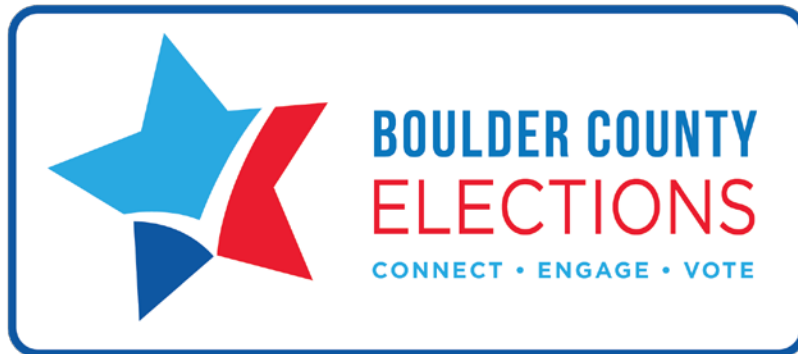




# Logic and Accuracy Test Information Packet 2018 Primary Election



**Boulder County Clerk & Recorder  
Elections Division**

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**AGENDA**  
**LOGIC AND ACCURACY TEST (LAT)**  
**May 30 - June 1, 2018**

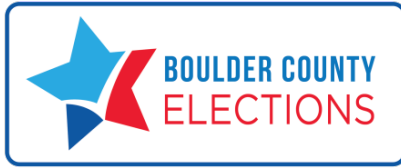
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**Planned Schedule:**

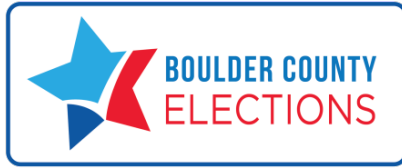
Please check in early at Elections Office front desk to obtain badge and name tags with affiliations

- Wednesday, May 30 9:30am – 4:30pm (LAT Kick-Off)
  - Thursday, May 31 9:30am – 4:30pm (Contingency Day)
  - Friday, June 1 1:00pm – 3:00pm (LAT Board Sign-Off)
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1. Storage of personal items (east wing lockers or designated area)
  - The following items are prohibited in the testing area:  
Personal belongings, cell phones, cameras, recording devices, memory devices, laptops, food or beverages
2. Welcome
  - Sign-In
  - Review and sign oaths
  - Obtain Information Packet
  - Introduction and Overview
  - Testing Board equipment selection review
3. Information packet contents
  - Agenda
  - Guidelines for Observers (Page 3)
  - Requirements of the LAT (Page 4)
  - Test Board Procedures (Page 6)
  - Sample Manual Verification Worksheet (Page 15)
  - Statute and Rule references (Page 18)
4. Ballot marking and tally
  - One (1) packet of 25 ballots provided to each test board member
  - Test ballots voted
  - Manual Verification Worksheet used to create a team tally (2 person process)

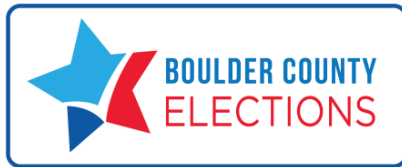


5. Image Cast X (ICX) and Image Cast Voter Activation (ICVA) Test (Ballot Marking Device)
  - Testing Board validates contest titles and content
  - Mark and print all Testing Board ballots using the ICX including at least one ballot using audio ballot playback and accessible input devices
  - Device qualification form completed for selected ICX and ICVA , Audio and printers
  
6. Scanner Test (Mail and In-Person ballot counting device)
  - Take manually marked and ICX marked ballots to scanner
  - Inspect for damage or improper markings
  - Process ballots on scanner in separate batches
  - Adjudicate applicable ballots in Adjudication
    - Adjudication is not required on ICX ballots unless there are write-ins
  - Tabulate and verify results against team tally
  - Complete device qualification form for selected scanner
  
7. Prepare Testing Results (optional attendance)
  - Tabulate scanned batches to create cumulative results for the LAT
  - Create cumulative result comparisons
  - Collect, organize and complete test documentation
  
8. Resetting and sealing of equipment
  - Reset and seal ICX and ICVA equipment
  - Reset Scan Stations
  - Reset Results Tally and Reporting (RTR)
  
9. Completion of testing
  - Review test information and results
  - Complete device qualification form for Tally
  - Complete Statement of Qualification
  
10. Secure storage of all LAT material and ballots



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

- The following items are prohibited in the testing area:
  - Personal belongings, cell phones, cameras, recording devices, memory devices, laptops, PDAs, food and beverages
- 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 of the Elections staff time and resources today. Therefore, any questions should be directed to Justine Vigil-Tapia, Elections Coordinator or her designee. At the conclusion of testing a representative of the Clerk's testing staff will be available for questions.



## 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 voting position for every contest candidate, situations where a voter may choose two or more options, and overvotes and undervotes for each contest (there are no write-in candidates for the primary election)
- Testing board is comprised of one registered elector from each major political party
- Test board members are registered in Boulder County
- 25 test ballots have been provided to each test board member
- All ballots are marked "TEST"
- Test ballots are marked using the instructions printed on the ballot
- Testing Board has 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
- Test board members have randomly selected the machines to test

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

Test Board members completed the following:

- Verified that the ICX public counter was set to zero and that the View Session Report on the ICVA had no cards activated
- Used at least one ICX to mark and print 25 ballots in the same manner he/she manually marked the test ballots (aside from overvotes)
- Marked at least one ballot using audio ballot playback and accessible input devices

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

Test Board members completed the following:

- Verified the zero report generated from the scanner
- Observed the separate counting of county and member's test ballots on at least one scanner

### Tabulation:

Test Board members completed the following:

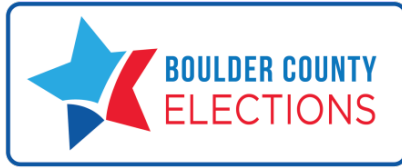
- Verified the zero report generated from RTR before tabulating
- Observed the separate tabulation of all manually marked and ICX marked test ballots
- Obtained results report and verified that the machine results exactly matched his/her predetermined tally.

### Comparison:

Test Board members completed the following:

- Verified that the results report generated exactly corresponded to the Testing Board member's predetermined tally of the votes.

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



Boulder County Elections

## Boulder County Clerk and Recorder

1750 33rd Street, Suite 200 • Boulder, CO 80301

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### **Storage of test material:**

- All test materials were secured in a sealed metal cage when not in use
- Each Test 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

### **Cumulative Results of LAT:**

- All ICX, In-Person, and Mail Ballot results were tabulated together to create cumulative results
- Tabulation results have been saved for ENR (Election Night Reporting) testing

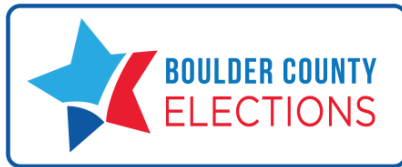
### **Resetting and sealing of equipment at the end of the test:**

- Testing Board watched the county reset and seal each voting device
- 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 serial 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



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

### **Common acronyms:**

- **CVR:** Cast Vote Record
- **ICC:** Image Cast Central (Scan Station also referred to as Tabulator)
- **ICVA:** Image Cast Voter Activation laptop
- **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)

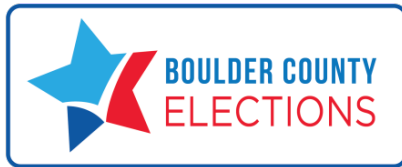
### **Purpose of LAT (CRS 1-7-509 and Rule 11):**

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. It also includes testing the ballot marking devices (ICX).

### **Test 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 test board member.



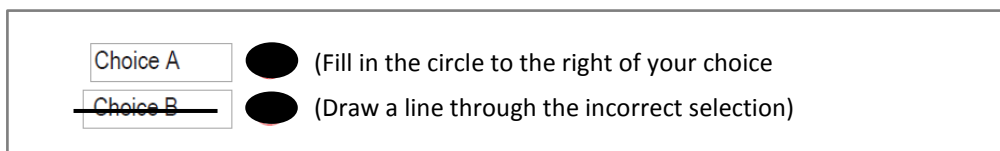


### Ballot Marking:

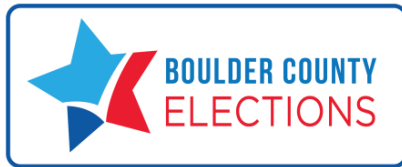
The county provides a packet of test ballots to each test board member for use in testing. Packets include 25 unique precinct district style ballots. This is in addition to the ballots prepared to fulfill the county test deck requirements.

1. Confirm the appropriate number of ballots is included, and that they are all labeled “TEST” and that they are numbered at the top, 1 through 25.
2. Mark your ballots following the instructions printed on the ballots.
  - Use black or blue ink pen and fill in the oval completely; no X or √.
  - 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.
3. Voter instructions for correcting a mistake:

*NOTE: Ballots that are damaged or improperly marked will be reviewed and/or rejected in 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, make a written note in the contest area to clarify your voting intent and/or request a replacement ballot from staff.
4. Overvotes on ICX:
    - Test ballots are used for the ICX portion of voting, which does not allow for overvotes. Paper test ballot overvoted contests will be left blank on the ICX and reflect as blank contest on the printed ballot.
  5. When finished marking your paper ballots, verify the ballots are in sequential order (1-25 upper right corner) and alert staff that you are ready to create your tally.



### Creating the tally:

The county will pair up each member with another individual and provide you with a Manual Verification Worksheet (MVW). They will also assign you a team number.

Test Board members are then provided a set of MVWs.

- 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.

For each Sheet of ballots, use the following procedure to create a tally for your test ballots:

1. Print both participant names on the first page of your MVW. (This document will be available to the public; please do not add your signature.)
2. Collect and organize the ballots in sequential order, confirm you have the appropriate number of ballots.
3. Starting with ballot #1, Person A reads aloud the ballot number recorded in the top right corner while Person B verifies this on the MVW.
4. Person A reads aloud each contest name and contest selection made, indicating any voting marks that are outside the prescribed voting instructions.
5. 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 category for that contest.
6. When all ballots have been recorded, team members trade roles to verify the accuracy of the MVW, noting and resolving any discrepancies found.
7. For each MVW set, the team then adds up the selections for each contest option and records this number in the applicable Total field.
  - It is extremely important to validate each other's calculations.
8. Testing Board Sheet 2 Totals are then transferred to the first Sheet in the column labeled "Sheet 2 Total", and the team adds the totals from Sheet 1 and Sheet 2 to create the Grand Total (team tally). Calculators are provided.
9. After verification has been completed, teams will provide their MVW to an election support staff member.
10. A copy of the MVW is made by support staff, initialed by team members, and then entered into the electronic cumulative manual verification spreadsheet.
  - By initialing the first page of the MVW, teams are confirming they have verified it to be accurate and that all resolution issues have been identified and recorded.



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

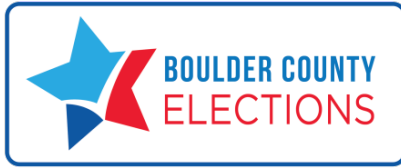
The ICX is a Ballot Marking Device (BMD) that visually displays or audibly presents ballots and allows voters to print a paper ballot. An ICX BMD also provides voting accessibility to voters who may be otherwise unable to mark a paper ballot privately and independently. It includes an audio ballot playback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

You cannot OVERVOTE on an ICX BMD. For ballots containing an OVERVOTE, the team should confirm that no OVERVOTE is possible, and then change the contest to a BLANK CONTEST for reconciliation purposes.

1. 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. The Testing Board will also confirm there are no voter activation cards reported in the View Session Report on the ICVA.
2. Ballots are organized so they are back in numeric order, matching the MVW. This helps members quickly resolve any discrepancies in reconciliation, if necessary.
3. Test ballots are then brought to the selected ICX where participants will:
  - Mark and validate the ICX audio and screen content for at least one manually marked test ballot pertaining to their district.
  - Confirm that contests and selections on the ICX Review screen match the paper ballot prior to printing (overvotes reflecting as a blank/unvoted contest).
  - Verify that contests and selections printed from the ICX match the paper ballot (overvotes reflecting as a blank contest).

Additionally, each Testing Board member with party participants will:

- Mark and print 25 ballots in the same manner he/she manually marked the test ballots.
  - Mark at least one ballot using the audio ballot playback and accessible input device.
  - Confirm the accuracy of audio, screen, and printed content for each applicable district style in his/her test packet.
4. Marking while verifying audio and screen content:
    - Person A
      - ✓ Compares audio against the manually marked test ballot to confirm accuracy of titles, choices, and text
      - ✓ Makes the selection on ICX that matches the manually marked ballot selection once audio is verified
    - Person B
      - ✓ Compares audio against the ICX screen to confirm accuracy of 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, the team verifies that the titles and choices displayed on the ICX Review Screen match the manually marked ballot selections and MVW.
7. Once printed, the team verifies the titles and selections of the ICX printed ballot and then initials the manually marked ballot, attesting that it matches the manually marked test ballot and MVW.
8. Participants will, 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. When all test ballots have been marked and printed on the ICX, the team completes a device qualification form confirming that the screen, audio, and printed content is accurate, and that the selected ballot marking device functioned properly during testing.



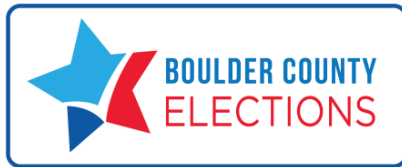
**Scanner Test (Mail and In-Person paper ballot counting device):**

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 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 1.1.14)  
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. Team ballots (manually marked and ICX marked) are brought to a selected ICC scan station and team members check that the Total Ballots Accepted on the scan screen is set to zero.
4. Team 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
  - The team is provided a device qualification form to complete after tabulation
  - Applicable ballots are adjudicated if needed following state rule and guidelines



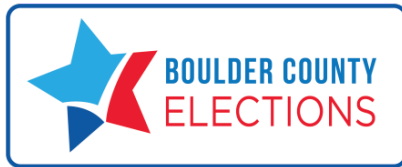
**Scanner results tabulated and verified:**

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 team’s test ballots.
  - 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 correspond 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 machine.
5. Team members complete the device qualification forms 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 DEO 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
- 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.

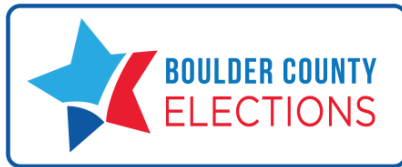
As is required for the Test Board member ballots, the county ballots are counted on one or more scanners, and then tabulated for comparison against the county tally (MVW). The Test Board will oversee this process, and verify the results for accuracy and completeness.

1. The County Test Deck is scanned into one or more ICC scanners, after participant testing is complete.
2. After tabulation, an Election Summary Report by Tabulator (ICC) is generated for the isolated tabulation of the County Test Deck.
3. Results are verified against the predetermined County Test Deck tally.

### **Prepare Results (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 into 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. Cumulative result information is entered and validated in the Cumulative Results Comparison spreadsheet.
5. Testing documentation is collected and organized.
6. Statement of Qualification document is drafted.



**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 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.
2. Testing Board witnesses the resetting and sealing of the ICX and ICVA equipment, verifying the seals number attached to each device.

**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 completes the device qualification form for Tally
4. Testing Board and Clerk completes 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.



	Ballot 1	Ballot 2	Ballot 3	Ballot 4	Ballot 5	Ballot 6	Ballot 7	Ballot 8	Ballot 9	Ballot 10	Ballot 11	Ballot 12	Sheet 1 Total	Sheet 2 Total	Grand Total
<b>Representative to the 116th United States Congress - District 2 - REP</b>															
Undervote	<del>1</del>	1	1	1	1	1	1	1	1	1	1	1	1	13	14
Peter Yu	1	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	11	0	11
<b>Representative to the 116th United States Congress - District 4 - REP</b>															
Undervote	<del>1</del>	1	1	1	1	1	1	1	1	1	1	1	1	13	14
Ken Buck	1	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	11	0	11
<b>Governor - REP</b>															
Undervote	<del>1</del>	1	1	1	1	1	1	1	1	1	1	1	1	0	1
Overvote	1	<del>1</del>	1	1	1	1	1	1	1	1	1	1	1	1	2
Walker Stapleton	1	1	<del>1</del>	<del>1</del>	1	1	1	1	1	1	1	1	2	5	7
Greg Lopez	1	1	1	1	<del>1</del>	<del>1</del>	<del>1</del>	1	1	1	1	1	3	3	6
Doug Robinson	1	1	1	1	1	1	1	<del>1</del>	<del>1</del>	<del>1</del>	1	1	3	2	5
Victor Mitchell	1	1	1	1	1	1	1	1	1	1	<del>1</del>	<del>1</del>	2	2	4
<b>Secretary of State - REP</b>															
Undervote	<del>1</del>	1	1	1	1	1	1	1	1	1	1	1	1	13	14
Wayne Williams	1	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	11	0	11
<b>State Treasurer - REP</b>															
Undervote	<del>1</del>	1	1	1	1	1	1	1	1	1	1	1	1	3	4
Overvote	1	<del>1</del>	<del>1</del>	1	1	1	1	1	1	1	1	1	2	4	6
Justin Everett	1	1	1	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	1	1	1	1	1	2	3	5
Polly Lawrence	1	1	1	1	1	<del>1</del>	<del>1</del>	<del>1</del>	1	1	1	1	3	1	4
Brian Watson	1	1	1	<del>1</del>	1	1	1	1	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	4	2	6
<b>Attorney General - REP</b>															
Undervote	<del>1</del>	1	1	1	1	1	1	1	1	1	1	1	1	13	14
George Brauchler	1	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	11	0	11
<b>State Board of Education Member - Congressional District 2 - REP</b>															
Undervote	<del>1</del>	1	1	1	1	1	1	1	1	1	1	1	1	13	14
Johnny Barrett	1	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	11	0	11
<b>State Board of Education Member - Congressional District 4 - REP</b>															
Undervote	<del>1</del>	1	1	1	1	1	1	1	1	1	1	1	1	13	14
Debora L. Scheffel	1	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	11	0	11
<b>Regent of the University of Colorado - At Large - REP</b>															
Undervote	<del>1</del>	1	1	1	1	1	1	1	1	1	1	1	1	13	14
Ken Montera	1	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	11	0	11
<b>State Senator - District 16 - REP</b>															
Undervote	<del>1</del>	1	1	1	1	1	1	1	1	1	1	1	1	13	14
Tim Neville	1	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	11	0	11
<b>State Representative - District 33 - REP</b>															
Undervote	<del>1</del>	1	1	1	1	1	1	1	1	1	1	1	1	13	14
Eric Rutherford	1	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	11	0	11
<b>District Attorney - 20th Judicial District</b>															
Undervote	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	<del>1</del>	12	13	25
There are no candidates for this office															

	Ballot 1	Ballot 2	Ballot 3	Ballot 4	Ballot 5	Ballot 6	Ballot 7	Ballot 8	Ballot 9	Ballot 10	Ballot 11	Ballot 12	Sheet 1 Total	Sheet 2 Total	Grand Total
<b>Boulder County Commissioner - REP</b>															
Undervote	1	1	1	1	1	1	1	1	1	1	1	1	1	13	14
Gary Cooper	1	1	1	1	1	1	1	1	1	1	1	1	11	0	11
<b>Boulder County Clerk and Record - REP</b>															
Undervote	1	1	1	1	1	1	1	1	1	1	1	1	12	13	25
There are no candidates for this office															
<b>Boulder County Treasurer - REP</b>															
Undervote	1	1	1	1	1	1	1	1	1	1	1	1	12	13	25
There are no candidates for this office															
<b>Boulder County Assessor - REP</b>															
Undervote	1	1	1	1	1	1	1	1	1	1	1	1	12	13	25
There are no candidates for this office															
<b>Boulder County Sheriff - REP</b>															
Undervote	1	1	1	1	1	1	1	1	1	1	1	1	1	13	14
John Bedrick	1	1	1	1	1	1	1	1	1	1	1	1	11	0	11
<b>Boulder County Surveyor - REP</b>															
Undervote	1	1	1	1	1	1	1	1	1	1	1	1	12	13	25
There are no candidates for this office															
<b>Boulder County Coroner - REP</b>															
Undervote	1	1	1	1	1	1	1	1	1	1	1	1	12	13	25
There are no candidates for this office															

SAMPLE

**1-7-509. Electronic and electromechanical vote counting - testing of equipment required - definition**

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**(1) (a)** An electronic or electromechanical voting system shall be tested at the conclusion of maintenance and testing. The tests shall be sufficient to determine that the voting system is properly programmed, the election is correctly defined on the voting system, and all of the voting system's input, output, and communication devices are working properly.

**(b)** The designated election official shall conduct at least three tests on all electronic and electromechanical voting equipment, including a hardware test, a public logic and accuracy test conducted in accordance with subsection (2) of this section, and a postelection test or audit conducted in accordance with rules promulgated by the secretary of state. Each type of ballot, including mail, provisional, and audio ballots, shall be tested in accordance with rules promulgated by the secretary of state. The tests must ensure that the equipment will correctly count the votes cast for all offices and on all ballot questions and ballot issues and that the voting system will accurately count ballots of all types.

**(c) (I)** For all partisan elections, the designated election official shall select a testing board comprising at least two persons, one from each major political party, from the list provided by the major political parties pursuant to section 1-6-102.

**(II)** For all nonpartisan elections, the designated election official or coordinated election official, as applicable, shall select a testing board comprising at least two persons who are registered electors.

**(III)** Repealed.

**(2) (a)** A public test of voting equipment shall be conducted prior to the commencement of voting in accordance with this section by processing a preaudited group of ballots produced so as to record a predetermined number of valid votes for each candidate and on each ballot question or ballot issue. The test shall ensure that the system accurately records votes when the elector has the option of voting for more than one candidate in a race. The test shall ensure that the voting system properly rejects and does not count overvotes and undervotes.

**(b)** The public test shall be open to representatives of the political parties, the press, and the public, subject to the rules promulgated by the secretary of state pursuant to subsection (6) of this section. 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. 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. The absence of observers or designees shall not delay or stop the public test.

**(c)** The testing board shall convene and designate at least one member to represent the board during the testing, sign the necessary reports, and report to the board. The programs and ballots used for testing shall be attested to and sealed by the board and retained in the custody of the designated election official. The absence of a member of the testing board shall not delay or stop the test.

**(d)** Upon completion of the testing conducted pursuant to this section, the testing board or its representative and the representatives of the political parties, ballot issue committees, and coordinating entities who attended the test may witness the resetting of each device that passed the test to a preelection state of readiness and the sealing of each such device in order to secure its state of readiness.

(e) The testing board or its representative shall sign a written statement indicating the devices tested, the results of the testing, the protective counter numbers of each device, if applicable, the number of the seal attached to each device upon completion of the testing, any problems reported to the designated election official as a result of the testing, and whether each device tested is satisfactory or unsatisfactory.

(3) Notice of the fact that the public test will take place shall be posted in the designated public place for posting notices in the county for at least seven days before the public test. The notice shall indicate the general time frame during which the test may take place and the manner in which members of the public may obtain specific information about the time and place of the test. Nothing in this subsection

(3) shall preclude the use of additional methods of providing information about the public test to members of the public.

(4) (a) If any tested device is found to have an error in tabulation, it shall be deemed unsatisfactory. For each device deemed unsatisfactory, the testing board shall attempt to determine the cause of the error, attempt to identify and test other devices that could reasonably be expected to have the same error, and test a number of additional devices sufficient to determine that all other devices are satisfactory. The cause of any error detected shall be corrected, and an errorless count shall be made before the voting equipment is approved. The test shall be repeated and errorless results achieved before official ballots are counted.

(b) If an error is detected in the operation or output of an electronic voting device, including an

error in spelling or in the order of candidates on a ballot, the problem shall be reported to the testing board and the designated election official. The designated election official shall correct the error.

(c) A voting device deemed unsatisfactory shall be recoded, repaired, or replaced and shall be made available for retesting unless a sufficient number of tested backup devices is available to replace the unsatisfactory device. The backup device may not be used in the election unless the testing board or its representative determines that the device is satisfactory. The designated election official shall announce at the conclusion of the first testing the date, place, and time that an unsatisfactory device will be retested, or, at the option of the testing board, the designated election official shall notify by telephone each person who was present at the first testing of the date, place, and time of the retesting.

(5) The designated election official shall keep records of all previous testing of electronic and electromechanical tabulation devices used in any election. Such records shall be available for inspection and reference during public testing by any person in attendance. The need of the testing board for access to such records during the testing shall take precedence over the need of other attendees for access so that the work of the testing board will not be hindered. Records of testing shall include, for each device, the name of the person who tested the device and the date, place, time, and results of each test. Records of testing shall be retained as part of the official records of the election in which the device is used.

(6) The secretary of state shall promulgate rules in accordance with article 4 of title 24, C.R.S., prescribing the manner of performing the logic and accuracy testing required by this section.

### 11.3.2 Logic and Accuracy Test

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- (a) The county clerk must conduct the public Logic and Accuracy Test no later than the 18<sup>th</sup> day before election day.
- (b) The county must ensure that the Logic and Accuracy Test is open to the extent allowable in accordance with section 1-7-509(2)(b), C.R.S. The county clerk may limit the number of representatives from each group because of space limitations.
- (c) Preparing for the Logic and Accuracy Test
  - (1) The county must 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, and include overvotes and undervotes for each contest. The county test deck must include at least one write-in vote for each qualified write-in candidate so that all qualified write-in candidate names will appear in the LAT result uploaded to ENR as required by Rule 11.10.3.
  - (2) The county must convene a Testing Board of one registered elector from each of the major political parties. Testing Board members must be registered to vote in the county and be sworn in as election judges.
  - (3) The county must provide at least 25 ballots that are clearly marked as test ballots to each Testing Board member.
  - (4) Testing Board members must mark their test ballots following the instructions printed on the ballots and retain a record of the tally.
  - (5) The Testing Board must test the ballots on each type of voting device used in the election and each type of ballot including audio ballots.
- (d) Conducting the Test
  - (1) The county and Testing Board must observe the tabulation of all test ballots, compare the tabulation with the previously retained records of the test vote count, and correct any discrepancies before the device is used in the election.

- (2) The county must reset the public counter to zero on all devices and present zero tapes to the Testing Board for verification.
- (3) The county must make an appropriate number of voting devices available and the Testing Board may witness the programming and/or downloading of memory devices necessary for the test.
- (4) The Testing Board and designated election official must count the test ballots as follows, if applicable:
  - (A) Optical Scanners:
    - (i) The Testing Board must test at least one central count optical scanner and at least one optical scanner used at a voter service and polling center, if applicable.
    - (ii) The Testing Board must randomly select the machines to test.
    - (iii) The Testing Board must count the board and county's test ballot batches separately and generate reports to verify that the machine count is identical to the predetermined tally.
  - (B) DREs:
    - (i) The Testing Board must test at least one DRE.
    - (ii) The Testing Board must randomly select the machines to test.
    - (iii) Each member of the Testing Board must separately cast his or her test ballots on the selected DREs. Each Testing Board member must cast at least one of his or her test ballots using the audio ballot playback and accessible input devices.
    - (iv) Each Testing Board member must examine the tabulation tape or report and verify that the DRE results match what the Testing Board member manually marked on his or her test ballots.
  - (C) Ballot Marking Devices (BMDs):
    - (i) The Testing Board must randomly select and test at least one BMD.
    - (ii) At least two members of the Testing Board must use the selected BMD to mark and print at least 25 ballots in the same manner that the testing board member manually marked his or her test ballots. At least two members of the Testing Board must mark at least one of his or her test ballots using the audio ballot playback and accessible input devices.

- (iii) A Testing Board member or county election official must separately scan and tabulate the test ballots marked with and printed from the BMD on one central count or polling location scanner, and generate a results report.
  - (iv) Each Testing Board member must verify that the results report generated from the scanner exactly corresponds to the testing board member's tally of the votes on the manually marked paper ballots comprising his or her test ballots.
- (e) Completing the test
  - (1) 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.
  - (2) The county must upload the results from all tested scanners and DREs to the tabulation software, and save the tabulation results for the ENR test required under Rule 11.10.3.
  - (3) After testing, the Testing Board must watch the county reset and seal each voting device.
  - (4) 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.
  - (5) The county may not change the programming of any voting device after completing the logic and accuracy test for an election, except as required to conduct a recount or as authorized by the Secretary of State.

**Rule 18. Uniform Counting Standards for Paper Ballots**

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- 18.1 In any election where a multiple page printed ballot is used, a voter must vote and return all pages of the ballot at the same time. Any voter who returns at least one page of a multiple page printed ballot will be considered to have voted and the county clerk or designated election official must count the votes on the submitted pages. The county clerk must not count votes on additional pages returned at a later time. The county clerk must appropriately mark, set aside, and preserve the ballots as election records in accordance with section 1-7-802, C.R.S.
- 18.2 Standards for hand counting paper ballots
- 18.2.1 In accordance with section 1-7-309, C.R.S., and Rule 18.5, judges counting ballots must consider the intent of the voter.
- 18.2.2 If a race or ballot measure is overvoted, the judges must not count any vote for that race or ballot measure.
- 18.2.3 If a race or ballot measure contains no markings by the voter, no tally will be made for that race or ballot measure. But all other candidate races or ballot measures properly marked by the voter on the ballot must be counted.
- 18.2.4 A ballot which has no markings for any candidate races or ballot measures must be tallied as a blank ballot.
- 18.3 Standards for counting paper ballots on ballot scanners
- 18.3.1 Procedures for counting paper ballots on ballot scanners at polling locations
- (a) To the extent permitted by its voting system, the county must program ballot scanners to sort ballots with write-in votes to a segregated bin of the ballot box or digital media and to initially reject blank ballots and ballots with overvotes.
- (b) Voters whose ballots are initially rejected by a ballot scanner as a blank or overvoted ballot must be given the opportunity to review and correct their ballot. If after review, a voter requests to submit the blank or overvoted ballot as originally marked, an election judge must assist the voter by overriding the initial rejection setting on the ballot scanner.
- (c) At the conclusion of voting, ballots with write-in votes must be delivered to the central count location in a secure container for resolution in accordance with Rule 18.5.3.
- 18.3.2 Procedures for counting paper ballots on ballot scanners at central count locations
- (a) Before tabulation, a resolution board must duplicate damaged ballots, and may duplicate ballots with marks that may identify the voter, in accordance with Rule 18.4. Election judges may visually inspect every ballot for the limited purpose of segregating damaged ballots and ballots with marks that may identify the voter.
- (b) A county must sort ballots requiring resolution according to the capabilities of its voting system.
- (1) If a county's voting system supports digital ballot resolution, the county must program the voting system to digitally queue for resolution blank



ballots, ballots with write-in votes, and ballots with overvotes. Ballots with marginal or ambiguous markings must be sorted according to the system provider's specifications, or, if different, the applicable Conditions of Use issued by the Secretary of State. The digitally queued ballots must be resolved by election judges in accordance with Rule 18.5.

- (2) If a county's voting system does not support digital ballot resolution, the county must program the central count ballot scanners to reject or sort blank ballots and ballots with overvotes, and to sort ballots with write-in votes. The resolution board must resolve all ballots initially rejected and sorted by the central count ballot scanners in accordance with Rule 18.5.
- (c) A resolution board must resolve ballots sorted or rejected for resolution.
- (1) In partisan elections, a resolution board must consist of at least two election judges affiliated with different major political parties.
  - (2) In nonpartisan elections, a resolution board must consist of at least two election judges.
  - (3) In counties with a voting system that does not support digital resolution, the county must have at least one resolution board.
  - (4) In counties with a voting system that supports digital resolution, a resolution board must work at each resolution workstation.
  - (5) The members of a resolution board for an election may change, but all members of the resolution board at any particular time must satisfy the eligibility requirements specified in this Rule 18.3.2(c).

## 18.4 Ballot Duplication

- 18.4.1 A resolution board must duplicate a voter's choices or selections on a damaged ballot onto a blank ballot of the same ballot style in accordance with Rule 18.4. During the duplication process, and to the extent necessary, the resolution board must also resolve overvotes, write-in votes, and ambiguous markings in accordance with Rule 18.5. During ballot duplication, two additional election judges must observe or review the work of each resolution board. In a partisan election, the observing election judges must be representatives of each major political party.
- 18.4.2 A resolution board must review the original ballot and the duplicated ballot, and consult the Voter Intent Guide if necessary, to ensure that each damaged ballot has been properly and accurately duplicated.
- 18.4.3 In order to match each damaged ballot to its corresponding duplicated ballot, the resolution board must identify and mark each damaged and duplicated ballot with the type of ballot and a unique number, similar to the following example: mark the damaged ballot "Orig 0001," and the counterpart duplicated ballot "Dupe 0001."
- 18.4.4 The resolution board must maintain a written log itemizing all damaged ballots that it duplicates. The duplication log must include at least each damaged and duplicated ballot's unique number, the date on which it was duplicated, the reason for duplication, and the printed names and signatures of the members of the resolution board.

18.4.5 A county clerk must count duplicated ballots in the same manner as all other paper ballots.

18.4.6 Before retention for storage, the resolution board must deposit all duplicated ballots and duplication logs in a sealable container that is clearly marked to identify its contents (e.g., “damaged ballots”). The county must maintain chain-of-custody and seal logs for the damaged ballot container at all times during the statutory election records retention period.

## 18.5 Ballot Resolution

18.5.1 A resolution board must resolve all blank ballots and ballots with overvotes, write-in votes, and ambiguous markings in accordance with the Secretary of State’s Voter Intent Guide.

18.5.2 Resolution of blank ballots. A resolution board must examine blank ballots to determine if the ballot is a true blank ballot or one that has been marked in a manner or medium that was not detected by the voting system.

(a) Counties without digital resolution capability. If the ballot is truly blank, the resolution board must re-scan the ballot and override the initial rejection setting. If the ballot is marked in a manner or medium that can be discerned by the resolution board but cannot be tabulated by the voting system, the resolution board must duplicate the ballot in accordance with Rule 18.4 and, to the extent necessary, resolve the ballot in accordance with Rule 18.5.

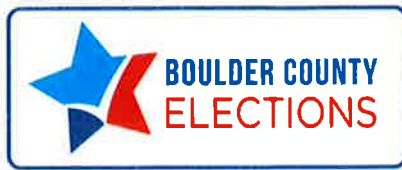
(b) Counties with digital resolution capability. If the ballot is truly blank, the resolution board must record the ballot as a blank ballot in the voting system’s resolution application. If the ballot is marked in a manner or medium that can be discerned by the resolution board but cannot be tabulated by the voting system, the resolution board must resolve the ballot in the voting system’s resolution application in accordance with Rules 18.5.2(b) and 18.5.3.

### 18.5.3 Resolution of write-in votes

(a) A resolution board must resolve all write-in votes in accordance with the Secretary of State’s Voter Intent Guide.

(b) In counties using voting systems featuring digital resolution capable of detecting voter markings on or in a write-in line or area, and if the voter does not mark any of the target areas in a particular contest, the resolution board must resolve during initial adjudication the written name of an eligible write-in candidate as a valid vote for that candidate even if the voter fails to mark the corresponding target area.

(c) In counties using voting systems that do not have digital resolution capability, or the digital resolution feature is not capable of detecting voter markings on or in a write-in line or area if the corresponding target area is not also marked, and if the voter does not mark any other target area in a particular contest, the resolution board must count as valid votes for eligible write-in candidates those instances in which the voter both marks the applicable target area and writes in the name of a certified write-in candidate. During any recount, if the number of undervotes in a ballot contest could change the outcome if attributed to an eligible write-in candidate, votes for that candidate must be counted whether or not the target area designating the selection of a write-in candidate has been marked, provided that the number of candidates chosen does not exceed the number permitted in that office.



Boulder County Elections  
**Boulder County Clerk and Recorder**

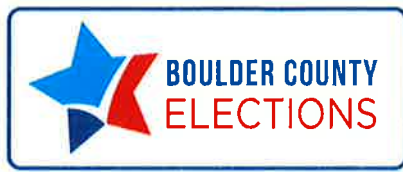
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 www.BoulderCountyVotes.org • Phone: (303) 413-7740

**Logic and Accuracy Test Documentation**

ICC Test Information

<b>Election Title:</b>	
2018 Boulder County Primary Election – June 26, 2018	
<b>Dominion Database Project Creation Date:</b>	
April 30, 2018	
<b>Test Date(s):</b>	<b>Test Location:</b>
May 30 – June 1, 2018	1750 33 <sup>rd</sup> St. Boulder, CO

Title/Team #	Printed Name	Scan Station	Satisfactory / Unsatisfactory	Initials
LAT Coordinator County Test Deck	Justine Vigil-Tapia <i>Boulder County Elections Coordinator</i>	N/A	N/A	On File
Board Member – Democratic Team #1A	Paul Geissler	B	Satisfactory	On File
Board Member – Republican Team #2A	Catherine Jarrett	F	Satisfactory	On File
Member – Democratic Team #1B	Angelique “Angie” Layton	B	Satisfactory	On File
Member – Republican Team #2B	Marshall Dawson	F	Satisfactory	On File
County Test Deck	Paul Geissler- Democratic Catherine Jarrett -Republican	A, C, D, E, G, H, I, and J	Satisfactory	On File



**Boulder County Elections  
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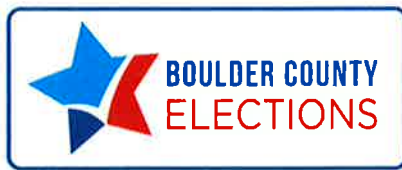
**Logic and Accuracy Test Documentation**

**Image Cast Voter Authorization (ICVA) Image Cast X (ICX, BMD) Test Information**

<b>Election Title:</b>	
<b>2018 Boulder County Primary Election – June 26, 2018</b>	
<b>Dominion Database Project Creation Date:</b>	
April 30, 2018	
<b>Test Date(s):</b>	<b>Test Location:</b>
May 30 – June 1, 2018	1750 33 <sup>rd</sup> St. Boulder, CO

**DEVICE DOCUMENTATION**

<b>Device ID</b>	<b>Type of Device</b>	<b>Members Testing Device</b>	<b>Satisfactory / Unsatisfactory</b>	<b>Initials</b>	<b>Seal # (Where applicable)</b>
ICVA-015 Serial # 4KSP2R1	Voter Activation Card Writer	Test Board Member REPUBLICAN	<b>Satisfactory</b>	On File	On File
Image Cast #008 Serial #RF2GB01VS9E	Ballot Marking Device (BMD)	Catherine Jarrett	<b>Satisfactory</b>	On File	On File
Image Cast Printer #008	Ballot Printer		<b>Satisfactory</b>	On File	On File
ICVA-015 Serial # 4KSP2R1	Voter Activation Card Writer	REPUBLICAN Participant	<b>Satisfactory</b>	On File	On File
Image Cast #013 Serial #RF2GB01VJZM	Ballot Marking Device (BMD)	Marshall Dawson	<b>Satisfactory</b>	On File	On File
Image Cast Printer #013	Voter Activation Card Writer		<b>Satisfactory</b>	On File	On File
ICVA-007 – Serial #74LFBS1	Voter Activation Card Writer	Test Board Member DEMOCRATIC	<b>Satisfactory</b>	On File	On File
Image Cast #004 Serial # RF2GB01VVLV	Ballot Marking Device (BMD)	Paul Geissler	<b>Satisfactory</b>	On File	On File
Image Cast Printer #004	Voter Activation Card Writer		<b>Satisfactory</b>	On File	On File
ICVA-007 – Serial #74LFBS1	Voter Activation Card Writer	DEMOCRATIC Participant	<b>Satisfactory</b>	On File	On File
Image Cast #006 Serial # RF2GB01VY9X	Ballot Marking Device (BMD)	Angelique Layton	<b>Satisfactory</b>	On File	On File
Image Cast Printer #006	Voter Activation Card Writer		<b>Satisfactory</b>	On File	On File



Boulder County Elections  
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**Logic and Accuracy Test**

**BOULDER COUNTY ELECTION SUPPORT STAFF**

Support Member	Justine Vigil-Tapia (Coordinator/Assistant to Board)
Support Member	Crystal Christman (Scan/Tabulation)
Support Member	Brad Light (ICX/Scan/Adjudication)
Support Member	Luke Belant (ICC Scan)
Support Member	Tricia Grossnickle (MVW/Assistant to Board)
Support Member	Jacob Feinberg (ICX)
Support Member	Nick Richebacher ( ICX/MVW)
Support Member	Ann Hansen (MVW/ICX/Scan/Adjudication)
Support Member	Patty Stahl (Inspect/Scan/Adjudication)
Support Member	Wes Soule (ICX/MVW)
Support Member	James Collins (ICX/MVW)



**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 Testing Board that all devices tested are qualified to be used in the 2018 Primary Election on June 26, 2018.

[Redacted signature]

Paul Geissler, Democratic Representative  
LAT Testing Board

[Redacted signature]

Catherine Jarrett, Republican Representative  
LAT Testing Board

[Redacted signature]

Hillary Hall  
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:

Paul Geissler, Democratic Party Representative of LAT Testing Board:

None

Catherine Jarrett, Republican Party Representative of LAT Testing Board:

[Redacted signature] none

Hillary Hall, Boulder County Clerk & Recorder:

none

# Election Summary Report

Closed Primary

Boulder

June 26, 2018

Summary for: All Contests, All Districts, All Tabulators, All Counting Groups  
Logic & Accuracy Test

Registered Voters: 1,006 of 128,119 (0.79%)

Ballots Cast: 1,006

## Representative to the 116th United States Congress - District 2 - DEM

		Total	
Times Cast		381 / 73,558	0.52%
Undervotes		318	
Overvotes		8	
Candidate	Party	Total	
Joe Neguse	DEM	13	23.64%
Mark Williams	DEM	42	76.36%
Total Votes		55	
		Total	
Unresolved Write-In		0	

## Representative to the 116th United States Congress - District 4 - DEM

		Total	
Times Cast		122 / 20,533	0.59%
Undervotes		102	
Overvotes		2	
Candidate	Party	Total	
Chase Kohne	DEM	8	44.44%
Karen McCormick	DEM	10	55.56%
Total Votes		18	
		Total	
Unresolved Write-In		0	

*Paul Geissler 6/1/18*  
*Catherine Jarrett 6-1-2018*

**Governor - DEM**

		Total	
Times Cast		503 / 94,091	0.53%
Undervotes		354	
Overvotes		9	
Candidate	Party	Total	
Cary Kennedy	DEM	33	23.57%
Jared Polis	DEM	30	21.43%
Donna Lynne	DEM	39	27.86%
Mike Johnston	DEM	38	27.14%
Total Votes		140	
		Total	
Unresolved Write-In		0	

**Secretary of State - DEM**

		Total	
Times Cast		503 / 94,091	0.53%
Undervotes		454	
Overvotes		0	
Candidate	Party	Total	
Jena Griswold	DEM	49	100.00%
Total Votes		49	
		Total	
Unresolved Write-In		0	

**State Treasurer - DEM**

		Total	
Times Cast		503 / 94,091	0.53%
Undervotes		423	
Overvotes		9	
Candidate	Party	Total	
Dave Young	DEM	39	54.93%
Bernard Douthit	DEM	32	45.07%
Total Votes		71	
		Total	
Unresolved Write-In		0	



**Attorney General - DEM**

		Total	
Times Cast		503 / 94,091	0.53%
Undervotes		423	
Overvotes		9	
Candidate	Party	Total	
Phil Weiser	DEM	31	43.66%
Joe Salazar	DEM	40	56.34%
Total Votes		71	
		Total	
Unresolved Write-In		0	

**State Board of Education Member - Congressional District 2 - DEM**

		Total	
Times Cast		381 / 73,558	0.52%
Undervotes		346	
Overvotes		0	
Candidate	Party	Total	
Angelika Schroeder	DEM	35	100.00%
Total Votes		35	
		Total	
Unresolved Write-In		0	

**State Board of Education Member - Congressional District 4 - DEM**

		Total	
Times Cast		122 / 20,533	0.59%
Undervotes		108	
Overvotes		0	
Candidate	Party	Total	
Tim Krug	DEM	14	100.00%
Total Votes		14	
		Total	
Unresolved Write-In		0	

## Regent of the University of Colorado - At Large - DEM

		Total	
Times Cast		503 / 94,091	0.53%
Undervotes		454	
Overvotes		0	
Candidate	Party	Total	
Lesley Smith	DEM	49	100.00%
Total Votes		49	
		Total	
Unresolved Write-In		0	

## State Senator - District 16 - DEM

		Total	
Times Cast		35 / 3,643	0.96%
Undervotes		29	
Overvotes		0	
Candidate	Party	Total	
Tammy Story	DEM	6	100.00%
Total Votes		6	
		Total	
Unresolved Write-In		0	

## State Representative - District 10 - DEM

		Total	
Times Cast		121 / 26,889	0.45%
Undervotes		114	
Overvotes		0	
Candidate	Party	Total	
Edie Hooton	DEM	7	100.00%
Total Votes		7	
		Total	
Unresolved Write-In		0	

## State Representative - District 11 - DEM

		Total	
Times Cast		120 / 19,345	0.62%
Undervotes		108	
Overvotes		0	
Candidate	Party	Total	
Jonathan Singer	DEM	12	100.00%
Total Votes		12	
		Total	
Unresolved Write-In		0	

### State Representative - District 12 - DEM

		Total	
Times Cast		118 / 23,878	0.49%
Undervotes		104	
Overvotes		0	
Candidate	Party	Total	
Sonya Jaquez Lewis	DEM	14	100.00%
Total Votes		14	
		Total	
Unresolved Write-In		0	

### State Representative - District 13 - DEM

		Total	
Times Cast		109 / 18,265	0.60%
Undervotes		97	
Overvotes		0	
Candidate	Party	Total	
K.C. Becker	DEM	12	100.00%
Total Votes		12	
		Total	
Unresolved Write-In		0	

### State Representative - District 33 - DEM

		Total	
Times Cast		35 / 5,714	0.61%
Undervotes		31	
Overvotes		0	
Candidate	Party	Total	
Matt Gray	DEM	4	100.00%
Total Votes		4	
		Total	
Unresolved Write-In		0	

### District Attorney - 20th Judicial District - DEM

		Total	
Times Cast		503 / 94,091	0.53%
Undervotes		420	
Overvotes		10	
Candidate	Party	Total	
Mike Foote	DEM	31	42.47%
Michael Dougherty	DEM	42	57.53%
Total Votes		73	
		Total	
Unresolved Write-In		0	

### Boulder County Commissioner - District 3 - DEM

		Total	
Times Cast		503 / 94,091	0.53%
Undervotes		454	
Overvotes		0	
Candidate	Party	Total	
Matt Jones	DEM	49	100.00%
Total Votes		49	
		Total	
Unresolved Write-In		0	

### Boulder County Clerk and Recorder - DEM

		Total	
Times Cast		503 / 94,091	0.53%
Undervotes		450	
Overvotes		0	
Candidate	Party	Total	
Molly Fitzpatrick	DEM	53	100.00%
Total Votes		53	
		Total	
Unresolved Write-In		0	

## Boulder County Treasurer - DEM

		Total	
Times Cast		503 / 94,091	0.53%
Undervotes		452	
Overvotes		0	
Candidate	Party	Total	
Paul Weissmann	DEM	51	100.00%
Total Votes		51	
		Total	
Unresolved Write-In		0	

## Boulder County Assessor - DEM

		Total	
Times Cast		503 / 94,091	0.53%
Undervotes		456	
Overvotes		0	
Candidate	Party	Total	
Cynthia Braddock	DEM	47	100.00%
Total Votes		47	
		Total	
Unresolved Write-In		0	

## Boulder County Sheriff - DEM

		Total	
Times Cast		503 / 94,091	0.53%
Undervotes		456	
Overvotes		0	
Candidate	Party	Total	
Joseph K Pelle	DEM	47	100.00%
Total Votes		47	
		Total	
Unresolved Write-In		0	

## Boulder County Surveyor - DEM

		Total	
Times Cast		503 / 94,091	0.53%
Undervotes		458	
Overvotes		0	
Candidate	Party	Total	
Lee Stadele	DEM	45	100.00%
Total Votes		45	
		Total	
Unresolved Write-In		0	

### Boulder County Coroner - DEM

		Total	
Times Cast		503 / 94,091	0.53%
Undervotes		456	
Overvotes		0	
Candidate	Party	Total	
Emma R. Hall	DEM	47	100.00%
Total Votes		47	
		Total	
Unresolved Write-In		0	

### Representative to the 116th United States Congress - District 2 - REP

		Total	
Times Cast		381 / 20,426	1.87%
Undervotes		338	
Overvotes		0	
Candidate	Party	Total	
Peter Yu	REP	43	100.00%
Total Votes		43	
		Total	
Unresolved Write-In		0	

### Representative to the 116th United States Congress - District 4 - REP

		Total	
Times Cast		122 / 13,602	0.90%
Undervotes		108	
Overvotes		0	
Candidate	Party	Total	
Ken Buck	REP	14	100.00%
Total Votes		14	
		Total	
Unresolved Write-In		0	

### Governor - REP

		Total	
Times Cast		503 / 34,028	1.48%
Undervotes		356	
Overvotes		11	
Candidate	Party	Total	
Walker Stapleton	REP	21	15.44%
Greg Lopez	REP	32	23.53%
Doug Robinson	REP	41	30.15%
Victor Mitchell	REP	42	30.88%
Total Votes		136	
		Total	
Unresolved Write-In		0	

### Secretary of State - REP

		Total	
Times Cast		503 / 34,028	1.48%
Undervotes		444	
Overvotes		0	
Candidate	Party	Total	
Wayne Williams	REP	59	100.00%
Total Votes		59	
		Total	
Unresolved Write-In		0	

### State Treasurer - REP

		Total	
Times Cast		503 / 34,028	1.48%
Undervotes		391	
Overvotes		10	
Candidate	Party	Total	
Justin Everett	REP	27	26.47%
Polly Lawrence	REP	40	39.22%
Brian Watson	REP	35	34.31%
Total Votes		102	
		Total	
Unresolved Write-In		0	

## Attorney General - REP

		Total	
Times Cast		503 / 34,028	1.48%
Undervotes		446	
Overvotes		0	
Candidate	Party	Total	
George Brauchler	REP	57	100.00%
Total Votes		57	
		Total	
Unresolved Write-In		0	

## State Board of Education Member - Congressional District 2 - REP

		Total	
Times Cast		381 / 20,426	1.87%
Undervotes		336	
Overvotes		0	
Candidate	Party	Total	
Johnny Barrett	REP	45	100.00%
Total Votes		45	
		Total	
Unresolved Write-In		0	

## State Board of Education Member - Congressional District 4 - REP

		Total	
Times Cast		122 / 13,602	0.90%
Undervotes		108	
Overvotes		0	
Candidate	Party	Total	
Debra L. Scheffel	REP	14	100.00%
Total Votes		14	
		Total	
Unresolved Write-In		0	

## Regent of the University of Colorado - At Large - REP

		Total	
Times Cast		503 / 34,028	1.48%
Undervotes		446	
Overvotes		0	
Candidate	Party	Total	
Ken Montera	REP	57	100.00%
Total Votes		57	
		Total	
Unresolved Write-In		0	



**State Senator - District 16 - REP**

		Total	
Times Cast		35 / 1,902	1.84%
Undervotes		23	
Overvotes		0	
Candidate	Party	Total	
Tim Neville	REP	12	100.00%
Total Votes		12	
		Total	
Unresolved Write-In		0	

**State Representative - District 10 - REP**

		Total	
Times Cast		121 / 4,953	2.44%
Undervotes		114	
Overvotes		0	
Candidate	Party	Total	
Murl S. Hendrickson IV	REP	7	100.00%
Total Votes		7	
		Total	
Unresolved Write-In		0	

**State Representative - District 11 - REP**

		Total	
Times Cast		120 / 11,865	1.01%
Undervotes		108	
Overvotes		0	
Candidate	Party	Total	
Brian O. Donahue	REP	12	100.00%
Total Votes		12	
		Total	
Unresolved Write-In		0	

**State Representative - District 12 - REP**

		Total	
Times Cast		118 / 10,524	1.12%
Undervotes		104	
Overvotes		0	
Candidate	Party	Total	
David Reid Ross	REP	14	100.00%
Total Votes		14	
		Total	
Unresolved Write-In		0	

### State Representative - District 13 - REP

		Total	
Times Cast		109 / 2,969	3.67%
Undervotes		97	
Overvotes		0	
Candidate	Party	Total	
Kevin Sipple	REP	12	100.00%
Total Votes		12	
		Total	
Unresolved Write-In		0	

### State Representative - District 33 - REP

		Total	
Times Cast		35 / 3,717	0.94%
Undervotes		23	
Overvotes		0	
Candidate	Party	Total	
Eric Rutherford	REP	12	100.00%
Total Votes		12	
		Total	
Unresolved Write-In		0	

### District Attorney - 20th Judicial District - REP

		Total	
Times Cast		503 / 34,028	1.48%
Undervotes		503	
Overvotes		0	
Candidate	Party	Total	
There are no candidates for this office			
Total Votes		0	
		Total	
Unresolved Write-In		0	

### Boulder County Commissioner - District 3 - REP

		Total	
Times Cast		503 / 34,028	1.48%
Undervotes		444	
Overvotes		0	
Candidate	Party	Total	
Gary Cooper	REP	59	100.00%
Total Votes		59	
		Total	
Unresolved Write-In		0	

### Boulder County Clerk and Recorder - REP

		Total	
Times Cast		503 / 34,028	1.48%
Undervotes		503	
Overvotes		0	
Candidate	Party	Total	
There are no candidates for this office			
Total Votes		0	
		Total	
Unresolved Write-In		0	

### Boulder County Treasurer - REP

		Total	
Times Cast		503 / 34,028	1.48%
Undervotes		503	
Overvotes		0	
Candidate	Party	Total	
There are no candidates for this office			
Total Votes		0	
		Total	
Unresolved Write-In		0	

### Boulder County Assessor - REP

		Total	
Times Cast		503 / 34,028	1.48%
Undervotes		503	
Overvotes		0	
Candidate	Party	Total	
There are no candidates for this office			
Total Votes		0	
		Total	
Unresolved Write-In		0	

### Boulder County Sheriff - REP

		Total	
Times Cast		503 / 34,028	1.48%
Undervotes		446	
Overvotes		0	
Candidate	Party	Total	
John Bedrick	REP	57	100.00%
Total Votes		57	
		Total	
Unresolved Write-In		0	

### Boulder County Surveyor - REP

		Total	
Times Cast		503 / 34,028	1.48%
Undervotes		503	
Overvotes		0	
Candidate	Party	Total	
There are no candidates for this office			
Total Votes		0	
		Total	
Unresolved Write-In		0	

## Boulder County Coroner - REP


		Total	
Times Cast		503 / 34,028	1,48%
Undervotes		503	
Overvotes		0	
Candidate	Party	Total	
There are no candidates for this office			
Total Votes		0	
		Total	
Unresolved Write-In		0	



	Cumulative Results		
	MVW Totals	Machine Totals	Difference
<b>Representative to the 116th United States Congress - District 2 - DEM</b>			
Undervote	318	318	0
Overvote	8	8	0
Joe Neguse	13	13	0
Mark Williams	42	42	0
<b>Representative to the 116th United States Congress - District 4 - DEM</b>			
Undervote	102	102	0
Overvote	2	2	0
Chase Kohne	8	8	0
Karen McCormick	10	10	0
<b>Governor - DEM</b>			
Undervote	354	354	0
Overvote	9	9	0
Cary Kennedy	33	33	0
Jared Polis	30	30	0
Donna Lynne	39	39	0
Mike Johnston	38	38	0
<b>Secretary of State - DEM</b>			
Undervote	454	454	0
Overvote	0	0	0
Jena Griswold	49	49	0
<b>State Treasurer - DEM</b>			
Undervote	423	423	0
Overvote	9	9	0
Dave Young	39	39	0
Bernard Douthit	32	32	0
<b>Attorney General - DEM</b>			
Undervote	423	423	0
Overvote	9	9	0
Phil Weiser	31	31	0
Joe Salazar	40	40	0
<b>State Board of Education Member - Congressional District 2 - DEM</b>			
Undervote	346	346	0
Overvote	0	0	0
Angelika Schroeder	35	35	0
<b>State Board of Education Member - Congressional District 4 - DEM</b>			
Undervote	108	108	0
Overvote	0	0	0
Tim Krug	14	14	0

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	Cumulative Results		
	MVW Totals	Machine Totals	Difference
<b>Regent of the University of Colorado - At Large - DEM</b>			
Undervote	454	454	0
Overvote	0	0	0
Lesley Smith	49	49	0
<b>State Senator - District 16 - DEM</b>			
Undervote	29	29	0
Overvote	0	0	0
Tammy Story	6	6	0
<b>State Representative - District 10 - DEM</b>			
Undervote	114	114	0
Overvote	0	0	0
Edie Hooton	7	7	0
<b>State Representative - District 11 - DEM</b>			
Undervote	108	108	0
Overvote	0	0	0
Jonathan Singer	12	12	0
<b>State Representative - District 12 - DEM</b>			
Undervote	104	104	0
Overvote	0	0	0
Sonya Jaquez Lewis	14	14	0
<b>State Representative - District 13 - DEM</b>			
Undervote	97	97	0
Overvote	0	0	0
K.C. Becker	12	12	0
<b>State Representative - District 33 - DEM</b>			
Undervote	31	31	0
Overvote	0	0	0
Matt Gray	4	4	0
<b>District Attorney - 20th Judicial District - DEM</b>			
Undervote	420	420	0
Overvote	10	10	0
Mike Foote	31	31	0
Michael Dougherty	42	42	0
<b>Boulder County Commissioner - District 3 - DEM</b>			
Undervote	454	454	0
Overvote	0	0	0
Matt Jones	49	49	0
<b>Boulder County Clerk and Recorder - DEM</b>			
Undervote	450	450	0
Overvote	0	0	0
Molly Fitzpatrick	53	53	0



	Cumulative Results		
	MVW Totals	Machine Totals	Difference
<b>Boulder County Treasurer - DEM</b>			
Undervote	452	452	0
Overvote	0	0	0
Paul Weissmann	51	51	0
<b>Boulder County Assessor - DEM</b>			
Undervote	456	456	0
Overvote	0	0	0
Cynthia Braddock	47	47	0
<b>Boulder County Sheriff - DEM</b>			
Undervote	456	456	0
Overvote	0	0	0
Joseph K Pelle	47	47	0
<b>Boulder County Surveyor - DEM</b>			
Undervote	458	458	0
Overvote	0	0	0
Lee Stadele	45	45	0
<b>Boulder County Coroner - DEM</b>			
Undervote	456	456	0
Overvote	0	0	0
Emma R. Hall	47	47	0
<b>Representative to the 116th United States Congress - District 2 - REP</b>			
Undervote	338	338	0
Overvote	0	0	0
Peter Yu	43	43	0
<b>Representative to the 116th United States Congress - District 4 - REP</b>			
Undervote	108	108	0
Overvote	0	0	0
Ken Buck	14	14	0
<b>Governor - REP</b>			
Undervote	356	356	0
Overvote	11	11	0
Walker Stapleton	21	21	0
Greg Lopez	32	32	0
Doug Robinson	41	41	0
Victor Mitchell	42	42	0
<b>Secretary of State - REP</b>			
Undervote	444	444	0
Overvote	0	0	0
Wayne Williams	59	59	0

	Cumulative Results		
	MVW Totals	Machine Totals	Difference
<b>State Treasurer - REP</b>			
Undervote	391	391	0
Overvote	10	10	0
Justin Everett	27	27	0
Polly Lawrence	40	40	0
Brian Watson	35	35	0
<b>Attorney General - REP</b>			
Undervote	446	446	0
Overvote	0	0	0
George Brauchler	57	57	0
<b>State Board of Education Member - Congressional District 2 - REP</b>			
Undervote	336	336	0
Overvote	0	0	0
Johnny Barrett	45	45	0
<b>State Board of Education Member - Congressional District 4 - REP</b>			
Undervote	108	108	0
Overvote	0	0	0
Debora L. Scheffel	14	14	0
<b>Regent of the University of Colorado - At Large - REP</b>			
Undervote	446	446	0
Overvote	0	0	0
Ken Montera	57	57	0
<b>State Senator - District 16 - REP</b>			
Undervote	23	23	0
Overvote	0	0	0
Tim Neville	12	12	0
<b>State Representative - District 10 - REP</b>			
Undervote	114	114	0
Overvote	0	0	0
Murl S. Hendrickson IV	7	7	0
<b>State Representative - District 11 - REP</b>			
Undervote	108	108	0
Overvote	0	0	0
Brian O. Donahue	12	12	0
<b>State Representative - District 12 - REP</b>			
Undervote	104	104	0
Overvote	0	0	0
David Reid Ross	14	14	0
<b>State Representative - District 13 - REP</b>			
Undervote	97	97	0
Overvote	0	0	0
Kevin Sipple	12	12	0

	Cumulative Results		
	MVW Totals	Machine Totals	Difference
<b>State Representative - District 33 - REP</b>			
Undervote	23	23	0
Overvote	0	0	0
Eric Rutherford	12	12	0
<b>District Attorney - 20th Judicial District - REP</b>			
Undervote	503	503	0
Overvote	0	0	0
There are no candidates for this office	0	0	0
<b>Boulder County Commissioner - District 3 - REP</b>			
Undervote	444	444	0
Overvote	0	0	0
Gary Cooper	59	59	0
<b>Boulder County Clerk and Recorder - REP</b>			
Undervote	503	503	0
Overvote	0	0	0
There are no candidates for this office	0	0	0
<b>Boulder County Treasurer - REP</b>			
Undervote	503	503	0
Overvote	0	0	0
There are no candidates for this office	0	0	0
<b>Boulder County Assessor - REP</b>			
Undervote	503	503	0
Overvote	0	0	0
There are no candidates for this office	0	0	0
<b>Boulder County Sheriff - REP</b>			
Undervote	446	446	0
Overvote	0	0	0
John Bedrick	57	57	0
<b>Boulder County Surveyor - REP</b>			
Undervote	503	503	0
Overvote	0	0	0
There are no candidates for this office	0	0	0
<b>Boulder County Coroner - REP</b>			
Undervote	503	503	0
Overvote	0	0	0
There are no candidates for this office	0	0	0