

## BOB GRAHAM Graham2211 22110676 22 March 2023

# Summary Report

The goal of this research session was to identify the biological parents of William Graham, who was born on 12 September 1873 in Shippensburg, Pennsylvania, and may be the son of William Graham and Mary E. Oliver. If his parents were identified, we were to continue extending his ancestral lines as far as time and records allowed.

Using your Big-Y DNA results in conjunction with autosomal DNA results, we determined the biological father of William Graham (born 1873) is likely to be a man with the surname Culbertson; however, additional research and further review of available autosomal DNA results is needed to accurately determine Culbertson candidates who are likely to be William's biological father. Regarding the identity of William's biological mother, distant autosomal DNA matches to the surname Hildebrand were identified; however, additional research is needed to determine if Mary Stuart Hildebrand, the spouse of William's proposed father William Graham (born 1833) is a possible candidate. Additionally, further research is needed to rule in or out Mary E. Oliver as a possible candidate.

### Background

Prior to this research session, you provided us access to your Big-Y results at FamilyTreeDNA, as well as your autosomal DNA results from AncestryDNA, MyHeritage DNA, and FamilyTreeDNA. During this research session, you also provided access to the results of your paternal aunt, Patricia Graham Napoli, as well as Ashley Graham, the proposed half second cousin once removed through your paternal grandfather's reported half-brother, Norman Graham (1896–1948). A review of Ashley's DNA matches confirmed Norman and your paternal grandfather, Calvin, were likely not genetically related, and Norman was also unlikely to be a Graham descendant.

#### Summary<sup>1</sup>

We began our research with a review and analysis of your Big-Y results at FamilyTreeDNA. Based on reported matches within your block tree, it was determined that your direct paternal line suggests you are likely a descendant of a Culbertson male. Because your previous research reported the assumed father of William Graham (born 1873), William Graham (born 1833), was married to a Mary Stuart Hildebrand and she was previously married to James B. Culbertson, we first explored the possibility you are a descendant of James. Document-based research suggests William (born 1873) was born in September of that year, while James B. Culbertson died in April of 1873, so it is biologically possible for William to be the son of James. However, a comparison of the proposed lineages of your Y-DNA matches and James B. Culbertson did not identify how James might fit into this scenario within the course of this research session.

We reviewed the family trees provided by Y-DNA matches Robert Washington and James L. Culbertson (deceased) and based on their proposed genealogies, we determined the following possible relationship between them, suggesting they may be eighth cousins to each other as follows:

<sup>&</sup>lt;sup>1</sup> Please refer to the attached research analysis portion of this project for all sources searched and detailed analysis. This section represents an executive summary only.



Proposed relationship between Y-DNA matches James L. Culbertson (deceased) and Robert Washington.

Turning to autosomal DNA, we identified and extended the Culbertson lines of interest for these matches and determined they are descendants of William H. Culbertson (1824–1900). As previous document research related to James B. Culbertson does not suggest he is closely related to this group, we explored two initial hypotheses: 1) James B. as the son of William H. Culbertson, and 2) William Graham (born 1873) as the son of Samuel Bell Culbertson (born c. 1848–?).

The autosomal DNA match to E.C. (managed by missim27) suggests you and Patricia are likely related within the range of second cousin once removed and second cousin, respectively, and your Y-DNA results support the fact that you likely descend from a Culbertson on your direct paternal line, but that Culbertson may not be James B., as the chart below highlights:



Autosomal DNA matches identified as descendants of William H. Culbertson (1824–1900) and William's proposed line of descent.

Based on the amounts of DNA you share with these matches and the reported probabilities for hypothesized relationships, it was determined it is unlikely James B. is the son of William H. Culbertson, but it would be possible for William Graham (born 1873) to be the son of Samuel Bell Culbertson. Samuel should be considered along with James B. Culbertson as a possible candidate.

With the remaining time in this research session, we sought to identify any autosomal DNA matches that could provide insight into the identity of the biological mother of William Graham (born 1873). A preliminary search at AncestryDNA identified four possible Hildebrand matches that may provide support to rule in Mary Stuart Hildebrand, the wife of William Graham (born 1833) and the former spouse of James B. Culbertson. Additional research is needed to extend the ancestral lines of Mary Stuart Hildebrand and determine if these and other autosomal DNA matches provide support for Mary Stuart Hildebrand as a candidate to be the biological mother of William Graham (born 1873). However, the absence so far of any Oliver matches should not be taken to suggest Mary E. Oliver has been ruled out as a candidate; additional research and a thorough review of available autosomal DNA matches across all DNA accounts will be needed to determine Mary E. Oliver's status as a possible candidate to be the biological mother of William Graham (born 1873).

#### Recommendations

The following are future recommendations for research:

- 1. Perform autosomal DNA testing at 23andMe and work to identify relevant matches within that database who are not represented in the databases where you have tested or transferred your DNA data.
- 2. Request access to DNA results of your sister Deborah Graham to identify other possibly relevant autosomal DNA matches that either you and/or your paternal aunt Patricia Graham Napoli do not share.

- 3. Request that Deborah and Patricia transfer a copy of their DNA data to MyHeritage DNA and FamilyTreeDNA to capture any additional DNA matches within those databases with whom you do not share DNA.
- 4. Join the suggested Culbertson Y-DNA project at FamilyTreeDNA, as participation in a surname group permits a tester to compare their personal STR data with the STR data of surname group members up to 111 markers, depending on the level of testing they have performed.
- 5. Pursue descendancy research to identify any living descendants of James B. Culbertson's children with his first wife, Jane Rodgers, and request that they perform targeted autosomal DNA testing. Any direct male descendants should also be invited to perform Y-DNA testing.
- 6. Continue research to identify other Culbertson autosomal DNA matches within all the testing databases to determine if any other candidates can be ruled in or out, based on the amounts of DNA shared.
- 7. Continue to review the autosomal DNA matches to identify any genetic connections to either Mary Oliver or Mary Stuart Hildebrand.
- 8. Pursue descendancy research to identify any living descendants of Mary Oliver and Mary Stuart Hildebrand, or descendants of any identified siblings of the women and perform targeted DNA testing to determine who is the more likely candidate to be the biological mother of William Graham (born 1873).
- 9. Identify potential candidates for mitochondrial DNA testing in order to supplement autosomal DNA matches and determine the biological mother of William Graham (born 1873).

We appreciate the opportunity to assist you with your family history research and look

forward to future research opportunities at your direction.

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# **Research Analysis**

### GOALS

Identify the biological parents of William Graham, and then continue extending his ancestral lines as far as time and records allow. William was born on 12 September 1873 in Shippensburg, Pennsylvania, and may be the son of William Graham and Mary E. Oliver.

Y-DNA ANALYSIS FOR BOB GRAHAM		
Source	Comments	
"Y-DNA Matches," kit 360697 (Robert Graham), matching, https://familytreedna.com, private database, accessed January 2023.	Your Big Y-700 results place you in the haplogroup R-Z39132.	
"FamilyTreeDNA Discover™," Ancestral Path for haplogroup R-Z39132, https://discover.familytreedna.com/y-dna/R- Z39132/story, accessed January 2023.	The SNP path from R-M269, the most common haplogroup for men with patrilineal origins in Europe, to R-Z39132 is as follows:	
	M269 > L23 > L51 > P310 > L151 > P312 > DF19 > DF88 > FGC11833 > S4281 > S4268 > S8137 > Z21742 > Y13847 > Y13224 > Z39132.	
"Big Y Block Tree," kit 360697 (Robert Graham), https://familytreedna.com, private database, accessed January 2023.	Big Y-700 matches sharing your haplogroup R- Z39132 include James L. Culbertson, Randie Ide, and Kenneth J. Culverson and matches in the downstream haplogroup R-Z43285, which include Robert Washington, Joe Culbertson, and Anonymous Culbertson:	

		P-73	<b>N</b>
		FT16	0481
		R-Z43285 Average: 1	Private Variants Average: 5
		R-Z43285	R-Z39132
		Countries 2	Countries 4
		<b>?</b> ? 1 2	
		DNA Matches 3 Robert Washington Joe Culbertson Anonymous Culberts	DNA Matches 3 James L. Culbertson Randie Ide Kenneth J. Culverson
			Your branch
Iain McDonald, "Improved Models of Coalescence Ages of Y-DNA Haplogroups," MDPI, https://mdpi.com/2073- 4425/12/6/862/htm, accessed January 2023.	Big Y mut aver SNP mult	Y-700 tests average ation) once every 8 age, so an individua s for multiple gener ci-hundred-year spa	one SNP (unique 3 years. This is an al tester may have new rations in a row, or a an without any.
"FamilyTreeDNA Discover™," Haplogroup Story for haplogroup R-Z39132, https://discover.familytreedna.com/y-dna/R- Z39132/story, accessed January 2023.	Fam uses and calcu on th	ilyTreeDNA's Disco these mutation rat tester-supplied gen ulate the formation ne haplotree.	ver tool's algorithm es, along with STR data ealogical data to date of individual SNPs
	They pate from man	y estimate that hapl rnal line was forme the ancestor R-Y13 kind around 1300 (	ogroup "R-Z39132's ed when it branched off 3224 and the rest of CE."

"With a 95% probability, the most recent common ancestor of all members of haplogroup R-Z39132 was born between the years 1169 and 1616 CE. The most likely estimate is 1425 CE, rounded to 1450 CE."
Your terminal haplogroup may be classified as a "paragroup," consisting of what FamilyTreeDNA refers to in their Discover tool as "yet unnamed lineages." Paragroups consist of testers who share a common ancestor but are not positive for downstream SNPs with anyone else. Each of the testers in your paragroup has their own private variants, which opens the possibility for any of them to form another branch.

"Non-Matching Variants," kit 360697 (Robert Graham),

https://www.familytreedna.com/my/bigy#matches, private database, accessed January 2023. The non-matching variants belonging to each tester in or downstream from haplogroup R-Z39132 are listed below.

Big Y Tester	Haplogroup	Non-matching variants
Robert Graham	R-Z39132	<b>10951985</b> , 11130742, 12886921, 13542563, 15178192, 19089785, 21854061, 5234228, 7352597, <b>7419635, CTS11685</b>
James L. Culbertson (deceased)	R-Z39132	5935890, 11784445, 21002845, 21119576
Randie Ide	R-Z39132	16292991, 4199887, 5630870, 7170837, 14260103, 14617652, 21262181, 22249281
Kenneth James Culverson	R-Z39132	21185195, BY28672, BY28674, BY28675, BY26157, BY26159, BY26160, BY44298, BY151409, BY151410, BY151411, BY151412, BY209070, BY209071, BY227572, BY227573, 5234228,
Robert Washington	R-Z43285	<b>Z43285</b> , 14814073, BY26940, BY26714, DC788, 10168447, BY43096
Joe Culbertson	R-Z43285	<b>Z43285</b> , BY44298, BY151409, BY151410, BY151411, BY151412, 13230989, BY209070, BY209071, BY227572, BY227573
Anonymous Culbertson	R-Z43285	<b>Z43285</b> , BY26167, BY26168, BY26198, BY26199, BY26200, BY26201, BY26366, BY26367, BY27095, BY27096, BY27097, BY27098, BY26176, BY26150, DC607

"Y-DNA - Matches," kit 360697 (Robert	While several of your STR matches have the
Graham), https://familytreedna.com, private	surnames of Beckett or Bicket, your closest
database, accessed March 2023.	matches at 111 markers have a genetic
	distance with you of 6 or 7 steps.
	Many of your other STR matches who are also Big Y matches belong to other descendant lineages, or subclades, of R-Y13224 which, as noted above, have a common ancestor who is estimated to have been born around 1350 CE.
	Most of your Beckett/Bicket matches belong to the subclade R-FT104740, and most of your Wylie/Wiley matches belong to subclade R- Z40803.
	These matches are not likely to be helpful in identifying the biological parents of William Graham; rather, working to identify targeted testing candidates through documentary research and autosomal matching will likely be the most effective approach to make additional progress towards your goal to
	identify William's parents.

The Y chromosome is the male sex chromosome and is passed from generation to generation in a pattern of direct-line paternal inheritance. Only males inherit a Y chromosome. Therefore, it follows the same inheritance pattern as surnames in many western civilizations. This quality makes it particularly useful for answering questions regarding paternity or shared paternal ancestry. Occasional mutations that are introduced into Y-DNA help to distinguish different lineages, some of which are ethnically and geographically specific. As the focus of your research is your direct-line paternal ancestor, William Graham (born 1873), you provided us access to your Big Y-700 test results at FamilyTreeDNA and that is where our analysis and research began. Additionally, you also provided us access to your autosomal DNA results, discussed in the following section.

STR data is generally effective at showing whether two men are likely related in a genealogical timeframe; however, genetic distance from STR testing is a rough estimate at best. Big Y testing analyzes hundreds of thousands of Single Nucleotide Polymorphisms (SNPs). SNPs are far more stable than STRs, and once a SNP is established in an ancestral line, that SNP is generally passed on to all descendants, with almost no possibility of descendants reverting to the original value. As a result, Big Y testing allows testers to be placed on FamilyTreeDNA's Y-DNA Haplotree using their confirmed haplogroup, allowing one to see how men in a group of testers are related to each other.

A review of your Big Y block tree identified your branch as R-Z39132, with the matches in your branch identified as James L. Culbertson (deceased), Randie Ide, and Kenneth J. Culverson. We next moved to identify lines of descent.

BIG Y-DNA MATCH GENEALOGIES		
Source	Comments	
"Big Y - Results," kit 360697 (Robert Graham), match Robert Washington, https://familytreedna.com, private database, accessed January 2023.	Robert Washington's associated family tree identifies Robert's paternal grandfather as William Emory Washington (1865–1944). William is reported to be the son of Young Jehu Culbertson (1829–1910); Young Jehu's parents are identified as Captain John R. Culbertson (1799–1862) and Luranah Pitts (1810–1885).	
	After Captain John R. Culbertson, the direct paternal line continues with James Culbertson of Laurens County, South Carolina > Robert Culbertson (1750–1840) of Lancaster County, Pennsylvania > Andrew Culbertson, Jr (?– 1779) of Shippensburg, Cumberland County, Pennsylvania > Andrew (Irish) Culbertson (?– 1746).	
	Andrew was reportedly born in Londonderry, Northern Ireland, and died in Shippensburg, Cumberland County, Pennsylvania.	
"Big Y - Results," kit 360697 (Robert Graham), match Mr. James L. Culbertson (deceased), https://familytreedna.com, private database, accessed January 2023.	James L. Culbertson does not have a tree associated with their account; however, his earliest known ancestors are identified as Samuel Creek Culbertson (1743–1806) and Martha McClay (c.1746–1816).	
"Catherine Curry Wolfe," Encinitas, California, born January 1948, https://beenverified.com, subscription database, accessed January 2023.	A search of the email address associated with James L. Culbertson's results returned the BeenVerified profile of Catherine Curry Wolfe. Relatives and associates include Charles Allan Wolfe, age 76; and Frank D. Culbertson, age 72 of Pasadena, California.	

	The name Curry Wolfe is noted to be in the information associated with James' Y-DNA results.
<i>California Birth Index, 1905–1995</i> (transcription), birth index entry for Catherine Curry Culbertson, 28 January 1948, Los Angeles, California, https://ancestry.com, subscription database, accessed January 2023.	Catherine Curry Culbertson was born on 28 January 1948 in Los Angeles County, California, to a mother with the surname Baugh.
1950 U.S. Census (population schedule), Pasadena, Los Angeles County, California, ED	The 1950 census enumeration of the David F Culbertson household included the following:
68–24, sheet 6, David F Culbertson household, https://ancestry.com, subscription database, accessed January 2023.	<ul> <li>David, head, age 36, born in Indiana, occupation-credit department of bank</li> <li>Betty B., wife, age 36, born in Indiana</li> <li>Cathy C., daughter, age 2, born in California</li> </ul>
Curry Wolfe, "Baugh & Culbertson Lines F3b 2012," David F Culbertson, Ancestry Public Trees, https://ancestry.com/family- tree/tree/36668254, subscription database, accessed January 2023.	Curry Wolfe's public Ancestry tree identifies the direct paternal line for Y-DNA match James L. Culbertson (1944–2011) as follows: James L. Culbertson (1910–1978) > David F. Culbertson (1878–1942) > James L. Culbertson (1828–1911) > Joseph Culbertson (1791–1850) > Joseph Culbertson (1768– 1816) > Samuel "Of the Creek" Culbertson (1743–1806). Samuel and 1768 Joseph Culbertson were born in Culbertson Row, Shippensburg, Franklin County, Pennsylvania. Samuel's father is identified as Joseph "Irish" Culbertson (1716–1784). Joseph was reportedly born in Ballygan, County Antrim, Northern Ireland.
Lewis Rogers Culbertson, <i>Genealogy of the Culbertson and Culberson families</i> (Zanesville: The Courier Co., Printers, and Binders, 1923), p. VI, Internet Archive, viewed digitally, https://archive.org, accessed January 2023.	The published genealogy of the Culbertson of "Irish Row" in Pennsylvania indicates Joseph was a first cousin to brothers Alexander, Robert, and Samuel Culbertson.
	If Joseph is, in fact, a first cousin to Alexander, the fact Andrew, identified ancestor of Y-DNA

	match Robert Washington and therefore, also identified as a brother, needs additional research to confirm this relationship to accurately determine how you and your Y- DNA matches are related.
"Big Y - Results," kit 360697 (Robert Graham), match Kenneth James Culverson, https://familytreedna.com, private database, accessed January 2023.	Kenneth James Culverson did not have a tree associated with their Y-DNA kit; however, he identifies his earliest known ancestor as James S. Culberson (1798–1871).
	Additional research is needed to determine how James S. Culberson might be related to the earliest Culbertsons identified. Communication with Kenneth is recommended.
"Big Y - Results," kit 360697 (Robert Graham), match Randie Ide, https://familytreedna.com, private database, accessed January 2023.	Randie Ide did not have a tree associated with their Y-DNA kit and he does not identify his earliest known ancestor. Additional research related to or contacting Randie is needed to determine how he might be related to you, James L. Culbertson (deceased) and Kenneth J. Culverson.
We reviewed the available family trees for Y-DNA matches Robert Washington and James L. Culbertson (deceased) and based on the proposed genealogies, we determined the following possible relationship between Y-DNA matches James L. Culbertson (deceased) and Robert Washington, suggesting they may be eighth cousins to each other as follows:	



16

Determining how Randie Ide and Kenneth J. Culverson might be connected will provide additional information as to where in the larger Culbertson tree you may fit.

We then turned to autosomal DNA analysis to determine if any autosomal Culbertson DNA matches exist and where they might fit within this initial Culbertson tree.

AUTOSOMAL ADMIXTURE ANALYSES FOR BOB GRAHAM AND PATRICIA NAPOLI AND Review for Ashley Graham		
Source	Comments	
AUTOSOMAL ADMIXTURE AN	NALYSES FOR BOB GRAHAM	
"DNA Story for Bob Graham," Ethnicity Estimate, updated, https://ancestry.com, private database, accessed January 2023.	The admixture (ethnicity) estimate as reported by AncestryDNA reports the regions of England & Northwestern Europe, specifically Devon & Cornwall, England, and Germanic Europe, which is representative of your other known ancestral lines back to the great-great-grandparent level.	
	Regions of interest that do not appear to be represented include Scotland (18 percent) and Sweden & Denmark (4 percent).	
	Ancestry DNA's SideView overview, which shows the percentages of each of the regions you likely inherited from each parent and can, in some cases, identify which data is likely representative of your paternal and maternal lines, associates the regions of Scotland (16 percent) and Sweden & Denmark (4 percent) as likely paternal.	
"DNA Results" for Boog Graham, ethnicity estimate, https://myheritage.com, private database, accessed January 2023.	The MyHeritage DNA admixture report is largely consistent with the information reported by AncestryDNA, reporting North and West Europe, English, and East European, as well as 7.7 percent Scandinavian admixture.	
"myOrigins," ethnic makeup percentage for kit 360697 (Robert Graham), https://familytreedna.com, private database, accessed January 2023.	Regions reported include Central Europe, which includes Denmark and Southern Sweden, Ireland, and England, Wales, and Scotland.	

AUTOSOMAL ADMIXTURE ANALYSIS FOR PATRICIA NAPOLI		
"DNA Story for patricia Napoli," Ethnicity Estimate, updated, https://ancestry.com, private database, accessed January 2023.	The regions represented are consistent with the same regions reported in your admixture estimate and her AncestryDNA SideView comparison identifies regions associated with her paternal side as largely England & Northwestern Europe, Germanic Europe, and Scotland.	
ASHLEY GRAHAM, PREVIOUSLY IDENTIFIED DESCENDANT OF WILLIAM GRAHAM (1873)		
"Ashley Graham's DNA Matches," list of matches https://ancestry.com, private database, accessed January 2023. "Ashley Graham's DNA Matches," estimated third to fourth cousin with Shawn Brown, sharing 70 cM across 6 segments, https://ancestry.com, private database, accessed January 2023.	Ashley Graham, identified as a descendant of William Graham (1873) through your grandfather's reported half brother, Norman Graham (1896–1948). Based on this expected relationship of half second cousins once removed to you and half second cousins to Patricia, the lack of shared DNA suggests this proposed relationship is statistically unlikely. The other descendant of Norman you identified prior to the start of this research session was Shawn Brown, also confirmed to be a DNA match to neither you nor Patricia. Shawn was, however, confirmed to be a DNA match to Ashley, sharing 70 cM, which is an appropriate amount of DNA for their hypothesized second cousin relationship. Additionally, based on the brief review of Ashley's matches, no Graham ancestors were identified, and it may be that Norman's biological father was someone with the surname Martin. Additional research is needed to confirm this hypothesis.	

Each DNA testing company utilizes slightly different algorithms and reference populations for the estimation of ethnic admixture. Therefore, each company differs slightly from other companies in the reported regions. By reviewing the test results from each company, it is possible to get a well-rounded perspective on the likely ancestral origins of a test subject.

In addition to your autosomal DNA results at AncestryDNA, MyHeritage DNA, and FamilyTreeDNA, you also granted us access to the results of your paternal aunt, Patricia Graham

Napoli. The regions of England & Northwestern Europe, specifically Devon & Cornwall, England, and Germanic Europe, which is representative of your other known ancestral lines back to the great-great-grandparent level and the lines in which you and Patricia share.

Additionally, you also provided us access to the AncestryDNA results of Ashley Graham, whom you previously identified as a descendant of William Graham (1873) through his son, Norman W. Graham (1896–1948). Based on Norman's proposed half sibling relationship to your paternal grandfather Calvin S. Graham (1905–1983), Ashley's proposed relationship to you is that of half second cousin once removed, which is statistically unlikely.

A review of your previous research indicated Mary Stuart Hildebrand, wife of William Graham (1833) and who was proposed to be the father of William Graham (1873), was previously married to a James B. Culbertson (1837–1873). Because of the Y-DNA analysis which showed you likely descend from a Culbertson, we first sought to determine if James B. Culbertson could be the biological father of William (1873).

JAMES D. CULBERTSON (103/-10/3)		
Source	Comments	
James B. Culbertson, FamilySearch Trees, https://familysearch.org/tree/pedigree/portrai t/GDY4-Y8N, subscription database, accessed January 2023.	The publicly available tree at FamilySearch identifies James B. Culbertson (1837–1873), whom your previous research identifies as the former spouse of Mary Stuart Hildebrand (1842–1921) who eventually married William A. Graham (1833–1908), the father who raised 1873 William Graham.	
	James' direct paternal line continues as follows: William Culbertson (1806 or 1809– 1873) > Samuel Culbertson (1780–1819) > James Culbertson (1748–1805) > Alexander Culbertson (1714–1756) > Joseph Culbertson (1689–1726) > William Scott Culbertson (1654–1694).	
	Because of this connection and Y-DNA matches who also share connections in Pennsylvania where James B. Culbertson also lived, we reviewed the autosomal DNA matches for both you and Patricia to determine if there were matches that supported a connection to either James or a relative of James.	

JAMES B. CULBERTSON (1837-1873)

	Additionally, this information suggests that if you are also a descendant of James B. Culbertson, the expected relationships between you and Y-DNA matche Robert Washington would be that of seventh cousins once removed and very possibly outside of the limits of autosomal DNA matching.
	The children of James B. Culbertson and his first wife, Jane D. Rodgers (1843–1883), who lived to adulthood are identified as Araminta M. Culbertson (1865–1897), who married James Morrow Rowles (1857–1916); and William A.W. Culbertson (1869–1954), who married Mary Jane Mower (1865–1945).
"Family Finder – Matches," kit 360697 (Robert Graham), null match with Robert Washington, https://familytreedna.com, private database, accessed January 2023.	A search of your FamilyTreeDNA FamilyFinder matches for Robert Washington to determine if he was a shared match; however, the search returned no results.
	A search of the surname Culbertson returned three matches between 9 and 14 cM; a search of variations of Culbertson, including Culberson and Culverson, returned no results.

Prior to the start of this research session, you provided us access to your research related to James B. Culbertson, former spouse of Mary Stuart Hildebrand. James B. Culbertson died on 9 April 1873 in Spring Run, Franklin County, Pennsylvania, and a comparison of James's reported date of death to William Graham's birthdate of 12 September 1873, indicates it is possible that James could be the biological father of William (1873).

Research suggests James B. Culbertson and his first wife, Jane Rodgers, had two children who lived to adulthood–Araminta Culbertson (1866–1897) and William Culbertson (1869–1954). Identifying descendants of Araminta and William for targeted DNA testing may help determine if you are also a descendant of James B. Culbertson.

We then reviewed the proposed lineage of James B. Culbertson to determine how he might fit into the proposed lineages of your Y-DNA matches James L. Culbertson (deceased) and Robert Washington; however, additional research will be needed to review the proposed lineages as well as the information gleaned from the autosomal DNA analysis in order to proceed. Because your Big Y results can only support that you are likely descended from a Culbertson and not which male Culbertson, autosomal Culbertson matches can provide more details and possibly identify from which Culbertson line you descend.

<b>AUTOSOMAL DNA MATCHES IDENTIFIED AS CULBERTSON DESCENDANTS</b>		
Source	Comments	
"booggraham55's DNA Matches," estimated second to third cousin with E.C. (managed by missim27), sharing 161 cM across 2 segments, https://ancestry.com, private database, accessed January 2023.	The tree linked to E.C.'s results identify the home person as the daughter of robert william cornelius (1934–2006).	
"patricia Napoli's DNA Matches," estimated second to third cousin with E.C. (managed by missim27), sharing 182 cM across 5 segments, https://ancestry.com, private database, accessed January 2023.		
"Robert W. (Bob) Cornelius," <i>Public Opinion</i> (Chambersburg, Pennsylvania), 24 February 2006, p. 4A, https://newspapers.com, subscription database, accessed January 2023.	The obituary for Robert W. Cornelius states he was born 18 June 1934 in Burnt Cabins, Pennsylvania, to parents Lloyd and Martha (Horton) Cornelius.	
	He is survived by his wife of 53 years, Elaine Runk Cornelius; and three children, Melissa Murphy, Robin Walraven, and Thomas Cornelius.	
	Using this information, we worked to extend the ancestral lines of Robert W. Cornelius; however, we were unable to identify a possible connection. Noting Robert's wife shared the same initials as the tester, we explored the possibility that Elaine was the match and therefore, the possible connection.	
"Denver S. Runk," <i>Public Opinion</i> (Chambersburg, Pennsylvania), 16 February 1990, p. 4A, https://newspapers.com, subscription database, accessed January 2023.	The obituary for Denver Runk states he was born on 16 March 1915 in Saltillo, Huntingdon County, Pennsylvania, and was the son of the late Samuel and Mary Culbertson Runk. Survivors listed include daughter Elaine (Mrs. Robert) Cornelius of Hustontown, R. R.	
Samuel Stoner, "Samuel Stoner family tree," Mary Janeta Culbertson, Ancestry Public Trees, https://ancestry.com/family-	This public family tree identifies Denver's parents as Samuel Baum Runk (1873–1935) and Mary Janeta Culbertson (1875–1953).	

tree/tree/51701621, subscription database, accessed January 2023.	Mary Janeta was born in Alliance, Stark County, Ohio, and is identified as the daughter of Samuel Culbertson of Perry County, Pennsylvania, and Julia A. Nonemaker (1856– 1907).
Kristy Brooks, "Brooks Family Tree," Samuel B.R. Culbertson, Ancestry Public Trees, https://ancestry.com/family- tree/tree/64940402, subscription database, accessed January 2023. Carol Gregory Slingsby, "Gregory-Crouch- Goodheart Family Tree," Samuel Bell Culbertson, Ancestry Public Trees, https://ancestry.com/family- tree/tree/79156702, subscription database, accessed January 2023.	This public family tree identifies Samuel's father as William H. Culbertson (1824–1900). The direct paternal line ancestors continue as follows: Samuel Culbertson (1796–1826), born in Cumberland County, Pennsylvania > William Culbertson (1760–1798), born in Cumberland County, Pennsylvania > William Culbertson (1714–1785), born in Culberson Row, Ballygan, County Antrim, Ireland, and died in Silver Spring, Cumberland County, Pennsylvania > Samuel Culbertson (1696– 1749), born in Londonderry, Ireland, and died in London Grove, Chester County, Pennsylvania.
	Based on the reported locations of this Culbertson family, it is likely Elaine is the source of the connection via autosomal DNA and that her linked tree showing her as the daughter of Robert W. Cornelius is likely incorrect.
	As a note, in some online trees, Samuel's mother is identified as Susanna Hench (1823– 1850) and in others, she is identified as Mary Jane Ewing (1832–1900).
"patricia Napoli's DNA Matches," estimated second to third cousin with joycebeam, sharing 94 cM across 3 segments, https://ancestry.com, private database, accessed January 2023.	Joyce's linked tree identifies her maternal grandmother as Vera M. Culbertson (1913– 1994). Her paternal grandparents are identified as Samuel Bell Culbertson and Julia "Nunemaker."
	This suggests the relationship between matches E.C. (managed by missim27) and

	joycebeam is that of second cousins once removed.
"booggraham55's DNA Matches," estimated fourth to sixth cousin with Thomas Hockenbury (managed by Daniel Hockenbury), sharing 25 cM across 2 segments, https://ancestry.com, private database, accessed January 2023.	The linked tree identifies Thomas as the son of Maude E. Culbertson (1906–1990). Her parents are identified as Frank Culbertson (1867–1910) and Pearl Mable Fleisher (1880– 1944).
"patricia Napoli's DNA Matches," estimated fourth to sixth cousin with Thomas Hockenbury (managed by Daniel Hockenbury), sharing 31 cM across 3 segments, https://ancestry.com, private database, accessed January 2023.	
Pennsylvania, U.S., Death Certificates, 1906–1968 (image and transcription), death certificate for Frank Culbertson, 18 December 1910, certificate no. 118938, Perry County, Pennsylvania, https://ancestry.com, subscription database, accessed January 2023.	The death certificate for Frank Culbertson states he was born 4 February 1868 in Perry County, Pennsylvania, and died 18 December 1910 in Madison, Perry County, Pennsylvania. His parents are identified as William Culbertson and Mary Ewing.
	This suggests Samuel Bell Culbertson was either the half or full brother of Frank Culbertson and the expected relationship between Thomas Hockenbury and DNA match E.C. (managed by missim27) is that of either full or half second cousins once removed; for Thomas Hockenbury and joycebeam, the expected relationship would be either half or full second cousins twice removed.
"The Shared cM Project 4.0 tool v4 beta," https://dnapainter.com, accessed January 2023.	Existing online trees identify some discrepancies in the direct paternal lines of both James B. Culbertson and William H. Culbertson (1824–1900), father of Samuel Bell Culbertson and Frank Culbertson. However, we hypothesized how the autosomal Culbertson matches might be related.
	Based on the proposed years of birth for William H. Culbertson (1824) and James B. (1837), it is biologically possible for William to be the father of James B. While an unlikely

scenario, we explored the possibility based on amounts of shared DNA and the relationship probabilities reported by DNA Painter:			
Match	Bob	Pat	Expected relationships
E.C. (managed by missim27)	161 cM	182 cM	Pat - half or full third cousin (0.5 percent half / 3 percent full) Bob - half or full third cousin once removed (0.5 percent half / 0 percent
Joycebeam	0 cM	94 cM	full) Pat - half or full third cousin once removed (0.55 percent half / 7 percent full) Bob - half or full fourth cousin (n/a)
Thomas Hockenbury	25 cM	31 cM	Pat - half or full second cousin once removed (27 percent half / 11 percent full) Bob - half or full second cousin twice removed (27 percent half / 22 percent full)

orobabil rio is no ships bo must b u and Pa the pos	The relationship p suggest this scena proposed relation DNA matches also relationship to yo We then explored Graham (1873) as Culbertson:
Bob	Match
161	E.C. (managed
cM o	by missim27)
0 0 cM 0	Joycebeam
25 3 cM 0	Thomas Hockenbury
babil bis no ips be iust b ind Pa ie pos ie sor ob 61 1 M 6 M 6 M 6 M 6	produced a second secon

	Bob - half or full second cousin twice removed (27 percent half / 22 percent full)
Based on these reported p possible for William Graha son of Samuel Bell Culbert considered along with Jam a possible candidate.	probabilities, it is am (1873) to be the tson and should be nes B. Culbertson as

We reviewed your results at AncestryDNA, MyHeritage DNA, and FamilyTreeDNA. While we were unable to clearly identify any DNA matches at MyHeritage DNA that would suggest or support a Culbertson connection from within your match list within this research session, we identified three at AncestryDNA who are of interest.

Additionally, because of the access you provided to the AncestryDNA results of your paternal aunt, Patricia Napoli–who is one generation closer and therefore, is likely to share DNA with more distant matches with whom you do not share–one of these matches is someone that would not have been identified using your results alone.

We identified and extended the Culbertson lines of interest for these three matches and determined they are descendants of William H. Culbertson (1824–1900). As previous document research related to James B. Culbertson does not suggest he is closely related to this group, we explored two hypotheses–James B. as the son of William H. Culbertson and William Graham (1873) as the son of Samuel Bell Culbertson (c. 1848–?). The DNA match to E.C. (managed by missim27) suggests you and Pat are likely related within the range of second cousin once removed and second cousin, respectively, and your Y-DNA results support the fact that you likely descend from a Culbertson on your direct paternal line, but that Culbertson could possibly not be James B., so this becomes a viable scenario as the chart below highlights:



27

Based on the amounts of DNA you share with these matches and the reported probabilities for hypothesized relationships, it was determined that it is unlikely James B. is the son of William H. Culbertson, but it is possible for William Graham (1873) to be the son of Samuel Bell Culbertson and should be considered along with James B. Culbertson as a possible candidate.

With the remaining time in this research session, we pursued possible autosomal DNA matches that could help identify the biological mother of William Graham (1873).

STUART HILDEBRAND, WIFE OF WILLIAM A. GRAHAM (1833–1908)		
Source	Comments	
"patricia Napoli's DNA Matches," estimated fifth to eighth cousin with EGensemer, sharing 28 cM across 1 segment, https://ancestry.com, private database, accessed January 2023.	DNA match EGensemer, who is only a match to Patricia and not a shared match with you, has a public family tree which suggests he is a descendant of a Susannah Hildebrand, born 1746 in Muddy Creek, Lancaster County, Pennsylvania, and died in 1818 in Muncy, Lycoming County, Pennsylvania.	
"booggraham55's DNA Matches," estimated fifth to eighth cousin with Eric Header, sharing 15 cM across 2 segments, https://ancestry.com, private database, accessed January 2023. "patricia Napoli's DNA Matches," estimated fifth to eighth cousin with Eric Header, sharing 11 cM across 2 segments, https://ancestry.com, private database, accessed January 2023.	Eric Header is a DNA match to both you and Patricia and his linked tree identifies him as a descendant of Johan G.N. Hildebrand (1733– 1804), who was reportedly born in Rhineland–Palatinate and died in Berks County, Pennsylvania.	
"booggraham55's DNA Matches," estimated fifth to eighth cousin with B.D. (managed by Constance Dunfee), sharing 11 cM across 1 segment, https://ancestry.com, private database, accessed January 2023.	The linked tree identifies the path to B.D.'s Hildebrand connection as follows: B.D. > Lavonne Hofacker > Irene V. Bergman > Viole Anna Eybsen > William H. Eybsen > Julianna Hay > Catharina Hildebrand. Patricia is not a shared match with B.D.; however, she does share other matches with whom B.D. shares, suggesting if a genealogical relationship is identified, the expected relationship between Patricia and B.D. will be more distant than third cousins	

## Possible Hildebrand Autosomal DNA Matches Genetic Connection to Mary Stuart Hildebrand, Wife of William A. Graham (1833–1908)

"booggraham55's DNA Matches," estimated fifth	The linked tree identifies B.S. as a descendant
to eighth cousin with B.S. (managed by Tina	of John Hildebrand (1821–1902), from
Workman), sharing 28 cM across 1 segment,	Franklin, Adams County, Ohio.
https://ancestry.com, private database,	
accessed January 2023.	

With the remaining time in this research session, we sought to identify any autosomal DNA matches that could provide insight as to the identity of the biological mother of William Graham (1873). An initial search within the AncestryDNA identified four possible Hildebrand matches that may provide support to rule in Mary Stuart Hildebrand, wife of William Graham (1833) and former spouse of James B. Culbertson. Additional research is needed to extend the ancestral lines of Mary Stuart Hildebrand.

The absence of any identified Oliver matches does not suggest Mary E. Oliver is ruled out as a candidate, and additional research and a thorough review of available autosomal DNA matches is needed to determine Mary E. Oliver's status as a possible candidate to be the biological mother of William Graham (1873).

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