



**LOGIC AND ACCURACY TEST (LAT)**  
**June 1 – June 3, 2022**

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**Planned Schedule:**

- Wednesday, June 1 9:30am – 6:00pm (Conduct the LAT)
  - Thursday, June 2 10:00am – 4:30pm (Contingency Day)
  - Friday, June 3 1:30pm – 3:30pm (Contingency Day)
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**Common acronyms:**

- **CVR:** Cast Vote Record
- **ICC:** Image Cast Central (Scan Station also referred to as Tabulator)
- **ICX:** Image Cast X Ballot Marking Device (BMD)
- **MVW:** Manual Verification Worksheet (To create your record of tally)
- **RTR:** Results Tally and Reporting (Tabulates results and generates voting reports)

**Storage of personal items (designated area)**

- The following items are prohibited in the testing area: Personal belongings, cell phones, cameras, recording devices, memory devices, laptops, food, or beverages

**AGENDA**

1. Introduction and Overview
2. Testing Board verifies public counter set to zero on applicable devices
3. Ballot marking and tally
  - One (1) packet of 25 ballots provided to each Testing Board member
  - Vote test ballots
  - Create a team tally (2-person process) using the MVW
4. Image Cast X (ICX) Test (Ballot Marking Device)
  - Testing Board validates contest titles and content
  - Mark and print all Testing Board ballots using the ICX including at least one ballot using audio ballot playback and accessible input devices
5. Scanner Test (Mail and In-Person ballot counting device)
  - Take manually marked and ICX marked ballots to scanner
  - Inspect for damage or improper markings
    - Improperly marked ballots must be corrected by team prior to scan
  - Process ballots on scanner in separate batches
  - Adjudicate ballots as needed
    - Adjudication is not required on ICX ballots unless there are write-ins
  - Tabulate and verify results against team tally



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6. Prepare Testing Results (optional attendance)
  - Create cumulative result comparisons for ease of use during LAT board review
  - Collect, organize, and complete test documentation
7. Resetting and sealing of equipment
  - Reset and seal ICX equipment
  - Reset Scan Stations
  - Reset Results Tally and Reporting (RTR)
8. Completion of testing
  - Review test information and results
  - Complete Statement of Qualification
9. Secure storage of all LAT material and ballots



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### **GUIDELINES FOR OBSERVERS AT THE LOGIC AND ACCURACY TEST**

- The LAT test shall be open to representatives of the political parties, the press, and the public to the extent allowable and pursuant to section (CRS 1-7-509(2)(b)). The designated election official may limit the number of representatives from each group because of space limitations. (Rule 11.3.2(b)).
- Each major political party, minor political party, ballot issue committee that has an issue on the ballot, and coordinating entity may designate one person, who shall be allowed to witness all public tests and the counting of pretest votes. (CRS 1-7-509(2)(b))
- If an observer or designee hinders or disturbs the test process, the designated election official may remove the person from the test area. An observer or designee who has been removed from a public test may be barred from future tests. (CRS 1-7-509(2)(b))
- The absence of observers or designees shall not delay or stop the public test. (CRS 1-7-509(2)(b))
- The election official will provide name tags and a sign-in sheet (everyone participating in or observing the test must wear a name tag and must sign-in). A copy of the LAT Information Packet and the Secretary of State LAT Rules will be available for watchers and observers.
- The Logic & Accuracy Testing will take substantially all the Elections staff time and resources today. Therefore, any questions should be directed to Stephanie Gnoza, Elections Director, or her designee.



## Requirements of the LAT

### Preparation:

- ✓ The county has prepared a test deck that includes every ballot style and precinct in the election
- ✓ The county test deck includes a mark for every vote position for every contest and candidate, situations where a voter may choose two or more options, and overvotes and undervotes for each contest; and includes write-in candidates
- ✓ The county test deck includes ballots printed from a ballot-on-demand printer that will be used in the upcoming election and commercially printed ballots
- ✓ Testing Board is comprised of one registered elector from each major political party
- ✓ Testing Board members are registered in Boulder County and have been sworn in as election judges
- ✓ 25 test ballots have been provided to each Test Board member and are clearly marked “TEST”
- ✓ Test ballots were marked using the instructions printed on the ballot
- ✓ Testing Board created and retained a record of the tally (Manual Verification Worksheet)
- ✓ Each type of voting device and each type of ballot is represented in testing
- ✓ Appropriate number of devices were made available for the test
- ✓ Testing Board members have randomly selected the machines to test

### ICX Test (Ballot Marking Device)\*:

Testing Board members completed the following:

- ✓ Verified that the ICX public counter was set to zero
- ✓ Used at least one ICX to mark and print 25 ballots in the same manner the Testing Board member manually marked their test ballots (aside from overvotes)
- ✓ Marked at least one ballot using audio ballot playback and accessible input device

### Scanner Test (Mail and In-Person Paper Ballot counting device) \*:

Testing Board members completed the following:

- ✓ Verified the zero-report generated from the scanner
- ✓ Observed the separate counting of county and Testing Board’s test ballots on at least one scanner

### Tabulation:

Testing Board members completed the following:

- ✓ Verified the zero-report generated from RTR before tabulating
- ✓ Observed the separate tabulation and result report generation of all test ballots

### Comparison:

Testing Board members completed the following:

- ✓ Verified that the results reports exactly correspond to the Testing Board member’s predetermined tally of the votes (aside from overvotes on the ICX ballots)
- ✓ Verified that the county test deck results report exactly corresponds to the county’s predetermined tally of the votes

*\*Scanner and ICX testing may be done in parallel, when applicable.*



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### Storage of test materials:

- ✓ All test materials were secured in a sealed metal cage when not in use
- ✓ Each Testing Board member verified the seals and initialed the chain-of-custody log
- ✓ If records were opened for inspection, at least two election officials verified the newly attached seals and initialed the chain-of-custody log

### Completing the test:

- ✓ Test result files have been exported for Election Night Reporting and Risk Limiting Audit purposes
- ✓ The county has backed up the election project containing test results, including test results and CVR files
- ✓ Testing Board watched the county reset and seal each voting device, if applicable
- ✓ Testing Board and Clerk verified the documented seal number attached to each voting device

### Statement of Qualification:

Testing Board and Clerk signed a written statement attesting to:

- ✓ The qualification of each device successfully tested
- ✓ The number of the seal attached to the voting device at the end of the test
- ✓ If applicable, any problems discovered, and
- ✓ Any other documentation necessary to provide a full and accurate account of the condition of a given device



## **Logic and Accuracy Test (LAT) Testing Board Procedures**

### **Purpose of LAT (CRS 1-7-509 and Rule 11):**

The purpose of the LAT is to test the compatibility of the election ballots through the scanning and tabulation equipment to confirm that every voting position on the ballot is accurately counted where a properly marked selection is made.

### **Testing Board member responsibilities:**

- You will be participating in all parts of the LAT, ensuring all requirements are met.
- You will attest to this at the end of the process and document the successful completion of testing.
- No process shall be delayed due to the absence of a Testing Board member.



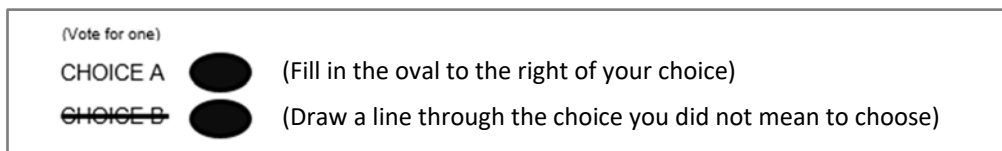
### Ballot Marking:

The county has provided a packet of test ballots to each Testing Board member that includes 25 unique precinct district style ballots. This is in addition to the ballots prepared to fulfill the county test deck requirements.

1. Confirm the number of ballots, verify they are all labeled “TEST” and are numbered at the top, 1 through 25 for the Testing Board.
2. Each Testing Board member has a support team member. The Testing Board member may enlist the help of their team member in marking their ballots.
3. Mark your ballots following the “Instructions for voting” printed on the ballot.
  - Use the pen provided and fill in the oval completely; no X or V.
  - Voting for more than the maximum number of allowed choices is considered an Overvote and will not be counted.
  - Voting for less than the maximum number of allowed choices is considered an Undervote.

4. How to correct a mistake:

*NOTE: Ballots that are damaged or improperly marked will be reviewed and/or rejected prior to the scanner portion of testing. Catching and correcting a mistake immediately prevents delays in testing later.*



- If a mistake (wrong choice, stray mark, hesitant mark) is made in a contest that you did not intend to vote, request a replacement ballot from staff.
5. Write-In votes: For this election **there is one (1) certified Write-In candidate**
    - A certified write-in candidate name shall be noted on the MVW.
    - Uncertified candidates are counted as an undervote if no other choice is marked.
    - A write-in vote will be counted if you:
      - ✓ Completely fill in the oval provided to the right of the words “Write-in”
      - ✓ Write at least the last name of the certified candidate.
      - ✓ Do not vote for more than the maximum number of allowed choices.
  6. When finished marking your paper ballots, organize your ballots in sequential order (1-25 in upper right corner).
  7. Notify staff that you are ready to create your tally.



### Creating the tally:

The county will pair up each member with another individual and assign you a team number.

Testing Board members are then provided their MVW.

- Sheet 1 will include columns to capture votes for ballots 1 through 12, totals for Sheet 1, totals for Sheet 2, and the Grand Total (tally) for each contest option.
- Sheet 2 will include columns to capture votes for ballots 13 through 25, and totals for Sheet 2.

On each sheet of the MVW, follow this procedure to create a tally for your test ballots:

1. Print both participant names on the first page of your MVW and initial subsequent pages.
  - This document will be available to the public so please do not add your signature.
2. Starting with ballot #1 and using the provided line rulers, Person A reads aloud the ballot number recorded in the top right corner while Person B verifies this on the MVW.
3. Person A reads aloud each contest name and contest selection made, indicating any voting marks that are outside the prescribed voting instructions.
4. Person B will record the selections read aloud by Person A on the manual verification worksheet by making a slash mark for the appropriate contest option read and will make notation of any abnormal markings as indicated.
  - If a contest has not been voted, a slash mark must be recorded in the “Undervote” row for that contest.
  - For contests that allow more than one selection, you can have more than one undervote.
    - ✓ You can vote for 3, but only mark one selection; you then need to record 2 undervotes for that ballot contest.
  - For contests not included on the current ballot, a slash mark must be recorded in the “Not on ballot” row for that contest.
5. When all ballots have been recorded, trade roles to verify the accuracy of the MVW, noting and resolving any discrepancies found.
6. For each MVW sheet, add up the selections for each contest option and record this number in the applicable Total field.
  - It is extremely important to validate each other’s calculations.
7. Transfer MVW Sheet 2 Totals to Sheet 1 in the column labeled “Sheet 2 Total,” and add the totals from Sheet 1 and Sheet 2 together to create the Grand Total (team tally). Calculators are provided.
8. After verification has been completed, organize your ballots in sequential order (1-25 in upper right corner) and give your MVW to an election support staff member.
9. Support staff will make a copy of the MVW. The copy should be reviewed by team members to confirm it is accurate.
  - Support staff then enter the MVW into the electronic cumulative manual verification spreadsheet.





### **ICX Test (Ballot Marking Device):**

The ICX is a Ballot Marking Device (BMD) that visually displays or audibly presents ballots and allows voters to print a paper ballot. An ICX BMD also provides voting accessibility to voters who may be otherwise unable to mark a paper ballot privately and independently. It includes an audio ballot playback feature with headphones and can accept adaptive devices for voters with mobility impairments.

1. Record which ICX you are testing in the upper right-hand corner of the MVW.
2. Before the start of ICX testing, a “zero” count is witnessed by the Testing Board for verification that the device has been reset and the public counter is at zero.
3. Bring your test ballots to the selected ICX where you will:
  - Mark and print all 25 test ballots on the ICX in the same manner you manually marked the test ballots.
  - Confirm that the ballot style, contests, and selections on the ICX review screen match the paper ballot prior to printing (overvotes reflecting as a blank/unvoted contest).
  - Verify that the ballot style, contests and selections printed from the ICX match the paper ballot (overvotes reflecting as a blank contest).
  - Validate the ICX audio and screen content for at least one manually marked test ballot.
  - Record which ICX you tested in the upper right-hand corner of your MVW
4. Marking while verifying audio and screen content:
  - Person A
    - ✓ Compares audio against the manually marked test ballot to confirm accuracy of the ballot style, titles, choices, and text
    - ✓ Makes the selection on the ICX that matches the manually marked ballot selection once audio is verified
  - Person B
    - ✓ Compares audio against the ICX screen to confirm accuracy of the ballot style, titles, choices, and text
    - ✓ Verifies that the ICX selection made matches the manually marked ballot selection
5. Marking a ballot using the audio ballot playback and accessible input device:
  - Person A
    - ✓ Listens to audio instruction and uses accessible input device (paddles) to make ballot selections
  - Person B
    - ✓ Verifies that the ICX selection made matches the manually marked ballot selection
6. Before printing the ballot, verify that the ballot style, titles, and choices displayed on the ICX Review Screen match the manually marked ballot selections and MVW.



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7. Once printed, verify the ballot style, titles, and selections of the ICX printed ballot and then initial the manually marked ballot, attesting that the ICX ballot matches the manually marked test ballot and MVW.
8. In the upper right-hand corner of the ICX ballot, write in the ballot number that coincides with the manually marked ballot used for testing (1, 2, 3).
9. Overvotes on ICX:
  - Hand marked ballots are used for the ICX portion of voting, which does not allow for overvotes. Since all ballots are to be marked in accordance with the voter instructions, there should be no overvotes. You are encouraged to verify the ICX does not allow you to create an overvote.
10. When all test ballots have been marked and printed on the ICX, initial the qualification form confirming that the screen, audio, and printed content is accurate, and that the selected ballot marking device functioned properly during testing.



**Scanner Test (Mail and In-Person paper ballot counting device):**

An ICC scan station is designed to capture an image of a voter's paper ballot, process the image of that ballot and capture the voter's choices. These are referred to as Cast Vote Records (CVRs).

This test ensures properly marked choices are being accurately captured and recorded; we want to make sure that a choice for Candidate A is being recorded as a vote for Candidate A, and not Candidate B and that there is compatibility between the ballots (proper printing and alignment), and the equipment.

An adjudication station provides for the resolution of voter intent as prescribed by the Colorado Secretary of State. Ballots that have been over voted will be flagged and adjudicated per state guidelines.

1. Before the start of any scanner testing, the Testing Board will verify the zero report at each ICC, confirm that the Total Ballots Accepted on the scan screen is set to zero, and verify that there are no batches listed in the Batch Reporting section of the ICC Status screen. They will also verify the zero report and zero count on the RTR tabulation system at this time.
2. The ballots are reviewed by staff to look for damaged and improperly marked ballots that would require manual review or duplication during the election cycle.
  - Damaged ballot: A ballot that is torn, bent, or otherwise mutilated or rendered unreadable, so that it cannot be processed by the ballot scanner. (Rule 1.1.15)  
Damaged ballots include:
    - ✓ All ballots that contain a foreign substance that could interfere with the ballot scanner (e.g. food, drink, etc.)
    - ✓ Ballots that are marked in a medium or manner that cannot be detected by a ballot scanner
  - Improper markings include: X's or V's as well as obvious stray marks, hesitant marks, incomplete marks or parts of written notes that are within the target area of a contest option where no other choice has been made.
3. Testing Board ballots (manually marked and ICX marked) are brought to the selected ICC scan station. Record the ICC station ID in the upper right-hand corner of your MVW and checks that the Batch Size on the scan screen is zero.
4. Testing Board ballots are then processed on the scanner and votes captured.
  - Each set of test ballots are scanned in and saved, to capture and process ballot images
  - Scan count is validated by the team
  - Applicable ballots are adjudicated if needed following state rule and guidelines



**Scanner results tabulated and verified:**

The RTR application in the Tally Room tabulates vote records to produce combined election results. This process confirms that votes are accurately tabulated and aggregated by the scanner and tabulation system.

1. Before starting the scanner test, the RTR Election Summary Report showing “0” votes cast is presented to the Testing Board for verification that the system has been set to zero. They also verify that no batch results have been received in RTR.
  - Both team members print their name and date the report, documenting that it has been verified.
2. After tabulation, an Election Summary Report by Tabulator (ICC) will be generated for the isolated tabulation of the Testing Board’s ballots.
  - A separate Election Summary Report is generated for manually marked and ICX marked ballots.
3. The team compares the results report to their team tally (MVW) validating that the results produced by the scanner exactly corresponds to the team’s predetermined tally of the manually marked and ICX marked test ballots.
4. When the team concludes the counts to be accurate, both team members print their name and date the results report, attesting to the accuracy of the count and the machine.
5. Team members then initial the qualification form for the ICC, attesting to the successful completion of testing for the scanner device.

**Discrepancy resolution (in order of escalation):**

1. Review for entry and recording errors
  - Review MVW for too few or too many votes captured
  - Review ballots with MVW for incorrect recording and recount if needed
  - Review Adjudication and Audit Marks for resolution differences (if applicable)
  - Review comparison and recount if needed
2. If error is identified as a hardware or software error on single device
  - Validate other tested equipment was not impacted
  - Mark device unsatisfactory, replace and test alternative/new device
3. If error is identified on more than one device and devices are failing in similar fashion
  - Test multiple devices that could reasonably have same error
  - Mark devices unsatisfactory, replace and test alternative/new devices
  - If enough resources are not available for replacement, error shall be corrected, and retesting will be completed
4. If error is identified as a software or ballot programming error
  - Alert LAT Designated Election Official for correction
  - Correct software or ballot programming error and restart testing from beginning



### **County Test Deck on Scanners:**

The county is required to prepare a test deck of ballots that includes every ballot style and, where applicable, precinct. The county test deck must include a sufficient number of ballots to:

- Mark every vote position for every contest, including write-in candidates
- Allow for situations where a contest permits an elector to vote for two or more positions
- Include overvotes and undervotes for each contest

In addition to the packets provided to the Testing Board, the county has prepared a deck and tally (MVW) that meets the above requirement.

As is required for the Testing Board ballots, the county ballots are counted on one or more scanners, adjudicated, and then tabulated for comparison against the county tally (MVW). Results are then generated and provided to the testing board, where the testing board then verifies that the results exactly match the pre-determined tally.

### **Reporting and back up (optional attendance):**

When all individual results have been verified, the county will generate a Cumulative Election Summary Report that includes all tested ballots. The reports will be reviewed with the Testing Board at the end of the LAT.

1. All team MVW and machine count data is entered onto the Cumulative Results Comparison spreadsheet.
2. Cumulative Election Summary Report is generated, and total ballot count verified.
3. Statement of Vote Report is generated and inspected to ensure all precincts are included in testing.
4. Election result files are exported to fulfill Election Night Reporting and Risk Limiting Audit requirements, and the test election data is backed up.
5. Cumulative result information is entered and validated in the Cumulative Results Comparison spreadsheet.
6. Testing documentation is collected and organized.
7. Statement of Qualification document is drafted.



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### **Resetting and sealing of equipment:**

After testing, the Testing Board must watch the county reset and seal each voting device, as applicable. As part of the Statement of Qualification, the Testing Board and Clerk must attest to the seal number attached to the voting device at the end of testing.

1. Testing Board witnesses the resetting and sealing of the ICX equipment, verifying the seal numbers attached to each device.
2. Testing Board witnesses the resetting of scan stations and Results Tally and Reporting, verifying that the Total Ballots Accepted on the ICCs is "0" and that the Election Summary Report is regenerated and shows "0" votes cast.

### **Completion of Testing:**

After the devices are reset and sealed, the results of all testing is reviewed with the Clerk and Testing Board, along with testing documentation. The Testing Board and the county clerk must sign a written statement attesting to the qualification of each device successfully tested, the number of the seal attached to the voting device at the end of the test, any problems discovered, and any other documentation necessary to provide a full and accurate account of the condition of a given device.

1. Test information and results are reviewed with the Clerk and Testing Board
2. Cumulative results are verified by the Testing Board
3. Testing Board and Clerk complete the Statement of Qualification

### **Secure storage of all LAT materials and ballots:**

The county must keep all test materials, when not in use, in a durable, secure box. Each member of the Testing Board must verify the seals and initial the chain-of-custody log maintained by the county clerk. If the records are opened for inspection, at least two election officials must verify the seals and initial the chain-of-custody log.



## Logic and Accuracy Test Information

<b>Election Title:</b> 2022 Boulder County Primary Election
<b>Election Date:</b> June 28, 2022
<b>Logic and Accuracy Test Dates:</b> June 1-3, 2022
<b>Test Location:</b> 1750 33rd St. Boulder, CO

Team	Entity	Participant Name
1	Democratic Party Testing Board Member	Lynne McNamara
1	Republican Party Testing Board Alternate & Support	Valerie Walsh
2	Republican Party Testing Board Member	Dave Murray
2	Democratic Party Testing Board Alternate & Support	Pat Feeser
N/A	Boulder County Clerk & Recorder	Molly Fitzpatrick
N/A	Boulder County Clerk & Recorder's Office LAT Coordinator	Stephanie Gnoza
N/A	Boulder County Support	Brad Light
N/A	Boulder County Support	Crystal Christman
N/A	Boulder County Support	Iola Freeland
N/A	Boulder County Support	Josh Hansen
N/A	Boulder County Support	Kayla Gehring
N/A	Boulder County Support	Molly Halsey
N/A	Boulder County Support	Tricia Grossnickle



Device ID	Type of Device	Seal # (Where applicable)	Seal # (Where applicable)	Seal # (Where applicable)
ICX 44	Ballot Marking Device (BMD)	On-File	On-File	On-File
		On-File	On-File	On-File
Image Cast Printer 038	BMD Printer	On-File	On-File	NA
ICX 78	Ballot Marking Device (BMD)	On-File	On-File	On-File
		On-File	On-File	On-File
Image Cast Printer 022	BMD Printer	On-File	On-File	NA
Scan Station A (1)	Central Count Scanner	On-File	NA	NA
Scan Station B (2)	Central Count Scanner	On-File	NA	NA
Scan Station C (3)	Central Count Scanner	On-File	NA	NA
Scan Station D (4)	Central Count Scanner	On-File	NA	NA
Scan Station E (5)	Central Count Scanner	On-File	NA	NA
Scan Station F (6)	Central Count Scanner	On-File	NA	NA
Scan Station G (7)	Central Count Scanner	On-File	NA	NA
Scan Station H (8)	Central Count Scanner	On-File	NA	NA
Scan Station J (10)	Central Count Scanner	On-File	NA	NA





<b>Device ID</b>	<b>Type of Device</b>	<b>Seal # (Where applicable)</b>	<b>Seal # (Where applicable)</b>	<b>Seal # (Where applicable)</b>
<b>Adjudication Workstation 1</b>	Adjudication Station	On-File	NA	NA
<b>Adjudication Workstation 2</b>	Adjudication Station	On-File	NA	NA
<b>Adjudication Workstation 3</b>	Adjudication Station	On-File	NA	NA
<b>Adjudication Workstation 4</b>	Adjudication Station	On-File	NA	NA
<b>Adjudication Workstation 5</b>	Adjudication Station	On-File	NA	NA
<b>EMS Workstation 1</b>	Results Tally & Reporting	On-File	NA	NA
<b>EMS Workstation 2</b>	Results Tally & Reporting	On-File	NA	NA
<b>Election Server 1</b>	Election Server	On-File	On-File	NA



**Boulder County Clerk & Recorder Elections Division  
Statement of Qualification of Election Devices**

I attest that, to the best of my knowledge, each election device used in the Logic and Accuracy Test (LAT) passed the requirements of the LAT and accurately tabulated all properly marked LAT ballots.

It is the determination of the Logic and Accuracy Test Board that all devices tested are qualified to be used in the 2022 Primary Election on June 28, 2022.

[Redacted signature]

Lynne McNamara, Democratic  
LAT Test Board Member

[Redacted signature]

Dave Murray, Republican  
LAT Test Board Member

[Redacted signature]

Molly Fitzpatrick  
Boulder County Clerk & Recorder

Any problems discovered during testing are described as follows. Additionally, I am reporting any other information or attaching any additional documentation that might be necessary to provide a full and accurate account of the condition of each piece of equipment:

Lynne McNamara, Democratic Party LAT Test Board Member:

N/A

Dave Murray, Republican Party LAT Test Board Member:

N/A

Molly Fitzpatrick, Boulder County Clerk & Recorder:

N/A

**2022 Primary Election Logic Accuracy Test  
Cumulative Results Comparison**

All Test Ballots (862)  
June 1, 2022

	Expected Tally	Machine Total	Difference
<b>Total Ballots Scanned</b>	862	862	0
<b>United States Senator - DEM</b>			
Michael Bennet	47	47	0
Undervote	381	381	0
<b>United States Senator - REP</b>			
Ron Hanks	25	25	0
Joe O'Dea	44	44	0
Daniel Hendricks (W)	35	35	0
Overvote	9	9	0
Undervote	321	321	0
<b>District 2 - Rep 118th US Congress - DEM</b>			
Joe Neguse	39	39	0
Undervote	389	389	0
<b>District 2 - Rep 118th US Congress - REP</b>			
Marshall Dawson	43	43	0
Undervote	391	391	0
<b>Governor - DEM</b>			
Jared Polis	43	43	0
Undervote	385	385	0
<b>Governor - REP</b>			
Greg Lopez	41	41	0
Heidi Ganahl	32	32	0
Overvote	9	9	0
Undervote	356	352	4*
<b>Secretary of State - DEM</b>			
Jena Griswald	47	47	0
Undervote	381	381	0
<b>Secretary of State - REP</b>			
Tina Peters	21	21	0
Mike O'Donnell	30	30	0
Pam Anderson	51	51	0
Overvote	9	9	0
Undervote	323	323	0
<b>State Treasurer - DEM</b>			
Dave Young	47	47	0
Undervote	381	381	0
<b>State Treasurer - REP</b>			
Lang Sias	47	47	0
Undervote	387	387	0
<b>Attorney General - DEM</b>			
Phil Weiser	47	47	0
Undervote	381	381	0

**2022 Primary Election Logic Accuracy Test  
Cumulative Results Comparison**

All Test Ballots (862)  
June 1, 2022

	Expected Tally	Machine Total	Difference
<b>Attorney General - REP</b>			
John Kellner	43	43	0
Undervote	391	391	0
<b>State Board of Education - DEM</b>			
Kathy Plomer	41	41	0
Undervote	387	387	0
<b>State Board of Education - REP</b>			
Dan Maloit	45	45	0
Undervote	389	389	0
<b>State Senator - District 15 - DEM</b>			
Janice Marchman	18	18	0
Undervote	59	59	0
<b>State Senator - District 15 - REP</b>			
Rob Woodward	18	18	0
Undervote	65	65	0
<b>State Representative - District 10 - DEM</b>			
Edie Hooton	5	5	0
Undervote	86	86	0
<b>State Representative - District 10 - REP</b>			
William B. DeOreo	5	5	0
Undervote	86	86	0
<b>State Representative - District 11 - DEM</b>			
Karen McCormick	10	10	0
Undervote	95	95	0
<b>State Representative - District 11 - REP</b>			
Tara Menza	8	8	0
Undervote	99	99	0
<b>State Representative - District 12 - DEM</b>			
Tracey Bernett	12	12	0
Undervote	99	99	0
<b>State Representative - District 12 - REP</b>			
Anya Kirvan	10	10	0
Undervote	103	103	0
<b>State Representative - District 19 - DEM</b>			
Jennifer Lea Parenti	12	12	0
Undervote	31	31	0
<b>State Representative - District 19 - REP</b>			
Dan Woog	12	12	0
Undervote	33	33	0
<b>State Representative - District 49 - DEM</b>			
Judy Amabile	10	10	0
Undervote	68	68	0

**2022 Primary Election Logic Accuracy Test  
Cumulative Results Comparison**

All Test Ballots (862)  
June 1, 2022

	Expected Tally	Machine Total	Difference
<b>State Representative - District 49 - REP</b>			
Kathryn Lehr	6	6	0
John A. Caldwell	12	12	0
Overvote	2	2	0
Undervote	58	58	0
<b>County Commissioner District 3 - DEM</b>			
Ashley Stolzmann	43	43	0
Elaina Shively	32	32	0
Overvote	9	9	0
Undervote	344	344	0
<b>County Commissioner District 3 - REP</b>			
No Candidate for Race	0	0	0
<b>Boulder County Clerk and Recorder - DEM</b>			
Molly Fitzpatrick	51	51	0
Undervote	377	377	0
<b>Boulder County Clerk and Recorder - REP</b>			
No Candidate for Race	0	0	0
<b>Boulder County Treasurer - DEM</b>			
Paul Weissman	47	47	0
Undervote	381	381	0
<b>Boulder County Treasurer - REP</b>			
No Candidate for Race	0	0	0
<b>Boulder County Assessor - DEM</b>			
Cynthia Braddock	47	48	-1**
Undervote	381	380	1
<b>Boulder County Assessor - REP</b>			
No Candidate for Race	0	0	0
<b>Boulder County Sheriff - DEM</b>			
Curtis Johnson	37	37	0
David D. Hayes	36	35	1***
Overvote	9	10	-1
Undervote	346	346	0
<b>Boulder County Sheriff - REP</b>			
No Candidate for Race	0	0	0
<b>Boulder County Surveyor - DEM</b>			
Lee Stadele	49	49	0
Undervote	379	379	0
<b>Boulder County Surveyor - REP</b>			
No Candidate for Race	0	0	0
<b>Boulder County Coroner - DEM</b>			
Emma R. Hall	53	53	0
Undervote	375	375	0
<b>Boulder County Coroner - REP</b>			
No Candidate for Race	0	0	0

**2022 Primary Election Logic Accuracy Test  
Cumulative Results Comparison**

All Test Ballots (862)  
June 1, 2022

Expected Tally	Machine Total	Difference
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**Explanation of Differences:**

- \* Governor - REP Contest: Data entry error. Undervote looked like a "4" on the MVW but was a "2"
- \*\* Boulder County Assessor - DEM Contest: MVW marked as an Undervote but adjudicated as a vote for Braddock
- \*\*\* Boulder County Sherriff - DEM Contest: MVW marked as a vote for Hayes but adjudicated as an Overvote

**Additional Note:**

Original County Test Deck MVW had a formula error impacting Undervotes where ballots were pulled for the Testing Board. This was reviewed with the Testing Board, corrected, and reprinted for accurate comparison of the county test deck and cumulative results.

# Election Summary Report

Closed Primary

Boulder

June 28, 2022

Summary for: All Contests, All Districts, All Tabulators, All Counting Groups

Cummulative Summary

Voters Cast: 862 of 246,462 (0.35%)

## United States Senator - DEM (Vote for 1) DEM

	Total
Times Cast	428 / 0 N/A
Undervotes	381
Overvotes	0

Candidate	Party	Total
Michael Bennet	DEM	47
Total Votes		47

	Total
Unresolved Write-In	0

D - 428  
 R - 434  
 -----  
 862

## Representative to the 118th United States Congress - District 2 - DEM (Vote for 1) DEM

	Total
Times Cast	428 / 0 N/A
Undervotes	389
Overvotes	0

Candidate	Party	Total
Joe Neguse	DEM	39
Total Votes		39

	Total
Unresolved Write-In	0

6/1/22 DAVID MURRAY DM  
 " LYNN McNAMARA Free

**Governor - DEM (Vote for 1)**  
**DEM**

	Total
Times Cast	428 / 0 N/A
Undervotes	385
Overvotes	0

Candidate	Party	Total
Jared Polis	DEM	43
Total Votes		43

	Total
Unresolved Write-In	0

**Secretary of State - DEM (Vote for 1)**  
**DEM**

	Total
Times Cast	428 / 0 N/A
Undervotes	381
Overvotes	0

Candidate	Party	Total
Jena Griswold	DEM	47
Total Votes		47

	Total
Unresolved Write-In	0

**State Treasurer - DEM (Vote for 1)**  
**DEM**

	Total
Times Cast	428 / 0 N/A
Undervotes	381
Overvotes	0

Candidate	Party	Total
Dave Young	DEM	47
Total Votes		47

	Total
Unresolved Write-In	0

**Attorney General - DEM (Vote for 1)**  
**DEM**

	Total
Times Cast	428 / 0 N/A
Undervotes	381
Overvotes	0

Candidate	Party	Total
Phil Weiser	DEM	47
Total Votes		47

	Total
Unresolved Write-In	0

*DM*  
*Sm*



**State Board of Education Member - At Large - DEM (Vote for 1)**  
**DEM**

		Total
Times Cast		428 / 0 N/A
Undervotes		387
Overvotes		0

Candidate	Party	Total
Kathy Plomer	DEM	41
Total Votes		41

		Total
Unresolved Write-In		0

**State Senator - District 15 - DEM (Vote for 1)**  
**DEM**

		Total
Times Cast		77 / 0 N/A
Undervotes		59
Overvotes		0

Candidate	Party	Total
Janice Marchman	DEM	18
Total Votes		18

		Total
Unresolved Write-In		0

**State Representative - District 10 - DEM (Vote for 1)**  
**DEM**

		Total
Times Cast		91 / 0 N/A
Undervotes		86
Overvotes		0

Candidate	Party	Total
Eddie Hooton	DEM	5
Total Votes		5

		Total
Unresolved Write-In		0

**State Representative - District 11 - DEM (Vote for 1)**  
**DEM**

		Total
Times Cast		105 / 0 N/A
Undervotes		95
Overvotes		0

Candidate	Party	Total
Karen McCormick	DEM	10
Total Votes		10

		Total
Unresolved Write-In		0

*dm*  
*Jmc*

**State Representative - District 12 - DEM (Vote for 1)**  
**DEM**

	Total
Times Cast	111 / 0 N/A
Undervotes	99
Overvotes	0

Candidate	Party	Total
Tracey Bennett	DEM	12
Total Votes		12

	Total
Unresolved Write-In	0

**State Representative - District 19 - DEM (Vote for 1)**  
**DEM**

	Total
Times Cast	43 / 0 N/A
Undervotes	31
Overvotes	0

Candidate	Party	Total
Jennifer Lea Parenti	DEM	12
Total Votes		12

	Total
Unresolved Write-In	0

**State Representative - District 49 - DEM (Vote for 1)**  
**DEM**

	Total
Times Cast	78 / 0 N/A
Undervotes	68
Overvotes	0

Candidate	Party	Total
Judy Amabile	DEM	10
Total Votes		10

	Total
Unresolved Write-In	0

*DM*

*Jmd*

**Boulder County Commissioner - District 3 - DEM (Vote for 1)  
DEM**

		Total
Times Cast		428 / 0 N/A
Undervotes		344
Overvotes		9
Candidate	Party	Total
Ashley Stolzmann	DEM	43
Elaina Shively	DEM	32
Total Votes		75
		Total
Unresolved Write-In		0

**Boulder County Clerk and Recorder - DEM (Vote for 1)  
DEM**

		Total
Times Cast		428 / 0 N/A
Undervotes		377
Overvotes		0
Candidate	Party	Total
Molly Fitzpatrick	DEM	51
Total Votes		51
		Total
Unresolved Write-In		0

**Boulder County Treasurer - DEM (Vote for 1)  
DEM**

		Total
Times Cast		428 / 0 N/A
Undervotes		381
Overvotes		0
Candidate	Party	Total
Paul Weissmann	DEM	47
Total Votes		47
		Total
Unresolved Write-In		0

*Imc*  
*DM*

### Boulder County Assessor - DEM (Vote for 1) DEM

	Total
Times Cast	428 / 0 N/A
Undervotes	380
Overvotes	0

Candidate	Party	Total
Cynthia Braddock	DEM	48
Total Votes		48

	Total
Unresolved Write-In	0

### Boulder County Sheriff - DEM (Vote for 1) DEM

	Total
Times Cast	428 / 0 N/A
Undervotes	346
Overvotes	10

Candidate	Party	Total
Curtis Johnson	DEM	37
David D. Hayes	DEM	35
Total Votes		72

	Total
Unresolved Write-In	0

### Boulder County Surveyor - DEM (Vote for 1) DEM

	Total
Times Cast	428 / 0 N/A
Undervotes	379
Overvotes	0

Candidate	Party	Total
Lee Stadele	DEM	49
Total Votes		49

	Total
Unresolved Write-In	0

*Lee* *DM*

**Boulder County Coroner - DEM (Vote for 1)  
DEM**

	Total
Times Cast	428 / 0 N/A
Undervotes	375
Overvotes	0

Candidate	Party	Total
Emma R. Hall	DEM	53
Total Votes		53

	Total
Unresolved Write-In	0

**United States Senator - REP (Vote for 1)  
REP**

	Total
Times Cast	434 / 0 N/A
Undervotes	321
Overvotes	9

Candidate	Party	Total
Ron Hanks	REP	25
Joe O'Dea	REP	44
Total Votes		104

	Total
Daniel Hendricks	WRITE-IN 35
Unresolved Write-In	0

**Representative to the 118th United States Congress - District 2 - REP (Vote for 1)  
REP**

	Total
Times Cast	434 / 0 N/A
Undervotes	391
Overvotes	0

Candidate	Party	Total
Marshall Dawson	REP	43
Total Votes		43

	Total
Unresolved Write-In	0

*DM*  
*Jm*

### Governor - REP (Vote for 1) REP

	Total
Times Cast	434 / 0 N/A
Undervotes	352
Overvotes	9

Candidate	Party	Total
Greg Lopez	REP	41
Heidi Ganahl	REP	32
Total Votes		73

	Total
Unresolved Write-In	0

### Secretary of State - REP (Vote for 1) REP

	Total
Times Cast	434 / 0 N/A
Undervotes	323
Overvotes	9

Candidate	Party	Total
Tina Peters	REP	21
Mike O'Donnell	REP	30
Pam Anderson	REP	51
Total Votes		102

	Total
Unresolved Write-In	0

### State Treasurer - REP (Vote for 1) REP

	Total
Times Cast	434 / 0 N/A
Undervotes	387
Overvotes	0

Candidate	Party	Total
Lang Sias	REP	47
Total Votes		47

	Total
Unresolved Write-In	0

*dm*  
*dm*

**Attorney General - REP (Vote for 1)  
REP**

		Total
Times Cast		434 / 0 N/A
Undervotes		391
Overvotes		0
Candidate	Party	Total
John Kellner	REP	43
Total Votes		43
		Total
Unresolved Write-In		0

**State Board of Education Member - At Large - REP (Vote for 1)  
REP**

		Total
Times Cast		434 / 0 N/A
Undervotes		389
Overvotes		0
Candidate	Party	Total
Dan Maloit	REP	45
Total Votes		45
		Total
Unresolved Write-In		0

**State Senator - District 15 - REP (Vote for 1)  
REP**

		Total
Times Cast		83 / 0 N/A
Undervotes		65
Overvotes		0
Candidate	Party	Total
Rob Woodward	REP	18
Total Votes		18
		Total
Unresolved Write-In		0

**State Representative - District 10 - REP (Vote for 1)  
REP**

		Total
Times Cast		91 / 0 N/A
Undervotes		86
Overvotes		0
Candidate	Party	Total
William B. DeOreo	REP	5
Total Votes		5
		Total
Unresolved Write-In		0

*DM*  
*Ime*

**State Representative - District 11 - REP (Vote for 1)  
REP**

		Total
Times Cast		107 / 0 N/A
Undervotes		99
Overvotes		0
Candidate	Party	Total
Tara Menza	REP	8
Total Votes		8
		Total
Unresolved Write-In		0

**State Representative - District 12 - REP (Vote for 1)  
REP**

		Total
Times Cast		113 / 0 N/A
Undervotes		103
Overvotes		0
Candidate	Party	Total
Anya Kirvan	REP	10
Total Votes		10
		Total
Unresolved Write-In		0

**State Representative - District 19 - REP (Vote for 1)  
REP**

		Total
Times Cast		45 / 0 N/A
Undervotes		33
Overvotes		0
Candidate	Party	Total
Dan Woog	REP	12
Total Votes		12
		Total
Unresolved Write-In		0

*DM*  
*DM*



**State Representative - District 49 - REP (Vote for 1)**  
**REP**

	Total	
Times Cast	78 / 0	N/A
Undervotes	58	
Overvotes	2	

Candidate	Party	Total
Kathryn Lehr	REP	6
John A. Caldwell	REP	12
<b>Total Votes</b>		<b>18</b>

	Total
Unresolved Write-In	0

**Boulder County Commissioner - District 3 - REP (Vote for 1)**  
**REP**

	Total	
Times Cast	434 / 0	N/A
Undervotes	434	
Overvotes	0	

Candidate	Party	Total
There are no candidates for this office		
<b>Total Votes</b>		<b>0</b>

	Total
Unresolved Write-In	0

**Boulder County Clerk and Recorder - REP (Vote for 1)**  
**REP**

	Total	
Times Cast	434 / 0	N/A
Undervotes	434	
Overvotes	0	

Candidate	Party	Total
There are no candidates for this office		
<b>Total Votes</b>		<b>0</b>

	Total
Unresolved Write-In	0

*Jmc* *DM*

### Boulder County Treasurer - REP (Vote for 1) REP

	Total
Times Cast	434 / 0 N/A
Undervotes	434
Overvotes	0

Candidate	Party	Total
There are no candidates for this office		
Total Votes		0

	Total
Unresolved Write-In	0

### Boulder County Assessor - REP (Vote for 1) REP

	Total
Times Cast	434 / 0 N/A
Undervotes	434
Overvotes	0

Candidate	Party	Total
There are no candidates for this office		
Total Votes		0

	Total
Unresolved Write-In	0

### Boulder County Sheriff - REP (Vote for 1) REP

	Total
Times Cast	434 / 0 N/A
Undervotes	434
Overvotes	0

Candidate	Party	Total
There are no candidates for this office		
Total Votes		0

	Total
Unresolved Write-In	0

*DM*  
*Jmu*

**Boulder County Surveyor - REP (Vote for 1)  
REP**

	Total
Times Cast	434 / 0 N/A
Undervotes	434
Overvotes	0

Candidate	Party	Total
There are no candidates for this office		
Total Votes		0

	Total
Unresolved Write-In	0

**Boulder County Coroner - REP (Vote for 1)  
REP**

	Total
Times Cast	434 / 0 N/A
Undervotes	434
Overvotes	0

Candidate	Party	Total
There are no candidates for this office		
Total Votes		0

	Total
Unresolved Write-In	0

*Jmc* *Jm*