NOTE: The client permitted both private sharing and publication on a website for educational purposes. [Standard 57 and the Code of Ethics] The author thanks the client for granting permission.

This client report has been modified to privatize matches to be published on the website for educational purposes. [Standard 57 and the Code of Ethics] The matches and citations would not be anonymized or redacted if submitted to the client or as part of a portfolio.

Supporting detail is required if submitting it as a part of a portfolio, but not if sent to the client.
KEY RESOURCES USED

- Ancestry (https://www.ancestry.com/)
- DNA Painter (https://dnapainter.com/)
- FamilySearch (https://www.familysearch.org/en/)
- Find a Grave (https://www.findagrave.com/)
- Newspapers.com (https://www.newspapers.com/)
- West Virginia Department of Arts, Culture and History (https://wvculture.org/)

SPELLING NOTE

Surname spellings vary: Durst, Darst, Dust, Dirst and Wilcoxon, Wilcoxen, Wilcoxson. Durst and Wilcoxon are used here, except in citations, where names appear as they do in the sources.
Documentary Evidence

Alta Jane Durst was born on 29 June 1857 in Mason County, Virginia (today in West Virginia), to Celesta E. and David Durst, a Mason County farmer who reported the birth. On 15 November 1883 at her father’s home Alta Jane married Frank Wilcoxon of Jackson County, West Virginia. Although Alta Jane married at twenty-six, Frank reported her age as twenty-five years old at the time of her marriage but based on her birth record, she was actually twenty-six. Alta Jane may have told him she was a year younger than she was because Frank was only twenty-three at the time or he simply got her age wrong.

Alta Jane and Frank had nine children: Clyde, James, Sheridan, Hoyt, Harry, Cynthia, John, Anna, and Ross. Between 1900 and 1910 the family moved from Mason County to Cherokee County,
Iowa. Alta Jane died there on 27 February 1927. On that occasion, her husband named her father as David Durst and gave her mother’s maiden name as Blackburn.

Table 1 summarizes documentary evidence relating to Alta Jane’s parents’ identities.

<table>
<thead>
<tr>
<th>Year of Report</th>
<th>Record</th>
<th>Father’s Name</th>
<th>Mother’s Name</th>
<th>Informant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1857</td>
<td>Birth record</td>
<td>David Darst</td>
<td>Celesta E. [Darst]</td>
<td>David Durst</td>
</tr>
<tr>
<td>1870</td>
<td>Census, relationships implied</td>
<td>David Dirst</td>
<td>Elizabeth Dirst</td>
<td>Unknown</td>
</tr>
<tr>
<td>1880</td>
<td>Census, relationship stated</td>
<td>David Durst</td>
<td>[David identified as widowed]</td>
<td>Unknown</td>
</tr>
<tr>
<td>1883</td>
<td>Marriage record</td>
<td>David Durst. Marriage took place in his home, but no relationship specified.</td>
<td></td>
<td>Frank Wilcoxon</td>
</tr>
<tr>
<td>1927</td>
<td>Death certificate</td>
<td>[no given name] Blackburn</td>
<td>Frank Wilcoxon</td>
<td></td>
</tr>
</tbody>
</table>

b. 1870 U.S. census, Mason Co., W.Va., population schedule, Cologne, fol. 159v, dwelling/family 85, David Darst household; microfilm publication M593, roll 1692, National Archives and Records Administration, Washington, D.C. (NARA).

David Durst appears consistently as Alta Jane’s father. Reports of her mother’s name vary but do not conflict. David Durst and “Miss Elizabeth Calista Blackburn” obtained a Mason County marriage license on 13 December 1855. They married three days later. The bride’s name agrees

with Alta Jane’s birth record, where “Celesta” likely means “Calista,” the 1870 census, and Alta Jane’s death certificate, where her mother’s maiden name is Blackburn. West Virginia did not document Elizabeth’s death, but her gravestone refers to her as “Elizabeth C. wife of David Durst.” She appears on the 1880 mortality schedule as “Elizabeth C. Darst” from widower David Durst’s household 189, which includes his daughter Alta J. Durst, twenty-two. 8

Documentary evidence identifies Alta Jane’s parents as David Durst and Elizabeth Calista Blackburn. Does DNA evidence support concluding that David was Alta Jane’s father?

**DNA Study**

**Methodology**

Alta Jane was the great-grandmother of Bonnie Ward Wilcoxon (test-taker A1). 10 All information in this study is based on data available through Bonnie’s autosomal DNA (atDNA) test results at *AncestryDNA*. 11 No contact occurred with other test takers regarding their DNA.

This study uses centimorgans—a measurement of shared atDNA—to support relationships as genetic. Everyone inherits 50 percent of their atDNA from each parent. It represents about 25 percent from each grandparent, roughly 12.5 percent from each great-grandparent, and so forth. Based on those approximations, different genetic relationships will share predictable ranges of centimorgans. If two people’s amount of shared atDNA falls within the range of shared centimorgans for their documented relationship, then the atDNA is consistent with the relationship. Shared atDNA falling outside the range creates a conflict needing resolution.

This study uses genetic clusters, people who share atDNA with most or all the others in the cluster. Clustered test takers likely descend from the same ancestral couple. Combining genetic clusters with documentary evidence can lead to powerful conclusions: “if several members of a genetic network

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10 See appendix A for documentary evidence.

group all descend from a known ancestor or ancestral couple, then it can be assumed that the other members of that group are also likely related through the same ancestral line.”

All test takers in this study are documented descendants of David Durst. They are in two groups: Alta Jane Durst’s descendants (group A) and Alta Jane’s documented siblings’ descendants (group B).

**GROUP-A TEST TAKERS**

The amount of shared atDNA among Group A test takers is consistent with their documented relationships.¹³

Eighteen of Alta Jane’s documented descendants took atDNA tests. Four considerations reduce the group to seven test takers:

- Test takers who received atDNA from others in the study are eliminated. For example, children of tester-taker A2, their mother, were tested. If their father is unrelated to Alta Jane, they received from their mother any atDNA they share with Alta Jane’s relatives.
- Because atDNA segments vary from sibling to sibling, testing different lines of descent provides more evidence.¹⁴ Testing separate lines also diminishes the possibility that the shared atDNA came from another shared ancestral line.
- People who share larger amounts of atDNA are typically more closely related to the most recent ancestral couple. Therefore, they are a better choice to include in the study. Where multiple descendants on a line of descent had atDNA test results, those with smaller amounts of shared atDNA are excluded. Their relationships, however, do not contradict those of the test takers with more shared atDNA.
- Where a line of descent includes multiple test takers, those generationally more distant from Alta Jane are excluded. Because the atDNA in each successive generation is roughly halved, those generationally closer to Alta Jane theoretically have more of her atDNA.

Figure 1 shows the relationships to test-taker A1 of the six other group-A test takers, the amounts of atDNA that each shares with her, and their respective lines of descent. The atDNA shared among Group A test takers confirms their genetic relationship to Alta Jane. However, the amount of shared atDNA among this group does not offer evidence to support their connection to David Durst, which is the focus of this study.

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Figure 1: Relationship Chart for Group A

For documentation, see Appendix A.

GROUP-B TEST TAKERS

Three group-B test takers descend from Alta Jane’s father, David Durst, through two of his documented children with Elizabeth Blackburn.\(^{15}\) After Elizabeth’s death, David married Kate Pruden. They had three children, Alta Jane’s half siblings.\(^{16}\) Two group-B test takers descend from two of those half siblings. The four considerations for selecting group-A test takers guided selection of the five group-B test takers.

Figure 2 shows the documented relationships of five group-B test takers, their relationships to test-taker A1, and the total centimorgans each shares with test-taker A1.

\(^{15}\) 1880 U.S. census, Mason Co., W.Va., pop. sch., Cologne, p. 231A, Enumeration District 92, pop. dwell. 182, fam. 189, David Durst household; NARA microfilm publication T9, roll 1408.

Figure 2: Relationship Chart for Test-taker A1 to Group-B Test Takers

For documentation, see appendix B. Test-taker B4 is an only child, whose parent has been anonymized.

DNA Analysis

Three characteristics of the sample minimize the risk of misattributing atDNA matches to the wrong ancestor:

- Twelve test takers in twelve lines of descent who share atDNA likely descend from one ancestral couple.
- All twelve test takers have documented descents from David Durst.17
- Evaluation of test-takers A1’s and B3’s pedigrees show no common ancestor through David Durst’s generation. Test-taker B3’s pedigree shows only one great-grandparent, a son of David Durst, born in West Virginia, the expected location of the shared DNA. See appendixes C and D.

17 See appendix A.
DNA analysis techniques like segment analysis and triangulation are not possible for this study. *Ancestry* does not provide the data required to conduct those analyses.

Table 2 shows centimorgans that test-taker A1 shares with each group-B test taker. It also shows the average amount of shared centimorgans and the range of shared centimorgans for each relationship.

<table>
<thead>
<tr>
<th>Test Taker</th>
<th>Documented Relationship to A1</th>
<th>Shared cM with A1</th>
<th>Average shared cM for Relationship</th>
<th>Range of shared cM for Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1</td>
<td>3C</td>
<td>24</td>
<td>73</td>
<td>0–234</td>
</tr>
<tr>
<td>B2</td>
<td>3C</td>
<td>65</td>
<td>73</td>
<td>0–234</td>
</tr>
<tr>
<td>B3</td>
<td>3C</td>
<td>102</td>
<td>73</td>
<td>0–234</td>
</tr>
<tr>
<td>B4</td>
<td>Half 2C1R</td>
<td>27</td>
<td>66</td>
<td>0–190</td>
</tr>
<tr>
<td>B5</td>
<td>Half 2C1R</td>
<td>25</td>
<td>66</td>
<td>0–190</td>
</tr>
</tbody>
</table>

a. For documented relationships, see figure 2 and appendix B.
d. For range of shared centimorgans, ibid.

Table 2 shows that each documented relationship falls within the shared-cM range for that relationship. Some results are lower than average, but none would be considered outliers.¹⁸

Group-B test takers, besides sharing atDNA with test-taker A1, share atDNA with the other group A test takers. Table 3 shows the results of 35 pairwise comparisons of each group-A test taker with each group-B test taker. Twenty-seven pairs share at least 20 cM of atDNA with each other, showing that the test takers form a genetic cluster.

This genetic cluster was manually created by examining shared matches. For example, the shared match list for A1 with B1 includes test-takers A2, A4, A5, A7. *Ancestry* does not specify those shared amounts except that they are above a 20-cM threshold. Not listed are A3 and A6. If they share any atDNA, it is below the 20 cM threshold.¹⁹

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Table 3: Pairwise Comparisons of Test Takers in Groups A and B\(^a\)

<table>
<thead>
<tr>
<th>Group-A Test Takers</th>
<th>Group-B Test Takers and the Respective Child of David Durst who is the Test-taker's Ancestor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B1 Thomas Durst</td>
</tr>
<tr>
<td>A1</td>
<td>Yes 3C</td>
</tr>
<tr>
<td>A2</td>
<td>Yes 3C</td>
</tr>
<tr>
<td>A3</td>
<td>No 3C1R</td>
</tr>
<tr>
<td>A4</td>
<td>Yes 3C</td>
</tr>
<tr>
<td>A5</td>
<td>Yes 2C1R</td>
</tr>
<tr>
<td>A6</td>
<td>No 3C</td>
</tr>
<tr>
<td>A7</td>
<td>Yes 2C1R</td>
</tr>
</tbody>
</table>

\(^a\) “DNA Matches” for test taker A1, *Ancestry* (https://www.ancestry.com/dna : accessed 1 Oct. 2020), utilizing shared match lists. “Yes” designates pairs sharing 20 or more cM of atDNA, and “No” designates pairs sharing less than 20 cM, including 0 cM.

All group-A test takers share atDNA with some, but not all, group-B test takers. The amounts of shared atDNA are consistent with the documented relationships, including relationships where amounts of shared atDNA can extend down to 0 cM. 20 Group-A and group-B test takers have a common ancestor.

**Conclusion**

Reliable documentary sources say Alta Jane’s father was David Durst. Seven atDNA test-takers, including the client, represent seven lines of descent from Alta Jane. Their amounts of atDNA shared with the client are consistent with their documented relationships. Five other test takers, representing four of David Durst’s other children, share amounts of atDNA with the client consistent with their documented relationships. The twelve test takers form a genetic cluster, indicating a common ancestor. The shared atDNA can be attributed only to David.

This project’s goal is met. The integration of documentary and genetic evidence shows that David Durst was Alta Jane Durst’s biological father. No evidence conflicts with that conclusion.

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Appendix A: Documentation for Figure 1

**BONNIE WARD WILCOXON (A1)**

- Bonnie Wilcoxon Ward to Kenneth Hoyt Wilcoxon: Bonnie identified her father as Kenneth Hoyt Wilcoxon.
- Kenneth Hoyt Wilcoxon to Clyde Welby Wilcoxon: Maryland, death certificate (1995), Kenneth H. Wilcoxon; Division of Vital Records, Baltimore.

A2

- A2 to Inez Wedge: [Redacted for publication for educational purposes]

A3

- A3 to LIVING to Hoyt Edgar Wilcoxon: [Redacted for publication for educational purposes]
- Hoyt Edgar Wilcoxon to Alta Jane Durst: West Virginia, delayed birth certificate 31355 (1890), Hoyt Edgar Wilcoxon; digital image, West Virginia Department of Arts, Culture and History.

A4

- A4 to John Robert Wilcoxon: A4 self-identifies as the child of John Robert Wilcoxon, [Redacted for publication for educational purposes]
A5
- A5 to Ross Oscar Wilcoxon: A5 self-identifies as the child of Ross Oscar Wilcoxon, [Redacted for publication for educational purposes]
- Ross Oscar Wilcoxon to Alta Jane Durst: Minnesota, death certificate 9476 (1946), Ross Wilcoxon; image, Steve Karlson, “Master Family Tree,” Ancestry, for Ross Oscar Wilcoxon.

A6
- A6 to Eugene Wilcoxon: [Redacted for publication for educational purposes]

A7
- A7 to Harry Blackburn Wilcoxon: A7 self-identifies as the child of Harry Blackburn Wilcoxon, [Redacted for publication for educational purposes]
Appendix B: Documentation for Figure 2

B1
- B1 to LIVING: [Redacted for publication for educational purposes]
- LIVING to Elizabeth Durst: [Redacted for publication for educational purposes]
- Elizabeth Durst to Thomas Durst: Mason Co., Register of Births: 1880–1903; Second District, p. 734, no. 35, Elizabeth Durst, 10 Aug. 1890; FamilySearch, digital film 004234096, image 516.

B2
- B2 to Mary Alice Hussell: B2 self-identifies as the child of Mary Alice Hussell, [Redacted for publication for educational purposes]
- Thomas Durst to David Durst: Mason Co., West Virginia, Register of Births & Deaths 1853–1879, p. 69, no. 49, Thomas Dellman Durst (1859); FamilySearch, digital film 004234095, image 252.

B3
- B3 to John Boydstun: B3 self-identifies as the child of John Boydstun, [Redacted for publication for educational purposes]

B4
- B4 is an only child whose parent also is anonymized. B4 to PARENT: [Redacted for publication for educational purposes]
- PARENT to Floyd Spencer Durst: [Redacted for publication for educational purposes]

B5

- B5 to Glen Boyd Durst: B5 self-identifies as the child of Glen Boyd Durst, [Redacted for publication for educational purposes]
Appendix C: Pedigree evaluation for test taker A1

For A1 to Kenneth Wilcoxon and LIVING:
- Client self-identified her parents. Client’s mother has tested at AncestryDNA and doesn’t share atDNA with any group-A or group-B test taker. Therefore, the match is on A1’s father’s side.

For Kenneth Wilcoxon to Clyde Wilcoxon and Mearla Wedge:
- Maryland, death certificate (1995), Kenneth H. Wilcoxon; Division of Vital Records, Baltimore.

For Clyde Wilcoxon to Benjamin Wilcoxon and Alta Jane Durst:
- Mason Co., Register of Births: 1880–1903; Second District,” p. 582, no. 8, Clyde W. Wilcoxen, 2 Aug. 1884.
- Clyde Welby Wilcoxon, SS no. 483-18-1304, 8 Nov. 1949, Application for Account Number (Form SS-5); Social Security Administration, Baltimore, Md.

For Mearla Wedge to John Wedge and Rosa Wheeler:
- Jackson Co., unnumbered register of births, p. 243, Mearla Wedge, 1 Mar. 1888; West Virginia Department of Arts, Culture and History.

For Benjamin Wilcoxon to Anthony Wilcoxon and Cynthia Parker:
- Mason County History Book Committee, History of Mason County, West Virginia, 1987 (Salem, W.Va.: Walsworth, 1987), 376.
For Alta Jane Durst to David Durst and Elizabeth Blackburn (additional sources in text):

- Iowa, death certificate 18-1357 (1927), Alta Jane Wilcoxson.

For John Wedge to Ira Wedge and Catherine Crawford:

- West Virginia, death certificate 15638 (1935), John Ira Wedge; West Virginia Department of Arts, Culture and History.
- 1870 U.S. census, Jackson Co., W.Va., pop. sch., Union, p. 385, dwell. 97, fam. 98, John L. Crawford and Ira Wedge household; NARA microfilm M593, roll 1689, implies John Wedge’s father is Ira.

For Rosa Wheeler to Joseph Wheeler and Lucy Sayre:

- Jackson Co., unnumbered register of births, p. 303, Rosa G. Wheeler, 17 June 1867; digital image, West Virginia Department of Arts, Culture and History.
Appendix D: Pedigree evaluation for test taker B3

For B3 to John Boydstun and LIVING:
- B3 self-identifies as the child of John Boydstun and LIVING, [Redacted for publication for educational purposes]

For John Boydstun to Emmet Boydstun and Eulula Durst:

For Emmett Boydstun to John Boydstun and Sarah Hudson:
For John Boydstun to William Boydstun and Margaret Hendricks:


For Sarah Hudson to H. M. Hudson and Polly A. Dickson:

- 1920 U.S. census, Lincoln Co., Okla., pop. sch., North Creek, ED 114, sheet 4B, dwell. 16, fam. 74, Sarah Boydstun; NARA microfilm T625, roll 1469. Her parents were born in Texas, not a known birth location of any of A1’s ancestors.

For Eulula Durst to Samuel Sheridan Durst and Lena Woosley:

- Obituary of Mrs. Lena Durst, Pantagraph (Bloomington, Ill.), 14 Sept. 1958, p. 31, col. 7; image, Newspapers.com.

For Samuel Durst to David Durst and Elizabeth Blackburn:

- Samuel Durst is the only great-grandparent of B3 who was born in West Virginia, the target location of the shared DNA.

For Lena Woosley to George Woosley and Luanne Gravitte:

- Obituary of Mrs. Lena Durst, Pantagraph, 14 Sept. 1958, p. 31, col. 7.

For LIVING to Loren Gosnell and Julia A Gerry:

- [Redacted for publication for educational purposes].

For Loren Gosnell to James Gosnell and Ann Buniger:


For James William Gosnell to William Gosnell and Olive Ferrier:

• “Died While Speaking,” Grand Junction News (Colo.), 5 Jan. 1895, p. 4, col. 3; image, Newspapers.com. Shows W.S. Gosnell died after moving family from Minnesota to Colorado.


For Ann Buniger to Jacob Buniger and Mary Jane “Jennie” Markley:

• Obituary of Mrs. Anna B. Schultz, Daily Sentinel, 10 May 1977, p. 12, col. 6; image, Newspapers.com.


For Julia Ann Gerry to Henry Gerry and Mary Jane Beaman:


• 1910 U.S. census, Mesa Co., Colo., pop. sch., Loma, ED 85, sheet 21B, dwell. 83, fam. 87, Henry A. Gerry household; NARA microfilm T624, roll 122.

For Henry Gerry to Albert Gerry and Elizabeth Henry:


• 1880 U.S. census, Defiance Co., Ohio, pop. sch., Milford, p. 215A, ED 239, dwell. 288, fam. 295, Albert Gerry household; NARA microfilm T9, roll 1011. Son Henry was eighteen. For his mother, Defiance Co., Ohio, marriages 1:227, Gerry-Henry (1855); FamilySearch, digital film 1977639, image 323.

For Mary Beaman to William Beaman and Rebecca/Ann Throckmorton:


• 1870 U.S. census, Polk Co., Iowa, pop. sch., Des Moines, Ward 7, p. 37, dwell. 302, fam. 297, Wm Beaman household, for implied daughter Mary; NARA microfilm M593, roll 415. Polk County is consistent with Mary Jane’s obituary, and the preceding household is the Throckmorton family.