.05	34.28	PASS
7713.00†	7532.40	-539.89	-1070.61	7472.40	7532.40	7903.59	-1333.98	11.08	8447.58	251.49	33.68	PASS
7813.00†	7594.17	-462.16	-1081.44	7534.17	7594.17	7903.59	-1333.98	8.89	8369.56	253.44	33.11	PASS
7913.00†	7641.70	-374.72	-1089.84	7581.70	7641.70	7903.59	-1333.98	6.87	8281.91	254.87	32.58	PASS
8013.00†	7673.53	-280.23	-1095.57	7613.53	7673.53	7903.59	-1333.98	3.71	8187.29	255.77	32.10	PASS
8113.00†	7688.71	-181.56	-1098.44	7628.71	7688.71	7903.59	-1333.98	-12.74	8088.58	256.16	31.66	PASS
8151.71	7690.00	-142.87	-1098.76	7630.00	7690.00	7903.59	-1333.98	-90.00	8049.90	256.17	31.51	PASS
8213.00†	7690.00	-81.59	-1098.92	7630.00	7690.00	7903.59	-1333.98	-90.00	7988.64	256.14	31.27	PASS
8313.00†	7690.00	18.41	-1099.18	7630.00	7690.00	7903.59	-1333.98	-90.00	7888.67	256.09	30.89	PASS
8413.00†	7690.00	118.41	-1099.44	7630.00	7690.00	7903.59	-1333.98	-90.00	7788.71	256.03	30.50	PASS
8513.00†	7690.00	218.41	-1099.70	7630.00	7690.00	7903.59	-1333.98	-90.00	7688.75	255.98	30.12	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	7690.00	318.41	-1099.96	7630.00	7690.00	7903.59	-1333.98	-90.00	7588.79	255.92	29.73	PASS
8713.00†	7690.00	418.41	-1100.22	7630.00	7690.00	7903.59	-1333.98	-90.00	7488.83	255.87	29.35	PASS
8813.00†	7690.00	518.41	-1100.49	7630.00	7690.00	7903.59	-1333.98	-90.00	7388.87	255.81	28.96	PASS
8913.00†	7690.00	618.41	-1100.75	7630.00	7690.00	7903.59	-1333.98	-90.00	7288.91	255.75	28.58	PASS
9013.00†	7690.00	718.41	-1101.01	7630.00	7690.00	7903.59	-1333.98	-90.00	7188.96	255.70	28.19	PASS
9113.00†	7690.00	818.41	-1101.27	7630.00	7690.00	7903.59	-1333.98	-90.00	7089.00	255.64	27.80	PASS
9213.00†	7690.00	918.41	-1101.53	7630.00	7690.00	7903.59	-1333.98	-90.00	6989.05	255.58	27.42	PASS
9313.00†	7690.00	1018.41	-1101.79	7630.00	7690.00	7903.59	-1333.98	-90.00	6889.10	255.52	27.03	PASS
9413.00†	7690.00	1118.41	-1102.05	7630.00	7690.00	7903.59	-1333.98	-90.00	6789.15	255.46	26.65	PASS
9513.00†	7690.00	1218.41	-1102.31	7630.00	7690.00	7903.59	-1333.98	-90.00	6689.20	255.40	26.26	PASS
9613.00†	7690.00	1318.41	-1102.58	7630.00	7690.00	7903.59	-1333.98	-90.00	6589.25	255.34	25.88	PASS
9713.00†	7690.00	1418.41	-1102.84	7630.00	7690.00	7903.59	-1333.98	-90.00	6489.30	255.27	25.49	PASS
9813.00†	7690.00	1518.41	-1103.10	7630.00	7690.00	7903.59	-1333.98	-90.00	6389.36	255.21	25.10	PASS
9913.00†	7690.00	1618.41	-1103.36	7630.00	7690.00	7903.59	-1333.98	-90.00	6289.41	255.15	24.72	PASS
10013.00†	7690.00	1718.41	-1103.62	7630.00	7690.00	7903.59	-1333.98	-90.00	6189.47	255.08	24.33	PASS
10113.00†	7690.00	1818.41	-1103.88	7630.00	7690.00	7903.59	-1333.98	-90.00	6089.53	255.01	23.94	PASS
10213.00†	7690.00	1918.41	-1104.14	7630.00	7690.00	7903.59	-1333.98	-90.00	5989.60	254.94	23.56	PASS
10313.00†	7690.00	2018.41	-1104.40	7630.00	7690.00	7903.59	-1333.98	-90.00	5889.66	254.87	23.17	PASS
10413.00†	7690.00	2118.41	-1104.67	7630.00	7690.00	7903.59	-1333.98	-90.00	5789.73	254.80	22.78	PASS
10513.00†	7690.00	2218.40	-1104.93	7630.00	7690.00	7903.59	-1333.98	-90.00	5689.80	254.72	22.40	PASS
10613.00†	7690.00	2318.40	-1105.19	7630.00	7690.00	7903.59	-1333.98	-90.00	5589.87	254.65	22.01	PASS
10713.00†	7690.00	2418.40	-1105.45	7630.00	7690.00	7903.59	-1333.98	-90.00	5489.95	254.57	21.62	PASS
10813.00†	7690.00	2518.40	-1105.71	7630.00	7690.00	7903.59	-1333.98	-90.00	5390.02	254.49	21.24	PASS
10913.00†	7690.00	2618.40	-1105.97	7630.00	7690.00	7903.59	-1333.98	-90.00	5290.10	254.40	20.85	PASS
11013.00†	7690.00	2718.40	-1106.23	7630.00	7690.00	7903.59	-1333.98	-90.00	5190.19	254.32	20.46	PASS
11113.00†	7690.00	2818.40	-1106.49	7630.00	7690.00	7903.59	-1333.98	-90.00	5090.27	254.23	20.08	PASS
11213.00†	7690.00	2918.40	-1106.76	7630.00	7690.00	7903.59	-1333.98	-90.00	4990.36	254.13	19.69	PASS
11313.00†	7690.00	3018.40	-1107.02	7630.00	7690.00	7903.59	-1333.98	-90.00	4890.46	254.04	19.30	PASS
11413.00†	7690.00	3118.40	-1107.28	7630.00	7690.00	7903.59	-1333.98	-90.00	4790.56	253.94	18.92	PASS
11513.00†	7690.00	3218.40	-1107.54	7630.00	7690.00	7903.59	-1333.98	-90.00	4690.66	253.84	18.53	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: CHAMPLIN 117 AMOCO G#5 AWB Offset Wellpath: CHAMPLIN 117 AMOCO G#5 AWB												
Facility: SEC.35-T01S-R66W Slot: SLOT#02 EX CHAMPLIN 117 AMOCO G #5 (1980'FNL & 660'FWL, SEC.35,8340,PR) Well: CHAMPLIN 117 AMOCO G#5 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11613.00†	7690.00	3318.40	-1107.80	7630.00	7690.00	7903.59	-1333.98	-90.00	4590.77	253.73	18.14	PASS
11713.00†	7690.00	3418.40	-1108.06	7630.00	7690.00	7903.59	-1333.98	-90.00	4490.88	253.62	17.75	PASS
11813.00†	7690.00	3518.40	-1108.32	7630.00	7690.00	7903.59	-1333.98	-90.00	4390.99	253.50	17.37	PASS
11913.00†	7690.00	3618.40	-1108.58	7630.00	7690.00	7903.59	-1333.98	-90.00	4291.11	253.38	16.98	PASS
12013.00†	7690.00	3718.40	-1108.85	7630.00	7690.00	7903.59	-1333.98	-90.00	4191.24	253.25	16.59	PASS
12113.00†	7690.00	3818.40	-1109.11	7630.00	7690.00	7903.59	-1333.98	-90.00	4091.38	253.12	16.21	PASS
12213.00†	7690.00	3918.40	-1109.37	7630.00	7690.00	7903.59	-1333.98	-90.00	3991.52	252.98	15.82	PASS
12313.00†	7690.00	4018.40	-1109.63	7630.00	7690.00	7903.59	-1333.98	-90.00	3891.66	252.84	15.43	PASS
12413.00†	7690.00	4118.40	-1109.89	7630.00	7690.00	7903.59	-1333.98	-90.00	3791.82	252.69	15.05	PASS
12513.00†	7690.00	4218.40	-1110.15	7630.00	7690.00	7903.59	-1333.98	-90.00	3691.98	252.53	14.66	PASS
12613.00†	7690.00	4318.40	-1110.41	7630.00	7690.00	7903.59	-1333.98	-90.00	3592.16	252.36	14.27	PASS
12713.00†	7690.00	4418.40	-1110.67	7630.00	7690.00	7903.59	-1333.98	-90.00	3492.34	252.19	13.88	PASS
12813.00†	7690.00	4518.40	-1110.94	7630.00	7690.00	7903.59	-1333.98	-90.00	3392.53	252.00	13.50	PASS
12913.00†	7690.00	4618.40	-1111.20	7630.00	7690.00	7903.59	-1333.98	-90.00	3292.74	251.81	13.11	PASS
13013.00†	7690.00	4718.40	-1111.46	7630.00	7690.00	7903.59	-1333.98	-90.00	3192.96	251.61	12.72	PASS
13113.00†	7690.00	4818.40	-1111.72	7630.00	7690.00	7903.59	-1333.98	-90.00	3093.19	251.39	12.34	PASS
13213.00†	7690.00	4918.40	-1111.98	7630.00	7690.00	7903.59	-1333.98	-90.00	2993.44	251.17	11.95	PASS
13313.00†	7690.00	5018.40	-1112.24	7630.00	7690.00	7903.59	-1333.98	-90.00	2893.70	250.93	11.56	PASS
13413.00†	7690.00	5118.39	-1112.50	7630.00	7690.00	7903.59	-1333.98	-90.00	2793.99	250.68	11.17	PASS
13513.00†	7690.00	5218.39	-1112.76	7630.00	7690.00	7903.59	-1333.98	-90.00	2694.29	250.41	10.79	PASS
13613.00†	7690.00	5318.39	-1113.03	7630.00	7690.00	7903.59	-1333.98	-90.00	2594.62	250.14	10.40	PASS
13713.00†	7690.00	5418.39	-1113.29	7630.00	7690.00	7903.59	-1333.98	-90.00	2494.98	249.85	10.01	PASS
13813.00†	7690.00	5518.39	-1113.55	7630.00	7690.00	7903.59	-1333.98	-90.00	2395.36	249.54	9.62	PASS
13913.00†	7690.00	5618.39	-1113.81	7630.00	7690.00	7903.59	-1333.98	-90.00	2295.78	249.22	9.24	PASS
14013.00†	7690.00	5718.39	-1114.07	7630.00	7690.00	7903.59	-1333.98	-90.00	2196.24	248.89	8.85	PASS
14113.00†	7690.00	5818.39	-1114.33	7630.00	7690.00	7903.59	-1333.98	-90.00	2096.74	248.54	8.46	PASS
14213.00†	7690.00	5918.39	-1114.59	7630.00	7690.00	7903.59	-1333.98	-90.00	1997.28	248.19	8.07	PASS
14313.00†	7690.00	6018.39	-1114.85	7630.00	7690.00	7903.59	-1333.98	-90.00	1897.89	247.83	7.68	PASS
14413.00†	7690.00	6118.39	-1115.11	7630.00	7690.00	7903.59	-1333.98	-90.00	1798.57	247.47	7.29	PASS
14513.00†	7690.00	6218.39	-1115.38	7630.00	7690.00	7903.59	-1333.98	-90.00	1699.32	247.13	6.89	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	7690.00	6318.39	-1115.64	7630.00	7690.00	7903.59	-1333.98	-90.00	1600.17	246.82	6.50	PASS
14713.00†	7690.00	6418.39	-1115.90	7630.00	7690.00	7903.59	-1333.98	-90.00	1501.13	246.56	6.10	PASS
14813.00†	7690.00	6518.39	-1116.16	7630.00	7690.00	7903.59	-1333.98	-90.00	1402.22	246.40	5.70	PASS
14913.00†	7690.00	6618.39	-1116.42	7630.00	7690.00	7903.59	-1333.98	-90.00	1303.49	246.39	5.30	PASS
15013.00†	7690.00	6718.39	-1116.68	7630.00	7690.00	7903.59	-1333.98	-90.00	1204.96	246.62	4.90	PASS
15113.00†	7690.00	6818.39	-1116.94	7630.00	7690.00	7903.59	-1333.98	-90.00	1106.69	247.22	4.49	PASS
15213.00†	7690.00	6918.39	-1117.20	7630.00	7690.00	7903.59	-1333.98	-90.00	1008.77	248.38	4.07	PASS
15313.00†	7690.00	7018.39	-1117.47	7630.00	7690.00	7903.59	-1333.98	-90.00	911.30	250.40	3.65	PASS
15413.00†	7690.00	7118.39	-1117.73	7630.00	7690.00	7903.59	-1333.98	-90.00	814.44	253.72	3.22	PASS
15513.00†	7690.00	7218.39	-1117.99	7630.00	7690.00	7903.59	-1333.98	-90.00	718.44	258.96	2.78	PASS
15613.00†	7690.00	7318.39	-1118.25	7630.00	7690.00	7903.59	-1333.98	-90.00	623.70	267.06	2.34	PASS
15713.00†	7690.00	7418.39	-1118.51	7630.00	7690.00	7903.59	-1333.98	-90.00	530.89	279.44	1.90	PASS
15813.00†	7690.00	7518.39	-1118.77	7630.00	7690.00	7903.59	-1333.98	-90.00	441.24	298.29	1.48	PASS
15913.00†	7690.00	7618.39	-1119.03	7630.00	7690.00	7903.59	-1333.98	-90.00	357.13	326.95	1.09	PASS
16013.00†	7690.00	7718.39	-1119.29	7630.00	7690.00	7903.59	-1333.98	-90.00	283.53	369.27	0.77	FAIL
16113.00†	7690.00	7818.39	-1119.56	7630.00	7690.00	7903.59	-1333.98	-90.00	230.73	422.20	0.55	FAIL
16198.43†	7690.00	7903.82	-1119.78	7630.58	7690.58	7903.59	-1333.98	-90.15	214.20	454.57	0.47	FAIL
16213.00†	7690.00	7918.39	-1119.82	7630.00	7690.00	7903.59	-1333.98	-90.00	214.67	456.78	0.47	FAIL
16313.00†	7690.00	8018.39	-1120.08	7630.00	7690.00	7903.59	-1333.98	-90.00	242.76	445.13	0.54	FAIL
16413.00†	7690.00	8118.38	-1120.34	7630.00	7690.00	7903.59	-1333.98	-90.00	302.95	412.26	0.73	FAIL
16513.00†	7690.00	8218.38	-1120.60	7630.00	7690.00	7903.59	-1333.98	-90.00	380.30	382.49	0.99	FAIL
16613.00†	7690.00	8318.38	-1120.86	7630.00	7690.00	7903.59	-1333.98	-90.00	466.34	360.23	1.30	PASS
16713.00†	7690.00	8418.38	-1121.12	7630.00	7690.00	7903.59	-1333.98	-90.00	557.06	344.01	1.62	PASS
16813.00†	7690.00	8518.38	-1121.38	7630.00	7690.00	7903.59	-1333.98	-90.00	650.51	332.00	1.96	PASS
16913.00†	7690.00	8618.38	-1121.65	7630.00	7690.00	7903.59	-1333.98	-90.00	745.66	322.89	2.31	PASS
17013.00†	7690.00	8718.38	-1121.91	7630.00	7690.00	7903.59	-1333.98	-90.00	841.94	315.81	2.67	PASS
17113.00†	7690.00	8818.38	-1122.17	7630.00	7690.00	7903.59	-1333.98	-90.00	938.99	310.18	3.03	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	2689.82	-1289.88	-25.62	2983.11	50.10	60.50	PASS
113.00†	113.00	0.00	0.00	104.00	113.00	2689.82	-1289.88	-25.62	2983.11	52.44	57.75	PASS
213.00†	213.00	0.00	0.00	204.00	213.00	2689.82	-1289.88	-25.62	2983.11	54.79	55.24	PASS
313.00†	313.00	0.00	0.00	304.00	313.00	2689.82	-1289.88	-25.62	2983.11	57.14	52.93	PASS
413.00†	413.00	0.00	0.00	404.00	413.00	2689.82	-1289.88	-25.62	2983.11	59.50	50.81	PASS
513.00†	513.00	0.00	0.00	504.00	513.00	2689.82	-1289.88	-25.62	2983.11	61.86	48.84	PASS
613.00†	613.00	0.00	0.00	604.00	613.00	2689.82	-1289.88	-25.62	2983.11	64.22	47.02	PASS
713.00†	713.00	0.00	0.00	704.00	713.00	2689.82	-1289.88	-25.62	2983.11	66.59	45.33	PASS
813.00†	813.00	0.00	0.00	804.00	813.00	2689.82	-1289.88	-25.62	2983.11	68.97	43.75	PASS
913.00†	913.00	0.00	0.00	904.00	913.00	2689.82	-1289.88	-25.62	2983.11	71.34	42.28	PASS
1000.00	1000.00	0.00	0.00	991.00	1000.00	2689.82	-1289.88	-25.62	2983.11	73.41	41.07	PASS
1013.00†	1013.00	-0.02	-0.02	1004.00	1013.00	2689.82	-1289.88	100.12	2983.12	73.72	40.90	PASS
1113.00†	1112.97	-1.30	-1.81	1103.97	1112.97	2689.82	-1289.88	100.16	2983.50	76.11	39.61	PASS
1213.00†	1212.80	-4.62	-6.42	1203.80	1212.80	2689.82	-1289.88	100.24	2984.51	78.49	38.41	PASS
1313.00†	1312.38	-9.98	-13.86	1303.38	1312.38	2689.82	-1289.88	100.38	2986.16	80.88	37.28	PASS
1413.00†	1411.57	-17.36	-24.12	1402.57	1411.57	2689.82	-1289.88	100.58	2988.48	83.27	36.23	PASS
1513.00†	1510.26	-26.76	-37.18	1501.26	1510.26	2689.82	-1289.88	100.82	2991.50	85.67	35.24	PASS
1597.14	1592.83	-36.22	-50.33	1583.83	1592.83	2689.82	-1289.88	101.05	2994.63	87.69	34.46	PASS
1613.00†	1608.34	-38.14	-52.99	1599.34	1608.34	2689.82	-1289.88	101.11	2995.28	88.07	34.31	PASS
1713.00†	1706.18	-50.23	-69.79	1697.18	1706.18	2689.82	-1289.88	101.49	2999.42	90.48	33.44	PASS
1813.00†	1804.01	-62.31	-86.59	1795.01	1804.01	2689.82	-1289.88	101.87	3003.70	92.82	32.60	PASS
1913.00†	1901.85	-74.40	-103.38	1892.85	1901.85	2689.82	-1289.88	102.25	3008.11	95.27	31.80	PASS
2013.00†	1999.68	-86.49	-120.18	1990.68	1999.68	2689.82	-1289.88	102.63	3012.66	97.74	31.04	PASS
2113.00†	2097.52	-98.58	-136.97	2088.52	2097.52	2689.82	-1289.88	103.00	3017.35	100.23	30.31	PASS
2213.00†	2195.35	-110.67	-153.77	2186.35	2195.35	2689.82	-1289.88	103.38	3022.17	102.73	29.62	PASS
2313.00†	2293.19	-122.75	-170.57	2284.19	2293.19	2689.82	-1289.88	103.75	3027.12	105.25	28.95	PASS
2413.00†	2391.03	-134.84	-187.36	2382.03	2391.03	2689.82	-1289.88	104.12	3032.21	107.79	28.31	PASS
2513.00†	2488.86	-146.93	-204.16	2479.86	2488.86	2689.82	-1289.88	104.49	3037.43	110.34	27.70	PASS
2613.00†	2586.70	-159.02	-220.95	2577.70	2586.70	2689.82	-1289.88	104.86	3042.78	112.90	27.11	PASS
2713.00†	2684.53	-171.11	-237.75	2675.53	2684.53	2689.82	-1289.88	105.23	3048.26	115.48	26.55	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	2782.37	-183.19	-254.55	2773.37	2782.37	2689.82	-1289.88	105.60	3053.87	118.07	26.01	PASS
2913.00†	2880.20	-195.28	-271.34	2871.20	2880.20	2689.82	-1289.88	105.96	3059.62	120.68	25.50	PASS
3013.00†	2978.04	-207.37	-288.14	2969.04	2978.04	2689.82	-1289.88	106.33	3065.49	123.29	25.00	PASS
3113.00†	3075.87	-219.46	-304.93	3066.87	3075.87	2689.82	-1289.88	106.69	3071.49	125.92	24.52	PASS
3213.00†	3173.71	-231.54	-321.73	3164.71	3173.71	2689.82	-1289.88	107.05	3077.61	128.56	24.07	PASS
3313.00†	3271.54	-243.63	-338.53	3262.54	3271.54	2689.82	-1289.88	107.41	3083.87	131.21	23.63	PASS
3413.00†	3369.38	-255.72	-355.32	3360.38	3369.38	2689.82	-1289.88	107.77	3090.25	133.86	23.20	PASS
3513.00†	3467.22	-267.81	-372.12	3458.22	3467.22	2689.82	-1289.88	108.13	3096.75	136.53	22.79	PASS
3613.00†	3565.05	-279.90	-388.91	3556.05	3565.05	2689.82	-1289.88	108.49	3103.38	139.21	22.40	PASS
3713.00†	3662.89	-291.98	-405.71	3653.89	3662.89	2689.82	-1289.88	108.84	3110.13	141.89	22.02	PASS
3813.00†	3760.72	-304.07	-422.51	3751.72	3760.72	2689.82	-1289.88	109.19	3117.01	144.59	21.66	PASS
3913.00†	3858.56	-316.16	-439.30	3849.56	3858.56	2689.82	-1289.88	109.54	3124.01	147.29	21.31	PASS
4013.00†	3956.39	-328.25	-456.10	3947.39	3956.39	2689.82	-1289.88	109.89	3131.13	149.99	20.97	PASS
4113.00†	4054.23	-340.33	-472.89	4045.23	4054.23	2689.82	-1289.88	110.24	3138.36	152.70	20.64	PASS
4213.00†	4152.06	-352.42	-489.69	4143.06	4152.06	2689.82	-1289.88	110.59	3145.72	155.42	20.33	PASS
4313.00†	4249.90	-364.51	-506.49	4240.90	4249.90	2689.82	-1289.88	110.94	3153.20	158.15	20.02	PASS
4413.00†	4347.74	-376.60	-523.28	4338.74	4347.74	2689.82	-1289.88	111.28	3160.79	160.88	19.73	PASS
4513.00†	4445.57	-388.69	-540.08	4436.57	4445.57	2689.82	-1289.88	111.62	3168.51	163.61	19.45	PASS
4613.00†	4543.41	-400.77	-556.87	4534.41	4543.41	2689.82	-1289.88	111.96	3176.33	166.35	19.17	PASS
4713.00†	4641.24	-412.86	-573.67	4632.24	4641.24	2689.82	-1289.88	112.30	3184.28	169.09	18.91	PASS
4813.00†	4739.08	-424.95	-590.47	4730.08	4739.08	2689.82	-1289.88	112.64	3192.33	171.84	18.65	PASS
4913.00†	4836.91	-437.04	-607.26	4827.91	4836.91	2689.82	-1289.88	112.97	3200.50	174.59	18.40	PASS
5013.00†	4934.75	-449.13	-624.06	4925.75	4934.75	2689.82	-1289.88	113.31	3208.79	177.35	18.16	PASS
5113.00†	5032.58	-461.21	-640.85	5023.58	5032.58	2689.82	-1289.88	113.64	3217.18	180.10	17.93	PASS
5213.00†	5130.42	-473.30	-657.65	5121.42	5130.42	2689.82	-1289.88	113.97	3225.69	182.86	17.70	PASS
5313.00†	5228.25	-485.39	-674.45	5219.25	5228.25	2689.82	-1289.88	114.30	3234.31	185.63	17.49	PASS
5413.00†	5326.09	-497.48	-691.24	5317.09	5326.09	2689.82	-1289.88	114.63	3243.03	188.39	17.28	PASS
5513.00†	5423.93	-509.56	-708.04	5414.93	5423.93	2689.82	-1289.88	114.95	3251.86	191.16	17.07	PASS
5613.00†	5521.76	-521.65	-724.83	5512.76	5521.76	2689.82	-1289.88	115.28	3260.81	193.93	16.87	PASS
5713.00†	5619.60	-533.74	-741.63	5610.60	5619.60	2689.82	-1289.88	115.60	3269.85	196.70	16.68	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	5717.43	-545.83	-758.43	5708.43	5717.43	2689.82	-1289.88	115.92	3279.01	199.47	16.49	PASS
5913.00†	5815.27	-557.92	-775.22	5806.27	5815.27	2689.82	-1289.88	116.24	3288.26	202.24	16.31	PASS
6013.00†	5913.10	-570.00	-792.02	5904.10	5913.10	2689.82	-1289.88	116.55	3297.63	205.02	16.14	PASS
6113.00†	6010.94	-582.09	-808.81	6001.94	6010.94	2689.82	-1289.88	116.87	3307.09	207.79	15.97	PASS
6213.00†	6108.77	-594.18	-825.61	6099.77	6108.77	2689.82	-1289.88	117.18	3316.66	210.57	15.80	PASS
6313.00†	6206.61	-606.27	-842.41	6197.61	6206.61	2689.82	-1289.88	117.49	3326.33	213.35	15.64	PASS
6413.00†	6304.44	-618.35	-859.20	6295.44	6304.44	2689.82	-1289.88	117.80	3336.09	216.12	15.48	PASS
6513.00†	6402.28	-630.44	-876.00	6393.28	6402.28	2689.82	-1289.88	118.11	3345.96	218.90	15.33	PASS
6613.00†	6500.12	-642.53	-892.79	6491.12	6500.12	2689.82	-1289.88	118.42	3355.93	221.68	15.18	PASS
6713.00†	6597.95	-654.62	-909.59	6588.95	6597.95	2689.82	-1289.88	118.72	3365.99	224.46	15.04	PASS
6813.00†	6695.79	-666.71	-926.39	6686.79	6695.79	2689.82	-1289.88	119.03	3376.15	227.24	14.90	PASS
6913.00†	6793.62	-678.79	-943.18	6784.62	6793.62	2689.82	-1289.88	119.33	3386.41	230.02	14.76	PASS
7013.00†	6891.46	-690.88	-959.98	6882.46	6891.46	2689.82	-1289.88	119.63	3396.76	232.79	14.63	PASS
7113.00†	6989.29	-702.97	-976.77	6980.29	6989.29	2689.82	-1289.88	119.92	3407.21	235.57	14.50	PASS
7182.54	7057.33	-711.38	-988.45	7048.33	7057.33	2689.82	-1289.88	120.13	3414.53	237.50	14.42	PASS
7213.00†	7087.21	-714.25	-993.59	7078.21	7087.21	2689.82	-1289.88	106.67	3416.95	238.35	14.38	PASS
7313.00†	7185.62	-712.33	-1010.52	7176.62	7185.62	2689.82	-1289.88	53.66	3413.60	241.30	14.19	PASS
7413.00†	7282.20	-693.10	-1027.18	7273.20	7282.20	2689.82	-1289.88	27.35	3393.10	244.65	13.91	PASS
7513.00†	7374.01	-657.14	-1043.06	7365.01	7374.01	2689.82	-1289.88	16.84	3356.05	247.87	13.58	PASS
7613.00†	7458.26	-605.54	-1057.69	7449.26	7458.26	2689.82	-1289.88	11.49	3303.54	250.69	13.21	PASS
7713.00†	7532.40	-539.89	-1070.61	7523.40	7532.40	2689.82	-1289.88	8.06	3237.14	253.07	12.82	PASS
7813.00†	7594.17	-462.16	-1081.44	7585.17	7594.17	2689.82	-1289.88	5.19	3158.86	254.96	12.42	PASS
7913.00†	7641.70	-374.72	-1089.84	7632.70	7641.70	2689.82	-1289.88	1.77	3071.06	256.32	12.01	PASS
8013.00†	7673.53	-280.23	-1095.57	7664.53	7673.53	2689.82	-1289.88	-5.05	2976.40	257.16	11.60	PASS
8113.00†	7688.71	-181.56	-1098.44	7679.71	7688.71	2689.82	-1289.88	-38.30	2877.76	257.47	11.21	PASS
8151.71	7690.00	-142.87	-1098.76	7681.00	7690.00	2689.82	-1289.88	-90.00	2839.14	257.45	11.06	PASS
8213.00†	7690.00	-81.59	-1098.92	7681.00	7690.00	2689.82	-1289.88	-90.00	2777.98	257.37	10.82	PASS
8313.00†	7690.00	18.41	-1099.18	7681.00	7690.00	2689.82	-1289.88	-90.00	2678.21	257.22	10.44	PASS
8413.00†	7690.00	118.41	-1099.44	7681.00	7690.00	2689.82	-1289.88	-90.00	2578.45	257.07	10.06	PASS
8513.00†	7690.00	218.41	-1099.70	7681.00	7690.00	2689.82	-1289.88	-90.00	2478.72	256.90	9.67	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	7690.00	318.41	-1099.96	7681.00	7690.00	2689.82	-1289.88	-90.00	2379.01	256.72	9.29	PASS
8713.00†	7690.00	418.41	-1100.22	7681.00	7690.00	2689.82	-1289.88	-90.00	2279.32	256.52	8.91	PASS
8813.00†	7690.00	518.41	-1100.49	7681.00	7690.00	2689.82	-1289.88	-90.00	2179.66	256.31	8.52	PASS
8913.00†	7690.00	618.41	-1100.75	7681.00	7690.00	2689.82	-1289.88	-90.00	2080.03	256.09	8.14	PASS
9013.00†	7690.00	718.41	-1101.01	7681.00	7690.00	2689.82	-1289.88	-90.00	1980.44	255.84	7.76	PASS
9113.00†	7690.00	818.41	-1101.27	7681.00	7690.00	2689.82	-1289.88	-90.00	1880.89	255.56	7.38	PASS
9213.00†	7690.00	918.41	-1101.53	7681.00	7690.00	2689.82	-1289.88	-90.00	1781.40	255.26	7.00	PASS
9313.00†	7690.00	1018.41	-1101.79	7681.00	7690.00	2689.82	-1289.88	-90.00	1681.96	254.92	6.61	PASS
9413.00†	7690.00	1118.41	-1102.05	7681.00	7690.00	2689.82	-1289.88	-90.00	1582.60	254.54	6.23	PASS
9513.00†	7690.00	1218.41	-1102.31	7681.00	7690.00	2689.82	-1289.88	-90.00	1483.32	254.12	5.85	PASS
9613.00†	7690.00	1318.41	-1102.58	7681.00	7690.00	2689.82	-1289.88	-90.00	1384.15	253.64	5.47	PASS
9713.00†	7690.00	1418.41	-1102.84	7681.00	7690.00	2689.82	-1289.88	-90.00	1285.10	253.10	5.09	PASS
9813.00†	7690.00	1518.41	-1103.10	7681.00	7690.00	2689.82	-1289.88	-90.00	1186.21	252.47	4.71	PASS
9913.00†	7690.00	1618.41	-1103.36	7681.00	7690.00	2689.82	-1289.88	-90.00	1087.53	251.75	4.33	PASS
10013.00†	7690.00	1718.41	-1103.62	7681.00	7690.00	2689.82	-1289.88	-90.00	989.11	250.91	3.95	PASS
10113.00†	7690.00	1818.41	-1103.88	7681.00	7690.00	2689.82	-1289.88	-90.00	891.05	249.93	3.57	PASS
10213.00†	7690.00	1918.41	-1104.14	7681.00	7690.00	2689.82	-1289.88	-90.00	793.46	248.77	3.20	PASS
10313.00†	7690.00	2018.41	-1104.40	7681.00	7690.00	2689.82	-1289.88	-90.00	696.57	247.43	2.82	PASS
10413.00†	7690.00	2118.41	-1104.67	7681.00	7690.00	2689.82	-1289.88	-90.00	600.69	245.92	2.45	PASS
10513.00†	7690.00	2218.40	-1104.93	7681.00	7690.00	2689.82	-1289.88	-90.00	506.40	244.43	2.07	PASS
10613.00†	7690.00	2318.40	-1105.19	7681.00	7690.00	2689.82	-1289.88	-90.00	414.81	243.64	1.70	PASS
10713.00†	7690.00	2418.40	-1105.45	7681.00	7690.00	2689.82	-1289.88	-90.00	328.15	245.79	1.34	PASS
10813.00†	7690.00	2518.40	-1105.71	7681.00	7690.00	2689.82	-1289.88	-90.00	251.60	256.11	0.98	FAIL
10913.00†	7690.00	2618.40	-1105.97	7681.00	7690.00	2689.82	-1289.88	-90.00	197.29	279.46	0.71	FAIL
10985.18†	7690.00	2690.58	-1106.16	7680.18	7689.18	2689.82	-1289.88	-89.74	183.73	298.02	0.62	FAIL
11003.24†	7690.00	2708.64	-1106.21	7681.00	7690.00	2689.82	-1289.88	-90.00	184.64	301.35	0.61	FAIL
11013.00†	7690.00	2718.40	-1106.23	7681.00	7690.00	2689.82	-1289.88	-90.00	185.86	302.81	0.61	FAIL
11113.00†	7690.00	2818.40	-1106.49	7681.00	7690.00	2689.82	-1289.88	-90.00	223.97	305.82	0.73	FAIL
11213.00†	7690.00	2918.40	-1106.76	7681.00	7690.00	2689.82	-1289.88	-90.00	292.89	298.76	0.98	FAIL
11313.00†	7690.00	3018.40	-1107.02	7681.00	7690.00	2689.82	-1289.88	-90.00	376.04	291.72	1.29	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	7690.00	3118.40	-1107.28	7681.00	7690.00	2689.82	-1289.88	-90.00	465.86	286.40	1.63	PASS
11513.00†	7690.00	3218.40	-1107.54	7681.00	7690.00	2689.82	-1289.88	-90.00	559.15	282.51	1.98	PASS
11613.00†	7690.00	3318.40	-1107.80	7681.00	7690.00	2689.82	-1289.88	-90.00	654.42	279.62	2.34	PASS
11713.00†	7690.00	3418.40	-1108.06	7681.00	7690.00	2689.82	-1289.88	-90.00	750.92	277.41	2.71	PASS
11813.00†	7690.00	3518.40	-1108.32	7681.00	7690.00	2689.82	-1289.88	-90.00	848.24	275.69	3.08	PASS
11913.00†	7690.00	3618.40	-1108.58	7681.00	7690.00	2689.82	-1289.88	-90.00	946.11	274.31	3.46	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 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
13.00	13.00	0.00	0.00	13.00	13.00	0.05	14.95	89.79	14.95	1.40	23.59	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.05	14.95	89.79	14.95	1.72	15.37	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.05	14.95	89.79	14.95	2.29	9.50	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.05	14.95	89.79	14.95	2.89	6.76	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.05	14.95	89.79	14.95	3.51	5.23	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.05	14.95	89.79	14.95	4.13	4.25	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.05	14.95	89.79	14.95	4.75	3.58	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.05	14.95	89.79	14.95	5.38	3.09	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.05	14.95	89.79	14.95	6.00	2.72	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.05	14.95	89.79	14.95	6.63	2.43	PASS
1000.00	1000.00	0.00	0.00	1000.00	1000.00	0.05	14.95	89.79	14.95	7.17	2.22	PASS
1013.00†	1013.00	-0.02	-0.02	1013.00	1013.00	0.05	14.95	-144.53	14.98	7.25	2.20	PASS
1113.00†	1112.97	-1.30	-1.81	1113.03	1113.03	0.03	14.93	-148.80	16.80	7.96	2.24	PASS
1213.00†	1212.80	-4.62	-6.42	1213.45	1213.42	-1.62	13.46	-152.84	20.12	8.95	2.37	PASS
1313.00†	1312.38	-9.98	-13.86	1313.98	1313.78	-5.90	9.63	-154.12	23.89	10.05	2.50	PASS
1413.00†	1411.57	-17.36	-24.12	1414.60	1413.97	-12.82	3.46	-153.69	28.06	11.07	2.66	PASS
1513.00†	1510.26	-26.76	-37.18	1515.32	1513.86	-22.36	-5.06	-152.20	32.62	12.02	2.84	PASS
1597.14	1592.83	-36.22	-50.33	1599.92	1597.40	-32.35	-13.97	-150.54	36.85	12.73	3.02	PASS
1613.00†	1608.34	-38.14	-52.99	1615.76	1613.02	-34.31	-15.73	-150.32	37.75	12.84	3.07	PASS
1713.00†	1706.18	-50.23	-69.79	1715.59	1711.46	-46.71	-26.80	-149.13	43.45	13.50	3.36	PASS
1813.00†	1804.01	-62.31	-86.59	1815.42	1809.89	-59.11	-37.87	-148.22	49.17	14.12	3.61	PASS
1913.00†	1901.85	-74.40	-103.38	1915.26	1908.33	-71.51	-48.95	-147.49	54.90	14.89	3.82	PASS
2013.00†	1999.68	-86.49	-120.18	2015.09	2006.77	-83.91	-60.02	-146.91	60.63	15.70	4.00	PASS
2113.00†	2097.52	-98.58	-136.97	2114.93	2105.21	-96.31	-71.09	-146.42	66.37	16.54	4.15	PASS
2213.00†	2195.35	-110.67	-153.77	2214.76	2203.65	-108.71	-82.16	-146.01	72.11	17.41	4.28	PASS
2313.00†	2293.19	-122.75	-170.57	2314.59	2302.09	-121.12	-93.23	-145.67	77.86	18.30	4.39	PASS
2413.00†	2391.03	-134.84	-187.36	2414.43	2400.53	-133.52	-104.31	-145.37	83.61	19.21	4.48	PASS
2513.00†	2488.86	-146.93	-204.16	2514.26	2498.97	-145.92	-115.38	-145.10	89.36	20.13	4.56	PASS
2613.00†	2586.70	-159.02	-220.95	2614.09	2597.41	-158.32	-126.45	-144.87	95.11	21.07	4.64	PASS
2713.00†	2684.53	-171.11	-237.75	2713.93	2695.85	-170.72	-137.52	-144.67	100.87	22.02	4.70	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
2813.00†	2782.37	-183.19	-254.55	2813.76	2794.29	-183.12	-148.59	-144.49	106.62	22.99	4.75	PASS
2913.00†	2880.20	-195.28	-271.34	2913.60	2892.73	-195.52	-159.66	-144.33	112.38	23.96	4.80	PASS
3013.00†	2978.04	-207.37	-288.14	3013.43	2991.17	-207.92	-170.74	-144.18	118.14	24.94	4.85	PASS
3113.00†	3075.87	-219.46	-304.93	3113.26	3089.61	-220.32	-181.81	-144.05	123.89	25.93	4.88	PASS
3213.00†	3173.71	-231.54	-321.73	3213.10	3188.05	-232.72	-192.88	-143.92	129.65	26.92	4.92	PASS
3313.00†	3271.54	-243.63	-338.53	3312.93	3286.49	-245.12	-203.95	-143.81	135.41	27.92	4.95	PASS
3413.00†	3369.38	-255.72	-355.32	3412.76	3384.93	-257.52	-215.02	-143.71	141.17	28.92	4.98	PASS
3513.00†	3467.22	-267.81	-372.12	3512.60	3483.37	-269.92	-226.09	-143.62	146.93	29.93	5.00	PASS
3613.00†	3565.05	-279.90	-388.91	3612.43	3581.81	-282.32	-237.17	-143.53	152.69	30.95	5.03	PASS
3713.00†	3662.89	-291.98	-405.71	3712.27	3680.25	-294.72	-248.24	-143.45	158.45	31.96	5.05	PASS
3813.00†	3760.72	-304.07	-422.51	3812.10	3778.69	-307.12	-259.31	-143.37	164.21	32.98	5.07	PASS
3913.00†	3858.56	-316.16	-439.30	3911.93	3877.13	-319.52	-270.38	-143.30	169.97	34.00	5.08	PASS
4013.00†	3956.39	-328.25	-456.10	4011.77	3975.57	-331.92	-281.45	-143.24	175.73	35.03	5.10	PASS
4113.00†	4054.23	-340.33	-472.89	4111.60	4074.01	-344.32	-292.53	-143.18	181.49	36.06	5.11	PASS
4213.00†	4152.06	-352.42	-489.69	4211.43	4172.45	-356.72	-303.60	-143.12	187.26	37.09	5.13	PASS
4313.00†	4249.90	-364.51	-506.49	4311.27	4270.89	-369.12	-314.67	-143.07	193.02	38.12	5.14	PASS
4413.00†	4347.74	-376.60	-523.28	4411.10	4369.33	-381.52	-325.74	-143.01	198.78	39.15	5.15	PASS
4513.00†	4445.57	-388.69	-540.08	4510.93	4467.77	-393.92	-336.81	-142.97	204.54	40.19	5.16	PASS
4613.00†	4543.41	-400.77	-556.87	4610.77	4566.21	-406.32	-347.88	-142.92	210.30	41.22	5.17	PASS
4713.00†	4641.24	-412.86	-573.67	4710.60	4664.65	-418.72	-358.96	-142.88	216.07	42.26	5.18	PASS
4813.00†	4739.08	-424.95	-590.47	4810.44	4763.09	-431.12	-370.03	-142.84	221.83	43.30	5.19	PASS
4913.00†	4836.91	-437.04	-607.26	4910.27	4861.53	-443.52	-381.10	-142.80	227.59	44.34	5.20	PASS
5013.00†	4934.75	-449.13	-624.06	5010.10	4959.97	-455.92	-392.17	-142.76	233.35	45.38	5.21	PASS
5113.00†	5032.58	-461.21	-640.85	5109.94	5058.41	-468.33	-403.24	-142.73	239.12	46.43	5.21	PASS
5213.00†	5130.42	-473.30	-657.65	5209.77	5156.85	-480.73	-414.32	-142.69	244.88	47.47	5.22	PASS
5313.00†	5228.25	-485.39	-674.45	5309.60	5255.29	-493.13	-425.39	-142.66	250.64	48.52	5.23	PASS
5413.00†	5326.09	-497.48	-691.24	5409.44	5353.73	-505.53	-436.46	-142.63	256.41	49.56	5.23	PASS
5513.00†	5423.93	-509.56	-708.04	5509.27	5452.17	-517.93	-447.53	-142.60	262.17	50.61	5.24	PASS
5613.00†	5521.76	-521.65	-724.83	5609.11	5550.61	-530.33	-458.60	-142.57	267.93	51.66	5.24	PASS
5713.00†	5619.60	-533.74	-741.63	5708.94	5649.05	-542.73	-469.67	-142.55	273.69	52.71	5.25	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1NBH PWB Offset Wellpath: ACKARD NORTH 2-35-1NBH PWP (REV. A.0)												
Facility: SEC.02-T03S-R66W		Slot: SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02)		Well: ACKARD NORTH 2-35-1NBH		Threshold Value=1.00		† = interpolated/extrapolated station				
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5717.43	-545.83	-758.43	5808.77	5747.49	-555.13	-480.75	-142.52	279.46	53.76	5.25	PASS
5913.00†	5815.27	-557.92	-775.22	5908.61	5845.93	-567.53	-491.82	-142.50	285.22	54.81	5.26	PASS
6013.00†	5913.10	-570.00	-792.02	6008.44	5944.37	-579.93	-502.89	-142.48	290.98	55.86	5.26	PASS
6113.00†	6010.94	-582.09	-808.81	6108.27	6042.81	-592.33	-513.96	-142.45	296.75	56.91	5.27	PASS
6213.00†	6108.77	-594.18	-825.61	6208.11	6141.25	-604.73	-525.03	-142.43	302.51	57.96	5.27	PASS
6313.00†	6206.61	-606.27	-842.41	6307.94	6239.69	-617.13	-536.10	-142.41	308.27	59.01	5.28	PASS
6413.00†	6304.44	-618.35	-859.20	6407.78	6338.13	-629.53	-547.18	-142.39	314.04	60.06	5.28	PASS
6513.00†	6402.28	-630.44	-876.00	6507.61	6436.57	-641.93	-558.25	-142.37	319.80	61.12	5.28	PASS
6613.00†	6500.12	-642.53	-892.79	6607.44	6535.01	-654.33	-569.32	-142.35	325.57	62.17	5.29	PASS
6713.00†	6597.95	-654.62	-909.59	6707.28	6633.45	-666.73	-580.39	-142.33	331.33	63.22	5.29	PASS
6813.00†	6695.79	-666.71	-926.39	6807.11	6731.89	-679.13	-591.46	-142.32	337.09	64.28	5.29	PASS
6913.00†	6793.62	-678.79	-943.18	6906.94	6830.33	-691.53	-602.54	-142.30	342.86	65.33	5.29	PASS
7013.00†	6891.46	-690.88	-959.98	7006.78	6928.77	-703.93	-613.61	-142.28	348.62	66.39	5.30	PASS
7113.00†	6989.29	-702.97	-976.77	7107.76	7028.56	-714.22	-624.84	-142.63	354.30	67.22	5.32	PASS
7182.54	7057.33	-711.38	-988.45	7177.35	7097.64	-712.47	-632.63	-144.28	358.10	66.53	5.43	PASS
7213.00†	7087.21	-714.25	-993.59	7207.06	7126.97	-709.16	-635.95	-159.00	359.88	66.65	5.45	PASS
7313.00†	7185.62	-712.33	-1010.52	7302.49	7219.38	-688.27	-646.43	144.09	366.44	65.88	5.61	PASS
7413.00†	7282.20	-693.10	-1027.18	7395.05	7304.53	-653.54	-656.13	114.30	373.82	64.46	5.85	PASS
7513.00†	7374.01	-657.14	-1043.06	7485.18	7381.05	-606.90	-664.88	100.82	381.57	63.63	6.05	PASS
7613.00†	7458.26	-605.54	-1057.69	7573.29	7447.93	-550.20	-672.57	93.10	389.21	62.26	6.31	PASS
7713.00†	7532.40	-539.89	-1070.61	7659.75	7504.41	-485.16	-679.11	88.03	396.30	60.90	6.57	PASS
7813.00†	7594.17	-462.16	-1081.44	7744.93	7549.92	-413.46	-684.44	84.53	402.42	59.61	6.82	PASS
7913.00†	7641.70	-374.72	-1089.84	7829.13	7584.05	-336.67	-688.49	82.15	407.26	58.40	7.05	PASS
8013.00†	7673.53	-280.23	-1095.57	7912.67	7606.51	-256.33	-691.23	80.67	410.55	57.29	7.24	PASS
8113.00†	7688.71	-181.56	-1098.44	7995.83	7617.10	-173.94	-692.64	80.00	412.14	56.27	7.40	PASS
8151.71	7690.00	-142.87	-1098.76	8027.98	7618.00	-141.81	-692.83	79.94	412.27	55.94	7.45	PASS
8213.00†	7690.00	-81.59	-1098.92	8089.26	7618.00	-80.52	-692.99	79.94	412.27	55.47	7.51	PASS
8313.00†	7690.00	18.41	-1099.18	8189.26	7618.00	19.48	-693.25	79.94	412.27	55.25	7.55	PASS
8413.00†	7690.00	118.41	-1099.44	8289.26	7618.00	119.47	-693.51	79.94	412.27	55.74	7.48	PASS
8513.00†	7690.00	218.41	-1099.70	8389.26	7618.00	219.47	-693.77	79.94	412.27	56.91	7.32	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: ACKARD NORTH 2-35-1NBH PWB Offset Wellpath: ACKARD NORTH 2-35-1NBH PWP (REV. A.0)												
Facility: SEC.02-T03S-R66W Slot: SLOT#04 ACKARD NORTH 2-35-1NBH (600'FSL & 1980'FWL, SEC.02) Well: ACKARD NORTH 2-35-1NBH Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
8613.00†	7690.00	318.41	-1099.96	8489.26	7618.00	319.47	-694.03	79.94	412.27	58.71	7.10	PASS
8713.00†	7690.00	418.41	-1100.22	8589.26	7618.00	419.47	-694.30	79.94	412.27	61.10	6.81	PASS
8813.00†	7690.00	518.41	-1100.49	8689.26	7618.00	519.47	-694.56	79.94	412.27	64.00	6.50	PASS
8913.00†	7690.00	618.41	-1100.75	8789.26	7618.00	619.47	-694.82	79.94	412.27	67.35	6.18	PASS
9013.00†	7690.00	718.41	-1101.01	8889.26	7618.00	719.47	-695.08	79.94	412.26	72.14	5.76	PASS
9113.00†	7690.00	818.41	-1101.27	8989.26	7618.00	819.47	-695.34	79.94	412.26	75.14	5.53	PASS
9213.00†	7690.00	918.41	-1101.53	9089.26	7618.00	919.47	-695.60	79.94	412.26	79.47	5.23	PASS
9313.00†	7690.00	1018.41	-1101.79	9189.26	7618.00	1019.47	-695.87	79.94	412.26	84.04	4.94	PASS
9413.00†	7690.00	1118.41	-1102.05	9289.26	7618.00	1119.47	-696.13	79.94	412.26	88.80	4.67	PASS
9513.00†	7690.00	1218.41	-1102.31	9389.26	7618.00	1219.47	-696.39	79.94	412.26	93.73	4.42	PASS
9613.00†	7690.00	1318.41	-1102.58	9489.26	7618.00	1319.47	-696.65	79.94	412.26	98.80	4.20	PASS
9713.00†	7690.00	1418.41	-1102.84	9589.26	7618.00	1419.47	-696.91	79.94	412.26	103.99	3.98	PASS
9813.00†	7690.00	1518.41	-1103.10	9689.26	7618.00	1519.47	-697.18	79.94	412.26	109.29	3.79	PASS
9913.00†	7690.00	1618.41	-1103.36	9789.26	7618.00	1619.47	-697.44	79.94	412.26	114.67	3.61	PASS
10013.00†	7690.00	1718.41	-1103.62	9889.26	7618.00	1719.47	-697.70	79.94	412.26	120.13	3.45	PASS
10113.00†	7690.00	1818.41	-1103.88	9989.26	7618.00	1819.47	-697.96	79.94	412.26	125.66	3.29	PASS
10213.00†	7690.00	1918.41	-1104.14	10089.26	7618.00	1919.47	-698.22	79.94	412.26	131.24	3.15	PASS
10313.00†	7690.00	2018.41	-1104.40	10189.26	7618.00	2019.47	-698.48	79.94	412.26	136.88	3.02	PASS
10413.00†	7690.00	2118.41	-1104.67	10289.26	7618.00	2119.47	-698.75	79.94	412.26	142.56	2.90	PASS
10513.00†	7690.00	2218.40	-1104.93	10389.26	7618.00	2219.47	-699.01	79.94	412.26	148.25	2.79	PASS
10613.00†	7690.00	2318.40	-1105.19	10489.26	7618.00	2319.47	-699.27	79.94	412.26	154.04	2.68	PASS
10713.00†	7690.00	2418.40	-1105.45	10589.26	7618.00	2419.47	-699.53	79.94	412.26	159.82	2.59	PASS
10813.00†	7690.00	2518.40	-1105.71	10689.26	7618.00	2519.47	-699.79	79.94	412.25	165.64	2.50	PASS
10913.00†	7690.00	2618.40	-1105.97	10789.26	7618.00	2619.47	-700.06	79.94	412.25	171.48	2.41	PASS
11013.00†	7690.00	2718.40	-1106.23	10889.26	7618.00	2719.47	-700.32	79.94	412.25	177.34	2.33	PASS
11113.00†	7690.00	2818.40	-1106.49	10989.26	7618.00	2819.47	-700.58	79.94	412.25	183.23	2.25	PASS
11213.00†	7690.00	2918.40	-1106.76	11089.26	7618.00	2919.47	-700.84	79.94	412.25	189.13	2.18	PASS
11313.00†	7690.00	3018.40	-1107.02	11189.26	7618.00	3019.46	-701.10	79.94	412.25	195.05	2.12	PASS
11413.00†	7690.00	3118.40	-1107.28	11289.26	7618.00	3119.46	-701.36	79.94	412.25	200.99	2.05	PASS
11513.00†	7690.00	3218.40	-1107.54	11389.26	7618.00	3219.46	-701.63	79.94	412.25	206.94	2.00	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
11613.00†	7690.00	3318.40	-1107.80	11489.26	7618.00	3319.46	-701.89	79.94	412.25	212.90	1.94	PASS
11713.00†	7690.00	3418.40	-1108.06	11589.26	7618.00	3419.46	-702.15	79.94	412.25	218.87	1.89	PASS
11813.00†	7690.00	3518.40	-1108.32	11689.26	7618.00	3519.46	-702.41	79.94	412.25	224.86	1.84	PASS
11913.00†	7690.00	3618.40	-1108.58	11789.26	7618.00	3619.46	-702.67	79.94	412.25	230.85	1.79	PASS
12013.00†	7690.00	3718.40	-1108.85	11889.26	7618.00	3719.46	-702.94	79.94	412.25	236.86	1.74	PASS
12113.00†	7690.00	3818.40	-1109.11	11989.26	7618.00	3819.46	-703.20	79.94	412.25	242.87	1.70	PASS
12213.00†	7690.00	3918.40	-1109.37	12089.26	7618.00	3919.46	-703.46	79.94	412.25	248.89	1.66	PASS
12313.00†	7690.00	4018.40	-1109.63	12189.26	7618.00	4019.46	-703.72	79.94	412.25	254.92	1.62	PASS
12413.00†	7690.00	4118.40	-1109.89	12289.26	7618.00	4119.46	-703.98	79.94	412.25	260.96	1.58	PASS
12513.00†	7690.00	4218.40	-1110.15	12389.26	7618.00	4219.46	-704.24	79.94	412.24	267.00	1.55	PASS
12613.00†	7690.00	4318.40	-1110.41	12489.26	7618.00	4319.46	-704.51	79.94	412.24	273.05	1.51	PASS
12713.00†	7690.00	4418.40	-1110.67	12589.26	7618.00	4419.46	-704.77	79.94	412.24	279.10	1.48	PASS
12813.00†	7690.00	4518.40	-1110.94	12689.26	7618.00	4519.46	-705.03	79.94	412.24	285.16	1.45	PASS
12913.00†	7690.00	4618.40	-1111.20	12789.26	7618.00	4619.46	-705.29	79.94	412.24	291.22	1.42	PASS
13013.00†	7690.00	4718.40	-1111.46	12889.26	7618.00	4719.46	-705.55	79.94	412.24	297.29	1.39	PASS
13113.00†	7690.00	4818.40	-1111.72	12989.26	7618.00	4819.46	-705.82	79.94	412.24	303.37	1.36	PASS
13213.00†	7690.00	4918.40	-1111.98	13089.26	7618.00	4919.46	-706.08	79.94	412.24	309.44	1.33	PASS
13313.00†	7690.00	5018.40	-1112.24	13189.26	7618.00	5019.46	-706.34	79.94	412.24	315.52	1.31	PASS
13413.00†	7690.00	5118.39	-1112.50	13289.26	7618.00	5119.46	-706.60	79.94	412.24	321.61	1.28	PASS
13513.00†	7690.00	5218.39	-1112.76	13389.26	7618.00	5219.46	-706.86	79.94	412.24	327.70	1.26	PASS
13613.00†	7690.00	5318.39	-1113.03	13489.26	7618.00	5319.46	-707.12	79.94	412.24	333.79	1.24	PASS
13713.00†	7690.00	5418.39	-1113.29	13589.26	7618.00	5419.46	-707.39	79.94	412.24	339.88	1.21	PASS
13813.00†	7690.00	5518.39	-1113.55	13689.26	7618.00	5519.46	-707.65	79.94	412.24	345.98	1.19	PASS
13913.00†	7690.00	5618.39	-1113.81	13789.26	7618.00	5619.46	-707.91	79.94	412.24	352.08	1.17	PASS
14013.00†	7690.00	5718.39	-1114.07	13889.26	7618.00	5719.46	-708.17	79.94	412.24	358.18	1.15	PASS
14113.00†	7690.00	5818.39	-1114.33	13989.26	7618.00	5819.46	-708.43	79.94	412.24	364.29	1.13	PASS
14213.00†	7690.00	5918.39	-1114.59	14089.26	7618.00	5919.45	-708.70	79.94	412.23	370.39	1.11	PASS
14313.00†	7690.00	6018.39	-1114.85	14189.26	7618.00	6019.45	-708.96	79.94	412.23	376.50	1.10	PASS
14413.00†	7690.00	6118.39	-1115.11	14289.26	7618.00	6119.45	-709.22	79.94	412.23	382.61	1.08	PASS
14513.00†	7690.00	6218.39	-1115.38	14389.26	7618.00	6219.45	-709.48	79.94	412.23	388.73	1.06	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
14613.00†	7690.00	6318.39	-1115.64	14489.26	7618.00	6319.45	-709.74	79.94	412.23	394.84	1.04	PASS
14713.00†	7690.00	6418.39	-1115.90	14589.26	7618.00	6419.45	-710.00	79.94	412.23	400.96	1.03	PASS
14813.00†	7690.00	6518.39	-1116.16	14689.26	7618.00	6519.45	-710.27	79.94	412.23	407.08	1.01	PASS
14913.00†	7690.00	6618.39	-1116.42	14789.26	7618.00	6619.45	-710.53	79.94	412.23	413.20	1.00	FAIL
15013.00†	7690.00	6718.39	-1116.68	14889.26	7618.00	6719.45	-710.79	79.94	412.23	419.33	0.98	FAIL
15113.00†	7690.00	6818.39	-1116.94	14989.26	7618.00	6819.45	-711.05	79.94	412.23	425.45	0.97	FAIL
15213.00†	7690.00	6918.39	-1117.20	15089.26	7618.00	6919.45	-711.31	79.94	412.23	431.57	0.96	FAIL
15313.00†	7690.00	7018.39	-1117.47	15189.26	7618.00	7019.45	-711.58	79.94	412.23	437.70	0.94	FAIL
15413.00†	7690.00	7118.39	-1117.73	15289.26	7618.00	7119.45	-711.84	79.94	412.23	443.83	0.93	FAIL
15513.00†	7690.00	7218.39	-1117.99	15389.26	7618.00	7219.45	-712.10	79.94	412.23	449.96	0.92	FAIL
15613.00†	7690.00	7318.39	-1118.25	15489.26	7618.00	7319.45	-712.36	79.94	412.23	456.09	0.90	FAIL
15713.00†	7690.00	7418.39	-1118.51	15589.26	7618.00	7419.45	-712.62	79.94	412.23	462.22	0.89	FAIL
15813.00†	7690.00	7518.39	-1118.77	15689.26	7618.00	7519.45	-712.88	79.94	412.23	468.36	0.88	FAIL
15913.00†	7690.00	7618.39	-1119.03	15789.26	7618.00	7619.45	-713.15	79.94	412.22	474.49	0.87	FAIL
16013.00†	7690.00	7718.39	-1119.29	15889.26	7618.00	7719.45	-713.41	79.94	412.22	480.63	0.86	FAIL
16113.00†	7690.00	7818.39	-1119.56	15989.26	7618.00	7819.45	-713.67	79.94	412.22	486.76	0.85	FAIL
16213.00†	7690.00	7918.39	-1119.82	16089.26	7618.00	7919.45	-713.93	79.94	412.22	492.90	0.84	FAIL
16313.00†	7690.00	8018.39	-1120.08	16189.26	7618.00	8019.45	-714.19	79.94	412.22	499.04	0.83	FAIL
16413.00†	7690.00	8118.38	-1120.34	16289.26	7618.00	8119.45	-714.46	79.94	412.22	505.18	0.82	FAIL
16513.00†	7690.00	8218.38	-1120.60	16389.26	7618.00	8219.45	-714.72	79.94	412.22	511.32	0.81	FAIL
16613.00†	7690.00	8318.38	-1120.86	16489.26	7618.00	8319.45	-714.98	79.94	412.22	517.46	0.80	FAIL
16713.00†	7690.00	8418.38	-1121.12	16589.26	7618.00	8419.45	-715.24	79.94	412.22	523.60	0.79	FAIL
16813.00†	7690.00	8518.38	-1121.38	16689.26	7618.00	8519.45	-715.50	79.94	412.22	529.75	0.78	FAIL
16913.00†	7690.00	8618.38	-1121.65	16789.26	7618.00	8619.45	-715.76	79.94	412.22	535.89	0.77	FAIL
17013.00†	7690.00	8718.38	-1121.91	16889.26	7618.00	8719.45	-716.03	79.94	412.22	542.03	0.76	FAIL
17113.00†	7690.00	8818.38	-1122.17	16989.26	7618.00	8819.44	-716.29	79.94	412.22	548.18	0.75	FAIL
17213.00†	7690.00	8918.38	-1122.43	17089.26	7618.00	8919.44	-716.55	79.94	412.22	554.32	0.74	FAIL
17313.00†	7690.00	9018.38	-1122.69	17189.26	7618.00	9019.44	-716.81	79.94	412.22	560.47	0.74	FAIL
17413.00†	7690.00	9118.38	-1122.95	17289.26	7618.00	9119.44	-717.07	79.94	412.22	566.62	0.73	FAIL
17513.00†	7690.00	9218.38	-1123.21	17389.26	7618.00	9219.44	-717.34	79.94	412.22	572.76	0.72	FAIL

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

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

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

Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
17613.00†	7690.00	9318.38	-1123.47	17489.26	7618.00	9319.44	-717.60	79.94	412.21	578.91	0.71	FAIL
17713.00†	7690.00	9418.38	-1123.74	17589.26	7618.00	9419.44	-717.86	79.94	412.21	585.06	0.70	FAIL
17813.00†	7690.00	9518.38	-1124.00	17689.26	7618.00	9519.44	-718.12	79.94	412.21	591.21	0.70	FAIL
17864.18†	7690.00	9569.56	-1124.13	17740.44	7618.00	9570.62	-718.26	79.94	412.21	594.36	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	1794.69	0.03	9.12	-17.42	-6.46
8.5in Open Hole	1800.00	17742.92	15942.92	1794.69	7618.00	-17.42	-6.46	2917.90	-214.37

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

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



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

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



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	0.02	-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	1.73	15.33	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.02	-15.01	-89.93	15.01	2.30	9.47	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.02	-15.01	-89.93	15.01	2.91	6.75	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.02	-15.01	-89.93	15.01	3.52	5.22	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.02	-15.01	-89.93	15.01	4.14	4.25	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.02	-15.01	-89.93	15.01	4.77	3.58	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.02	-15.01	-89.93	15.01	5.39	3.10	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.02	-15.01	-89.93	15.01	6.02	2.73	PASS
913.00†	913.00	0.00	0.00	912.94	912.94	0.00	-15.04	-89.99	15.04	6.64	2.44	PASS
1000.00	1000.00	0.00	0.00	999.51	999.49	-0.88	-16.49	-93.04	16.52	7.27	2.43	PASS
1013.00†	1013.00	-0.02	-0.02	1012.44	1012.41	-1.12	-16.90	31.99	16.92	7.36	2.46	PASS
1113.00†	1112.97	-1.30	-1.81	1111.80	1111.60	-4.03	-21.71	27.89	20.13	8.41	2.54	PASS
1213.00†	1212.80	-4.62	-6.42	1211.04	1210.43	-8.71	-29.45	25.56	23.50	9.62	2.57	PASS
1313.00†	1312.38	-9.98	-13.86	1310.16	1308.76	-15.14	-40.10	24.39	26.98	10.75	2.63	PASS
1413.00†	1411.57	-17.36	-24.12	1409.16	1406.48	-23.32	-53.64	23.98	30.54	11.79	2.71	PASS
1513.00†	1510.26	-26.76	-37.18	1508.04	1503.48	-33.23	-70.03	24.10	34.16	12.79	2.78	PASS
1597.14	1592.83	-36.22	-50.33	1591.15	1584.47	-42.89	-86.02	24.50	37.26	13.54	2.86	PASS
1613.00†	1608.34	-38.14	-52.99	1607.00	1599.86	-44.85	-89.26	24.60	37.85	13.66	2.88	PASS
1713.00†	1706.18	-50.23	-69.79	1706.93	1696.90	-57.18	-109.68	25.17	41.54	14.28	3.02	PASS
1813.00†	1804.01	-62.31	-86.59	1806.86	1793.94	-69.52	-130.10	25.65	45.25	14.86	3.15	PASS
1913.00†	1901.85	-74.40	-103.38	1906.79	1890.98	-81.86	-150.52	26.06	48.95	15.57	3.25	PASS
2013.00†	1999.68	-86.49	-120.18	2006.72	1988.02	-94.20	-170.94	26.40	52.65	16.31	3.33	PASS
2113.00†	2097.52	-98.58	-136.97	2106.66	2085.06	-106.53	-191.36	26.71	56.36	17.08	3.40	PASS
2213.00†	2195.35	-110.67	-153.77	2206.59	2182.10	-118.87	-211.78	26.97	60.07	17.88	3.46	PASS
2313.00†	2293.19	-122.75	-170.57	2306.52	2279.15	-131.21	-232.20	27.21	63.78	18.69	3.51	PASS
2413.00†	2391.03	-134.84	-187.36	2406.45	2376.19	-143.55	-252.62	27.42	67.49	19.53	3.55	PASS
2513.00†	2488.86	-146.93	-204.16	2506.38	2473.23	-155.89	-273.04	27.60	71.20	20.39	3.58	PASS
2613.00†	2586.70	-159.02	-220.95	2606.31	2570.27	-168.22	-293.46	27.77	74.91	21.25	3.61	PASS
2713.00†	2684.53	-171.11	-237.75	2706.24	2667.31	-180.56	-313.88	27.93	78.63	22.14	3.64	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	2782.37	-183.19	-254.55	2806.17	2764.35	-192.90	-334.30	28.06	82.34	23.03	3.66	PASS
2913.00†	2880.20	-195.28	-271.34	2906.10	2861.39	-205.24	-354.72	28.19	86.05	23.93	3.67	PASS
3013.00†	2978.04	-207.37	-288.14	3006.03	2958.43	-217.57	-375.14	28.31	89.77	24.85	3.69	PASS
3113.00†	3075.87	-219.46	-304.93	3105.96	3055.47	-229.91	-395.56	28.42	93.48	25.77	3.70	PASS
3213.00†	3173.71	-231.54	-321.73	3205.89	3152.52	-242.25	-415.98	28.51	97.20	26.69	3.71	PASS
3313.00†	3271.54	-243.63	-338.53	3305.83	3249.56	-254.59	-436.40	28.61	100.91	27.63	3.72	PASS
3413.00†	3369.38	-255.72	-355.32	3405.76	3346.60	-266.93	-456.82	28.69	104.63	28.57	3.73	PASS
3513.00†	3467.22	-267.81	-372.12	3505.69	3443.64	-279.26	-477.24	28.77	108.34	29.51	3.74	PASS
3613.00†	3565.05	-279.90	-388.91	3605.62	3540.68	-291.60	-497.66	28.84	112.06	30.46	3.74	PASS
3713.00†	3662.89	-291.98	-405.71	3705.55	3637.72	-303.94	-518.08	28.91	115.77	31.41	3.75	PASS
3813.00†	3760.72	-304.07	-422.51	3805.48	3734.76	-316.28	-538.50	28.98	119.49	32.37	3.75	PASS
3913.00†	3858.56	-316.16	-439.30	3905.41	3831.80	-328.61	-558.92	29.04	123.21	33.33	3.75	PASS
4013.00†	3956.39	-328.25	-456.10	4005.34	3928.84	-340.95	-579.34	29.10	126.92	34.30	3.76	PASS
4113.00†	4054.23	-340.33	-472.89	4105.27	4025.89	-353.29	-599.76	29.15	130.64	35.26	3.76	PASS
4213.00†	4152.06	-352.42	-489.69	4205.20	4122.93	-365.63	-620.18	29.20	134.35	36.23	3.76	PASS
4313.00†	4249.90	-364.51	-506.49	4305.13	4219.97	-377.97	-640.60	29.25	138.07	37.21	3.76	PASS
4413.00†	4347.74	-376.60	-523.28	4405.06	4317.01	-390.30	-661.02	29.30	141.79	38.18	3.76	PASS
4513.00†	4445.57	-388.69	-540.08	4505.00	4414.05	-402.64	-681.44	29.34	145.51	39.16	3.77	PASS
4613.00†	4543.41	-400.77	-556.87	4604.93	4511.09	-414.98	-701.86	29.38	149.22	40.14	3.77	PASS
4713.00†	4641.24	-412.86	-573.67	4704.86	4608.13	-427.32	-722.28	29.42	152.94	41.12	3.77	PASS
4813.00†	4739.08	-424.95	-590.47	4804.79	4705.17	-439.65	-742.70	29.46	156.66	42.10	3.77	PASS
4913.00†	4836.91	-437.04	-607.26	4904.72	4802.21	-451.99	-763.12	29.50	160.37	43.09	3.77	PASS
5013.00†	4934.75	-449.13	-624.06	5004.65	4899.26	-464.33	-783.54	29.53	164.09	44.07	3.77	PASS
5113.00†	5032.58	-461.21	-640.85	5104.58	4996.30	-476.67	-803.96	29.56	167.81	45.06	3.77	PASS
5213.00†	5130.42	-473.30	-657.65	5204.51	5093.34	-489.01	-824.38	29.59	171.52	46.05	3.77	PASS
5313.00†	5228.25	-485.39	-674.45	5304.44	5190.38	-501.34	-844.80	29.62	175.24	47.04	3.77	PASS
5413.00†	5326.09	-497.48	-691.24	5404.37	5287.42	-513.68	-865.22	29.65	178.96	48.03	3.77	PASS
5513.00†	5423.93	-509.56	-708.04	5504.30	5384.46	-526.02	-885.64	29.68	182.68	49.02	3.77	PASS
5613.00†	5521.76	-521.65	-724.83	5604.23	5481.50	-538.36	-906.06	29.71	186.39	50.01	3.77	PASS
5713.00†	5619.60	-533.74	-741.63	5704.17	5578.54	-550.69	-926.48	29.73	190.11	51.01	3.77	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	5717.43	-545.83	-758.43	5804.10	5675.58	-563.03	-946.90	29.76	193.83	52.00	3.77	PASS
5913.00†	5815.27	-557.92	-775.22	5904.03	5772.63	-575.37	-967.32	29.78	197.55	53.00	3.76	PASS
6013.00†	5913.10	-570.00	-792.02	6003.96	5869.67	-587.71	-987.74	29.80	201.26	53.99	3.76	PASS
6113.00†	6010.94	-582.09	-808.81	6103.89	5966.71	-600.05	-1008.16	29.82	204.98	54.99	3.76	PASS
6213.00†	6108.77	-594.18	-825.61	6203.82	6063.75	-612.38	-1028.58	29.84	208.70	55.99	3.76	PASS
6313.00†	6206.61	-606.27	-842.41	6303.75	6160.79	-624.72	-1049.00	29.87	212.42	56.99	3.76	PASS
6413.00†	6304.44	-618.35	-859.20	6403.68	6257.83	-637.06	-1069.42	29.88	216.13	57.99	3.76	PASS
6513.00†	6402.28	-630.44	-876.00	6503.61	6354.87	-649.40	-1089.84	29.90	219.85	58.99	3.76	PASS
6613.00†	6500.12	-642.53	-892.79	6603.54	6451.91	-661.73	-1110.26	29.92	223.57	59.99	3.76	PASS
6713.00†	6597.95	-654.62	-909.59	6703.47	6548.95	-674.07	-1130.68	29.94	227.29	60.99	3.76	PASS
6813.00†	6695.79	-666.71	-926.39	6803.40	6646.00	-686.41	-1151.10	29.96	231.00	61.99	3.76	PASS
6913.00†	6793.62	-678.79	-943.18	6903.34	6743.04	-698.75	-1171.52	29.97	234.72	62.99	3.76	PASS
7013.00†	6891.46	-690.88	-959.98	7003.29	6840.10	-711.09	-1191.94	29.99	238.44	63.99	3.76	PASS
7113.00†	6989.29	-702.97	-976.77	7105.38	6939.79	-714.50	-1213.02	32.18	241.65	66.29	3.67	PASS
7182.54	7057.33	-711.38	-988.45	7173.09	7005.55	-706.76	-1227.02	35.92	244.16	67.35	3.65	PASS
7213.00†	7087.21	-714.25	-993.59	7201.65	7032.93	-701.12	-1232.87	24.43	245.72	70.42	3.51	PASS
7313.00†	7185.62	-712.33	-1010.52	7292.77	7117.86	-673.95	-1251.13	-22.34	252.90	73.41	3.47	PASS
7413.00†	7282.20	-693.10	-1027.18	7380.42	7194.57	-635.15	-1267.77	-42.93	262.53	75.19	3.52	PASS
7513.00†	7374.01	-657.14	-1043.06	7465.23	7262.43	-586.64	-1282.64	-48.34	273.52	74.35	3.70	PASS
7613.00†	7458.26	-605.54	-1057.69	7547.77	7321.03	-530.09	-1295.62	-49.23	284.84	72.00	3.99	PASS
7713.00†	7532.40	-539.89	-1070.61	7628.51	7370.08	-466.98	-1306.65	-48.71	295.60	68.75	4.33	PASS
7813.00†	7594.17	-462.16	-1081.44	7707.88	7409.35	-398.68	-1315.67	-47.85	305.04	65.20	4.72	PASS
7913.00†	7641.70	-374.72	-1089.84	7786.23	7438.70	-326.43	-1322.62	-47.05	312.61	62.02	5.09	PASS
8013.00†	7673.53	-280.23	-1095.57	7863.91	7458.00	-251.41	-1327.47	-46.50	317.91	59.83	5.37	PASS
8113.00†	7688.71	-181.56	-1098.44	7941.21	7467.17	-174.76	-1330.20	-46.26	320.69	58.99	5.49	PASS
8151.71	7690.00	-142.87	-1098.76	7971.10	7468.00	-144.89	-1330.68	-46.25	321.05	59.00	5.50	PASS
8213.00†	7690.00	-81.59	-1098.92	8032.03	7468.00	-83.97	-1331.30	-46.31	321.39	59.35	5.47	PASS
8313.00†	7690.00	18.41	-1099.18	8132.02	7468.00	16.03	-1332.33	-46.40	321.94	60.17	5.40	PASS
8413.00†	7690.00	118.41	-1099.44	8232.02	7468.00	116.02	-1333.35	-46.50	322.50	61.37	5.30	PASS
8513.00†	7690.00	218.41	-1099.70	8332.02	7468.00	216.01	-1334.37	-46.59	323.05	62.91	5.18	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	7690.00	318.41	-1099.96	8432.02	7468.00	316.00	-1335.40	-46.68	323.60	64.78	5.04	PASS
8713.00†	7690.00	418.41	-1100.22	8532.01	7468.00	415.99	-1336.42	-46.78	324.16	66.95	4.88	PASS
8813.00†	7690.00	518.41	-1100.49	8632.01	7468.00	515.99	-1337.44	-46.87	324.71	68.99	4.74	PASS
8913.00†	7690.00	618.41	-1100.75	8732.01	7468.00	615.98	-1338.47	-46.96	325.27	72.08	4.55	PASS
9013.00†	7690.00	718.41	-1101.01	8832.00	7468.00	715.97	-1339.49	-47.05	325.83	74.99	4.38	PASS
9113.00†	7690.00	818.41	-1101.27	8932.00	7468.00	815.96	-1340.51	-47.14	326.38	78.11	4.21	PASS
9213.00†	7690.00	918.41	-1101.53	9032.00	7468.00	915.95	-1341.53	-47.23	326.94	81.40	4.04	PASS
9313.00†	7690.00	1018.41	-1101.79	9132.00	7468.00	1015.95	-1342.56	-47.32	327.50	84.85	3.88	PASS
9413.00†	7690.00	1118.41	-1102.05	9231.99	7468.00	1115.94	-1343.58	-47.41	328.06	88.45	3.73	PASS
9513.00†	7690.00	1218.41	-1102.31	9331.99	7468.00	1215.93	-1344.60	-47.50	328.62	92.17	3.59	PASS
9613.00†	7690.00	1318.41	-1102.58	9431.99	7468.00	1315.92	-1345.63	-47.59	329.19	96.01	3.45	PASS
9713.00†	7690.00	1418.41	-1102.84	9531.98	7468.00	1415.91	-1346.65	-47.68	329.75	99.94	3.32	PASS
9813.00†	7690.00	1518.41	-1103.10	9631.98	7468.00	1515.90	-1347.67	-47.77	330.31	103.98	3.19	PASS
9913.00†	7690.00	1618.41	-1103.36	9731.98	7468.00	1615.90	-1348.70	-47.86	330.88	108.09	3.07	PASS
10013.00†	7690.00	1718.41	-1103.62	9831.98	7468.00	1715.89	-1349.72	-47.95	331.44	112.28	2.96	PASS
10113.00†	7690.00	1818.41	-1103.88	9931.97	7468.00	1815.88	-1350.74	-48.04	332.01	116.54	2.86	PASS
10213.00†	7690.00	1918.41	-1104.14	10031.97	7468.00	1915.87	-1351.77	-48.12	332.58	120.86	2.76	PASS
10313.00†	7690.00	2018.41	-1104.40	10131.97	7468.00	2015.86	-1352.79	-48.21	333.14	125.23	2.67	PASS
10413.00†	7690.00	2118.41	-1104.67	10231.96	7468.00	2115.86	-1353.81	-48.30	333.71	129.66	2.58	PASS
10513.00†	7690.00	2218.40	-1104.93	10331.96	7468.00	2215.85	-1354.84	-48.39	334.28	134.14	2.50	PASS
10613.00†	7690.00	2318.40	-1105.19	10431.96	7468.00	2315.84	-1355.86	-48.47	334.85	138.66	2.42	PASS
10713.00†	7690.00	2418.40	-1105.45	10531.95	7468.00	2415.83	-1356.88	-48.56	335.42	143.23	2.35	PASS
10813.00†	7690.00	2518.40	-1105.71	10631.95	7468.00	2515.82	-1357.90	-48.64	335.99	147.83	2.28	PASS
10913.00†	7690.00	2618.40	-1105.97	10731.95	7468.00	2615.82	-1358.93	-48.73	336.57	152.47	2.21	PASS
11013.00†	7690.00	2718.40	-1106.23	10831.95	7468.00	2715.81	-1359.95	-48.82	337.14	157.14	2.15	PASS
11113.00†	7690.00	2818.40	-1106.49	10931.94	7468.00	2815.80	-1360.97	-48.90	337.71	161.84	2.09	PASS
11213.00†	7690.00	2918.40	-1106.76	11031.94	7468.00	2915.79	-1362.00	-48.99	338.29	166.58	2.04	PASS
11313.00†	7690.00	3018.40	-1107.02	11131.94	7468.00	3015.78	-1363.02	-49.07	338.86	171.34	1.98	PASS
11413.00†	7690.00	3118.40	-1107.28	11231.93	7468.00	3115.77	-1364.04	-49.15	339.44	176.12	1.93	PASS
11513.00†	7690.00	3218.40	-1107.54	11331.93	7468.00	3215.77	-1365.07	-49.24	340.02	180.93	1.88	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	7690.00	3318.40	-1107.80	11431.93	7468.00	3315.76	-1366.09	-49.32	340.59	185.77	1.84	PASS
11713.00†	7690.00	3418.40	-1108.06	11531.93	7468.00	3415.75	-1367.11	-49.41	341.17	190.63	1.79	PASS
11813.00†	7690.00	3518.40	-1108.32	11631.92	7468.00	3515.74	-1368.14	-49.49	341.75	195.51	1.75	PASS
11913.00†	7690.00	3618.40	-1108.58	11731.92	7468.00	3615.73	-1369.16	-49.57	342.33	200.41	1.71	PASS
12013.00†	7690.00	3718.40	-1108.85	11831.92	7468.00	3715.73	-1370.18	-49.65	342.91	205.33	1.67	PASS
12113.00†	7690.00	3818.40	-1109.11	11931.91	7468.00	3815.72	-1371.21	-49.74	343.49	210.27	1.64	PASS
12213.00†	7690.00	3918.40	-1109.37	12031.91	7468.00	3915.71	-1372.23	-49.82	344.07	215.23	1.60	PASS
12313.00†	7690.00	4018.40	-1109.63	12131.91	7468.00	4015.70	-1373.25	-49.90	344.66	220.21	1.57	PASS
12413.00†	7690.00	4118.40	-1109.89	12231.91	7468.00	4115.69	-1374.27	-49.98	345.24	225.19	1.53	PASS
12513.00†	7690.00	4218.40	-1110.15	12331.90	7468.00	4215.69	-1375.30	-50.06	345.82	230.20	1.50	PASS
12613.00†	7690.00	4318.40	-1110.41	12431.90	7468.00	4315.68	-1376.32	-50.14	346.41	235.23	1.47	PASS
12713.00†	7690.00	4418.40	-1110.67	12531.90	7468.00	4415.67	-1377.34	-50.22	346.99	240.27	1.45	PASS
12813.00†	7690.00	4518.40	-1110.94	12631.89	7468.00	4515.66	-1378.37	-50.30	347.58	245.32	1.42	PASS
12913.00†	7690.00	4618.40	-1111.20	12731.89	7468.00	4615.65	-1379.39	-50.38	348.17	250.39	1.39	PASS
13013.00†	7690.00	4718.40	-1111.46	12831.89	7468.00	4715.64	-1380.41	-50.46	348.75	255.47	1.37	PASS
13113.00†	7690.00	4818.40	-1111.72	12931.89	7468.00	4815.64	-1381.44	-50.54	349.34	260.57	1.34	PASS
13213.00†	7690.00	4918.40	-1111.98	13031.88	7468.00	4915.63	-1382.46	-50.62	349.93	265.68	1.32	PASS
13313.00†	7690.00	5018.40	-1112.24	13131.88	7468.00	5015.62	-1383.48	-50.70	350.52	270.80	1.30	PASS
13413.00†	7690.00	5118.39	-1112.50	13231.88	7468.00	5115.61	-1384.51	-50.78	351.11	275.94	1.27	PASS
13513.00†	7690.00	5218.39	-1112.76	13331.87	7468.00	5215.60	-1385.53	-50.86	351.70	281.09	1.25	PASS
13613.00†	7690.00	5318.39	-1113.03	13431.87	7468.00	5315.60	-1386.55	-50.94	352.29	286.25	1.23	PASS
13713.00†	7690.00	5418.39	-1113.29	13531.87	7468.00	5415.59	-1387.57	-51.02	352.88	291.42	1.21	PASS
13813.00†	7690.00	5518.39	-1113.55	13631.86	7468.00	5515.58	-1388.60	-51.09	353.48	296.60	1.19	PASS
13913.00†	7690.00	5618.39	-1113.81	13731.86	7468.00	5615.57	-1389.62	-51.17	354.07	301.80	1.17	PASS
14013.00†	7690.00	5718.39	-1114.07	13831.86	7468.00	5715.56	-1390.64	-51.25	354.66	307.01	1.16	PASS
14113.00†	7690.00	5818.39	-1114.33	13931.86	7468.00	5815.55	-1391.67	-51.32	355.26	312.22	1.14	PASS
14213.00†	7690.00	5918.39	-1114.59	14031.85	7468.00	5915.55	-1392.69	-51.40	355.85	317.45	1.12	PASS
14313.00†	7690.00	6018.39	-1114.85	14131.85	7468.00	6015.54	-1393.71	-51.48	356.45	322.69	1.10	PASS
14413.00†	7690.00	6118.39	-1115.11	14231.85	7468.00	6115.53	-1394.74	-51.55	357.04	327.94	1.09	PASS
14513.00†	7690.00	6218.39	-1115.38	14331.84	7468.00	6215.52	-1395.76	-51.63	357.64	333.20	1.07	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	7690.00	6318.39	-1115.64	14431.84	7468.00	6315.51	-1396.78	-51.71	358.24	338.47	1.06	PASS
14713.00†	7690.00	6418.39	-1115.90	14531.84	7468.00	6415.51	-1397.81	-51.78	358.84	343.74	1.04	PASS
14813.00†	7690.00	6518.39	-1116.16	14631.84	7468.00	6515.50	-1398.83	-51.86	359.44	349.03	1.03	PASS
14913.00†	7690.00	6618.39	-1116.42	14731.83	7468.00	6615.49	-1399.85	-51.93	360.04	354.33	1.02	PASS
15013.00†	7690.00	6718.39	-1116.68	14831.83	7468.00	6715.48	-1400.88	-52.01	360.64	359.64	1.00	PASS
15113.00†	7690.00	6818.39	-1116.94	14931.83	7468.00	6815.47	-1401.90	-52.08	361.24	364.95	0.99	FAIL
15213.00†	7690.00	6918.39	-1117.20	15031.82	7468.00	6915.47	-1402.92	-52.15	361.84	370.28	0.98	FAIL
15313.00†	7690.00	7018.39	-1117.47	15131.82	7468.00	7015.46	-1403.94	-52.23	362.44	375.61	0.96	FAIL
15413.00†	7690.00	7118.39	-1117.73	15231.82	7468.00	7115.45	-1404.97	-52.30	363.04	380.95	0.95	FAIL
15513.00†	7690.00	7218.39	-1117.99	15331.82	7468.00	7215.44	-1405.99	-52.38	363.65	386.31	0.94	FAIL
15613.00†	7690.00	7318.39	-1118.25	15431.81	7468.00	7315.43	-1407.01	-52.45	364.25	391.67	0.93	FAIL
15713.00†	7690.00	7418.39	-1118.51	15531.81	7468.00	7415.42	-1408.04	-52.52	364.85	397.03	0.92	FAIL
15813.00†	7690.00	7518.39	-1118.77	15631.81	7468.00	7515.42	-1409.06	-52.59	365.46	402.41	0.91	FAIL
15913.00†	7690.00	7618.39	-1119.03	15731.80	7468.00	7615.41	-1410.08	-52.67	366.06	407.80	0.90	FAIL
16013.00†	7690.00	7718.39	-1119.29	15831.80	7468.00	7715.40	-1411.11	-52.74	366.67	413.19	0.89	FAIL
16113.00†	7690.00	7818.39	-1119.56	15931.80	7468.00	7815.39	-1412.13	-52.81	367.28	418.59	0.88	FAIL
16213.00†	7690.00	7918.39	-1119.82	16031.80	7468.00	7915.38	-1413.15	-52.88	367.88	424.00	0.87	FAIL
16313.00†	7690.00	8018.39	-1120.08	16131.79	7468.00	8015.38	-1414.18	-52.95	368.49	429.41	0.86	FAIL
16413.00†	7690.00	8118.38	-1120.34	16231.79	7468.00	8115.37	-1415.20	-53.03	369.10	434.84	0.85	FAIL
16513.00†	7690.00	8218.38	-1120.60	16331.79	7468.00	8215.36	-1416.22	-53.10	369.71	440.27	0.84	FAIL
16613.00†	7690.00	8318.38	-1120.86	16431.78	7468.00	8315.35	-1417.25	-53.17	370.32	445.71	0.83	FAIL
16713.00†	7690.00	8418.38	-1121.12	16531.78	7468.00	8415.34	-1418.27	-53.24	370.93	451.16	0.82	FAIL
16813.00†	7690.00	8518.38	-1121.38	16631.78	7468.00	8515.34	-1419.29	-53.31	371.54	456.61	0.81	FAIL
16913.00†	7690.00	8618.38	-1121.65	16731.77	7468.00	8615.33	-1420.31	-53.38	372.15	462.07	0.81	FAIL
17013.00†	7690.00	8718.38	-1121.91	16831.77	7468.00	8715.32	-1421.34	-53.45	372.76	467.54	0.80	FAIL
17113.00†	7690.00	8818.38	-1122.17	16931.77	7468.00	8815.31	-1422.36	-53.52	373.38	473.02	0.79	FAIL
17213.00†	7690.00	8918.38	-1122.43	17031.77	7468.00	8915.30	-1423.38	-53.59	373.99	478.50	0.78	FAIL
17313.00†	7690.00	9018.38	-1122.69	17131.76	7468.00	9015.29	-1424.41	-53.66	374.60	483.99	0.77	FAIL
17413.00†	7690.00	9118.38	-1122.95	17231.76	7468.00	9115.29	-1425.43	-53.72	375.22	489.49	0.77	FAIL
17513.00†	7690.00	9218.38	-1123.21	17331.76	7468.00	9215.28	-1426.45	-53.79	375.83	494.99	0.76	FAIL

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	7690.00	9318.38	-1123.47	17431.75	7468.00	9315.27	-1427.48	-53.86	376.45	500.50	0.75	FAIL
17713.00†	7690.00	9418.38	-1123.74	17531.75	7468.00	9415.26	-1428.50	-53.93	377.06	506.02	0.74	FAIL
17813.00†	7690.00	9518.38	-1124.00	17631.75	7468.00	9515.25	-1429.52	-54.00	377.68	511.54	0.74	FAIL
17864.18†	7690.00	9569.56	-1124.13	17682.93	7468.00	9566.43	-1430.05	-54.03	377.99	514.37	0.73	FAIL

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	0.01	-9.15	-20.93	-43.80
8.5in Open Hole	1800.00	17683.47	15883.47	1787.28	7468.00	-20.93	-43.80	2916.02	-440.46

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

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



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	-0.04	-30.02	-90.07	30.02	1.40	48.70	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	-0.04	-30.02	-90.07	30.02	1.73	31.52	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	-0.04	-30.02	-90.07	30.02	2.30	19.46	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	-0.04	-30.02	-90.07	30.02	2.91	13.87	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	-0.04	-30.02	-90.07	30.02	3.52	10.73	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	-0.04	-30.02	-90.07	30.02	4.14	8.74	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	-0.04	-30.02	-90.07	30.02	4.77	7.37	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	-0.04	-30.02	-90.07	30.02	5.39	6.37	PASS
813.00†	813.00	0.00	0.00	812.88	812.88	-0.05	-30.05	-90.10	30.05	6.02	5.61	PASS
913.00†	913.00	0.00	0.00	911.91	911.88	-1.07	-31.95	-91.91	31.99	6.75	5.25	PASS
1000.00	1000.00	0.00	0.00	997.85	997.69	-3.25	-36.05	-95.16	36.27	7.61	5.21	PASS
1013.00†	1013.00	-0.02	-0.02	1010.67	1010.48	-3.68	-36.85	30.05	37.10	7.74	5.23	PASS
1113.00†	1112.97	-1.30	-1.81	1109.13	1108.53	-7.88	-44.72	26.94	43.64	8.76	5.38	PASS
1213.00†	1212.80	-4.62	-6.42	1207.36	1205.99	-13.65	-55.53	25.14	50.39	9.95	5.42	PASS
1313.00†	1312.38	-9.98	-13.86	1305.36	1302.75	-20.97	-69.25	24.21	57.28	11.02	5.53	PASS
1413.00†	1411.57	-17.36	-24.12	1403.13	1398.68	-29.81	-85.83	23.87	64.26	12.06	5.64	PASS
1513.00†	1510.26	-26.76	-37.18	1500.70	1493.73	-40.17	-105.25	23.94	71.32	13.01	5.78	PASS
1597.14	1592.83	-36.22	-50.33	1584.69	1575.24	-49.73	-123.16	24.53	76.13	13.65	5.86	PASS
1613.00†	1608.34	-38.14	-52.99	1600.54	1590.61	-51.53	-126.54	24.71	76.83	13.76	5.87	PASS
1713.00†	1706.18	-50.23	-69.79	1700.43	1687.54	-62.90	-147.83	25.79	81.23	14.38	5.92	PASS
1813.00†	1804.01	-62.31	-86.59	1800.32	1784.47	-74.26	-169.13	26.75	85.66	14.97	5.96	PASS
1913.00†	1901.85	-74.40	-103.38	1900.21	1881.41	-85.62	-190.43	27.62	90.12	15.68	5.97	PASS
2013.00†	1999.68	-86.49	-120.18	2000.10	1978.34	-96.99	-211.73	28.41	94.59	16.45	5.97	PASS
2113.00†	2097.52	-98.58	-136.97	2100.00	2075.27	-108.35	-233.03	29.13	99.08	17.25	5.95	PASS
2213.00†	2195.35	-110.67	-153.77	2199.89	2172.20	-119.72	-254.33	29.78	103.59	18.08	5.92	PASS
2313.00†	2293.19	-122.75	-170.57	2299.78	2269.13	-131.08	-275.63	30.38	108.10	18.95	5.89	PASS
2413.00†	2391.03	-134.84	-187.36	2399.67	2366.06	-142.44	-296.93	30.93	112.63	19.84	5.85	PASS
2513.00†	2488.86	-146.93	-204.16	2499.56	2462.99	-153.81	-318.22	31.44	117.17	20.75	5.81	PASS
2613.00†	2586.70	-159.02	-220.95	2599.46	2559.92	-165.17	-339.52	31.91	121.71	21.68	5.77	PASS
2713.00†	2684.53	-171.11	-237.75	2699.35	2656.85	-176.54	-360.82	32.35	126.26	22.64	5.73	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	2782.37	-183.19	-254.55	2799.24	2753.78	-187.90	-382.12	32.75	130.82	23.61	5.68	PASS
2913.00†	2880.20	-195.28	-271.34	2899.13	2850.71	-199.26	-403.42	33.13	135.39	24.59	5.64	PASS
3013.00†	2978.04	-207.37	-288.14	2999.02	2947.65	-210.63	-424.72	33.48	139.96	25.59	5.60	PASS
3113.00†	3075.87	-219.46	-304.93	3098.92	3044.58	-221.99	-446.02	33.82	144.53	26.60	5.55	PASS
3213.00†	3173.71	-231.54	-321.73	3198.81	3141.51	-233.36	-467.32	34.13	149.11	27.62	5.51	PASS
3313.00†	3271.54	-243.63	-338.53	3298.70	3238.44	-244.72	-488.61	34.42	153.70	28.65	5.47	PASS
3413.00†	3369.38	-255.72	-355.32	3398.59	3335.37	-256.08	-509.91	34.70	158.29	29.69	5.44	PASS
3513.00†	3467.22	-267.81	-372.12	3498.48	3432.30	-267.45	-531.21	34.96	162.88	30.74	5.40	PASS
3613.00†	3565.05	-279.90	-388.91	3598.37	3529.23	-278.81	-552.51	35.20	167.47	31.79	5.36	PASS
3713.00†	3662.89	-291.98	-405.71	3698.27	3626.16	-290.18	-573.81	35.44	172.07	32.86	5.33	PASS
3813.00†	3760.72	-304.07	-422.51	3798.16	3723.09	-301.54	-595.11	35.66	176.67	33.92	5.30	PASS
3913.00†	3858.56	-316.16	-439.30	3898.05	3820.02	-312.90	-616.41	35.87	181.28	35.00	5.27	PASS
4013.00†	3956.39	-328.25	-456.10	3997.94	3916.96	-324.27	-637.70	36.07	185.88	36.08	5.24	PASS
4113.00†	4054.23	-340.33	-472.89	4097.83	4013.89	-335.63	-659.00	36.25	190.49	37.16	5.21	PASS
4213.00†	4152.06	-352.42	-489.69	4197.73	4110.82	-347.00	-680.30	36.44	195.10	38.25	5.18	PASS
4313.00†	4249.90	-364.51	-506.49	4297.62	4207.75	-358.36	-701.60	36.61	199.71	39.34	5.15	PASS
4413.00†	4347.74	-376.60	-523.28	4397.51	4304.68	-369.72	-722.90	36.77	204.32	40.43	5.13	PASS
4513.00†	4445.57	-388.69	-540.08	4497.40	4401.61	-381.09	-744.20	36.93	208.94	41.53	5.10	PASS
4613.00†	4543.41	-400.77	-556.87	4597.29	4498.54	-392.45	-765.50	37.08	213.55	42.63	5.08	PASS
4713.00†	4641.24	-412.86	-573.67	4697.18	4595.47	-403.82	-786.80	37.22	218.17	43.74	5.05	PASS
4813.00†	4739.08	-424.95	-590.47	4797.08	4692.40	-415.18	-808.09	37.36	222.79	44.85	5.03	PASS
4913.00†	4836.91	-437.04	-607.26	4896.97	4789.33	-426.54	-829.39	37.49	227.41	45.96	5.01	PASS
5013.00†	4934.75	-449.13	-624.06	4996.86	4886.26	-437.91	-850.69	37.62	232.03	47.07	4.99	PASS
5113.00†	5032.58	-461.21	-640.85	5096.75	4983.20	-449.27	-871.99	37.74	236.66	48.18	4.97	PASS
5213.00†	5130.42	-473.30	-657.65	5196.64	5080.13	-460.64	-893.29	37.86	241.28	49.30	4.95	PASS
5313.00†	5228.25	-485.39	-674.45	5296.54	5177.06	-472.00	-914.59	37.97	245.90	50.42	4.93	PASS
5413.00†	5326.09	-497.48	-691.24	5396.43	5273.99	-483.36	-935.89	38.08	250.53	51.54	4.91	PASS
5513.00†	5423.93	-509.56	-708.04	5496.32	5370.92	-494.73	-957.19	38.19	255.15	52.66	4.90	PASS
5613.00†	5521.76	-521.65	-724.83	5596.21	5467.85	-506.09	-978.48	38.29	259.78	53.79	4.88	PASS
5713.00†	5619.60	-533.74	-741.63	5696.10	5564.78	-517.46	-999.78	38.39	264.41	54.91	4.87	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
Page 42 of 112



REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	5717.43	-545.83	-758.43	5796.00	5661.71	-528.82	-1021.08	38.48	269.04	56.04	4.85	PASS
5913.00†	5815.27	-557.92	-775.22	5895.89	5758.64	-540.18	-1042.38	38.57	273.67	57.17	4.83	PASS
6013.00†	5913.10	-570.00	-792.02	5995.78	5855.57	-551.55	-1063.68	38.66	278.30	58.30	4.82	PASS
6113.00†	6010.94	-582.09	-808.81	6095.67	5952.50	-562.91	-1084.98	38.74	282.93	59.43	4.81	PASS
6213.00†	6108.77	-594.18	-825.61	6195.56	6049.44	-574.28	-1106.28	38.83	287.56	60.56	4.79	PASS
6313.00†	6206.61	-606.27	-842.41	6295.45	6146.37	-585.64	-1127.58	38.91	292.19	61.69	4.78	PASS
6413.00†	6304.44	-618.35	-859.20	6395.35	6243.30	-597.00	-1148.87	38.99	296.82	62.83	4.77	PASS
6513.00†	6402.28	-630.44	-876.00	6495.24	6340.23	-608.37	-1170.17	39.06	301.46	63.96	4.75	PASS
6613.00†	6500.12	-642.53	-892.79	6595.13	6437.16	-619.73	-1191.47	39.13	306.09	65.10	4.74	PASS
6713.00†	6597.95	-654.62	-909.59	6695.02	6534.09	-631.10	-1212.77	39.20	310.72	66.23	4.73	PASS
6813.00†	6695.79	-666.71	-926.39	6794.91	6631.02	-642.46	-1234.07	39.27	315.36	67.37	4.72	PASS
6913.00†	6793.62	-678.79	-943.18	6894.81	6727.95	-653.82	-1255.37	39.34	319.99	68.51	4.71	PASS
7013.00†	6891.46	-690.88	-959.98	6994.70	6824.88	-665.19	-1276.67	39.40	324.63	69.65	4.70	PASS
7113.00†	6989.29	-702.97	-976.77	7094.59	6921.81	-676.55	-1297.96	39.47	329.26	70.79	4.69	PASS
7182.54	7057.33	-711.38	-988.45	7164.05	6989.22	-684.45	-1312.78	39.51	332.49	71.58	4.68	PASS
7213.00†	7087.21	-714.25	-993.59	7194.47	7018.74	-687.92	-1319.26	25.95	333.84	71.81	4.68	PASS
7313.00†	7185.62	-712.33	-1010.52	7293.36	7114.69	-699.16	-1340.35	-29.21	337.62	71.02	4.79	PASS
7413.00†	7282.20	-693.10	-1027.18	7388.43	7206.95	-709.98	-1360.62	-60.00	342.24	68.16	5.06	PASS
7513.00†	7374.01	-657.14	-1043.06	7484.11	7300.09	-716.63	-1381.10	-76.21	351.09	64.43	5.50	PASS
7613.00†	7458.26	-605.54	-1057.69	7589.04	7401.92	-706.24	-1403.53	-86.97	364.58	62.04	5.93	PASS
7713.00†	7532.40	-539.89	-1070.61	7704.82	7510.00	-672.97	-1427.40	-95.12	381.45	62.01	6.21	PASS
7813.00†	7594.17	-462.16	-1081.44	7834.02	7620.12	-610.52	-1451.79	-101.61	399.80	62.33	6.48	PASS
7913.00†	7641.70	-374.72	-1089.84	7978.71	7723.69	-512.71	-1474.83	-106.68	417.11	61.93	6.80	PASS
8013.00†	7673.53	-280.23	-1095.57	8139.02	7806.50	-377.31	-1493.41	-110.22	430.56	60.47	7.19	PASS
8113.00†	7688.71	-181.56	-1098.44	8311.24	7851.05	-211.95	-1503.64	-111.97	437.57	58.77	7.52	PASS
8151.71	7690.00	-142.87	-1098.76	8379.41	7855.00	-143.93	-1504.69	-112.12	438.18	58.19	7.61	PASS
8213.00†	7690.00	-81.59	-1098.92	8440.70	7855.00	-82.65	-1504.85	-112.12	438.18	57.73	7.67	PASS
8313.00†	7690.00	18.41	-1099.18	8540.70	7855.00	17.35	-1505.11	-112.12	438.18	57.39	7.72	PASS
8413.00†	7690.00	118.41	-1099.44	8640.70	7855.00	117.35	-1505.37	-112.12	438.18	57.68	7.68	PASS
8513.00†	7690.00	218.41	-1099.70	8740.70	7855.00	217.35	-1505.63	-112.12	438.18	58.55	7.56	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	7690.00	318.41	-1099.96	8840.70	7855.00	317.35	-1505.89	-112.12	438.18	60.00	7.38	PASS
8713.00†	7690.00	418.41	-1100.22	8940.70	7855.00	417.35	-1506.15	-112.12	438.18	60.85	7.27	PASS
8813.00†	7690.00	518.41	-1100.49	9040.70	7855.00	517.35	-1506.41	-112.12	438.18	64.42	6.87	PASS
8913.00†	7690.00	618.41	-1100.75	9140.70	7855.00	617.35	-1506.67	-112.12	438.18	67.30	6.57	PASS
9013.00†	7690.00	718.41	-1101.01	9240.70	7855.00	717.35	-1506.93	-112.12	438.18	70.55	6.26	PASS
9113.00†	7690.00	818.41	-1101.27	9340.70	7855.00	817.35	-1507.19	-112.12	438.18	74.13	5.96	PASS
9213.00†	7690.00	918.41	-1101.53	9440.70	7855.00	917.35	-1507.45	-112.12	438.18	77.98	5.66	PASS
9313.00†	7690.00	1018.41	-1101.79	9540.70	7855.00	1017.35	-1507.72	-112.12	438.18	82.08	5.38	PASS
9413.00†	7690.00	1118.41	-1102.05	9640.70	7855.00	1117.35	-1507.98	-112.12	438.18	86.38	5.11	PASS
9513.00†	7690.00	1218.41	-1102.31	9740.70	7855.00	1217.35	-1508.24	-112.12	438.18	90.85	4.85	PASS
9613.00†	7690.00	1318.41	-1102.58	9840.70	7855.00	1317.35	-1508.50	-112.12	438.18	95.48	4.62	PASS
9713.00†	7690.00	1418.41	-1102.84	9940.70	7855.00	1417.35	-1508.76	-112.12	438.18	100.23	4.40	PASS
9813.00†	7690.00	1518.41	-1103.10	10040.70	7855.00	1517.35	-1509.02	-112.12	438.17	105.10	4.19	PASS
9913.00†	7690.00	1618.41	-1103.36	10140.70	7855.00	1617.35	-1509.28	-112.12	438.17	110.06	4.00	PASS
10013.00†	7690.00	1718.41	-1103.62	10240.70	7855.00	1717.35	-1509.54	-112.12	438.17	115.11	3.82	PASS
10113.00†	7690.00	1818.41	-1103.88	10340.70	7855.00	1817.35	-1509.80	-112.12	438.17	120.23	3.66	PASS
10213.00†	7690.00	1918.41	-1104.14	10440.70	7855.00	1917.35	-1510.06	-112.12	438.17	125.42	3.51	PASS
10313.00†	7690.00	2018.41	-1104.40	10540.70	7855.00	2017.35	-1510.32	-112.12	438.17	130.67	3.37	PASS
10413.00†	7690.00	2118.41	-1104.67	10640.70	7855.00	2117.35	-1510.58	-112.12	438.17	135.96	3.23	PASS
10513.00†	7690.00	2218.40	-1104.93	10740.70	7855.00	2217.35	-1510.84	-112.12	438.17	141.30	3.11	PASS
10613.00†	7690.00	2318.40	-1105.19	10840.70	7855.00	2317.35	-1511.10	-112.12	438.17	146.68	3.00	PASS
10713.00†	7690.00	2418.40	-1105.45	10940.70	7855.00	2417.35	-1511.36	-112.12	438.17	152.09	2.89	PASS
10813.00†	7690.00	2518.40	-1105.71	11040.70	7855.00	2517.35	-1511.63	-112.12	438.17	157.54	2.79	PASS
10913.00†	7690.00	2618.40	-1105.97	11140.70	7855.00	2617.35	-1511.89	-112.12	438.17	163.01	2.70	PASS
11013.00†	7690.00	2718.40	-1106.23	11240.70	7855.00	2717.34	-1512.15	-112.12	438.17	168.51	2.61	PASS
11113.00†	7690.00	2818.40	-1106.49	11340.70	7855.00	2817.34	-1512.41	-112.12	438.17	174.04	2.52	PASS
11213.00†	7690.00	2918.40	-1106.76	11440.70	7855.00	2917.34	-1512.67	-112.12	438.17	179.58	2.45	PASS
11313.00†	7690.00	3018.40	-1107.02	11540.70	7855.00	3017.34	-1512.93	-112.12	438.17	185.15	2.37	PASS
11413.00†	7690.00	3118.40	-1107.28	11640.70	7855.00	3117.34	-1513.19	-112.12	438.17	190.73	2.30	PASS
11513.00†	7690.00	3218.40	-1107.54	11740.70	7855.00	3217.34	-1513.45	-112.12	438.17	196.33	2.24	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	7690.00	3318.40	-1107.80	11840.70	7855.00	3317.34	-1513.71	-112.12	438.17	201.94	2.17	PASS
11713.00†	7690.00	3418.40	-1108.06	11940.70	7855.00	3417.34	-1513.97	-112.12	438.17	207.57	2.11	PASS
11813.00†	7690.00	3518.40	-1108.32	12040.70	7855.00	3517.34	-1514.23	-112.12	438.16	213.20	2.06	PASS
11913.00†	7690.00	3618.40	-1108.58	12140.70	7855.00	3617.34	-1514.49	-112.12	438.16	218.85	2.01	PASS
12013.00†	7690.00	3718.40	-1108.85	12240.70	7855.00	3717.34	-1514.75	-112.12	438.16	224.52	1.95	PASS
12113.00†	7690.00	3818.40	-1109.11	12340.70	7855.00	3817.34	-1515.01	-112.12	438.16	230.19	1.91	PASS
12213.00†	7690.00	3918.40	-1109.37	12440.70	7855.00	3917.34	-1515.27	-112.12	438.16	235.87	1.86	PASS
12313.00†	7690.00	4018.40	-1109.63	12540.70	7855.00	4017.34	-1515.54	-112.12	438.16	241.55	1.82	PASS
12413.00†	7690.00	4118.40	-1109.89	12640.70	7855.00	4117.34	-1515.80	-112.12	438.16	247.25	1.77	PASS
12513.00†	7690.00	4218.40	-1110.15	12740.70	7855.00	4217.34	-1516.06	-112.12	438.16	252.95	1.73	PASS
12613.00†	7690.00	4318.40	-1110.41	12840.70	7855.00	4317.34	-1516.32	-112.12	438.16	258.67	1.70	PASS
12713.00†	7690.00	4418.40	-1110.67	12940.70	7855.00	4417.34	-1516.58	-112.12	438.16	264.38	1.66	PASS
12813.00†	7690.00	4518.40	-1110.94	13040.70	7855.00	4517.34	-1516.84	-112.12	438.16	270.10	1.62	PASS
12913.00†	7690.00	4618.40	-1111.20	13140.70	7855.00	4617.34	-1517.10	-112.12	438.16	275.83	1.59	PASS
13013.00†	7690.00	4718.40	-1111.46	13240.70	7855.00	4717.34	-1517.36	-112.12	438.16	281.57	1.56	PASS
13113.00†	7690.00	4818.40	-1111.72	13340.70	7855.00	4817.34	-1517.62	-112.12	438.16	287.31	1.53	PASS
13213.00†	7690.00	4918.40	-1111.98	13440.70	7855.00	4917.34	-1517.88	-112.12	438.16	293.05	1.50	PASS
13313.00†	7690.00	5018.40	-1112.24	13540.70	7855.00	5017.34	-1518.14	-112.12	438.16	298.80	1.47	PASS
13413.00†	7690.00	5118.39	-1112.50	13640.70	7855.00	5117.34	-1518.40	-112.12	438.16	304.55	1.44	PASS
13513.00†	7690.00	5218.39	-1112.76	13740.70	7855.00	5217.34	-1518.66	-112.12	438.16	310.30	1.41	PASS
13613.00†	7690.00	5318.39	-1113.03	13840.70	7855.00	5317.34	-1518.92	-112.12	438.16	316.06	1.39	PASS
13713.00†	7690.00	5418.39	-1113.29	13940.70	7855.00	5417.34	-1519.18	-112.12	438.16	321.83	1.36	PASS
13813.00†	7690.00	5518.39	-1113.55	14040.70	7855.00	5517.34	-1519.45	-112.12	438.15	327.59	1.34	PASS
13913.00†	7690.00	5618.39	-1113.81	14140.70	7855.00	5617.34	-1519.71	-112.12	438.15	333.36	1.32	PASS
14013.00†	7690.00	5718.39	-1114.07	14240.70	7855.00	5717.33	-1519.97	-112.12	438.15	339.14	1.29	PASS
14113.00†	7690.00	5818.39	-1114.33	14340.70	7855.00	5817.33	-1520.23	-112.12	438.15	344.91	1.27	PASS
14213.00†	7690.00	5918.39	-1114.59	14440.70	7855.00	5917.33	-1520.49	-112.12	438.15	350.69	1.25	PASS
14313.00†	7690.00	6018.39	-1114.85	14540.70	7855.00	6017.33	-1520.75	-112.12	438.15	356.47	1.23	PASS
14413.00†	7690.00	6118.39	-1115.11	14640.70	7855.00	6117.33	-1521.01	-112.12	438.15	362.25	1.21	PASS
14513.00†	7690.00	6218.39	-1115.38	14740.70	7855.00	6217.33	-1521.27	-112.12	438.15	368.04	1.19	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	7690.00	6318.39	-1115.64	14840.70	7855.00	6317.33	-1521.53	-112.12	438.15	373.83	1.17	PASS
14713.00†	7690.00	6418.39	-1115.90	14940.70	7855.00	6417.33	-1521.79	-112.12	438.15	379.62	1.15	PASS
14813.00†	7690.00	6518.39	-1116.16	15040.70	7855.00	6517.33	-1522.05	-112.12	438.15	385.41	1.14	PASS
14913.00†	7690.00	6618.39	-1116.42	15140.70	7855.00	6617.33	-1522.31	-112.12	438.15	391.20	1.12	PASS
15013.00†	7690.00	6718.39	-1116.68	15240.70	7855.00	6717.33	-1522.57	-112.12	438.15	397.00	1.10	PASS
15113.00†	7690.00	6818.39	-1116.94	15340.70	7855.00	6817.33	-1522.83	-112.12	438.15	402.80	1.09	PASS
15213.00†	7690.00	6918.39	-1117.20	15440.70	7855.00	6917.33	-1523.10	-112.12	438.15	408.60	1.07	PASS
15313.00†	7690.00	7018.39	-1117.47	15540.70	7855.00	7017.33	-1523.36	-112.12	438.15	414.40	1.06	PASS
15413.00†	7690.00	7118.39	-1117.73	15640.70	7855.00	7117.33	-1523.62	-112.12	438.15	420.20	1.04	PASS
15513.00†	7690.00	7218.39	-1117.99	15740.70	7855.00	7217.33	-1523.88	-112.12	438.15	426.00	1.03	PASS
15613.00†	7690.00	7318.39	-1118.25	15840.70	7855.00	7317.33	-1524.14	-112.12	438.15	431.81	1.01	PASS
15713.00†	7690.00	7418.39	-1118.51	15940.70	7855.00	7417.33	-1524.40	-112.12	438.14	437.62	1.00	PASS
15813.00†	7690.00	7518.39	-1118.77	16040.70	7855.00	7517.33	-1524.66	-112.12	438.14	443.42	0.99	FAIL
15913.00†	7690.00	7618.39	-1119.03	16140.70	7855.00	7617.33	-1524.92	-112.12	438.14	449.23	0.98	FAIL
16013.00†	7690.00	7718.39	-1119.29	16240.70	7855.00	7717.33	-1525.18	-112.12	438.14	455.04	0.96	FAIL
16113.00†	7690.00	7818.39	-1119.56	16340.70	7855.00	7817.33	-1525.44	-112.12	438.14	460.86	0.95	FAIL
16213.00†	7690.00	7918.39	-1119.82	16440.70	7855.00	7917.33	-1525.70	-112.12	438.14	466.67	0.94	FAIL
16313.00†	7690.00	8018.39	-1120.08	16540.70	7855.00	8017.33	-1525.96	-112.12	438.14	472.48	0.93	FAIL
16413.00†	7690.00	8118.38	-1120.34	16640.70	7855.00	8117.33	-1526.22	-112.12	438.14	478.30	0.92	FAIL
16513.00†	7690.00	8218.38	-1120.60	16740.70	7855.00	8217.33	-1526.48	-112.12	438.14	484.11	0.90	FAIL
16613.00†	7690.00	8318.38	-1120.86	16840.70	7855.00	8317.33	-1526.74	-112.12	438.14	489.93	0.89	FAIL
16713.00†	7690.00	8418.38	-1121.12	16940.70	7855.00	8417.33	-1527.01	-112.12	438.14	495.75	0.88	FAIL
16813.00†	7690.00	8518.38	-1121.38	17040.70	7855.00	8517.33	-1527.27	-112.12	438.14	501.57	0.87	FAIL
16913.00†	7690.00	8618.38	-1121.65	17140.70	7855.00	8617.32	-1527.53	-112.12	438.14	507.39	0.86	FAIL
17013.00†	7690.00	8718.38	-1121.91	17240.70	7855.00	8717.32	-1527.79	-112.12	438.14	513.21	0.85	FAIL
17113.00†	7690.00	8818.38	-1122.17	17340.70	7855.00	8817.32	-1528.05	-112.12	438.14	519.03	0.84	FAIL
17213.00†	7690.00	8918.38	-1122.43	17440.70	7855.00	8917.32	-1528.31	-112.12	438.14	524.85	0.83	FAIL
17313.00†	7690.00	9018.38	-1122.69	17540.70	7855.00	9017.32	-1528.57	-112.12	438.14	530.67	0.83	FAIL
17413.00†	7690.00	9118.38	-1122.95	17640.70	7855.00	9117.32	-1528.83	-112.12	438.14	536.50	0.82	FAIL
17513.00†	7690.00	9218.38	-1123.21	17740.70	7855.00	9217.32	-1529.09	-112.12	438.14	542.32	0.81	FAIL

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	7690.00	9318.38	-1123.47	17840.70	7855.00	9317.32	-1529.35	-112.12	438.14	548.15	0.80	FAIL
17713.00†	7690.00	9418.38	-1123.74	17940.70	7855.00	9417.32	-1529.61	-112.12	438.13	553.97	0.79	FAIL
17813.00†	7690.00	9518.38	-1124.00	18040.70	7855.00	9517.32	-1529.87	-112.12	438.13	559.80	0.78	FAIL
17864.18†	7690.00	9569.56	-1124.13	18089.51	7855.00	9566.13	-1530.00	-112.12	438.14	563.12	0.78	FAIL

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	-0.02	-18.30	-22.63	-60.68
8.5in Open Hole	1800.00	18089.51	16289.51	1784.16	7855.00	-22.63	-60.68	2915.75	-475.49

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

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



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	0.07	29.96	89.86	29.96	1.40	48.60	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.07	29.96	89.86	29.96	1.72	31.63	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.07	29.96	89.86	29.96	2.29	19.55	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.07	29.96	89.86	29.96	2.90	13.92	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.07	29.96	89.86	29.96	3.51	10.76	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.07	29.96	89.86	29.96	4.13	8.76	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.07	29.96	89.86	29.96	4.75	7.38	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.07	29.96	89.86	29.96	5.38	6.37	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.07	29.96	89.86	29.96	6.00	5.61	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.07	29.96	89.86	29.96	6.63	5.00	PASS
1000.00	1000.00	0.00	0.00	1000.00	1000.00	0.07	29.96	89.86	29.96	7.17	4.58	PASS
1013.00†	1013.00	-0.02	-0.02	1013.00	1013.00	0.07	29.96	-144.43	29.99	7.25	4.52	PASS
1113.00†	1112.97	-1.30	-1.81	1112.97	1112.97	0.07	29.96	-146.72	31.80	7.96	4.33	PASS
1213.00†	1212.80	-4.62	-6.42	1212.88	1212.88	0.05	29.95	-151.51	36.68	8.88	4.44	PASS
1313.00†	1312.38	-9.98	-13.86	1313.33	1313.30	-2.01	29.13	-154.68	43.74	9.81	4.77	PASS
1413.00†	1411.57	-17.36	-24.12	1413.89	1413.69	-7.34	27.00	-155.26	52.14	10.77	5.15	PASS
1513.00†	1510.26	-26.76	-37.18	1514.49	1513.86	-15.94	23.56	-154.26	61.80	11.67	5.61	PASS
1597.14	1592.83	-36.22	-50.33	1598.82	1597.55	-25.56	19.71	-152.77	71.00	12.36	6.07	PASS
1613.00†	1608.34	-38.14	-52.99	1614.56	1613.16	-27.47	18.94	-152.55	72.89	12.48	6.17	PASS
1713.00†	1706.18	-50.23	-69.79	1713.84	1711.59	-39.48	14.14	-151.40	84.79	13.13	6.81	PASS
1813.00†	1804.01	-62.31	-86.59	1813.12	1810.02	-51.49	9.33	-150.53	96.71	13.75	7.36	PASS
1913.00†	1901.85	-74.40	-103.38	1912.39	1908.45	-63.50	4.53	-149.85	108.66	14.51	7.82	PASS
2013.00†	1999.68	-86.49	-120.18	2011.67	2006.88	-75.51	-0.28	-149.31	120.62	15.30	8.22	PASS
2113.00†	2097.52	-98.58	-136.97	2110.95	2105.31	-87.52	-5.09	-148.86	132.58	16.11	8.56	PASS
2213.00†	2195.35	-110.67	-153.77	2210.22	2203.74	-99.53	-9.89	-148.49	144.55	16.95	8.86	PASS
2313.00†	2293.19	-122.75	-170.57	2309.50	2302.17	-111.55	-14.70	-148.17	156.53	17.81	9.11	PASS
2413.00†	2391.03	-134.84	-187.36	2408.78	2400.60	-123.56	-19.50	-147.90	168.51	18.68	9.34	PASS
2513.00†	2488.86	-146.93	-204.16	2508.05	2499.03	-135.57	-24.31	-147.67	180.49	19.57	9.53	PASS
2613.00†	2586.70	-159.02	-220.95	2607.33	2597.46	-147.58	-29.11	-147.46	192.48	20.47	9.71	PASS
2713.00†	2684.53	-171.11	-237.75	2706.61	2695.89	-159.59	-33.92	-147.28	204.47	21.38	9.86	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	2782.37	-183.19	-254.55	2805.89	2794.32	-171.60	-38.73	-147.12	216.46	22.30	9.99	PASS
2913.00†	2880.20	-195.28	-271.34	2905.16	2892.75	-183.61	-43.53	-146.98	228.45	23.23	10.11	PASS
3013.00†	2978.04	-207.37	-288.14	3004.44	2991.18	-195.62	-48.34	-146.85	240.45	24.16	10.22	PASS
3113.00†	3075.87	-219.46	-304.93	3103.72	3089.61	-207.63	-53.14	-146.73	252.44	25.10	10.32	PASS
3213.00†	3173.71	-231.54	-321.73	3202.99	3188.04	-219.64	-57.95	-146.62	264.44	26.05	10.41	PASS
3313.00†	3271.54	-243.63	-338.53	3302.27	3286.47	-231.66	-62.76	-146.53	276.43	27.00	10.49	PASS
3413.00†	3369.38	-255.72	-355.32	3401.55	3384.90	-243.67	-67.56	-146.44	288.43	27.95	10.56	PASS
3513.00†	3467.22	-267.81	-372.12	3500.82	3483.33	-255.68	-72.37	-146.35	300.43	28.91	10.63	PASS
3613.00†	3565.05	-279.90	-388.91	3600.10	3581.76	-267.69	-77.17	-146.28	312.43	29.88	10.69	PASS
3713.00†	3662.89	-291.98	-405.71	3699.38	3680.19	-279.70	-81.98	-146.21	324.42	30.84	10.74	PASS
3813.00†	3760.72	-304.07	-422.51	3798.65	3778.62	-291.71	-86.79	-146.14	336.42	31.81	10.79	PASS
3913.00†	3858.56	-316.16	-439.30	3897.93	3877.05	-303.72	-91.59	-146.08	348.42	32.78	10.84	PASS
4013.00†	3956.39	-328.25	-456.10	3997.21	3975.48	-315.73	-96.40	-146.03	360.42	33.76	10.88	PASS
4113.00†	4054.23	-340.33	-472.89	4096.48	4073.91	-327.74	-101.20	-145.97	372.42	34.73	10.93	PASS
4213.00†	4152.06	-352.42	-489.69	4195.76	4172.34	-339.76	-106.01	-145.92	384.42	35.71	10.96	PASS
4313.00†	4249.90	-364.51	-506.49	4295.04	4270.77	-351.77	-110.82	-145.88	396.43	36.69	11.00	PASS
4413.00†	4347.74	-376.60	-523.28	4394.31	4369.20	-363.78	-115.62	-145.83	408.43	37.67	11.03	PASS
4513.00†	4445.57	-388.69	-540.08	4493.59	4467.63	-375.79	-120.43	-145.79	420.43	38.65	11.06	PASS
4613.00†	4543.41	-400.77	-556.87	4592.87	4566.06	-387.80	-125.23	-145.75	432.43	39.64	11.09	PASS
4713.00†	4641.24	-412.86	-573.67	4692.14	4664.49	-399.81	-130.04	-145.71	444.43	40.62	11.12	PASS
4813.00†	4739.08	-424.95	-590.47	4791.42	4762.93	-411.82	-134.85	-145.68	456.43	41.61	11.14	PASS
4913.00†	4836.91	-437.04	-607.26	4890.70	4861.36	-423.83	-139.65	-145.65	468.43	42.60	11.17	PASS
5013.00†	4934.75	-449.13	-624.06	4989.97	4959.79	-435.84	-144.46	-145.61	480.44	43.59	11.19	PASS
5113.00†	5032.58	-461.21	-640.85	5089.25	5058.22	-447.85	-149.26	-145.58	492.44	44.58	11.21	PASS
5213.00†	5130.42	-473.30	-657.65	5188.53	5156.65	-459.87	-154.07	-145.56	504.44	45.57	11.23	PASS
5313.00†	5228.25	-485.39	-674.45	5287.80	5255.08	-471.88	-158.88	-145.53	516.44	46.56	11.25	PASS
5413.00†	5326.09	-497.48	-691.24	5387.08	5353.51	-483.89	-163.68	-145.50	528.45	47.55	11.27	PASS
5513.00†	5423.93	-509.56	-708.04	5486.36	5451.94	-495.90	-168.49	-145.48	540.45	48.55	11.28	PASS
5613.00†	5521.76	-521.65	-724.83	5585.64	5550.37	-507.91	-173.29	-145.45	552.45	49.54	11.30	PASS
5713.00†	5619.60	-533.74	-741.63	5684.91	5648.80	-519.92	-178.10	-145.43	564.46	50.54	11.31	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	5717.43	-545.83	-758.43	5784.19	5747.23	-531.93	-182.91	-145.41	576.46	51.53	11.33	PASS
5913.00†	5815.27	-557.92	-775.22	5883.47	5845.66	-543.94	-187.71	-145.39	588.46	52.53	11.34	PASS
6013.00†	5913.10	-570.00	-792.02	5982.74	5944.09	-555.95	-192.52	-145.37	600.47	53.52	11.36	PASS
6113.00†	6010.94	-582.09	-808.81	6082.02	6042.52	-567.96	-197.32	-145.35	612.47	54.52	11.37	PASS
6213.00†	6108.77	-594.18	-825.61	6181.30	6140.95	-579.98	-202.13	-145.33	624.47	55.52	11.38	PASS
6313.00†	6206.61	-606.27	-842.41	6280.57	6239.38	-591.99	-206.94	-145.31	636.48	56.52	11.39	PASS
6413.00†	6304.44	-618.35	-859.20	6379.85	6337.81	-604.00	-211.74	-145.29	648.48	57.52	11.40	PASS
6513.00†	6402.28	-630.44	-876.00	6479.13	6436.24	-616.01	-216.55	-145.28	660.48	58.52	11.41	PASS
6613.00†	6500.12	-642.53	-892.79	6578.40	6534.67	-628.02	-221.35	-145.26	672.49	59.52	11.42	PASS
6713.00†	6597.95	-654.62	-909.59	6677.68	6633.10	-640.03	-226.16	-145.25	684.49	60.52	11.43	PASS
6813.00†	6695.79	-666.71	-926.39	6776.96	6731.53	-652.04	-230.97	-145.23	696.49	61.52	11.44	PASS
6913.00†	6793.62	-678.79	-943.18	6876.23	6829.96	-664.05	-235.77	-145.22	708.50	62.52	11.45	PASS
7013.00†	6891.46	-690.88	-959.98	6975.51	6928.39	-676.06	-240.58	-145.20	720.50	63.52	11.46	PASS
7113.00†	6989.29	-702.97	-976.77	7074.79	7026.82	-688.08	-245.38	-145.19	732.51	64.52	11.47	PASS
7182.54	7057.33	-711.38	-988.45	7143.82	7095.27	-696.43	-248.73	-145.18	740.85	65.22	11.47	PASS
7213.00†	7087.21	-714.25	-993.59	7174.05	7125.24	-700.08	-250.19	-159.05	744.51	65.53	11.47	PASS
7313.00†	7185.62	-712.33	-1010.52	7272.25	7222.65	-711.58	-254.95	147.52	756.48	66.70	11.45	PASS
7413.00†	7282.20	-693.10	-1027.18	7371.57	7321.72	-711.34	-259.82	121.32	768.60	68.31	11.36	PASS
7513.00†	7374.01	-657.14	-1043.06	7474.47	7422.72	-693.05	-264.83	111.12	780.59	68.79	11.46	PASS
7613.00†	7458.26	-605.54	-1057.69	7581.31	7522.37	-655.28	-269.82	106.29	792.04	68.19	11.73	PASS
7713.00†	7532.40	-539.89	-1070.61	7692.30	7616.60	-597.17	-274.61	103.69	802.50	66.46	12.19	PASS
7813.00†	7594.17	-462.16	-1081.44	7807.42	7700.64	-518.88	-278.94	102.20	811.52	64.14	12.78	PASS
7913.00†	7641.70	-374.72	-1089.84	7926.34	7769.24	-422.08	-282.57	101.34	818.66	61.72	13.41	PASS
8013.00†	7673.53	-280.23	-1095.57	8048.30	7817.36	-310.30	-285.22	100.88	823.56	59.50	14.00	PASS
8113.00†	7688.71	-181.56	-1098.44	8172.22	7840.97	-188.90	-286.70	100.69	825.92	57.97	14.41	PASS
8151.71	7690.00	-142.87	-1098.76	8220.42	7843.00	-140.76	-286.93	100.67	826.13	57.56	14.52	PASS
8213.00†	7690.00	-81.59	-1098.92	8281.72	7843.00	-79.46	-287.09	100.67	826.13	57.28	14.59	PASS
8313.00†	7690.00	18.41	-1099.18	8381.72	7843.00	20.54	-287.35	100.67	826.12	57.32	14.58	PASS
8413.00†	7690.00	118.41	-1099.44	8481.72	7843.00	120.54	-287.61	100.67	826.12	58.03	14.40	PASS
8513.00†	7690.00	218.41	-1099.70	8581.72	7843.00	220.54	-287.87	100.67	826.12	59.39	14.07	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	7690.00	318.41	-1099.96	8681.72	7843.00	320.54	-288.13	100.67	826.12	61.34	13.61	PASS
8713.00†	7690.00	418.41	-1100.22	8781.72	7843.00	420.54	-288.40	100.67	826.12	63.84	13.07	PASS
8813.00†	7690.00	518.41	-1100.49	8881.72	7843.00	520.54	-288.66	100.67	826.12	66.82	12.48	PASS
8913.00†	7690.00	618.41	-1100.75	8981.72	7843.00	620.54	-288.92	100.67	826.12	70.22	11.87	PASS
9013.00†	7690.00	718.41	-1101.01	9081.72	7843.00	720.53	-289.18	100.67	826.12	73.98	11.26	PASS
9113.00†	7690.00	818.41	-1101.27	9181.72	7843.00	820.53	-289.44	100.67	826.12	79.36	10.49	PASS
9213.00†	7690.00	918.41	-1101.53	9281.72	7843.00	920.53	-289.71	100.67	826.12	82.39	10.10	PASS
9313.00†	7690.00	1018.41	-1101.79	9381.72	7843.00	1020.53	-289.97	100.67	826.12	86.96	9.57	PASS
9413.00†	7690.00	1118.41	-1102.05	9481.72	7843.00	1120.53	-290.23	100.67	826.12	91.71	9.07	PASS
9513.00†	7690.00	1218.41	-1102.31	9581.72	7843.00	1220.53	-290.49	100.67	826.12	96.62	8.61	PASS
9613.00†	7690.00	1318.41	-1102.58	9681.72	7843.00	1320.53	-290.75	100.67	826.12	101.66	8.18	PASS
9713.00†	7690.00	1418.41	-1102.84	9781.72	7843.00	1420.53	-291.01	100.67	826.12	106.83	7.78	PASS
9813.00†	7690.00	1518.41	-1103.10	9881.72	7843.00	1520.53	-291.28	100.67	826.12	112.10	7.41	PASS
9913.00†	7690.00	1618.41	-1103.36	9981.72	7843.00	1620.53	-291.54	100.67	826.12	117.36	7.08	PASS
10013.00†	7690.00	1718.41	-1103.62	10081.72	7843.00	1720.53	-291.80	100.67	826.12	122.88	6.76	PASS
10113.00†	7690.00	1818.41	-1103.88	10181.72	7843.00	1820.53	-292.06	100.67	826.12	128.38	6.47	PASS
10213.00†	7690.00	1918.41	-1104.14	10281.72	7843.00	1920.53	-292.32	100.67	826.12	133.93	6.20	PASS
10313.00†	7690.00	2018.41	-1104.40	10381.72	7843.00	2020.53	-292.58	100.67	826.11	139.54	5.95	PASS
10413.00†	7690.00	2118.41	-1104.67	10481.72	7843.00	2120.53	-292.85	100.67	826.11	145.19	5.71	PASS
10513.00†	7690.00	2218.40	-1104.93	10581.72	7843.00	2220.53	-293.11	100.67	826.11	150.88	5.50	PASS
10613.00†	7690.00	2318.40	-1105.19	10681.72	7843.00	2320.53	-293.37	100.67	826.11	156.61	5.29	PASS
10713.00†	7690.00	2418.40	-1105.45	10781.72	7843.00	2420.53	-293.63	100.67	826.11	162.37	5.11	PASS
10813.00†	7690.00	2518.40	-1105.71	10881.72	7843.00	2520.53	-293.89	100.67	826.11	168.16	4.93	PASS
10913.00†	7690.00	2618.40	-1105.97	10981.72	7843.00	2620.53	-294.15	100.67	826.11	173.97	4.76	PASS
11013.00†	7690.00	2718.40	-1106.23	11081.72	7843.00	2720.53	-294.42	100.67	826.11	179.81	4.61	PASS
11113.00†	7690.00	2818.40	-1106.49	11181.72	7843.00	2820.53	-294.68	100.67	826.11	185.67	4.46	PASS
11213.00†	7690.00	2918.40	-1106.76	11281.72	7843.00	2920.53	-294.94	100.67	826.11	191.55	4.33	PASS
11313.00†	7690.00	3018.40	-1107.02	11381.72	7843.00	3020.53	-295.20	100.67	826.11	197.45	4.20	PASS
11413.00†	7690.00	3118.40	-1107.28	11481.72	7843.00	3120.53	-295.46	100.67	826.11	203.36	4.07	PASS
11513.00†	7690.00	3218.40	-1107.54	11581.72	7843.00	3220.53	-295.72	100.67	826.11	209.28	3.96	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	7690.00	3318.40	-1107.80	11681.72	7843.00	3320.53	-295.99	100.67	826.11	215.22	3.85	PASS
11713.00†	7690.00	3418.40	-1108.06	11781.72	7843.00	3420.53	-296.25	100.67	826.11	221.17	3.74	PASS
11813.00†	7690.00	3518.40	-1108.32	11881.72	7843.00	3520.53	-296.51	100.67	826.11	227.14	3.65	PASS
11913.00†	7690.00	3618.40	-1108.58	11981.72	7843.00	3620.52	-296.77	100.67	826.11	233.11	3.55	PASS
12013.00†	7690.00	3718.40	-1108.85	12081.72	7843.00	3720.52	-297.03	100.67	826.11	239.09	3.46	PASS
12113.00†	7690.00	3818.40	-1109.11	12181.72	7843.00	3820.52	-297.30	100.67	826.11	245.08	3.38	PASS
12213.00†	7690.00	3918.40	-1109.37	12281.72	7843.00	3920.52	-297.56	100.67	826.11	251.08	3.30	PASS
12313.00†	7690.00	4018.40	-1109.63	12381.72	7843.00	4020.52	-297.82	100.67	826.10	257.09	3.22	PASS
12413.00†	7690.00	4118.40	-1109.89	12481.72	7843.00	4120.52	-298.08	100.67	826.10	263.11	3.15	PASS
12513.00†	7690.00	4218.40	-1110.15	12581.72	7843.00	4220.52	-298.34	100.67	826.10	269.13	3.07	PASS
12613.00†	7690.00	4318.40	-1110.41	12681.72	7843.00	4320.52	-298.60	100.67	826.10	275.16	3.01	PASS
12713.00†	7690.00	4418.40	-1110.67	12781.72	7843.00	4420.52	-298.87	100.67	826.10	281.19	2.94	PASS
12813.00†	7690.00	4518.40	-1110.94	12881.72	7843.00	4520.52	-299.13	100.67	826.10	287.23	2.88	PASS
12913.00†	7690.00	4618.40	-1111.20	12981.72	7843.00	4620.52	-299.39	100.67	826.10	293.28	2.82	PASS
13013.00†	7690.00	4718.40	-1111.46	13081.72	7843.00	4720.52	-299.65	100.67	826.10	299.33	2.76	PASS
13113.00†	7690.00	4818.40	-1111.72	13181.72	7843.00	4820.52	-299.91	100.67	826.10	305.38	2.71	PASS
13213.00†	7690.00	4918.40	-1111.98	13281.72	7843.00	4920.52	-300.17	100.67	826.10	311.44	2.66	PASS
13313.00†	7690.00	5018.40	-1112.24	13381.72	7843.00	5020.52	-300.44	100.67	826.10	317.50	2.61	PASS
13413.00†	7690.00	5118.39	-1112.50	13481.72	7843.00	5120.52	-300.70	100.67	826.10	323.57	2.56	PASS
13513.00†	7690.00	5218.39	-1112.76	13581.72	7843.00	5220.52	-300.96	100.67	826.10	329.64	2.51	PASS
13613.00†	7690.00	5318.39	-1113.03	13681.72	7843.00	5320.52	-301.22	100.67	826.10	335.71	2.46	PASS
13713.00†	7690.00	5418.39	-1113.29	13781.72	7843.00	5420.52	-301.48	100.67	826.10	341.79	2.42	PASS
13813.00†	7690.00	5518.39	-1113.55	13881.72	7843.00	5520.52	-301.74	100.67	826.10	347.87	2.38	PASS
13913.00†	7690.00	5618.39	-1113.81	13981.72	7843.00	5620.52	-302.01	100.67	826.10	353.95	2.34	PASS
14013.00†	7690.00	5718.39	-1114.07	14081.72	7843.00	5720.52	-302.27	100.67	826.10	360.03	2.30	PASS
14113.00†	7690.00	5818.39	-1114.33	14181.72	7843.00	5820.52	-302.53	100.67	826.10	366.12	2.26	PASS
14213.00†	7690.00	5918.39	-1114.59	14281.72	7843.00	5920.52	-302.79	100.67	826.10	372.21	2.22	PASS
14313.00†	7690.00	6018.39	-1114.85	14381.72	7843.00	6020.52	-303.05	100.67	826.09	378.30	2.19	PASS
14413.00†	7690.00	6118.39	-1115.11	14481.72	7843.00	6120.52	-303.32	100.67	826.09	384.40	2.15	PASS
14513.00†	7690.00	6218.39	-1115.38	14581.72	7843.00	6220.52	-303.58	100.67	826.09	390.49	2.12	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	7690.00	6318.39	-1115.64	14681.72	7843.00	6320.52	-303.84	100.67	826.09	396.59	2.08	PASS
14713.00†	7690.00	6418.39	-1115.90	14781.72	7843.00	6420.52	-304.10	100.67	826.09	402.69	2.05	PASS
14813.00†	7690.00	6518.39	-1116.16	14881.72	7843.00	6520.51	-304.36	100.67	826.09	408.80	2.02	PASS
14913.00†	7690.00	6618.39	-1116.42	14981.72	7843.00	6620.51	-304.62	100.67	826.09	414.90	1.99	PASS
15013.00†	7690.00	6718.39	-1116.68	15081.72	7843.00	6720.51	-304.89	100.67	826.09	421.01	1.96	PASS
15113.00†	7690.00	6818.39	-1116.94	15181.72	7843.00	6820.51	-305.15	100.67	826.09	427.12	1.94	PASS
15213.00†	7690.00	6918.39	-1117.20	15281.72	7843.00	6920.51	-305.41	100.67	826.09	433.23	1.91	PASS
15313.00†	7690.00	7018.39	-1117.47	15381.72	7843.00	7020.51	-305.67	100.67	826.09	439.34	1.88	PASS
15413.00†	7690.00	7118.39	-1117.73	15481.72	7843.00	7120.51	-305.93	100.67	826.09	445.45	1.86	PASS
15513.00†	7690.00	7218.39	-1117.99	15581.72	7843.00	7220.51	-306.19	100.67	826.09	451.56	1.83	PASS
15613.00†	7690.00	7318.39	-1118.25	15681.72	7843.00	7320.51	-306.46	100.67	826.09	457.68	1.81	PASS
15713.00†	7690.00	7418.39	-1118.51	15781.72	7843.00	7420.51	-306.72	100.67	826.09	463.79	1.78	PASS
15813.00†	7690.00	7518.39	-1118.77	15881.72	7843.00	7520.51	-306.98	100.67	826.09	469.91	1.76	PASS
15913.00†	7690.00	7618.39	-1119.03	15981.72	7843.00	7620.51	-307.24	100.67	826.09	476.03	1.74	PASS
16013.00†	7690.00	7718.39	-1119.29	16081.72	7843.00	7720.51	-307.50	100.67	826.09	482.15	1.71	PASS
16113.00†	7690.00	7818.39	-1119.56	16181.72	7843.00	7820.51	-307.76	100.67	826.09	488.27	1.69	PASS
16213.00†	7690.00	7918.39	-1119.82	16281.72	7843.00	7920.51	-308.03	100.67	826.09	494.39	1.67	PASS
16313.00†	7690.00	8018.39	-1120.08	16381.72	7843.00	8020.51	-308.29	100.67	826.08	500.52	1.65	PASS
16413.00†	7690.00	8118.38	-1120.34	16481.72	7843.00	8120.51	-308.55	100.67	826.08	506.64	1.63	PASS
16513.00†	7690.00	8218.38	-1120.60	16581.72	7843.00	8220.51	-308.81	100.67	826.08	512.77	1.61	PASS
16613.00†	7690.00	8318.38	-1120.86	16681.72	7843.00	8320.51	-309.07	100.67	826.08	518.89	1.59	PASS
16713.00†	7690.00	8418.38	-1121.12	16781.72	7843.00	8420.51	-309.34	100.67	826.08	525.02	1.57	PASS
16813.00†	7690.00	8518.38	-1121.38	16881.72	7843.00	8520.51	-309.60	100.67	826.08	531.15	1.56	PASS
16913.00†	7690.00	8618.38	-1121.65	16981.72	7843.00	8620.51	-309.86	100.67	826.08	537.27	1.54	PASS
17013.00†	7690.00	8718.38	-1121.91	17081.72	7843.00	8720.51	-310.12	100.67	826.08	543.40	1.52	PASS
17113.00†	7690.00	8818.38	-1122.17	17181.72	7843.00	8820.51	-310.38	100.67	826.08	549.53	1.50	PASS
17213.00†	7690.00	8918.38	-1122.43	17281.72	7843.00	8920.51	-310.64	100.67	826.08	555.66	1.49	PASS
17313.00†	7690.00	9018.38	-1122.69	17381.72	7843.00	9020.51	-310.91	100.67	826.08	561.79	1.47	PASS
17413.00†	7690.00	9118.38	-1122.95	17481.72	7843.00	9120.51	-311.17	100.67	826.08	567.93	1.46	PASS
17513.00†	7690.00	9218.38	-1123.21	17581.72	7843.00	9220.51	-311.43	100.67	826.08	574.06	1.44	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	7690.00	9318.38	-1123.47	17681.72	7843.00	9320.51	-311.69	100.67	826.08	580.19	1.42	PASS
17713.00†	7690.00	9418.38	-1123.74	17781.72	7843.00	9420.50	-311.95	100.67	826.08	586.33	1.41	PASS
17813.00†	7690.00	9518.38	-1124.00	17881.72	7843.00	9520.50	-312.21	100.67	826.08	592.46	1.39	PASS
17864.18†	7690.00	9569.56	-1124.13	17932.90	7843.00	9571.69	-312.35	100.67	826.08	595.60	1.39	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

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

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

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

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1797.01	0.04	18.27	-15.19	12.17
8.5in Open Hole	1800.00	17937.78	16137.78	1797.01	7843.00	-15.19	12.17	2918.96	-86.07

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

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



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	0.13	44.95	89.84	44.95	1.40	73.58	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.13	44.95	89.84	44.95	1.72	47.94	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.13	44.95	89.84	44.95	2.29	29.64	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.13	44.95	89.84	44.95	2.89	21.10	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.13	44.95	89.84	44.95	3.51	16.31	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.13	44.95	89.84	44.95	4.13	13.27	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.13	44.95	89.84	44.95	4.75	11.18	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.13	44.95	89.84	44.95	5.38	9.65	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.13	44.95	89.84	44.95	6.00	8.49	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.13	44.95	89.84	44.95	6.63	7.58	PASS
1000.00	1000.00	0.00	0.00	1000.00	1000.00	0.13	44.95	89.84	44.95	7.17	6.93	PASS
1013.00†	1013.00	-0.02	-0.02	1013.00	1013.00	0.13	44.95	-144.44	44.97	7.25	6.85	PASS
1113.00†	1112.97	-1.30	-1.81	1112.97	1112.97	0.13	44.95	-145.99	46.78	7.95	6.43	PASS
1213.00†	1212.80	-4.62	-6.42	1212.80	1212.80	0.13	44.95	-149.47	51.59	8.86	6.30	PASS
1313.00†	1312.38	-9.98	-13.86	1312.49	1312.49	0.10	44.94	-153.85	59.66	9.77	6.56	PASS
1413.00†	1411.57	-17.36	-24.12	1412.93	1412.90	-2.01	44.33	-156.74	70.16	10.66	7.03	PASS
1513.00†	1510.26	-26.76	-37.18	1513.50	1513.30	-7.51	42.74	-157.62	82.26	11.59	7.55	PASS
1597.14	1592.83	-36.22	-50.33	1598.16	1597.62	-14.76	40.64	-157.32	93.59	12.32	8.05	PASS
1613.00†	1608.34	-38.14	-52.99	1614.12	1613.49	-16.40	40.16	-157.20	95.80	12.45	8.16	PASS
1713.00†	1706.18	-50.23	-69.79	1714.61	1713.18	-28.58	36.63	-155.60	108.83	13.11	8.78	PASS
1813.00†	1804.01	-62.31	-86.59	1813.76	1811.38	-41.68	32.84	-153.89	121.42	13.69	9.30	PASS
1913.00†	1901.85	-74.40	-103.38	1912.91	1909.58	-54.79	29.05	-152.49	134.10	14.41	9.73	PASS
2013.00†	1999.68	-86.49	-120.18	2012.05	2007.78	-67.89	25.25	-151.34	146.84	15.18	10.09	PASS
2113.00†	2097.52	-98.58	-136.97	2111.20	2105.99	-80.99	21.46	-150.37	159.63	15.99	10.40	PASS
2213.00†	2195.35	-110.67	-153.77	2210.34	2204.19	-94.09	17.66	-149.54	172.46	16.84	10.65	PASS
2313.00†	2293.19	-122.75	-170.57	2309.49	2302.39	-107.20	13.87	-148.83	185.32	17.71	10.86	PASS
2413.00†	2391.03	-134.84	-187.36	2408.63	2400.59	-120.30	10.07	-148.22	198.20	18.59	11.04	PASS
2513.00†	2488.86	-146.93	-204.16	2507.78	2498.80	-133.40	6.28	-147.67	211.11	19.50	11.19	PASS
2613.00†	2586.70	-159.02	-220.95	2606.92	2597.00	-146.50	2.49	-147.19	224.03	20.43	11.32	PASS
2713.00†	2684.53	-171.11	-237.75	2706.07	2695.20	-159.60	-1.31	-146.76	236.96	21.37	11.43	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	2782.37	-183.19	-254.55	2805.21	2793.40	-172.71	-5.10	-146.38	249.91	22.33	11.53	PASS
2913.00†	2880.20	-195.28	-271.34	2904.36	2891.61	-185.81	-8.90	-146.04	262.86	23.29	11.61	PASS
3013.00†	2978.04	-207.37	-288.14	3003.50	2989.81	-198.91	-12.69	-145.72	275.83	24.26	11.68	PASS
3113.00†	3075.87	-219.46	-304.93	3102.65	3088.01	-212.01	-16.48	-145.44	288.80	25.25	11.74	PASS
3213.00†	3173.71	-231.54	-321.73	3201.79	3186.21	-225.12	-20.28	-145.18	301.78	26.23	11.79	PASS
3313.00†	3271.54	-243.63	-338.53	3300.94	3284.42	-238.22	-24.07	-144.94	314.76	27.23	11.84	PASS
3413.00†	3369.38	-255.72	-355.32	3400.08	3382.62	-251.32	-27.87	-144.72	327.75	28.23	11.88	PASS
3513.00†	3467.22	-267.81	-372.12	3499.23	3480.82	-264.42	-31.66	-144.51	340.75	29.24	11.92	PASS
3613.00†	3565.05	-279.90	-388.91	3598.37	3579.02	-277.53	-35.46	-144.32	353.74	30.25	11.95	PASS
3713.00†	3662.89	-291.98	-405.71	3697.52	3677.23	-290.63	-39.25	-144.15	366.74	31.26	11.98	PASS
3813.00†	3760.72	-304.07	-422.51	3796.67	3775.43	-303.73	-43.04	-143.99	379.75	32.28	12.01	PASS
3913.00†	3858.56	-316.16	-439.30	3895.81	3873.63	-316.83	-46.84	-143.84	392.75	33.30	12.03	PASS
4013.00†	3956.39	-328.25	-456.10	3994.96	3971.83	-329.94	-50.63	-143.69	405.76	34.33	12.05	PASS
4113.00†	4054.23	-340.33	-472.89	4094.10	4070.04	-343.04	-54.43	-143.56	418.77	35.35	12.07	PASS
4213.00†	4152.06	-352.42	-489.69	4193.25	4168.24	-356.14	-58.22	-143.43	431.79	36.38	12.08	PASS
4313.00†	4249.90	-364.51	-506.49	4292.39	4266.44	-369.24	-62.01	-143.32	444.80	37.42	12.10	PASS
4413.00†	4347.74	-376.60	-523.28	4391.54	4364.64	-382.35	-65.81	-143.20	457.82	38.45	12.11	PASS
4513.00†	4445.57	-388.69	-540.08	4490.68	4462.85	-395.45	-69.60	-143.10	470.84	39.49	12.12	PASS
4613.00†	4543.41	-400.77	-556.87	4589.83	4561.05	-408.55	-73.40	-143.00	483.86	40.53	12.13	PASS
4713.00†	4641.24	-412.86	-573.67	4688.97	4659.25	-421.65	-77.19	-142.90	496.88	41.56	12.14	PASS
4813.00†	4739.08	-424.95	-590.47	4788.12	4757.45	-434.76	-80.99	-142.81	509.91	42.61	12.15	PASS
4913.00†	4836.91	-437.04	-607.26	4887.26	4855.66	-447.86	-84.78	-142.73	522.93	43.65	12.16	PASS
5013.00†	4934.75	-449.13	-624.06	4986.41	4953.86	-460.96	-88.57	-142.65	535.96	44.69	12.17	PASS
5113.00†	5032.58	-461.21	-640.85	5085.55	5052.06	-474.06	-92.37	-142.57	548.98	45.74	12.18	PASS
5213.00†	5130.42	-473.30	-657.65	5184.70	5150.26	-487.17	-96.16	-142.50	562.01	46.78	12.18	PASS
5313.00†	5228.25	-485.39	-674.45	5283.84	5248.47	-500.27	-99.96	-142.43	575.04	47.83	12.19	PASS
5413.00†	5326.09	-497.48	-691.24	5382.99	5346.67	-513.37	-103.75	-142.36	588.07	48.88	12.19	PASS
5513.00†	5423.93	-509.56	-708.04	5482.14	5444.87	-526.47	-107.55	-142.29	601.10	49.93	12.20	PASS
5613.00†	5521.76	-521.65	-724.83	5581.28	5543.07	-539.58	-111.34	-142.23	614.13	50.98	12.20	PASS
5713.00†	5619.60	-533.74	-741.63	5680.43	5641.27	-552.68	-115.13	-142.17	627.16	52.03	12.21	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	5717.43	-545.83	-758.43	5779.57	5739.48	-565.78	-118.93	-142.12	640.19	53.08	12.21	PASS
5913.00†	5815.27	-557.92	-775.22	5878.72	5837.68	-578.88	-122.72	-142.06	653.22	54.13	12.21	PASS
6013.00†	5913.10	-570.00	-792.02	5977.86	5935.88	-591.99	-126.52	-142.01	666.25	55.19	12.22	PASS
6113.00†	6010.94	-582.09	-808.81	6077.01	6034.08	-605.09	-130.31	-141.96	679.29	56.24	12.22	PASS
6213.00†	6108.77	-594.18	-825.61	6176.15	6132.29	-618.19	-134.10	-141.91	692.32	57.30	12.22	PASS
6313.00†	6206.61	-606.27	-842.41	6275.30	6230.49	-631.29	-137.90	-141.87	705.36	58.35	12.22	PASS
6413.00†	6304.44	-618.35	-859.20	6374.44	6328.69	-644.40	-141.69	-141.82	718.39	59.41	12.23	PASS
6513.00†	6402.28	-630.44	-876.00	6473.59	6426.89	-657.50	-145.49	-141.78	731.43	60.46	12.23	PASS
6613.00†	6500.12	-642.53	-892.79	6572.73	6525.10	-670.60	-149.28	-141.74	744.46	61.52	12.23	PASS
6713.00†	6597.95	-654.62	-909.59	6671.88	6623.30	-683.70	-153.08	-141.70	757.50	62.58	12.23	PASS
6813.00†	6695.79	-666.71	-926.39	6771.02	6721.50	-696.81	-156.87	-141.66	770.53	63.63	12.23	PASS
6913.00†	6793.62	-678.79	-943.18	6870.91	6820.45	-709.87	-160.69	-141.63	783.57	64.68	12.24	PASS
7013.00†	6891.46	-690.88	-959.98	6974.80	6924.10	-711.92	-164.73	-142.44	796.20	65.61	12.26	PASS
7113.00†	6989.29	-702.97	-976.77	7071.89	7019.83	-696.88	-168.50	-144.36	808.87	65.89	12.40	PASS
7182.54	7057.33	-711.38	-988.45	7133.07	7078.32	-679.18	-170.83	-146.11	818.53	67.08	12.32	PASS
7213.00†	7087.21	-714.25	-993.59	7158.36	7101.88	-670.05	-171.77	-160.93	823.14	66.82	12.44	PASS
7313.00†	7185.62	-712.33	-1010.52	7238.61	7173.63	-634.36	-174.66	141.80	839.57	65.91	12.87	PASS
7413.00†	7282.20	-693.10	-1027.18	7315.41	7236.98	-591.13	-177.24	111.64	857.22	65.06	13.31	PASS
7513.00†	7374.01	-657.14	-1043.06	7389.62	7292.19	-541.67	-179.52	97.80	875.06	63.99	13.82	PASS
7613.00†	7458.26	-605.54	-1057.69	7461.86	7339.36	-487.05	-181.51	89.72	892.12	62.78	14.36	PASS
7713.00†	7532.40	-539.89	-1070.61	7532.64	7378.56	-428.20	-183.19	84.34	907.56	61.39	14.95	PASS
7813.00†	7594.17	-462.16	-1081.44	7602.33	7409.79	-365.96	-184.57	80.58	920.67	60.04	15.50	PASS
7913.00†	7641.70	-374.72	-1089.84	7671.24	7433.02	-301.14	-185.64	78.01	930.88	58.82	16.01	PASS
8013.00†	7673.53	-280.23	-1095.57	7739.64	7448.24	-234.50	-186.41	76.40	937.77	57.71	16.44	PASS
8113.00†	7688.71	-181.56	-1098.44	7807.75	7455.39	-166.81	-186.87	75.67	941.07	56.80	16.77	PASS
8151.71	7690.00	-142.87	-1098.76	7834.09	7456.00	-140.48	-186.96	75.61	941.35	56.45	16.87	PASS
8213.00†	7690.00	-81.59	-1098.92	7895.37	7456.00	-79.20	-187.12	75.61	941.35	56.01	17.01	PASS
8313.00†	7690.00	18.41	-1099.18	7995.37	7456.00	20.80	-187.38	75.61	941.35	55.83	17.06	PASS
8413.00†	7690.00	118.41	-1099.44	8095.37	7456.00	120.80	-187.64	75.61	941.35	56.33	16.91	PASS
8513.00†	7690.00	218.41	-1099.70	8195.37	7456.00	220.80	-187.90	75.61	941.35	57.48	16.57	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	7690.00	318.41	-1099.96	8295.37	7456.00	320.80	-188.17	75.61	941.35	59.24	16.07	PASS
8713.00†	7690.00	418.41	-1100.22	8395.37	7456.00	420.80	-188.43	75.61	941.35	61.57	15.46	PASS
8813.00†	7690.00	518.41	-1100.49	8495.37	7456.00	520.80	-188.69	75.61	941.35	64.39	14.77	PASS
8913.00†	7690.00	618.41	-1100.75	8595.37	7456.00	620.80	-188.95	75.61	941.35	67.64	14.05	PASS
9013.00†	7690.00	718.41	-1101.01	8695.37	7456.00	720.80	-189.21	75.61	941.35	71.27	13.33	PASS
9113.00†	7690.00	818.41	-1101.27	8795.37	7456.00	820.79	-189.47	75.61	941.35	75.23	12.62	PASS
9213.00†	7690.00	918.41	-1101.53	8895.37	7456.00	920.79	-189.74	75.61	941.35	79.46	11.94	PASS
9313.00†	7690.00	1018.41	-1101.79	8995.37	7456.00	1020.79	-190.00	75.61	941.35	84.21	11.26	PASS
9413.00†	7690.00	1118.41	-1102.05	9095.37	7456.00	1120.79	-190.26	75.61	941.34	88.57	10.71	PASS
9513.00†	7690.00	1218.41	-1102.31	9195.37	7456.00	1220.79	-190.52	75.61	941.34	93.39	10.15	PASS
9613.00†	7690.00	1318.41	-1102.58	9295.37	7456.00	1320.79	-190.78	75.61	941.34	98.36	9.63	PASS
9713.00†	7690.00	1418.41	-1102.84	9395.37	7456.00	1420.79	-191.04	75.61	941.34	103.44	9.16	PASS
9813.00†	7690.00	1518.41	-1103.10	9495.37	7456.00	1520.79	-191.31	75.61	941.34	108.63	8.72	PASS
9913.00†	7690.00	1618.41	-1103.36	9595.37	7456.00	1620.79	-191.57	75.61	941.34	113.89	8.31	PASS
10013.00†	7690.00	1718.41	-1103.62	9695.37	7456.00	1720.79	-191.83	75.61	941.34	119.27	7.93	PASS
10113.00†	7690.00	1818.41	-1103.88	9795.37	7456.00	1820.79	-192.09	75.61	941.34	124.69	7.59	PASS
10213.00†	7690.00	1918.41	-1104.14	9895.37	7456.00	1920.79	-192.35	75.61	941.34	130.17	7.27	PASS
10313.00†	7690.00	2018.41	-1104.40	9995.37	7456.00	2020.79	-192.61	75.61	941.34	135.71	6.97	PASS
10413.00†	7690.00	2118.41	-1104.67	10095.37	7456.00	2120.79	-192.88	75.61	941.34	141.29	6.69	PASS
10513.00†	7690.00	2218.40	-1104.93	10195.37	7456.00	2220.79	-193.14	75.61	941.34	146.91	6.43	PASS
10613.00†	7690.00	2318.40	-1105.19	10295.37	7456.00	2320.79	-193.40	75.61	941.34	152.57	6.19	PASS
10713.00†	7690.00	2418.40	-1105.45	10395.37	7456.00	2420.79	-193.66	75.61	941.34	158.26	5.97	PASS
10813.00†	7690.00	2518.40	-1105.71	10495.37	7456.00	2520.79	-193.92	75.61	941.34	163.97	5.76	PASS
10913.00†	7690.00	2618.40	-1105.97	10595.37	7456.00	2620.79	-194.18	75.61	941.34	169.72	5.57	PASS
11013.00†	7690.00	2718.40	-1106.23	10695.37	7456.00	2720.79	-194.44	75.61	941.34	175.49	5.38	PASS
11113.00†	7690.00	2818.40	-1106.49	10795.37	7456.00	2820.79	-194.71	75.61	941.34	181.28	5.21	PASS
11213.00†	7690.00	2918.40	-1106.76	10895.37	7456.00	2920.79	-194.97	75.61	941.34	187.08	5.05	PASS
11313.00†	7690.00	3018.40	-1107.02	10995.37	7456.00	3020.79	-195.23	75.61	941.34	192.91	4.89	PASS
11413.00†	7690.00	3118.40	-1107.28	11095.37	7456.00	3120.79	-195.49	75.61	941.34	198.75	4.75	PASS
11513.00†	7690.00	3218.40	-1107.54	11195.37	7456.00	3220.79	-195.75	75.61	941.34	204.61	4.61	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	7690.00	3318.40	-1107.80	11295.37	7456.00	3320.79	-196.01	75.61	941.34	210.47	4.48	PASS
11713.00†	7690.00	3418.40	-1108.06	11395.37	7456.00	3420.79	-196.28	75.61	941.34	216.36	4.36	PASS
11813.00†	7690.00	3518.40	-1108.32	11495.37	7456.00	3520.79	-196.54	75.61	941.34	222.25	4.25	PASS
11913.00†	7690.00	3618.40	-1108.58	11595.37	7456.00	3620.79	-196.80	75.61	941.34	228.15	4.14	PASS
12013.00†	7690.00	3718.40	-1108.85	11695.37	7456.00	3720.78	-197.06	75.61	941.34	234.06	4.03	PASS
12113.00†	7690.00	3818.40	-1109.11	11795.37	7456.00	3820.78	-197.32	75.61	941.34	239.98	3.93	PASS
12213.00†	7690.00	3918.40	-1109.37	11895.37	7456.00	3920.78	-197.58	75.61	941.33	245.91	3.84	PASS
12313.00†	7690.00	4018.40	-1109.63	11995.37	7456.00	4020.78	-197.85	75.61	941.33	251.85	3.75	PASS
12413.00†	7690.00	4118.40	-1109.89	12095.37	7456.00	4120.78	-198.11	75.61	941.33	257.80	3.66	PASS
12513.00†	7690.00	4218.40	-1110.15	12195.37	7456.00	4220.78	-198.37	75.61	941.33	263.75	3.58	PASS
12613.00†	7690.00	4318.40	-1110.41	12295.37	7456.00	4320.78	-198.63	75.61	941.33	269.70	3.50	PASS
12713.00†	7690.00	4418.40	-1110.67	12395.37	7456.00	4420.78	-198.89	75.61	941.33	275.67	3.42	PASS
12813.00†	7690.00	4518.40	-1110.94	12495.37	7456.00	4520.78	-199.15	75.61	941.33	281.63	3.35	PASS
12913.00†	7690.00	4618.40	-1111.20	12595.37	7456.00	4620.78	-199.42	75.61	941.33	287.61	3.28	PASS
13013.00†	7690.00	4718.40	-1111.46	12695.37	7456.00	4720.78	-199.68	75.61	941.33	293.59	3.21	PASS
13113.00†	7690.00	4818.40	-1111.72	12795.37	7456.00	4820.78	-199.94	75.61	941.33	299.57	3.15	PASS
13213.00†	7690.00	4918.40	-1111.98	12895.37	7456.00	4920.78	-200.20	75.61	941.33	305.56	3.09	PASS
13313.00†	7690.00	5018.40	-1112.24	12995.37	7456.00	5020.78	-200.46	75.61	941.33	311.55	3.03	PASS
13413.00†	7690.00	5118.39	-1112.50	13095.37	7456.00	5120.78	-200.72	75.61	941.33	317.54	2.97	PASS
13513.00†	7690.00	5218.39	-1112.76	13195.37	7456.00	5220.78	-200.98	75.61	941.33	323.54	2.91	PASS
13613.00†	7690.00	5318.39	-1113.03	13295.37	7456.00	5320.78	-201.25	75.61	941.33	329.54	2.86	PASS
13713.00†	7690.00	5418.39	-1113.29	13395.37	7456.00	5420.78	-201.51	75.61	941.33	335.54	2.81	PASS
13813.00†	7690.00	5518.39	-1113.55	13495.37	7456.00	5520.78	-201.77	75.61	941.33	341.55	2.76	PASS
13913.00†	7690.00	5618.39	-1113.81	13595.37	7456.00	5620.78	-202.03	75.61	941.33	347.56	2.71	PASS
14013.00†	7690.00	5718.39	-1114.07	13695.37	7456.00	5720.78	-202.29	75.61	941.33	353.58	2.67	PASS
14113.00†	7690.00	5818.39	-1114.33	13795.37	7456.00	5820.78	-202.55	75.61	941.33	359.59	2.62	PASS
14213.00†	7690.00	5918.39	-1114.59	13895.37	7456.00	5920.78	-202.82	75.61	941.33	365.61	2.58	PASS
14313.00†	7690.00	6018.39	-1114.85	13995.37	7456.00	6020.78	-203.08	75.61	941.33	371.63	2.54	PASS
14413.00†	7690.00	6118.39	-1115.11	14095.37	7456.00	6120.78	-203.34	75.61	941.33	377.65	2.50	PASS
14513.00†	7690.00	6218.39	-1115.38	14195.37	7456.00	6220.78	-203.60	75.61	941.33	383.68	2.46	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	7690.00	6318.39	-1115.64	14295.37	7456.00	6320.78	-203.86	75.61	941.33	389.70	2.42	PASS
14713.00†	7690.00	6418.39	-1115.90	14395.37	7456.00	6420.78	-204.12	75.61	941.33	395.73	2.38	PASS
14813.00†	7690.00	6518.39	-1116.16	14495.37	7456.00	6520.78	-204.39	75.61	941.33	401.76	2.35	PASS
14913.00†	7690.00	6618.39	-1116.42	14595.37	7456.00	6620.77	-204.65	75.61	941.33	407.79	2.31	PASS
15013.00†	7690.00	6718.39	-1116.68	14695.37	7456.00	6720.77	-204.91	75.61	941.32	413.83	2.28	PASS
15113.00†	7690.00	6818.39	-1116.94	14795.37	7456.00	6820.77	-205.17	75.61	941.32	419.86	2.24	PASS
15213.00†	7690.00	6918.39	-1117.20	14895.37	7456.00	6920.77	-205.43	75.61	941.32	425.90	2.21	PASS
15313.00†	7690.00	7018.39	-1117.47	14995.37	7456.00	7020.77	-205.69	75.61	941.32	431.94	2.18	PASS
15413.00†	7690.00	7118.39	-1117.73	15095.37	7456.00	7120.77	-205.96	75.61	941.32	437.98	2.15	PASS
15513.00†	7690.00	7218.39	-1117.99	15195.37	7456.00	7220.77	-206.22	75.61	941.32	444.02	2.12	PASS
15613.00†	7690.00	7318.39	-1118.25	15295.37	7456.00	7320.77	-206.48	75.61	941.32	450.06	2.09	PASS
15713.00†	7690.00	7418.39	-1118.51	15395.37	7456.00	7420.77	-206.74	75.61	941.32	456.11	2.07	PASS
15813.00†	7690.00	7518.39	-1118.77	15495.37	7456.00	7520.77	-207.00	75.61	941.32	462.15	2.04	PASS
15913.00†	7690.00	7618.39	-1119.03	15595.37	7456.00	7620.77	-207.26	75.61	941.32	468.20	2.01	PASS
16013.00†	7690.00	7718.39	-1119.29	15695.37	7456.00	7720.77	-207.52	75.61	941.32	474.24	1.99	PASS
16113.00†	7690.00	7818.39	-1119.56	15795.37	7456.00	7820.77	-207.79	75.61	941.32	480.29	1.96	PASS
16213.00†	7690.00	7918.39	-1119.82	15895.37	7456.00	7920.77	-208.05	75.61	941.32	486.34	1.94	PASS
16313.00†	7690.00	8018.39	-1120.08	15995.37	7456.00	8020.77	-208.31	75.61	941.32	492.39	1.91	PASS
16413.00†	7690.00	8118.38	-1120.34	16095.37	7456.00	8120.77	-208.57	75.61	941.32	498.44	1.89	PASS
16513.00†	7690.00	8218.38	-1120.60	16195.37	7456.00	8220.77	-208.83	75.61	941.32	504.50	1.87	PASS
16613.00†	7690.00	8318.38	-1120.86	16295.37	7456.00	8320.77	-209.09	75.61	941.32	510.55	1.84	PASS
16713.00†	7690.00	8418.38	-1121.12	16395.37	7456.00	8420.77	-209.36	75.61	941.32	516.60	1.82	PASS
16813.00†	7690.00	8518.38	-1121.38	16495.37	7456.00	8520.77	-209.62	75.61	941.32	522.66	1.80	PASS
16913.00†	7690.00	8618.38	-1121.65	16595.37	7456.00	8620.77	-209.88	75.61	941.32	528.71	1.78	PASS
17013.00†	7690.00	8718.38	-1121.91	16695.37	7456.00	8720.77	-210.14	75.61	941.32	534.77	1.76	PASS
17113.00†	7690.00	8818.38	-1122.17	16795.37	7456.00	8820.77	-210.40	75.61	941.32	540.83	1.74	PASS
17213.00†	7690.00	8918.38	-1122.43	16895.37	7456.00	8920.77	-210.66	75.61	941.32	546.88	1.72	PASS
17313.00†	7690.00	9018.38	-1122.69	16995.37	7456.00	9020.77	-210.93	75.61	941.32	552.94	1.70	PASS
17413.00†	7690.00	9118.38	-1122.95	17095.37	7456.00	9120.77	-211.19	75.61	941.32	559.00	1.68	PASS
17513.00†	7690.00	9218.38	-1123.21	17195.37	7456.00	9220.77	-211.45	75.61	941.32	565.06	1.67	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	7690.00	9318.38	-1123.47	17295.37	7456.00	9320.77	-211.71	75.61	941.32	571.12	1.65	PASS
17713.00†	7690.00	9418.38	-1123.74	17395.37	7456.00	9420.77	-211.97	75.61	941.32	577.18	1.63	PASS
17813.00†	7690.00	9518.38	-1124.00	17495.37	7456.00	9520.77	-212.23	75.61	941.31	583.24	1.61	PASS
17864.18†	7690.00	9569.56	-1124.13	17546.55	7456.00	9571.95	-212.37	75.61	941.31	586.34	1.61	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

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

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

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

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1797.75	0.08	27.40	-12.11	23.87
8.5in Open Hole	1800.00	17752.02	15952.02	1797.75	N/A	-12.11	23.87	N/A	N/A

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

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



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

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



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	0.18	59.99	89.83	59.99	1.40	98.64	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.18	59.99	89.83	59.99	1.72	64.27	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.18	59.99	89.83	59.99	2.29	39.73	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.18	59.99	89.83	59.99	2.89	28.28	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.18	59.99	89.83	59.99	3.51	21.86	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.18	59.99	89.83	59.99	4.13	17.79	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.18	59.99	89.83	59.99	4.75	14.99	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.18	59.99	89.83	59.99	5.38	12.94	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.18	59.99	89.83	59.99	6.00	11.38	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.18	59.99	89.83	59.99	6.63	10.16	PASS
1000.00	1000.00	0.00	0.00	1000.00	1000.00	0.18	59.99	89.83	59.99	7.17	9.29	PASS
1013.00†	1013.00	-0.02	-0.02	1013.00	1013.00	0.18	59.99	-144.45	60.01	7.25	9.18	PASS
1113.00†	1112.97	-1.30	-1.81	1112.97	1112.97	0.18	59.99	-145.61	61.81	7.95	8.53	PASS
1213.00†	1212.80	-4.62	-6.42	1212.80	1212.80	0.18	59.99	-148.33	66.58	8.86	8.17	PASS
1313.00†	1312.38	-9.98	-13.86	1312.38	1312.38	0.18	59.99	-151.95	74.55	9.75	8.24	PASS
1413.00†	1411.57	-17.36	-24.12	1411.62	1411.62	0.16	59.99	-155.80	85.91	10.63	8.66	PASS
1513.00†	1510.26	-26.76	-37.18	1510.96	1510.93	-1.96	60.15	-158.26	100.44	11.49	9.32	PASS
1597.14	1592.83	-36.22	-50.33	1594.42	1594.27	-6.39	60.49	-158.96	114.77	12.18	10.02	PASS
1613.00†	1608.34	-38.14	-52.99	1610.14	1609.95	-7.50	60.57	-159.00	117.64	12.29	10.17	PASS
1713.00†	1706.18	-50.23	-69.79	1709.34	1708.74	-16.45	61.26	-158.37	135.36	12.93	11.09	PASS
1813.00†	1804.01	-62.31	-86.59	1808.27	1806.92	-28.54	62.19	-156.69	152.59	13.49	11.88	PASS
1913.00†	1901.85	-74.40	-103.38	1906.68	1904.50	-41.23	63.16	-155.13	169.83	14.20	12.54	PASS
2013.00†	1999.68	-86.49	-120.18	2005.08	2002.08	-53.92	64.13	-153.85	187.18	14.95	13.10	PASS
2113.00†	2097.52	-98.58	-136.97	2103.49	2099.66	-66.61	65.10	-152.80	204.60	15.73	13.57	PASS
2213.00†	2195.35	-110.67	-153.77	2201.90	2197.24	-79.29	66.08	-151.91	222.08	16.55	13.97	PASS
2313.00†	2293.19	-122.75	-170.57	2300.30	2294.82	-91.98	67.05	-151.15	239.60	17.39	14.32	PASS
2413.00†	2391.03	-134.84	-187.36	2398.71	2392.40	-104.67	68.02	-150.49	257.16	18.26	14.61	PASS
2513.00†	2488.86	-146.93	-204.16	2497.12	2489.98	-117.36	68.99	-149.92	274.75	19.14	14.87	PASS
2613.00†	2586.70	-159.02	-220.95	2595.52	2587.57	-130.05	69.96	-149.42	292.36	20.03	15.09	PASS
2713.00†	2684.53	-171.11	-237.75	2693.93	2685.15	-142.73	70.94	-148.97	309.99	20.94	15.28	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	2782.37	-183.19	-254.55	2792.34	2782.73	-155.42	71.91	-148.57	327.63	21.87	15.45	PASS
2913.00†	2880.20	-195.28	-271.34	2890.74	2880.31	-168.11	72.88	-148.22	345.29	22.80	15.60	PASS
3013.00†	2978.04	-207.37	-288.14	2989.15	2977.89	-180.80	73.85	-147.89	362.97	23.74	15.73	PASS
3113.00†	3075.87	-219.46	-304.93	3087.56	3075.47	-193.49	74.83	-147.60	380.65	24.69	15.84	PASS
3213.00†	3173.71	-231.54	-321.73	3185.96	3173.05	-206.17	75.80	-147.33	398.34	25.65	15.94	PASS
3313.00†	3271.54	-243.63	-338.53	3284.37	3270.63	-218.86	76.77	-147.09	416.04	26.61	16.04	PASS
3413.00†	3369.38	-255.72	-355.32	3382.78	3368.21	-231.55	77.74	-146.86	433.74	27.58	16.12	PASS
3513.00†	3467.22	-267.81	-372.12	3481.18	3465.79	-244.24	78.71	-146.66	451.45	28.55	16.19	PASS
3613.00†	3565.05	-279.90	-388.91	3579.59	3563.37	-256.92	79.69	-146.47	469.17	29.53	16.26	PASS
3713.00†	3662.89	-291.98	-405.71	3678.00	3660.95	-269.61	80.66	-146.29	486.89	30.51	16.32	PASS
3813.00†	3760.72	-304.07	-422.51	3776.40	3758.53	-282.30	81.63	-146.12	504.61	31.49	16.37	PASS
3913.00†	3858.56	-316.16	-439.30	3874.81	3856.11	-294.99	82.60	-145.97	522.34	32.48	16.42	PASS
4013.00†	3956.39	-328.25	-456.10	3973.22	3953.69	-307.68	83.58	-145.83	540.07	33.47	16.46	PASS
4113.00†	4054.23	-340.33	-472.89	4071.62	4051.27	-320.36	84.55	-145.69	557.81	34.46	16.50	PASS
4213.00†	4152.06	-352.42	-489.69	4170.03	4148.85	-333.05	85.52	-145.57	575.55	35.46	16.54	PASS
4313.00†	4249.90	-364.51	-506.49	4268.44	4246.43	-345.74	86.49	-145.45	593.29	36.46	16.58	PASS
4413.00†	4347.74	-376.60	-523.28	4366.84	4344.01	-358.43	87.46	-145.34	611.03	37.46	16.61	PASS
4513.00†	4445.57	-388.69	-540.08	4465.25	4441.59	-371.12	88.44	-145.23	628.77	38.46	16.64	PASS
4613.00†	4543.41	-400.77	-556.87	4563.66	4539.17	-383.80	89.41	-145.13	646.52	39.46	16.66	PASS
4713.00†	4641.24	-412.86	-573.67	4662.06	4636.75	-396.49	90.38	-145.04	664.27	40.47	16.69	PASS
4813.00†	4739.08	-424.95	-590.47	4760.47	4734.33	-409.18	91.35	-144.95	682.02	41.48	16.71	PASS
4913.00†	4836.91	-437.04	-607.26	4858.88	4831.91	-421.87	92.33	-144.86	699.77	42.48	16.73	PASS
5013.00†	4934.75	-449.13	-624.06	4957.28	4929.49	-434.56	93.30	-144.78	717.52	43.49	16.75	PASS
5113.00†	5032.58	-461.21	-640.85	5055.69	5027.08	-447.24	94.27	-144.71	735.28	44.51	16.77	PASS
5213.00†	5130.42	-473.30	-657.65	5154.10	5124.66	-459.93	95.24	-144.63	753.03	45.52	16.79	PASS
5313.00†	5228.25	-485.39	-674.45	5252.50	5222.24	-472.62	96.21	-144.56	770.79	46.53	16.81	PASS
5413.00†	5326.09	-497.48	-691.24	5350.91	5319.82	-485.31	97.19	-144.50	788.55	47.54	16.82	PASS
5513.00†	5423.93	-509.56	-708.04	5449.32	5417.40	-498.00	98.16	-144.43	806.31	48.56	16.84	PASS
5613.00†	5521.76	-521.65	-724.83	5547.72	5514.98	-510.68	99.13	-144.37	824.07	49.58	16.85	PASS
5713.00†	5619.60	-533.74	-741.63	5646.13	5612.56	-523.37	100.10	-144.31	841.83	50.59	16.86	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	5717.43	-545.83	-758.43	5744.54	5710.14	-536.06	101.08	-144.26	859.59	51.61	16.87	PASS
5913.00†	5815.27	-557.92	-775.22	5842.94	5807.72	-548.75	102.05	-144.20	877.35	52.63	16.88	PASS
6013.00†	5913.10	-570.00	-792.02	5941.35	5905.30	-561.44	103.02	-144.15	895.11	53.65	16.90	PASS
6113.00†	6010.94	-582.09	-808.81	6039.76	6002.88	-574.12	103.99	-144.10	912.88	54.67	16.91	PASS
6213.00†	6108.77	-594.18	-825.61	6138.16	6100.46	-586.81	104.96	-144.06	930.64	55.69	16.91	PASS
6313.00†	6206.61	-606.27	-842.41	6236.57	6198.04	-599.50	105.94	-144.01	948.41	56.71	16.92	PASS
6413.00†	6304.44	-618.35	-859.20	6334.98	6295.62	-612.19	106.91	-143.97	966.17	57.73	16.93	PASS
6513.00†	6402.28	-630.44	-876.00	6433.38	6393.20	-624.88	107.88	-143.92	983.94	58.75	16.94	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
Facility Surface Uncertainty @1SD		Horizontal	8.200ft
		Vertical	1.000ft
		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	0.11	36.57	-8.32	37.21
8.5in Open Hole	1800.00	17770.56	15970.56	1798.72	7678.00	-8.32	37.21	2920.05	46.79

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	Wellbore
13.00	20586.05	Custom BHI NaviTrak (Standard Rotating) (Rockies 0.03Gt model)	ACKARD NORTH 2-35-2NCH PWB



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

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



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	9284.51	25.84	0.16	9284.69	25.40	377.37	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: CHAMPLIN 117 AMOCO G#6 AWB Offset Wellpath: CHAMPLIN 117 AMOCO G#6 AWP			
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical 1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical 3.000ft

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

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	-1206.83	-1266.19	-133.63	1749.52	25.40	71.09	PASS
113.00†	113.00	0.00	0.00	53.00	113.00	-1206.83	-1266.19	-133.63	1749.19	51.25	34.66	PASS
213.00†	213.00	0.00	0.00	153.00	213.00	-1206.83	-1266.19	-133.63	1749.19	53.60	33.12	PASS
313.00†	313.00	0.00	0.00	253.00	313.00	-1206.83	-1266.19	-133.63	1749.19	55.95	31.70	PASS
413.00†	413.00	0.00	0.00	353.00	413.00	-1206.83	-1266.19	-133.63	1749.19	58.30	30.41	PASS
513.00†	513.00	0.00	0.00	453.00	513.00	-1206.83	-1266.19	-133.63	1749.19	60.66	29.21	PASS
613.00†	613.00	0.00	0.00	553.00	613.00	-1206.83	-1266.19	-133.63	1749.19	63.03	28.10	PASS
713.00†	713.00	0.00	0.00	653.00	713.00	-1206.83	-1266.19	-133.63	1749.19	65.40	27.07	PASS
813.00†	813.00	0.00	0.00	753.00	813.00	-1206.83	-1266.19	-133.63	1749.19	67.77	26.11	PASS
913.00†	913.00	0.00	0.00	853.00	913.00	-1206.83	-1266.19	-133.63	1749.19	70.14	25.21	PASS
1000.00	1000.00	0.00	0.00	940.00	1000.00	-1206.83	-1266.19	-133.63	1749.19	72.21	24.48	PASS
1013.00†	1013.00	-0.02	-0.02	953.00	1013.00	-1206.83	-1266.19	-7.88	1749.16	72.52	24.38	PASS
1113.00†	1112.97	-1.30	-1.81	1052.97	1112.97	-1206.83	-1266.19	-7.90	1746.98	74.92	23.56	PASS
1213.00†	1212.80	-4.62	-6.42	1152.80	1212.80	-1206.83	-1266.19	-7.94	1741.35	77.36	22.73	PASS
1313.00†	1312.38	-9.98	-13.86	1252.38	1312.38	-1206.83	-1266.19	-8.01	1732.27	79.81	21.92	PASS
1413.00†	1411.57	-17.36	-24.12	1351.57	1411.57	-1206.83	-1266.19	-8.10	1719.76	82.24	21.11	PASS
1513.00†	1510.26	-26.76	-37.18	1450.26	1510.26	-1206.83	-1266.19	-8.22	1703.82	84.67	20.30	PASS
1597.14	1592.83	-36.22	-50.33	1532.83	1592.83	-1206.83	-1266.19	-8.35	1687.79	86.71	19.64	PASS
1613.00†	1608.34	-38.14	-52.99	1548.34	1608.34	-1206.83	-1266.19	-8.37	1684.54	87.08	19.51	PASS
1713.00†	1706.18	-50.23	-69.79	1646.18	1706.18	-1206.83	-1266.19	-8.47	1664.06	89.44	18.76	PASS
1813.00†	1804.01	-62.31	-86.59	1744.01	1804.01	-1206.83	-1266.19	-8.58	1643.58	91.72	18.05	PASS
1913.00†	1901.85	-74.40	-103.38	1841.85	1901.85	-1206.83	-1266.19	-8.69	1623.11	94.09	17.37	PASS
2013.00†	1999.68	-86.49	-120.18	1939.68	1999.68	-1206.83	-1266.19	-8.80	1602.65	96.47	16.73	PASS
2113.00†	2097.52	-98.58	-136.97	2037.52	2097.52	-1206.83	-1266.19	-8.91	1582.19	98.85	16.11	PASS
2213.00†	2195.35	-110.67	-153.77	2135.35	2195.35	-1206.83	-1266.19	-9.03	1561.74	101.24	15.53	PASS
2313.00†	2293.19	-122.75	-170.57	2233.19	2293.19	-1206.83	-1266.19	-9.15	1541.30	103.64	14.97	PASS
2413.00†	2391.03	-134.84	-187.36	2331.03	2391.03	-1206.83	-1266.19	-9.27	1520.86	106.04	14.43	PASS
2513.00†	2488.86	-146.93	-204.16	2428.86	2488.86	-1206.83	-1266.19	-9.40	1500.43	108.44	13.92	PASS
2613.00†	2586.70	-159.02	-220.95	2526.70	2586.70	-1206.83	-1266.19	-9.53	1480.01	110.86	13.43	PASS
2713.00†	2684.53	-171.11	-237.75	2624.53	2684.53	-1206.83	-1266.19	-9.67	1459.59	113.27	12.96	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	2782.37	-183.19	-254.55	2722.37	2782.37	-1206.83	-1266.19	-9.80	1439.18	115.70	12.51	PASS
2913.00†	2880.20	-195.28	-271.34	2820.20	2880.20	-1206.83	-1266.19	-9.95	1418.78	118.13	12.08	PASS
3013.00†	2978.04	-207.37	-288.14	2918.04	2978.04	-1206.83	-1266.19	-10.09	1398.39	120.56	11.66	PASS
3113.00†	3075.87	-219.46	-304.93	3015.87	3075.87	-1206.83	-1266.19	-10.24	1378.01	123.00	11.26	PASS
3213.00†	3173.71	-231.54	-321.73	3113.71	3173.71	-1206.83	-1266.19	-10.40	1357.64	125.45	10.88	PASS
3313.00†	3271.54	-243.63	-338.53	3211.54	3271.54	-1206.83	-1266.19	-10.56	1337.27	127.90	10.51	PASS
3413.00†	3369.38	-255.72	-355.32	3309.38	3369.38	-1206.83	-1266.19	-10.72	1316.92	130.36	10.15	PASS
3513.00†	3467.22	-267.81	-372.12	3407.22	3467.22	-1206.83	-1266.19	-10.89	1296.58	132.82	9.81	PASS
3613.00†	3565.05	-279.90	-388.91	3505.05	3565.05	-1206.83	-1266.19	-11.07	1276.25	135.28	9.48	PASS
3713.00†	3662.89	-291.98	-405.71	3602.89	3662.89	-1206.83	-1266.19	-11.25	1255.93	137.76	9.16	PASS
3813.00†	3760.72	-304.07	-422.51	3700.72	3760.72	-1206.83	-1266.19	-11.44	1235.62	140.24	8.85	PASS
3913.00†	3858.56	-316.16	-439.30	3798.56	3858.56	-1206.83	-1266.19	-11.63	1215.33	142.72	8.55	PASS
4013.00†	3956.39	-328.25	-456.10	3896.39	3956.39	-1206.83	-1266.19	-11.83	1195.05	145.21	8.27	PASS
4113.00†	4054.23	-340.33	-472.89	3994.23	4054.23	-1206.83	-1266.19	-12.04	1174.79	147.70	7.99	PASS
4213.00†	4152.06	-352.42	-489.69	4092.06	4152.06	-1206.83	-1266.19	-12.25	1154.54	150.20	7.72	PASS
4313.00†	4249.90	-364.51	-506.49	4189.90	4249.90	-1206.83	-1266.19	-12.47	1134.30	152.71	7.46	PASS
4413.00†	4347.74	-376.60	-523.28	4287.74	4347.74	-1206.83	-1266.19	-12.70	1114.09	155.22	7.21	PASS
4513.00†	4445.57	-388.69	-540.08	4385.57	4445.57	-1206.83	-1266.19	-12.94	1093.89	157.74	6.96	PASS
4613.00†	4543.41	-400.77	-556.87	4483.41	4543.41	-1206.83	-1266.19	-13.19	1073.71	160.26	6.73	PASS
4713.00†	4641.24	-412.86	-573.67	4581.24	4641.24	-1206.83	-1266.19	-13.44	1053.55	162.79	6.50	PASS
4813.00†	4739.08	-424.95	-590.47	4679.08	4739.08	-1206.83	-1266.19	-13.71	1033.41	165.32	6.27	PASS
4913.00†	4836.91	-437.04	-607.26	4776.91	4836.91	-1206.83	-1266.19	-13.99	1013.29	167.86	6.06	PASS
5013.00†	4934.75	-449.13	-624.06	4874.75	4934.75	-1206.83	-1266.19	-14.27	993.20	170.41	5.85	PASS
5113.00†	5032.58	-461.21	-640.85	4972.58	5032.58	-1206.83	-1266.19	-14.57	973.13	172.96	5.65	PASS
5213.00†	5130.42	-473.30	-657.65	5070.42	5130.42	-1206.83	-1266.19	-14.89	953.09	175.52	5.45	PASS
5313.00†	5228.25	-485.39	-674.45	5168.25	5228.25	-1206.83	-1266.19	-15.21	933.08	178.09	5.26	PASS
5413.00†	5326.09	-497.48	-691.24	5266.09	5326.09	-1206.83	-1266.19	-15.55	913.09	180.66	5.07	PASS
5513.00†	5423.93	-509.56	-708.04	5363.93	5423.93	-1206.83	-1266.19	-15.91	893.14	183.24	4.89	PASS
5613.00†	5521.76	-521.65	-724.83	5461.76	5521.76	-1206.83	-1266.19	-16.28	873.23	185.83	4.71	PASS
5713.00†	5619.60	-533.74	-741.63	5559.60	5619.60	-1206.83	-1266.19	-16.67	853.35	188.43	4.54	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

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

Facility: SEC.11-T02S-R66W Slot: SLOT#01 EX HSR-VAN SCHAAK #4-11 (623'FNL & 696'FWL, SEC.11, 8374, PR) Well: HSR-VAN SCHAAK #4-11 Threshold Value=1.00 † = interpolated/extrapolated station												
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio	ACR Status
5813.00†	5717.43	-545.83	-758.43	5657.43	5717.43	-1206.83	-1266.19	-17.08	833.51	191.04	4.38	PASS
5913.00†	5815.27	-557.92	-775.22	5755.27	5815.27	-1206.83	-1266.19	-17.50	813.71	193.65	4.21	PASS
6013.00†	5913.10	-570.00	-792.02	5853.10	5913.10	-1206.83	-1266.19	-17.95	793.96	196.28	4.06	PASS
6113.00†	6010.94	-582.09	-808.81	5950.94	6010.94	-1206.83	-1266.19	-18.42	774.26	198.91	3.90	PASS
6213.00†	6108.77	-594.18	-825.61	6048.77	6108.77	-1206.83	-1266.19	-18.92	754.62	201.56	3.75	PASS
6313.00†	6206.61	-606.27	-842.41	6146.61	6206.61	-1206.83	-1266.19	-19.44	735.03	204.22	3.61	PASS
6413.00†	6304.44	-618.35	-859.20	6244.44	6304.44	-1206.83	-1266.19	-19.99	715.50	206.89	3.47	PASS
6513.00†	6402.28	-630.44	-876.00	6342.28	6402.28	-1206.83	-1266.19	-20.57	696.04	209.58	3.33	PASS
6613.00†	6500.12	-642.53	-892.79	6440.12	6500.12	-1206.83	-1266.19	-21.19	676.65	212.28	3.19	PASS
6713.00†	6597.95	-654.62	-909.59	6537.95	6597.95	-1206.83	-1266.19	-21.83	657.34	214.99	3.06	PASS
6813.00†	6695.79	-666.71	-926.39	6635.79	6695.79	-1206.83	-1266.19	-22.52	638.12	217.73	2.94	PASS
6913.00†	6793.62	-678.79	-943.18	6733.62	6793.62	-1206.83	-1266.19	-23.26	618.99	220.48	2.81	PASS
7013.00†	6891.46	-690.88	-959.98	6831.46	6891.46	-1206.83	-1266.19	-24.03	599.97	223.26	2.69	PASS
7113.00†	6989.29	-702.97	-976.77	6929.29	6989.29	-1206.83	-1266.19	-24.86	581.06	226.06	2.58	PASS
7182.54	7057.33	-711.38	-988.45	6997.33	7057.33	-1206.83	-1266.19	-25.47	567.99	228.03	2.50	PASS
7213.00†	7087.21	-714.25	-993.59	7027.21	7087.21	-1206.83	-1266.19	-39.60	562.97	228.90	2.46	PASS
7302.01†	7174.84	-713.39	-1008.66	7114.89	7174.89	-1206.83	-1266.19	-89.74	556.59	231.96	2.40	PASS
7313.00†	7185.62	-712.33	-1010.52	7125.62	7185.62	-1206.83	-1266.19	-94.77	556.68	232.29	2.40	PASS
7413.00†	7282.20	-693.10	-1027.18	7222.20	7282.20	-1206.83	-1266.19	-123.07	566.61	236.68	2.40	PASS
7464.25†	7330.03	-676.70	-1035.45	7270.03	7330.03	-1206.83	-1266.19	-130.36	578.17	247.32	2.34	PASS
7513.00†	7374.01	-657.14	-1043.06	7314.01	7374.01	-1206.83	-1266.19	-135.20	593.25	241.05	2.47	PASS
7613.00†	7458.26	-605.54	-1057.69	7398.26	7458.26	-1206.83	-1266.19	-141.49	636.41	244.98	2.60	PASS
7713.00†	7532.40	-539.89	-1070.61	7472.40	7532.40	-1206.83	-1266.19	-144.77	695.02	248.43	2.80	PASS
7813.00†	7594.17	-462.16	-1081.44	7534.17	7594.17	-1206.83	-1266.19	-145.65	767.24	251.27	3.06	PASS
7913.00†	7641.70	-374.72	-1089.84	7581.70	7641.70	-1206.83	-1266.19	-143.57	850.59	253.45	3.36	PASS
8013.00†	7673.53	-280.23	-1095.57	7613.53	7673.53	-1206.83	-1266.19	-135.71	942.18	254.96	3.70	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

POSITIONAL UNCERTAINTY - Offset Wellbore: HSR-VAN SCHAACK #4-11 AWB Offset Wellpath: HSR-VAN SCHAACK #4-11 AWP			
Slot Surface Uncertainty @1SD	Horizontal	0.100ft	Vertical 1.000ft
Facility Surface Uncertainty @1SD	Horizontal	8.200ft	Vertical 3.000ft

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

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	0.24	74.97	89.82	74.97	1.40	123.61	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.24	74.97	89.82	74.97	1.72	80.54	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.24	74.97	89.82	74.97	2.29	49.79	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.24	74.97	89.82	74.97	2.89	35.44	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.24	74.97	89.82	74.97	3.51	27.40	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.24	74.97	89.82	74.97	4.13	22.29	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.24	74.97	89.82	74.97	4.75	18.78	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.24	74.97	89.82	74.97	5.38	16.22	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.24	74.97	89.82	74.97	6.00	14.27	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.24	74.97	89.82	74.97	6.63	12.73	PASS
1000.00	1000.00	0.00	0.00	1000.00	1000.00	0.24	74.97	89.82	74.97	7.17	11.65	PASS
1013.00†	1013.00	-0.02	-0.02	1013.00	1013.00	0.24	74.97	-144.45	74.99	7.25	11.50	PASS
1113.00†	1112.97	-1.30	-1.81	1112.97	1112.97	0.24	74.97	-145.39	76.79	7.95	10.63	PASS
1213.00†	1212.80	-4.62	-6.42	1212.80	1212.80	0.24	74.97	-147.60	81.54	8.85	10.03	PASS
1313.00†	1312.38	-9.98	-13.86	1312.38	1312.38	0.24	74.97	-150.67	89.42	9.74	9.92	PASS
1413.00†	1411.57	-17.36	-24.12	1411.57	1411.57	0.24	74.97	-154.09	100.64	10.61	10.17	PASS
1513.00†	1510.26	-26.76	-37.18	1510.15	1510.15	0.22	74.98	-157.46	115.36	11.48	10.73	PASS
1597.14	1592.83	-36.22	-50.33	1591.82	1591.81	-1.04	75.70	-159.41	130.85	12.16	11.45	PASS
1613.00†	1608.34	-38.14	-52.99	1607.17	1607.15	-1.51	75.96	-159.68	134.06	12.28	11.61	PASS
1713.00†	1706.18	-50.23	-69.79	1703.86	1703.69	-6.07	78.55	-160.38	154.80	12.90	12.73	PASS
1813.00†	1804.01	-62.31	-86.59	1800.23	1799.68	-13.43	82.74	-159.86	176.29	13.44	13.79	PASS
1913.00†	1901.85	-74.40	-103.38	1896.07	1894.80	-23.52	88.48	-158.53	198.62	14.12	14.75	PASS
2013.00†	1999.68	-86.49	-120.18	1992.28	1989.93	-36.05	95.60	-156.76	221.81	14.84	15.64	PASS
2113.00†	2097.52	-98.58	-136.97	2089.29	2085.80	-48.98	102.96	-155.22	245.29	15.61	16.41	PASS
2213.00†	2195.35	-110.67	-153.77	2186.31	2181.67	-61.92	110.32	-153.96	268.90	16.41	17.08	PASS
2313.00†	2293.19	-122.75	-170.57	2283.32	2277.53	-74.86	117.67	-152.90	292.61	17.24	17.66	PASS
2413.00†	2391.03	-134.84	-187.36	2380.34	2373.40	-87.79	125.03	-151.99	316.41	18.09	18.16	PASS
2513.00†	2488.86	-146.93	-204.16	2477.36	2469.27	-100.73	132.39	-151.22	340.27	18.98	18.58	PASS
2613.00†	2586.70	-159.02	-220.95	2574.37	2565.14	-113.67	139.75	-150.54	364.18	19.85	18.99	PASS
2713.00†	2684.53	-171.11	-237.75	2671.39	2661.00	-126.60	147.10	-149.95	388.13	20.75	19.33	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	2782.37	-183.19	-254.55	2768.40	2756.87	-139.54	154.46	-149.43	412.12	21.67	19.63	PASS
2913.00†	2880.20	-195.28	-271.34	2865.42	2852.74	-152.48	161.82	-148.96	436.13	22.60	19.89	PASS
3013.00†	2978.04	-207.37	-288.14	2962.43	2948.61	-165.41	169.17	-148.55	460.17	23.54	20.13	PASS
3113.00†	3075.87	-219.46	-304.93	3059.45	3044.47	-178.35	176.53	-148.17	484.24	24.48	20.34	PASS
3213.00†	3173.71	-231.54	-321.73	3156.47	3140.34	-191.29	183.89	-147.83	508.31	25.44	20.53	PASS
3313.00†	3271.54	-243.63	-338.53	3253.48	3236.21	-204.22	191.25	-147.52	532.41	26.40	20.70	PASS
3413.00†	3369.38	-255.72	-355.32	3350.50	3332.07	-217.16	198.60	-147.24	556.52	27.36	20.85	PASS
3513.00†	3467.22	-267.81	-372.12	3447.51	3427.94	-230.10	205.96	-146.98	580.64	28.34	20.99	PASS
3613.00†	3565.05	-279.90	-388.91	3544.53	3523.81	-243.03	213.32	-146.74	604.77	29.31	21.12	PASS
3713.00†	3662.89	-291.98	-405.71	3641.54	3619.68	-255.97	220.67	-146.52	628.90	30.29	21.23	PASS
3813.00†	3760.72	-304.07	-422.51	3738.56	3715.54	-268.91	228.03	-146.32	653.05	31.28	21.34	PASS
3913.00†	3858.56	-316.16	-439.30	3835.58	3811.41	-281.84	235.39	-146.13	677.21	32.27	21.44	PASS
4013.00†	3956.39	-328.25	-456.10	3932.59	3907.28	-294.78	242.74	-145.95	701.37	33.26	21.53	PASS
4113.00†	4054.23	-340.33	-472.89	4029.61	4003.15	-307.71	250.10	-145.79	725.53	34.25	21.61	PASS
4213.00†	4152.06	-352.42	-489.69	4126.62	4099.01	-320.65	257.46	-145.63	749.70	35.25	21.69	PASS
4313.00†	4249.90	-364.51	-506.49	4223.64	4194.88	-333.59	264.82	-145.49	773.88	36.25	21.76	PASS
4413.00†	4347.74	-376.60	-523.28	4320.65	4290.75	-346.52	272.17	-145.35	798.06	37.25	21.82	PASS
4513.00†	4445.57	-388.69	-540.08	4417.67	4386.62	-359.46	279.53	-145.23	822.25	38.25	21.88	PASS
4613.00†	4543.41	-400.77	-556.87	4514.68	4482.48	-372.40	286.89	-145.10	846.43	39.26	21.94	PASS
4713.00†	4641.24	-412.86	-573.67	4611.70	4578.35	-385.33	294.24	-144.99	870.63	40.26	21.99	PASS
4813.00†	4739.08	-424.95	-590.47	4708.72	4674.22	-398.27	301.60	-144.88	894.82	41.27	22.04	PASS
4913.00†	4836.91	-437.04	-607.26	4805.73	4770.09	-411.21	308.96	-144.78	919.02	42.28	22.09	PASS
5013.00†	4934.75	-449.13	-624.06	4902.75	4865.95	-424.14	316.32	-144.69	943.22	43.29	22.13	PASS
5113.00†	5032.58	-461.21	-640.85	4999.76	4961.82	-437.08	323.67	-144.59	967.42	44.31	22.17	PASS
5213.00†	5130.42	-473.30	-657.65	5096.78	5057.69	-450.02	331.03	-144.51	991.62	45.32	22.21	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

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	0.14	45.70	-4.01	48.07
8.5in Open Hole	1800.00	17719.12	15919.12	1799.45	N/A	-4.01	48.07	N/A	N/A

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

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



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	6610.25	28.13	0.24	6610.31	25.40	268.66	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWB Offset Wellpath: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWP			
Slot Surface Uncertainty @1SD		Horizontal	0.100ft
Facility Surface Uncertainty @1SD		Horizontal	8.200ft
		Vertical	1.000ft
		Vertical	3.000ft

WELLPATH COMPOSITION - Offset Wellbore: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWB Offset Wellpath: SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWP			
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Wellbore
0.00	8360.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8360>
			SLOT#01 EX CHAMPLIN 117 AMOCO G#3 AWB

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	0.26	89.95	89.84	89.95	1.40	148.58	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.26	89.95	89.84	89.95	1.72	96.81	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.26	89.95	89.84	89.95	2.29	59.85	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.26	89.95	89.84	89.95	2.89	42.60	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.26	89.95	89.84	89.95	3.51	32.93	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.26	89.95	89.84	89.95	4.13	26.80	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.26	89.95	89.84	89.95	4.75	22.57	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.26	89.95	89.84	89.95	5.38	19.49	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.26	89.95	89.84	89.95	6.00	17.15	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.26	89.95	89.84	89.95	6.63	15.31	PASS
1000.00	1000.00	0.00	0.00	1000.00	1000.00	0.26	89.95	89.84	89.95	7.17	14.00	PASS
1013.00†	1013.00	-0.02	-0.02	1013.00	1013.00	0.26	89.95	-144.43	89.97	7.25	13.83	PASS
1113.00†	1112.97	-1.30	-1.81	1112.97	1112.97	0.26	89.95	-145.21	91.77	7.95	12.73	PASS
1213.00†	1212.80	-4.62	-6.42	1212.80	1212.80	0.26	89.95	-147.08	96.50	8.85	11.90	PASS
1313.00†	1312.38	-9.98	-13.86	1312.38	1312.38	0.26	89.95	-149.74	104.32	9.73	11.60	PASS
1413.00†	1411.57	-17.36	-24.12	1411.57	1411.57	0.26	89.95	-152.79	115.42	10.60	11.70	PASS
1513.00†	1510.26	-26.76	-37.18	1510.26	1510.26	0.26	89.95	-155.91	129.97	11.46	12.12	PASS
1597.14	1592.83	-36.22	-50.33	1592.83	1592.83	0.26	89.95	-158.41	144.95	12.15	12.70	PASS
1613.00†	1608.34	-38.14	-52.99	1608.15	1608.15	0.25	89.96	-158.87	148.02	12.27	12.84	PASS
1713.00†	1706.18	-50.23	-69.79	1703.54	1703.52	-1.12	91.22	-160.77	168.36	12.90	13.85	PASS
1813.00†	1804.01	-62.31	-86.59	1798.54	1798.38	-4.79	94.63	-161.38	190.21	13.47	14.91	PASS
1913.00†	1901.85	-74.40	-103.38	1892.94	1892.43	-10.71	100.13	-161.08	213.45	14.11	15.87	PASS
2013.00†	1999.68	-86.49	-120.18	1986.55	1985.38	-18.83	107.66	-160.16	238.10	14.80	16.84	PASS
2113.00†	2097.52	-98.58	-136.97	2079.17	2076.94	-29.05	117.15	-158.81	264.26	15.54	17.77	PASS
2213.00†	2195.35	-110.67	-153.77	2172.71	2168.97	-41.33	128.54	-157.19	291.90	16.30	18.67	PASS
2313.00†	2293.19	-122.75	-170.57	2268.41	2263.04	-54.22	140.50	-155.76	319.95	17.09	19.48	PASS
2413.00†	2391.03	-134.84	-187.36	2364.11	2357.11	-67.10	152.46	-154.55	348.16	17.92	20.19	PASS
2513.00†	2488.86	-146.93	-204.16	2459.81	2451.18	-79.99	164.42	-153.52	376.49	18.77	20.80	PASS
2613.00†	2586.70	-159.02	-220.95	2555.51	2545.25	-92.88	176.37	-152.64	404.92	19.66	21.33	PASS
2713.00†	2684.53	-171.11	-237.75	2651.21	2639.32	-105.76	188.33	-151.87	433.43	20.52	21.84	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	2782.37	-183.19	-254.55	2746.91	2733.39	-118.65	200.29	-151.20	462.00	21.42	22.27	PASS
2913.00†	2880.20	-195.28	-271.34	2842.61	2827.46	-131.53	212.25	-150.60	490.62	22.33	22.65	PASS
3013.00†	2978.04	-207.37	-288.14	2938.31	2921.53	-144.42	224.21	-150.07	519.28	23.26	23.00	PASS
3113.00†	3075.87	-219.46	-304.93	3034.01	3015.60	-157.31	236.17	-149.60	547.98	24.19	23.30	PASS
3213.00†	3173.71	-231.54	-321.73	3129.70	3109.67	-170.19	248.12	-149.17	576.71	25.14	23.58	PASS
3313.00†	3271.54	-243.63	-338.53	3225.40	3203.74	-183.08	260.08	-148.79	605.47	26.09	23.83	PASS
3413.00†	3369.38	-255.72	-355.32	3321.10	3297.82	-195.97	272.04	-148.43	634.25	27.05	24.05	PASS
3513.00†	3467.22	-267.81	-372.12	3416.80	3391.89	-208.85	284.00	-148.11	663.05	28.01	24.26	PASS
3613.00†	3565.05	-279.90	-388.91	3512.50	3485.96	-221.74	295.96	-147.82	691.87	28.98	24.45	PASS
3713.00†	3662.89	-291.98	-405.71	3608.20	3580.03	-234.63	307.92	-147.55	720.71	29.95	24.62	PASS
3813.00†	3760.72	-304.07	-422.51	3703.90	3674.10	-247.51	319.87	-147.30	749.55	30.93	24.78	PASS
3913.00†	3858.56	-316.16	-439.30	3799.60	3768.17	-260.40	331.83	-147.07	778.41	31.92	24.92	PASS
4013.00†	3956.39	-328.25	-456.10	3895.30	3862.24	-273.28	343.79	-146.85	807.28	32.90	25.05	PASS
4113.00†	4054.23	-340.33	-472.89	3991.00	3956.31	-286.17	355.75	-146.65	836.16	33.89	25.18	PASS
4213.00†	4152.06	-352.42	-489.69	4086.70	4050.38	-299.06	367.71	-146.46	865.05	34.88	25.29	PASS
4313.00†	4249.90	-364.51	-506.49	4182.40	4144.45	-311.94	379.67	-146.29	893.95	35.88	25.40	PASS
4413.00†	4347.74	-376.60	-523.28	4278.10	4238.52	-324.83	391.62	-146.13	922.85	36.88	25.50	PASS
4513.00†	4445.57	-388.69	-540.08	4373.80	4332.59	-337.72	403.58	-145.97	951.77	37.88	25.59	PASS
4613.00†	4543.41	-400.77	-556.87	4469.50	4426.66	-350.60	415.54	-145.83	980.68	38.88	25.67	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

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

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



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

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	0.16	54.83	-1.40	56.28
8.5in Open Hole	1800.00	17807.10	16007.10	1799.84	7663.00	-1.40	56.28	2921.94	276.40

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	10591.95	24.25	0.13	10592.10	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 2-35-1NCH PWP (REV-A.0)
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

CLEARANCE DATA - Offset Wellbore: MARTIN #1 AWB Offset Wellpath: MARTIN #1 AWP											
Facility: SEC.02-T02S-R66W Slot: SLOT#01 EX MARTIN #1 (600'FNL & 2040'FWL, SEC.02,8400, SI) Well: MARTIN #1 Threshold Value=1.00 † = interpolated/extrapolated station											
Ref MD [ft]	Ref TVD [ft]	Ref North [ft]	Ref East [ft]	Offset MD [ft]	Offset TVD [ft]	Offset North [ft]	Offset East [ft]	Angle from Highside [°]	C-C Clear Dist [ft]	ACR MASD [ft]	Sep Ratio
13.00	13.00	0.00	0.00	27.00	13.00	4042.44	82.81	1.17	4043.29	50.64	81.12
PASS											

C-C Clearance Distance Cutoff: 1000.00 ft

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

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

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



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	0.27	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	113.11	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.27	104.96	89.85	104.96	2.29	69.93	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.27	104.96	89.85	104.96	2.89	49.78	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.27	104.96	89.85	104.96	3.51	38.48	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.27	104.96	89.85	104.96	4.13	31.31	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.27	104.96	89.85	104.96	4.75	26.37	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.27	104.96	89.85	104.96	5.38	22.78	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.27	104.96	89.85	104.96	6.00	20.04	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.27	104.96	89.85	104.96	6.63	17.88	PASS
1000.00	1000.00	0.00	0.00	1000.00	1000.00	0.27	104.96	89.85	104.96	7.17	16.36	PASS
1013.00†	1013.00	-0.02	-0.02	1013.00	1013.00	0.27	104.96	-144.42	104.99	7.25	16.15	PASS
1113.00†	1112.97	-1.30	-1.81	1112.97	1112.97	0.27	104.96	-145.08	106.78	7.95	14.83	PASS
1213.00†	1212.80	-4.62	-6.42	1212.80	1212.80	0.27	104.96	-146.70	111.49	8.84	13.77	PASS
1313.00†	1312.38	-9.98	-13.86	1312.38	1312.38	0.27	104.96	-149.04	119.27	9.72	13.29	PASS
1413.00†	1411.57	-17.36	-24.12	1411.57	1411.57	0.27	104.96	-151.79	130.28	10.59	13.23	PASS
1513.00†	1510.26	-26.76	-37.18	1509.91	1509.91	0.26	104.98	-154.66	144.70	11.44	13.52	PASS
1597.14	1592.83	-36.22	-50.33	1589.48	1589.47	-0.53	106.10	-156.56	160.49	12.15	14.07	PASS
1613.00†	1608.34	-38.14	-52.99	1604.39	1604.37	-0.82	106.52	-156.86	163.87	12.26	14.23	PASS
1713.00†	1706.18	-50.23	-69.79	1697.98	1697.82	-3.66	110.56	-158.11	186.45	12.97	15.26	PASS
1813.00†	1804.01	-62.31	-86.59	1790.72	1790.22	-8.20	117.02	-158.43	211.12	13.60	16.38	PASS
1913.00†	1901.85	-74.40	-103.38	1882.44	1881.30	-14.38	125.81	-158.12	237.81	14.29	17.46	PASS
2013.00†	1999.68	-86.49	-120.18	1972.96	1970.82	-22.12	136.83	-157.38	266.51	15.04	18.55	PASS
2113.00†	2097.52	-98.58	-136.97	2062.14	2058.54	-31.34	149.94	-156.36	297.25	15.77	19.69	PASS
2213.00†	2195.35	-110.67	-153.77	2149.84	2144.28	-41.92	165.00	-155.17	330.08	16.54	20.81	PASS
2313.00†	2293.19	-122.75	-170.57	2241.50	2233.44	-54.15	182.40	-153.89	364.50	17.33	21.88	PASS
2413.00†	2391.03	-134.84	-187.36	2335.06	2324.42	-66.69	200.24	-152.80	399.14	18.15	22.84	PASS
2513.00†	2488.86	-146.93	-204.16	2428.62	2415.40	-79.22	218.08	-151.89	433.89	19.01	23.67	PASS
2613.00†	2586.70	-159.02	-220.95	2522.17	2506.39	-91.76	235.92	-151.10	468.73	19.85	24.45	PASS
2713.00†	2684.53	-171.11	-237.75	2615.73	2597.37	-104.30	253.75	-150.43	503.62	20.73	25.12	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	2782.37	-183.19	-254.55	2709.29	2688.35	-116.84	271.59	-149.84	538.58	21.62	25.72	PASS
2913.00†	2880.20	-195.28	-271.34	2802.85	2779.34	-129.37	289.43	-149.33	573.57	22.53	26.25	PASS
3013.00†	2978.04	-207.37	-288.14	2896.41	2870.32	-141.91	307.27	-148.87	608.61	23.45	26.73	PASS
3113.00†	3075.87	-219.46	-304.93	2989.97	2961.30	-154.45	325.11	-148.47	643.67	24.38	27.16	PASS
3213.00†	3173.71	-231.54	-321.73	3083.53	3052.28	-166.98	342.95	-148.10	678.76	25.32	27.55	PASS
3313.00†	3271.54	-243.63	-338.53	3177.09	3143.27	-179.52	360.79	-147.77	713.87	26.26	27.91	PASS
3413.00†	3369.38	-255.72	-355.32	3270.65	3234.25	-192.06	378.63	-147.47	748.99	27.22	28.23	PASS
3513.00†	3467.22	-267.81	-372.12	3364.21	3325.23	-204.60	396.46	-147.20	784.14	28.18	28.52	PASS
3613.00†	3565.05	-279.90	-388.91	3457.76	3416.22	-217.13	414.30	-146.95	819.30	29.14	28.79	PASS
3713.00†	3662.89	-291.98	-405.71	3551.32	3507.20	-229.67	432.14	-146.73	854.47	30.11	29.04	PASS
3813.00†	3760.72	-304.07	-422.51	3644.88	3598.18	-242.21	449.98	-146.52	889.65	31.08	29.26	PASS
3913.00†	3858.56	-316.16	-439.30	3738.44	3689.16	-254.74	467.82	-146.32	924.84	32.06	29.47	PASS
4013.00†	3956.39	-328.25	-456.10	3832.00	3780.15	-267.28	485.66	-146.14	960.04	33.05	29.67	PASS
4113.00†	4054.23	-340.33	-472.89	3925.56	3871.13	-279.82	503.50	-145.98	995.25	34.03	29.84	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

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

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

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

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	13.00	1800.00	1787.00	13.00	1799.45	0.17	63.98	-2.58	67.90
8.5in Open Hole	1800.00	17798.06	15998.06	1799.45	7591.00	-2.58	67.90	2922.91	404.69



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

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 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	10587.79	-1324.71	-7.13	10670.54	25.40	433.70	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: LEECH #14-26 AWB Offset Wellpath: LEECH #14-26 AWP			
Slot Surface Uncertainty @1SD		Horizontal	0.100ft
Facility Surface Uncertainty @1SD		Horizontal	8.200ft

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

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	0.33	119.92	89.84	119.92	1.40	198.52	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.33	119.92	89.84	119.92	1.72	129.35	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.33	119.92	89.84	119.92	2.29	79.97	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.33	119.92	89.84	119.92	2.89	56.92	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.33	119.92	89.84	119.92	3.51	44.00	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.33	119.92	89.84	119.92	4.13	35.80	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.33	119.92	89.84	119.92	4.75	30.16	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.33	119.92	89.84	119.92	5.38	26.05	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.33	119.92	89.84	119.92	6.00	22.91	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.33	119.92	89.84	119.92	6.63	20.45	PASS
1000.00	1000.00	0.00	0.00	1000.00	1000.00	0.33	119.92	89.84	119.92	7.17	18.70	PASS
1013.00†	1013.00	-0.02	-0.02	1013.00	1013.00	0.33	119.92	-144.42	119.94	7.25	18.47	PASS
1113.00†	1112.97	-1.30	-1.81	1112.97	1112.97	0.33	119.92	-145.00	121.73	7.95	16.92	PASS
1213.00†	1212.80	-4.62	-6.42	1212.80	1212.80	0.33	119.92	-146.43	126.44	8.84	15.63	PASS
1313.00†	1312.38	-9.98	-13.86	1312.38	1312.38	0.33	119.92	-148.51	134.18	9.71	14.97	PASS
1413.00†	1411.57	-17.36	-24.12	1411.12	1411.12	0.32	119.93	-150.99	145.14	10.57	14.77	PASS
1513.00†	1510.26	-26.76	-37.18	1505.73	1505.71	-0.67	121.59	-153.09	160.97	11.46	15.03	PASS
1597.14	1592.83	-36.22	-50.33	1584.33	1584.21	-2.69	125.02	-154.35	178.73	12.26	15.52	PASS
1613.00†	1608.34	-38.14	-52.99	1599.03	1598.87	-3.19	125.86	-154.57	182.48	12.39	15.68	PASS
1713.00†	1706.18	-50.23	-69.79	1691.15	1690.65	-7.21	132.63	-155.41	207.53	13.06	16.86	PASS
1813.00†	1804.01	-62.31	-86.59	1782.17	1781.04	-12.65	141.81	-155.57	234.86	13.78	17.97	PASS
1913.00†	1901.85	-74.40	-103.38	1871.93	1869.80	-19.44	153.28	-155.26	264.43	14.47	19.17	PASS
2013.00†	1999.68	-86.49	-120.18	1960.27	1956.71	-27.51	166.90	-154.64	296.21	14.93	20.78	PASS
2113.00†	2097.52	-98.58	-136.97	2047.08	2041.59	-36.76	182.52	-153.81	330.19	15.98	21.58	PASS
2213.00†	2195.35	-110.67	-153.77	2132.23	2124.29	-47.11	199.99	-152.86	366.38	16.75	22.79	PASS
2313.00†	2293.19	-122.75	-170.57	2220.91	2209.85	-58.97	220.01	-151.83	404.43	17.54	23.98	PASS
2413.00†	2391.03	-134.84	-187.36	2313.06	2298.71	-71.40	241.00	-150.92	442.76	18.35	25.05	PASS
2513.00†	2488.86	-146.93	-204.16	2405.21	2387.57	-83.84	261.99	-150.15	481.18	19.21	25.97	PASS
2613.00†	2586.70	-159.02	-220.95	2497.35	2476.43	-96.28	282.98	-149.50	519.66	20.06	26.82	PASS
2713.00†	2684.53	-171.11	-237.75	2589.50	2565.29	-108.71	303.97	-148.93	558.19	20.94	27.56	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	2782.37	-183.19	-254.55	2681.65	2654.16	-121.15	324.96	-148.44	596.76	21.83	28.22	PASS
2913.00†	2880.20	-195.28	-271.34	2773.80	2743.02	-133.58	345.95	-148.01	635.36	22.74	28.81	PASS
3013.00†	2978.04	-207.37	-288.14	2865.95	2831.88	-146.02	366.94	-147.63	673.99	23.65	29.34	PASS
3113.00†	3075.87	-219.46	-304.93	2958.10	2920.74	-158.46	387.94	-147.28	712.64	24.58	29.82	PASS
3213.00†	3173.71	-231.54	-321.73	3050.25	3009.60	-170.89	408.93	-146.98	751.31	25.52	30.25	PASS
3313.00†	3271.54	-243.63	-338.53	3142.40	3098.46	-183.33	429.92	-146.70	790.00	26.47	30.64	PASS
3413.00†	3369.38	-255.72	-355.32	3234.55	3187.32	-195.76	450.91	-146.45	828.70	27.42	31.00	PASS
3513.00†	3467.22	-267.81	-372.12	3326.70	3276.18	-208.20	471.90	-146.22	867.42	28.38	31.32	PASS
3613.00†	3565.05	-279.90	-388.91	3418.85	3365.04	-220.64	492.89	-146.01	906.15	29.35	31.62	PASS
3713.00†	3662.89	-291.98	-405.71	3510.99	3453.90	-233.07	513.88	-145.82	944.88	30.32	31.89	PASS
3813.00†	3760.72	-304.07	-422.51	3603.14	3542.76	-245.51	534.87	-145.65	983.62	31.30	32.13	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	0.20	73.10	-4.13	80.41
8.5in Open Hole	1800.00	17693.67	15893.67	1798.70	7440.00	-4.13	80.41	2923.64	502.49



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	1349.42	64.21	2.72	1350.94	50.22	27.32	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

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	0.38	134.93	89.84	134.93	1.40	223.54	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.38	134.93	89.84	134.93	1.72	145.66	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.38	134.93	89.84	134.93	2.29	90.05	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.38	134.93	89.84	134.93	2.89	64.10	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.38	134.93	89.84	134.93	3.51	49.54	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.38	134.93	89.84	134.93	4.13	40.32	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.38	134.93	89.84	134.93	4.75	33.96	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.38	134.93	89.84	134.93	5.38	29.33	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.38	134.93	89.84	134.93	6.00	25.80	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.38	134.93	89.84	134.93	6.63	23.03	PASS
1000.00	1000.00	0.00	0.00	1000.00	1000.00	0.38	134.93	89.84	134.93	7.17	21.06	PASS
1013.00†	1013.00	-0.02	-0.02	1013.00	1013.00	0.38	134.93	-144.43	134.95	7.25	20.80	PASS
1113.00†	1112.97	-1.30	-1.81	1112.97	1112.97	0.38	134.93	-144.94	136.74	7.95	19.02	PASS
1213.00†	1212.80	-4.62	-6.42	1212.80	1212.80	0.38	134.93	-146.21	141.44	8.84	17.50	PASS
1313.00†	1312.38	-9.98	-13.86	1311.85	1311.85	0.37	134.95	-148.07	149.17	9.71	16.66	PASS
1413.00†	1411.57	-17.36	-24.12	1406.58	1406.55	-0.53	136.68	-149.84	161.76	10.60	16.42	PASS
1513.00†	1510.26	-26.76	-37.18	1500.14	1499.97	-2.85	141.12	-151.23	180.19	11.61	16.60	PASS
1597.14	1592.83	-36.22	-50.33	1577.63	1577.20	-5.83	146.84	-152.07	200.11	12.37	17.23	PASS
1613.00†	1608.34	-38.14	-52.99	1592.10	1591.60	-6.50	148.12	-152.23	204.27	12.52	17.37	PASS
1713.00†	1706.18	-50.23	-69.79	1682.64	1681.51	-11.42	157.55	-152.86	231.94	13.29	18.50	PASS
1813.00†	1804.01	-62.31	-86.59	1771.87	1769.74	-17.55	169.30	-152.96	262.03	13.96	19.79	PASS
1913.00†	1901.85	-74.40	-103.38	1859.65	1856.10	-24.82	183.24	-152.71	294.45	14.39	21.47	PASS
2013.00†	1999.68	-86.49	-120.18	1945.86	1940.40	-33.15	199.20	-152.21	329.19	15.41	22.35	PASS
2113.00†	2097.52	-98.58	-136.97	2030.37	2022.49	-42.45	217.03	-151.56	366.19	16.17	23.64	PASS
2213.00†	2195.35	-110.67	-153.77	2117.86	2106.90	-53.08	237.42	-150.80	405.18	16.93	24.94	PASS
2313.00†	2293.19	-122.75	-170.57	2209.69	2195.41	-64.39	259.10	-150.12	444.50	17.71	26.11	PASS
2413.00†	2391.03	-134.84	-187.36	2301.51	2283.92	-75.70	280.78	-149.54	483.87	18.54	27.10	PASS
2513.00†	2488.86	-146.93	-204.16	2393.34	2372.43	-87.01	302.46	-149.05	523.27	19.35	28.04	PASS
2613.00†	2586.70	-159.02	-220.95	2485.17	2460.94	-98.32	324.14	-148.63	562.69	20.19	28.84	PASS
2713.00†	2684.53	-171.11	-237.75	2576.99	2549.45	-109.63	345.82	-148.27	602.15	21.06	29.56	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	2782.37	-183.19	-254.55	2668.82	2637.96	-120.94	367.50	-147.95	641.61	21.94	30.19	PASS
2913.00†	2880.20	-195.28	-271.34	2760.65	2726.47	-132.25	389.18	-147.67	681.10	22.83	30.76	PASS
3013.00†	2978.04	-207.37	-288.14	2852.47	2814.98	-143.56	410.86	-147.42	720.59	23.73	31.27	PASS
3113.00†	3075.87	-219.46	-304.93	2944.30	2903.49	-154.87	432.54	-147.19	760.10	24.64	31.73	PASS
3213.00†	3173.71	-231.54	-321.73	3036.12	2992.00	-166.18	454.22	-146.99	799.61	25.56	32.15	PASS
3313.00†	3271.54	-243.63	-338.53	3127.95	3080.51	-177.49	475.90	-146.80	839.14	26.49	32.52	PASS
3413.00†	3369.38	-255.72	-355.32	3219.78	3169.03	-188.80	497.58	-146.63	878.67	27.42	32.86	PASS
3513.00†	3467.22	-267.81	-372.12	3311.60	3257.54	-200.11	519.25	-146.48	918.20	28.37	33.17	PASS
3613.00†	3565.05	-279.90	-388.91	3403.43	3346.05	-211.42	540.93	-146.34	957.74	29.31	33.46	PASS
3713.00†	3662.89	-291.98	-405.71	3495.26	3434.56	-222.72	562.61	-146.21	997.29	30.27	33.71	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	0.23	82.25	-5.90	94.01
8.5in Open Hole	1800.00	18103.54	16303.54	1797.47	7828.00	-5.90	94.01	2923.92	537.53

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

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	18103.54	Custom BHI NaviTrak (Standard Rotating) (Rockies 0.03Gt model)		ACKARD NORTH 2-35-3CDH PWB



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH PWB
Facility	SEC.02-T03S-R66W		

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



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	2427.67	-2613.25	-47.11	3566.99	25.40	144.96	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
0.00	8598.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8598>
		Wellbore	
		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 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	0.40	149.96	89.85	149.96	1.40	248.60	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.40	149.96	89.85	149.96	1.72	161.99	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.40	149.96	89.85	149.96	2.29	100.14	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.40	149.96	89.85	149.96	2.89	71.28	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.40	149.96	89.85	149.96	3.51	55.10	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.40	149.96	89.85	149.96	4.13	44.84	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.40	149.96	89.85	149.96	4.75	37.77	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.40	149.96	89.85	149.96	5.38	32.62	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.40	149.96	89.85	149.96	6.00	28.69	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.40	149.96	89.85	149.96	6.63	25.61	PASS
1000.00	1000.00	0.00	0.00	1000.00	1000.00	0.40	149.96	89.85	149.96	7.17	23.42	PASS
1013.00†	1013.00	-0.02	-0.02	1013.00	1013.00	0.40	149.96	-144.42	149.99	7.25	23.13	PASS
1113.00†	1112.97	-1.30	-1.81	1112.97	1112.97	0.40	149.96	-144.88	151.78	7.95	21.12	PASS
1213.00†	1212.80	-4.62	-6.42	1212.20	1212.20	0.39	149.99	-146.01	156.49	8.84	19.38	PASS
1313.00†	1312.38	-9.98	-13.86	1306.83	1306.80	-0.36	151.80	-147.31	166.04	9.75	18.46	PASS
1413.00†	1411.57	-17.36	-24.12	1400.45	1400.28	-2.28	156.44	-148.50	181.54	10.81	18.06	PASS
1513.00†	1510.26	-26.76	-37.18	1492.58	1492.07	-5.31	163.76	-149.48	202.90	11.82	18.33	PASS
1597.14	1592.83	-36.22	-50.33	1568.64	1567.63	-8.65	171.85	-150.12	225.30	12.59	19.04	PASS
1613.00†	1608.34	-38.14	-52.99	1582.82	1581.68	-9.36	173.56	-150.27	229.93	12.73	19.21	PASS
1713.00†	1706.18	-50.23	-69.79	1671.37	1669.25	-14.39	185.72	-150.88	260.64	13.49	20.47	PASS
1813.00†	1804.01	-62.31	-86.59	1758.41	1754.88	-20.34	200.09	-151.08	293.87	13.95	22.21	PASS
1913.00†	1901.85	-74.40	-103.38	1843.81	1838.40	-27.14	216.53	-151.00	329.55	14.86	23.24	PASS
2013.00†	1999.68	-86.49	-120.18	1927.47	1919.68	-34.72	234.85	-150.72	367.60	15.60	24.63	PASS
2113.00†	2097.52	-98.58	-136.97	2009.30	1998.58	-43.01	254.89	-150.32	407.97	16.35	26.03	PASS
2213.00†	2195.35	-110.67	-153.77	2089.24	2075.03	-51.94	276.47	-149.83	450.59	17.12	27.42	PASS
2313.00†	2293.19	-122.75	-170.57	2170.43	2152.01	-61.80	300.30	-149.27	495.34	17.91	28.75	PASS
2413.00†	2391.03	-134.84	-187.36	2259.44	2236.21	-72.84	326.98	-148.73	540.70	18.67	30.07	PASS
2513.00†	2488.86	-146.93	-204.16	2348.45	2320.41	-83.88	353.65	-148.27	586.09	19.47	31.21	PASS
2613.00†	2586.70	-159.02	-220.95	2437.46	2404.61	-94.91	380.33	-147.87	631.51	20.30	32.20	PASS
2713.00†	2684.53	-171.11	-237.75	2526.48	2488.81	-105.95	407.00	-147.53	676.95	21.15	33.08	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	2782.37	-183.19	-254.55	2615.49	2573.01	-116.99	433.68	-147.23	722.40	22.02	33.86	PASS
2913.00†	2880.20	-195.28	-271.34	2704.50	2657.22	-128.02	460.35	-146.97	767.87	22.91	34.56	PASS
3013.00†	2978.04	-207.37	-288.14	2793.52	2741.42	-139.06	487.03	-146.73	813.35	23.81	35.18	PASS
3113.00†	3075.87	-219.46	-304.93	2882.53	2825.62	-150.10	513.71	-146.52	858.84	24.71	35.75	PASS
3213.00†	3173.71	-231.54	-321.73	2971.54	2909.82	-161.14	540.38	-146.33	904.34	25.63	36.26	PASS
3313.00†	3271.54	-243.63	-338.53	3060.55	2994.02	-172.17	567.06	-146.16	949.84	26.56	36.72	PASS
3413.00†	3369.38	-255.72	-355.32	3149.57	3078.22	-183.21	593.73	-146.01	995.36	27.49	37.13	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	0.25	91.42	-7.05	109.05
8.5in Open Hole	1800.00	18043.25	16243.25	1795.62	7658.00	-7.05	109.05	2924.89	665.85

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 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	7976.24	1338.15	9.52	8087.72	25.40	328.71	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
Facility Surface Uncertainty @1SD		Horizontal	8.200ft
		Vertical	1.000ft
		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
0.00	8312.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8312>
		Wellbore	
		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 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	0.49	164.92	89.83	164.92	1.40	273.53	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.49	164.92	89.83	164.92	1.72	178.23	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.49	164.92	89.83	164.92	2.29	110.18	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.49	164.92	89.83	164.92	2.89	78.43	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.49	164.92	89.83	164.92	3.51	60.62	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.49	164.92	89.83	164.92	4.13	49.33	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.49	164.92	89.83	164.92	4.75	41.56	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.49	164.92	89.83	164.92	5.38	35.89	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.49	164.92	89.83	164.92	6.00	31.57	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.49	164.92	89.83	164.92	6.63	28.18	PASS
1000.00	1000.00	0.00	0.00	1000.00	1000.00	0.49	164.92	89.83	164.92	7.17	25.77	PASS
1013.00†	1013.00	-0.02	-0.02	1013.00	1013.00	0.49	164.92	-144.44	164.94	7.25	25.45	PASS
1113.00†	1112.97	-1.30	-1.81	1112.30	1112.30	0.48	164.94	-144.85	166.76	7.95	23.23	PASS
1213.00†	1212.80	-4.62	-6.42	1206.77	1206.75	-0.15	166.80	-145.58	173.39	8.90	21.31	PASS
1313.00†	1312.38	-9.98	-13.86	1300.43	1300.27	-1.78	171.55	-146.41	185.99	10.01	20.12	PASS
1413.00†	1411.57	-17.36	-24.12	1392.80	1392.29	-4.35	179.06	-147.23	204.51	11.07	19.84	PASS
1513.00†	1510.26	-26.76	-37.18	1483.40	1482.26	-7.80	189.16	-147.96	228.85	12.01	20.35	PASS
1597.14	1592.83	-36.22	-50.33	1557.96	1556.01	-11.33	199.48	-148.48	253.73	12.80	21.08	PASS
1613.00†	1608.34	-38.14	-52.99	1571.84	1569.71	-12.05	201.60	-148.62	258.83	12.93	21.27	PASS
1713.00†	1706.18	-50.23	-69.79	1658.39	1654.87	-17.06	216.25	-149.24	292.49	13.67	22.67	PASS
1813.00†	1804.01	-62.31	-86.59	1743.27	1737.88	-22.78	232.97	-149.52	328.71	14.36	24.11	PASS
1913.00†	1901.85	-74.40	-103.38	1826.37	1818.61	-29.15	251.58	-149.57	367.39	15.04	25.58	PASS
2013.00†	1999.68	-86.49	-120.18	1907.61	1896.96	-36.11	271.92	-149.46	408.45	15.78	27.06	PASS
2113.00†	2097.52	-98.58	-136.97	1986.93	1972.83	-43.59	293.79	-149.23	451.81	16.51	28.54	PASS
2213.00†	2195.35	-110.67	-153.77	2064.28	2046.18	-51.54	317.03	-148.93	497.39	17.28	29.97	PASS
2313.00†	2293.19	-122.75	-170.57	2139.63	2116.96	-59.89	341.45	-148.58	545.14	18.04	31.41	PASS
2413.00†	2391.03	-134.84	-187.36	2213.65	2185.82	-68.68	367.16	-148.19	594.96	18.72	32.98	PASS
2513.00†	2488.86	-146.93	-204.16	2299.72	2265.52	-79.20	397.91	-147.77	645.72	19.52	34.29	PASS
2613.00†	2586.70	-159.02	-220.95	2385.80	2345.22	-89.72	428.66	-147.40	696.50	20.33	35.45	PASS
2713.00†	2684.53	-171.11	-237.75	2471.87	2424.92	-100.24	459.41	-147.09	747.29	21.17	36.48	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	2782.37	-183.19	-254.55	2557.94	2504.62	-110.75	490.15	-146.82	798.11	22.03	37.40	PASS
2913.00†	2880.20	-195.28	-271.34	2644.01	2584.32	-121.27	520.90	-146.58	848.93	22.90	38.23	PASS
3013.00†	2978.04	-207.37	-288.14	2730.08	2664.02	-131.79	551.65	-146.36	899.76	23.78	38.96	PASS
3113.00†	3075.87	-219.46	-304.93	2816.15	2743.71	-142.31	582.40	-146.17	950.60	24.68	39.63	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	0.30	100.53	-8.09	125.08
8.5in Open Hole	1800.00	18099.99	16299.99	1793.06	7586.00	-8.09	125.08	2925.89	794.11

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 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	10830.59	1519.84	7.99	10936.85	25.40	444.53	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

POSITIONAL UNCERTAINTY - Offset Wellbore: MAUL #2 AWB Offset Wellpath: MAUL #2 AWP			
Slot Surface Uncertainty @1SD		Horizontal	0.100ft
Facility Surface Uncertainty @1SD		Horizontal	8.200ft

WELLPATH COMPOSITION - Offset Wellbore: MAUL #2 AWB Offset Wellpath: MAUL #2 AWP			
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Wellbore
0.00	8280.00	Drift Indicator - Inclination Only (Actual Survey)	MAUL #2 AWB

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



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
Closest Approach
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	56.73	-2626.72	-88.76	2627.63	25.40	106.78	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

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

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

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	0.51	179.93	89.84	179.93	1.40	298.55	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.51	179.93	89.84	179.93	1.72	194.53	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.51	179.93	89.84	179.93	2.29	120.26	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.51	179.93	89.84	179.93	2.89	85.60	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.51	179.93	89.84	179.93	3.51	66.17	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.51	179.93	89.84	179.93	4.13	53.84	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.51	179.93	89.84	179.93	4.75	45.36	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.51	179.93	89.84	179.93	5.38	39.17	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.51	179.93	89.84	179.93	6.00	34.46	PASS
913.00†	913.00	0.00	0.00	913.00	913.00	0.51	179.93	89.84	179.93	6.63	30.76	PASS
1000.00	1000.00	0.00	0.00	1000.00	1000.00	0.51	179.93	89.84	179.93	7.17	28.13	PASS
1013.00†	1013.00	-0.02	-0.02	1012.27	1012.27	0.50	179.95	-144.42	179.98	7.25	27.79	PASS
1113.00†	1112.97	-1.30	-1.81	1106.51	1106.49	-0.10	181.81	-144.57	183.74	8.02	25.34	PASS
1213.00†	1212.80	-4.62	-6.42	1200.18	1200.02	-1.65	186.58	-144.90	193.45	9.18	22.99	PASS
1313.00†	1312.38	-9.98	-13.86	1292.78	1292.27	-4.11	194.15	-145.37	209.06	10.26	22.01	PASS
1413.00†	1411.57	-17.36	-24.12	1383.84	1382.69	-7.42	204.35	-145.89	230.50	11.26	21.97	PASS
1513.00†	1510.26	-26.76	-37.18	1472.92	1470.78	-11.52	216.97	-146.38	257.65	12.22	22.49	PASS
1597.14	1592.83	-36.22	-50.33	1546.05	1542.75	-15.52	229.27	-146.75	284.81	13.01	23.27	PASS
1613.00†	1608.34	-38.14	-52.99	1559.64	1556.09	-16.32	231.75	-146.88	290.32	13.04	23.65	PASS
1713.00†	1706.18	-50.23	-69.79	1644.34	1638.92	-21.78	248.56	-147.45	326.61	13.84	24.98	PASS
1813.00†	1804.01	-62.31	-86.59	1727.25	1719.46	-27.85	267.25	-147.74	365.43	14.53	26.48	PASS
1913.00†	1901.85	-74.40	-103.38	1808.29	1797.61	-34.48	287.66	-147.84	406.66	15.21	28.00	PASS
2013.00†	1999.68	-86.49	-120.18	1887.41	1873.29	-41.61	309.61	-147.80	450.23	15.94	29.52	PASS
2113.00†	2097.52	-98.58	-136.97	1964.56	1946.43	-49.18	332.91	-147.65	496.05	16.70	30.98	PASS
2213.00†	2195.35	-110.67	-153.77	2039.69	2017.02	-57.13	357.40	-147.44	544.03	17.46	32.44	PASS
2313.00†	2293.19	-122.75	-170.57	2112.79	2085.02	-65.42	382.91	-147.18	594.11	18.13	34.06	PASS
2413.00†	2391.03	-134.84	-187.36	2188.22	2154.49	-74.49	410.86	-146.88	646.11	18.85	35.57	PASS
2513.00†	2488.86	-146.93	-204.16	2273.27	2232.63	-84.87	442.80	-146.57	698.61	19.65	36.84	PASS
2613.00†	2586.70	-159.02	-220.95	2358.32	2310.77	-95.24	474.74	-146.30	751.13	20.47	37.97	PASS
2713.00†	2684.53	-171.11	-237.75	2443.37	2388.91	-105.62	506.69	-146.07	803.66	21.31	38.98	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	2782.37	-183.19	-254.55	2528.42	2467.04	-115.99	538.63	-145.87	856.19	22.17	39.87	PASS
2913.00†	2880.20	-195.28	-271.34	2613.48	2545.18	-126.37	570.57	-145.69	908.74	23.04	40.66	PASS
3013.00†	2978.04	-207.37	-288.14	2698.53	2623.32	-136.74	602.51	-145.53	961.29	23.93	41.37	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	0.31	109.68	-10.14	141.86
8.5in Open Hole	1800.00	17994.78	16194.78	1789.64	7436.00	-10.14	141.86	2926.61	891.93

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

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

OFFSET WELLPATH REFERENCE - Offset Wellbore: ACKARD NORTH 2-35-4NAH PWB Offset Wellpath: ACKARD NORTH 2-35-4NAH PWP (REV. A.0)

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	5342.77	1339.67	14.08	5508.17	50.38	111.08	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



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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	0.57	194.94	89.83	194.94	1.40	323.56	PASS
113.00†	113.00	0.00	0.00	113.00	113.00	0.57	194.94	89.83	194.94	1.72	210.83	PASS
213.00†	213.00	0.00	0.00	213.00	213.00	0.57	194.94	89.83	194.94	2.29	130.34	PASS
313.00†	313.00	0.00	0.00	313.00	313.00	0.57	194.94	89.83	194.94	2.89	92.78	PASS
413.00†	413.00	0.00	0.00	413.00	413.00	0.57	194.94	89.83	194.94	3.51	71.71	PASS
513.00†	513.00	0.00	0.00	513.00	513.00	0.57	194.94	89.83	194.94	4.13	58.35	PASS
613.00†	613.00	0.00	0.00	613.00	613.00	0.57	194.94	89.83	194.94	4.75	49.16	PASS
713.00†	713.00	0.00	0.00	713.00	713.00	0.57	194.94	89.83	194.94	5.38	42.45	PASS
813.00†	813.00	0.00	0.00	813.00	813.00	0.57	194.94	89.83	194.94	6.00	37.35	PASS
913.00†	913.00	0.00	0.00	912.20	912.20	0.56	194.96	89.84	194.97	6.62	33.36	PASS
1000.00	1000.00	0.00	0.00	993.84	993.82	0.14	196.41	89.96	196.51	7.24	30.40	PASS
1013.00†	1013.00	-0.02	-0.02	1006.03	1006.00	0.02	196.82	-144.26	196.97	7.33	30.04	PASS
1113.00†	1112.97	-1.30	-1.81	1099.51	1099.35	-1.37	201.61	-144.13	203.87	8.34	26.95	PASS
1213.00†	1212.80	-4.62	-6.42	1192.15	1191.64	-3.59	209.23	-144.21	216.69	9.47	24.89	PASS
1313.00†	1312.38	-9.98	-13.86	1283.47	1282.33	-6.59	219.55	-144.46	235.36	10.55	24.07	PASS
1413.00†	1411.57	-17.36	-24.12	1373.01	1370.86	-10.32	232.35	-144.79	259.78	11.49	24.23	PASS
1513.00†	1510.26	-26.76	-37.18	1460.36	1456.79	-14.69	247.39	-145.15	289.81	12.20	25.36	PASS
1597.14	1592.83	-36.22	-50.33	1531.88	1526.76	-18.82	261.58	-145.44	319.30	13.18	25.74	PASS
1613.00†	1608.34	-38.14	-52.99	1545.15	1539.71	-19.64	264.40	-145.55	325.25	13.31	25.94	PASS
1713.00†	1706.18	-50.23	-69.79	1627.79	1619.98	-25.12	283.23	-146.13	364.26	14.02	27.49	PASS
1813.00†	1804.01	-62.31	-86.59	1708.54	1697.85	-31.09	303.77	-146.47	405.74	14.69	29.05	PASS
1913.00†	1901.85	-74.40	-103.38	1787.36	1773.24	-37.52	325.85	-146.64	449.60	15.42	30.62	PASS
2013.00†	1999.68	-86.49	-120.18	1864.19	1846.09	-44.33	349.27	-146.68	495.73	16.11	32.14	PASS
2113.00†	2097.52	-98.58	-136.97	1939.00	1916.38	-51.49	373.88	-146.63	544.06	16.87	33.63	PASS
2213.00†	2195.35	-110.67	-153.77	2011.78	1984.08	-58.94	399.50	-146.52	594.49	17.52	35.31	PASS
2313.00†	2293.19	-122.75	-170.57	2082.51	2049.21	-66.64	425.97	-146.36	646.94	18.21	36.92	PASS
2413.00†	2391.03	-134.84	-187.36	2166.75	2126.36	-76.09	458.45	-146.17	700.40	18.99	38.27	PASS
2513.00†	2488.86	-146.93	-204.16	2251.23	2203.74	-85.57	491.02	-146.00	753.88	19.78	39.49	PASS
2613.00†	2586.70	-159.02	-220.95	2335.71	2281.11	-95.04	523.59	-145.85	807.35	20.60	40.56	PASS
2713.00†	2684.53	-171.11	-237.75	2420.20	2358.49	-104.52	556.16	-145.72	860.83	21.43	41.51	PASS

C-C Clearance Distance Cutoff: 1000.00 ft



Clearance Report

ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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†	2782.37	-183.19	-254.55	2504.68	2435.86	-113.99	588.73	-145.60	914.32	22.28	42.35	PASS
2913.00†	2880.20	-195.28	-271.34	2589.16	2513.23	-123.47	621.30	-145.50	967.80	23.15	43.09	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
Facility Surface Uncertainty @1SD		Horizontal	8.200ft
		Vertical	1.000ft
		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	0.35	118.83	-11.59	159.87
8.5in Open Hole	1800.00	18444.07	16644.07	1785.27	7823.00	-11.59	159.87	2926.86	926.97

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
13.00	18444.07	Custom BHI NaviTrak (Standard Rotating) (Rockies 0.03Gt model)	ACKARD NORTH 2-35-4CDH PWB

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



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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	10621.72	2649.07	14.00	10947.17	25.40	444.94	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

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

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

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

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

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

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



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ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	6610.75	2639.60	21.77	7118.25	50.08	144.45	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	Log Name/Comment
0.00	8360.00	Drift Indicator - Inclination Only (Actual Survey)	ASSUMED VERTICAL <8360>
		Wellbore	
		SLOT#01 EX CHAMPLIN 117 AMOCO G#1 AWB	

OFFSET WELLPATH REFERENCE - Offset Wellbore: SLOT#01 EX CHAMPLIN 117 AMOCO G#1 AWB Offset Wellpath: SLOT#01 EX CHAMPLIN 117 AMOCO G#1 AWP	
MD Reference: Rig on SLOT#02 EX CHAMPLIN 117 AMOCO G#1 (1980'FSL & 660'FEL, SEC.35, PA,8360) (RT)	Offset TVD & local coordinates use Reference Wellpath settings (See WELLPATH DATUM on page 1 of this report)
Ellipse Start MD	0.00ft



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ACKARD NORTH 2-35-1NCH PWP (REV-A.0)
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REFERENCE WELLPATH IDENTIFICATION			
Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	-1196.71	1378.28	130.97	1825.31	25.40	74.16	PASS

C-C Clearance Distance Cutoff: 1000.00 ft

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

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

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



Clearance Report

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

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	4031.80	2669.39	33.51	4835.40	50.94	96.42	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 2-35-1NCH PWP (REV-A.0)
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REFERENCE WELLPATH IDENTIFICATION

Operator	PETROSHARE	Slot	SLOT#03 ACKARD NORTH 2-35-1NCH (600'FSL & 1965'FWL, SEC.02)
Area	COLORADO	Well	ACKARD NORTH 2-35-1NCH
Field	ADAMS COUNTY (NAD83/ GRID NORTH)	Wellbore	ACKARD NORTH 2-35-1NCH 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	2694.97	3948.98	55.69	4780.93	50.92	95.38	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