

Speckin Forensics, LLC

120 N. WASHINGTON SQUARE, SUITE 300
PMB 5068
LANSING, MICHIGAN 48933
517-349-3528 • FAX 954-839-8219

PLEASE DIRECT CORRESPONDENCE & PAYMENT HERE:
110 E. BROWARD BOULEVARD, SUITE 1700
FORT LAUDERDALE, FLORIDA 33301
954-763-6134 • FAX 954-839-8219

WWW.4N6.COM

LEONARD A. SPECKIN
RETIRED DOCUMENT ANALYST

MICHAEL J. SINKE
RETIRED LATENT PRINT SPECIALIST
RETIRED CRIME SCENE RECONSTRUCTION
RETIRED FORENSIC DOCUMENT ANALYST

ROBERT D. KULLMAN
RETIRED FORENSIC DOCUMENT ANALYST

DR. GEORGE F. JACKSON Ph.D.
TOXICOLOGIST

ERICH J. SPECKIN
FORENSIC DOCUMENT ANALYST
INK DATING SPECIALIST

ROGER J. BOLHOUSE MBA
LABORATORY DIRECTOR
CRIME SCENE RECONSTRUCTION
FORENSIC ANALYST & CONSULTANT

THOMAS K. HUARD Ph.D.
DNA ANALYST & CONSULTANT

TERRY NADEAU
ARSON INVESTIGATOR

RICHARD L. BRUNELLE
RETIRED INK DATING CONSULTANT

DR. LAURENCE R. SIMSON M.D.
RETIRED FORENSIC PATHOLOGIST

ANTHONY A. MILONE
COMPUTER & GRAPHICS SPECIALIST
FORENSIC DOCUMENT SPECIALIST

DR. JULIE HOWENSTINE
SEROLOGIST
DNA ANALYST & CONSULTANT
CRIME SCENE RECONSTRUCTION

September 16, 2022

I have been asked to review scans and ballot count sheets from the November 2020 election in Allegheny County, Pennsylvania.

I have reviewed election cases including ballots in many instances in my career over the past 29 years associated with my expertise in document examination.

In this case, I had access to PDF scans of the front and back of each ballot as well as the corresponding PDF of the detail for the counting and tabulation of each ballot. Every ballot has a unique individual identifying number associated with the counting and is part of the PDF file name.

There are three primary groups of ballots; first is the poll site (election day) voting. These appear to be processed by different scanners/tabulators than the mail in votes. The second category is the mail in or absentee votes. These appear to be counted at a central location with their own set of tabulators from random areas as would be expected. The final type is a small number of ballots labeled as provisional. These provisional ballots were not focused on during my examination.

The polling site (election day) ballots are the lowest ballot numbers and the first series counted. The mail in/absentee being the next series counted and the provisional ballots being the final group counted.

Results:

As a result of only having images, the forensic examination that can be performed is limited. It is always more desirable to have the original evidence when possible. The examination conducted used the available captured reliable evidence in the images to make the findings and arrive at the conclusions.

When the series of the mail in ballots was examined, a range of ballot ID numbers contained images that were far inferior to the other ballot images provided. See image comparisons below:

Good Scan

Pennsylvania **Official Mail-In General Election Ballot**
MOON DIST 9

Presidential Electors Vote for the candidates of one party for President and Vice President or insert the names of candidates. ☒ Joseph R. Biden Kamala D. Harris Democratic ☐ Donald J. Trump Michael R. Pence Republican ☐ Jo Jorgensen Jeremy Spike Cohen Libertarian	Representative in Congress 17th District 2 Year Term Vote for One ☐ Conor Lamb Democratic ☒ Sean Parnell Republican ☐ _____ Write-in Senator in the General Assembly 37th District
--	--

Cast Vote Record 455140
Record 8 Moon Dist. 9

Bad scan

Pennsylvania **Official Mail-In General Election Ballot**
MOON DIST 9

Presidential Electors Vote for the candidates of one party for President and Vice President or insert the names of candidates. ☒ Joseph R. Biden Kamala D. Harris Democratic ☐ Donald J. Trump Michael R. Pence Republican ☐ Jo Jorgensen Jeremy Spike Cohen Libertarian	Representative in Congress 17th District 2 Year Term Vote for One ☒ Conor Lamb Democratic ☐ Sean Parnell Republican ☐ _____ Write-in Senator in the General Assembly 37th District
--	--

Cast Vote Record 455005
Record 8 Mood Dist. 9

When the poor image ballots were examined and compared to the corresponding tabulation record, the scanner that appeared for these images was consistently the same (8520050452). Many of these images have similar defects in the printing/copying process which would indicate common source of production, but different than the remaining examined ballots. Clearly in the mail in counting area, a random printing defect that may have existed in mailing out of ballots could not consistently come back and be counted on the same scanner. Therefore, a printing defect on the printing side of the ballot creation is not the likely cause of this anomaly.

Presidential Electors
Vote for the candidates of one party for President and Vice President or insert the names of candidates.

Cast Vote Record 444064
Record 7 McKee Rock Ward 1 Dist. 2

Presidential Electors
Vote for the candidates of one party for President and Vice President or insert the names of candidates.

Cast Vote Record 445034
Record 2 Casl Shannon Dist. 1

It would be a theoretical possibility that the issue in image quality was caused by the scanner at the time of counting or tabulation through a malfunction or an issue with a setting instead of a repeatable defect caused by common printing/copying source. However, upon further investigation, there are a number

of ballot images captured by this anomalous scanner (8520050452) that contain no issues in image quality or repeatable defects. Below are four examples of ballots scanned in the mail in ballots.

Ivania		Official Mail-In General Election Ballot BETHEL PARK WARD 4 DIST 1	
Presidential Electors Vote for the candidates of one party for President and Vice President or insert the names of candidates.		Representative in Congress 18th District 2 Year Term Vote for One	
☐ Joseph R. Biden Kamala D. Harris Democratic		☒ Mike Doyle Democratic	
☒ Donald J. Trump Michael R. Pence Republican		☐ Luke Edison Negron Republican	
☐ Jo Jorgensen Jeremy Spike Cohen Libertarian		☐ _____ Write-In	
		Senator in the General Assembly 37th District 4 Year Term Vote for One	

Cast Vote Record 460779
Record 1 Bethel 4 Dist. 1

Ivania		Official Mail-In General Election Ballot FOX CHAPEL DIST 2	
Presidential Electors Vote for the candidates of one party for President and Vice President or insert the names of candidates.		Representative in Congress 17th District 2 Year Term Vote for One	
☐ Joseph R. Biden Kamala D. Harris Democratic		☐ Conor Lamb Democratic	
☒ Donald J. Trump Michael R. Pence Republican		☒ Sean Parnell Republican	
☐ Jo Jorgensen Jeremy Spike Cohen Libertarian		☐ _____ Write-In	
☐ _____ Write-In		Representative in the General Assembly 30th District 2 Year Term Vote for One	
		☐ Lissa Geiger Shulman	

Cast Vote Record 458116
Record 4 Fox Chap Dist.

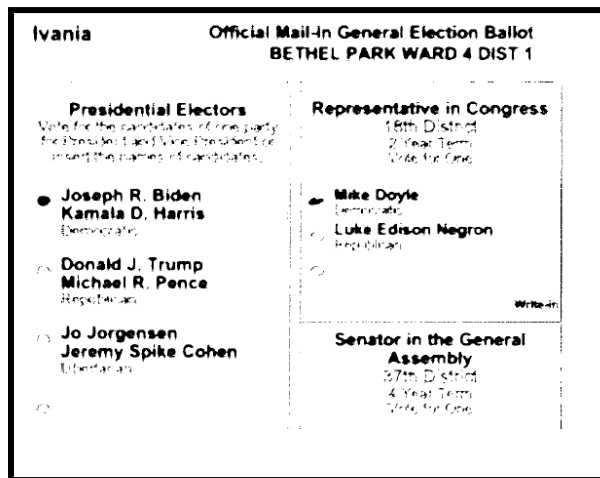
Ivania		Official Mail-In General Election Ballot OHIO DIST 3	
Presidential Electors Vote for the candidates of one party for President and Vice President or insert the names of candidates.		Representative in Congress 17th District 2 Year Term Vote for One	
☒ Joseph R. Biden Kamala D. Harris Democratic		☒ Conor Lamb Democratic	
☐ Donald J. Trump Michael R. Pence Republican		☐ Sean Parnell Republican	
☐ Jo Jorgensen Jeremy Spike Cohen Libertarian		☐ _____ Write-In	
☐ _____ Write-In		Senator in the General Assembly 37th District 4 Year Term Vote for One	

Cast Vote Record 469103
Record 10 Ohio Dist. 3

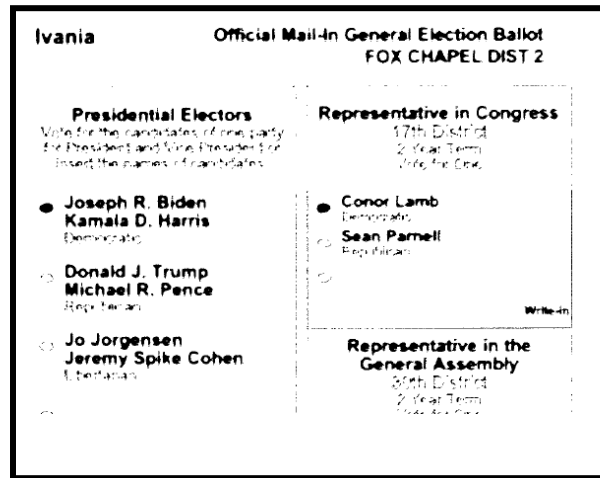
Ivania		Official Mail-In General Election Ballot PLUM DIST 1	
Presidential Electors Vote for the candidates of one party for President and Vice President or insert the names of candidates.		Representative in Congress 18th District 2 Year Term Vote for One	
☒ Joseph R. Biden Kamala D. Harris Democratic		☐ Mike Doyle Democratic	
☐ Donald J. Trump Michael R. Pence Republican		☒ Luke Edison Negron Republican	
☐ Jo Jorgensen Jeremy Spike Cohen Libertarian		☐ _____ Write-In	
		Senator in the General Assembly 45th District 4 Year Term	

Cast Vote Record 443200
Record 16 Plum Dist. 1

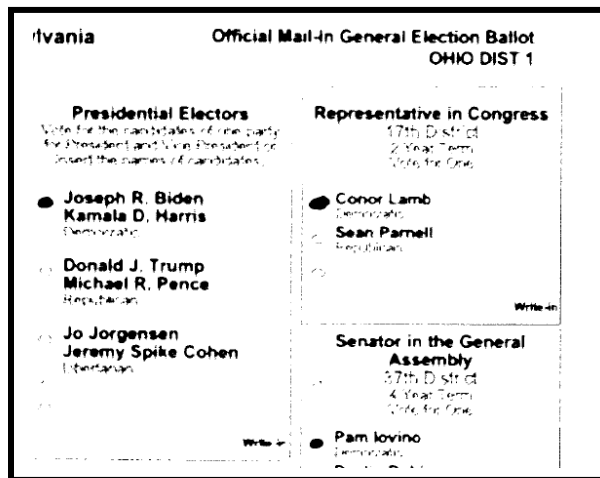
Below are four examples of ballots with poor scans from the same areas in the same scanning range by the numerical ID for the ballot.



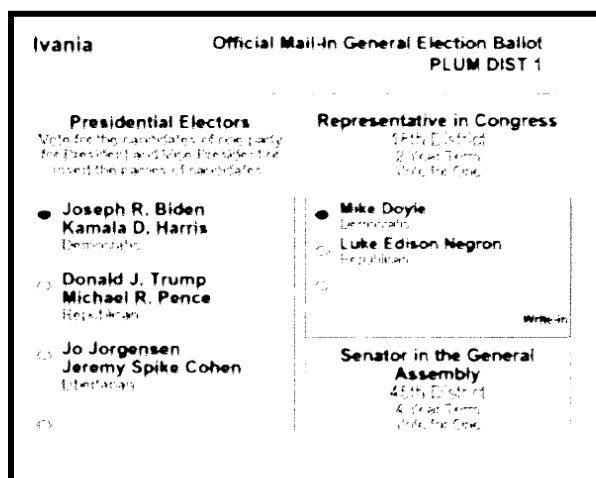
Cast Vote Record 444476
Record 1 Bethel 4 Dist. 1



Cast Vote Record 451891
Record 4 Fox Chap Dist. 2



Cast Vote Record 448587
Record 10 Ohio Dist. 1



Cast Vote Record 43361
Record 16 Plum Dist. 1

At this point in my review, I have identified thousands of ballots with this visible defect. The number is checked by hand at calculated on current totals over 10,000 ballots contain this issue from the same scanner. Based on the identical nature of the anomalies, it is my opinion that this subset of ballots

originated from the same source at some point but not the same source that printed the other ballots where the images have no visible issues.

Based on the forensic findings, it is my opinion that further work and review of the original ballots should be conducted to determine what significance these findings have on the whole of the approximately 700,000 ballots cast.

1. Review the original ballots that were scanned and created the submitted images to determine the scope and correlation of these printing anomalies or if an alternative theory could exist that cannot be determined at this time.
2. Determine the details of the scanner with the anomalies noted in the user, time frames scanned, and cause of the poor image.
 - a. Then to determine the origin of the original ballots if the issue is with a printing defect.
 - b. Conduct a study of the voting pattern (if any) in these areas compared to other correctly printed ballots.
3. If the original ballots are made available:
 - a. To look for impressions of ballots into each other. In the normal course of voting these would not be filled out one on top of each other.
 - b. Using infrared light to determine if more than one ink formulation was used to complete a ballot and which races contained different inks to see if there is any pattern of additions or not.
 - c. In ballots that are color printed to review the CPS code and yellow printed dots to determine similarities in the machines and the timing for the printing process.

A handwritten signature in black ink, appearing to read 'Erich Speckin'. The signature is stylized with a large, looped 'E' and a long, horizontal stroke for the 'S'.

Erich Speckin

Forensic Document Analyst