



2020 State Primary Election Risk-limiting Audit Discrepancy Report

The attached report represents the discrepancies reported by audit boards during the 2020 State Primary Election. It is generated using the Colorado Risk-limiting Audit Software with an annotation by the Voting Systems team in the Colorado Secretary of State's office. The report contains the following columns:

- `county_name` – The county that audited the ballot on which the discrepancy occurred
- `contest_name` – The contest on the ballot that had the discrepancy
- `imprinted_id` – This is the unique number assigned to each ballot. In the Democracy Suite voting system the `imprinted_id` is a three-part number (X-XXX-XXX). The first part represents the tabulator the ballot was tabulated on. The second part represents the batch number of that tabulator. The third part represents the ballot position within the batch. The Clear Ballot system uses a similar notation, with the addition of a notation for the election added.
- `choice_per_voting_computer` – The choice that was tabulated by the voting system according to the cast vote record
- `audit_board_selection` – The choice that was reported by the audit board
- Target Contest – Denotes if it is a target contest for the audit
- Discrepancy – Denotes if it constitutes a discrepancy
- Remarks – The Voting Systems team determination on the most probable reason for the discrepancy.

After the audit has concluded, counties are required to send images of each ballot that had a discrepancy (regardless if it is a targeted contest or not). The Voting Systems team at the Secretary of State's office then compares the images to reports to try to determine the most likely reason for the discrepancy. In the 2020 State Primary Election the following reasons were most likely responsible for all discrepancies:

- Audit Board Error – The audit board entered incorrect information which did not accurately represent the voter markings.
- Pulled wrong ballot – The audit board retrieved a different ballot than the ballot required by the RLA software, and therefore entered in incorrect choices
- Voting System Limitation – A narrow circumstance where the voting system tabulates a vote for a selection the voter corrected because the voter did not choose a different choice in the contest. (A different selection would result in an overvote and the system

would out stack the ballot for adjudication by an election judge.) In this case, the voting system is incapable of discerning true voter intent.

The reasons for the discrepancies are an interpretation by the Voting Systems team based on the ballot image as well as some supporting data found in the audit reports. It is not definitive. Likewise, this list of types of discrepancies is not exhaustive, but are the only types that were found by the Voting Systems team in this election.

county_name	contest_name	imprinted_id	choice_per_voting_computer	audit_board_selection	Target	Contest	Discrepancy	Remarks
Arapahoe	State Senator - District 28 - DEM	7-277-65		"Janet Buckner"		X		Audit board error
Arapahoe	State Senator - District 26 - DEM	7-311-68	"Jeff Bridges"			X		Voting System Limitation
Arapahoe	Representative to the 117th United States Cc 4-299-19		"Jason Crow"			X		Voting System Limitation
Boulder	Boulder County Commissioner - District 2 - D 6-54-139		"Marta Loachamin"	"Jonathan Singer"	X	X		Pulled wrong ballot
Boulder	Representative to the 117th United States Cc 6-54-139			"Joe Neguse"		X		Pulled wrong ballot
Boulder	United States Senator - DEM	6-54-139	"Andrew Romanoff"	"John W. Hickenlooper"		X		Pulled wrong ballot
Broomfield	Regent of the University of Colorado - Congre 2-666-18		"Aaron Harber"	"Callie Rennison"		X		Pulled wrong ballot
Broomfield	United States Senator - DEM	2-666-18	"John W. Hickenlooper"	"Andrew Romanoff"		X		Pulled wrong ballot
Douglas	Douglas County Commissioner - District 2 - D 1-PRI-0851-16			"Lisa Neal-Graves"		X		Audit board error
Douglas	United States Senator - REP	1-PRI-0615-16	"Cory Gardner"			X		Voting System Limitation
El Paso	United States Senator - DEM	101-37-1	"John W. Hickenlooper"	"Andrew Romanoff"		X		Audit board error
El Paso	El Paso County Commissioner - District 3 - RE 104-123-90			"Stan Lee VanderWerf"		X		Audit board error
El Paso	District Attorney - 4th Judicial District - REP - 108-29-83		"Mark Waller"	"Michael Allen"		X		Audit board error
Gilpin	District Attorney--1st Judicial District - DEM 2-48-11		"Jake Lilly"	"Alexis King"		X		Audit board error
Hinsdale	District Attorney - 7th Judicial District - REP 2-17-2			"Seth D. Ryan"		X		Pulled wrong ballot
Hinsdale	Representative to the 117th United States Cc 2-17-2		"Lauren Boebert"	"Scott R. Tipton"		X		Pulled wrong ballot
Hinsdale	State Board of Education Member - Congress 2-17-2			"Joyce Rankin"		X		Pulled wrong ballot
Hinsdale	State Representative - District 59 - REP 2-17-2			"Marilyn Harris"		X		Pulled wrong ballot
Hinsdale	Representative to the 117th United States Cc 2-17-16		"Lauren Boebert"	"Scott R. Tipton"		X		Pulled wrong ballot
Hinsdale	United States Senator - REP 2-17-16		"Cory Gardner"			X		Pulled wrong ballot
Hinsdale	District Attorney - 7th Judicial District - REP 2-2-3		"Seth D. Ryan"			X		Pulled wrong ballot
Hinsdale	Representative to the 117th United States Cc 2-2-3		"Scott R. Tipton"	"Lauren Boebert"		X		Pulled wrong ballot
Hinsdale	State Board of Education Member - Congress 2-2-3		"Joyce Rankin"			X		Pulled wrong ballot
Hinsdale	State Representative - District 59 - REP 2-2-3		"Marilyn Harris"			X		Pulled wrong ballot
Hinsdale	United States Senator - REP 2-2-3		"Cory Gardner"			X		Pulled wrong ballot
Hinsdale	District Attorney - 7th Judicial District - REP 2-2-4		"Seth D. Ryan"			X		Pulled wrong ballot
Hinsdale	State Board of Education Member - Congress 2-2-4		"Joyce Rankin"			X		Pulled wrong ballot
Hinsdale	State Representative - District 59 - REP 2-2-4		"Marilyn Harris"			X		Pulled wrong ballot
Hinsdale	United States Senator - REP 2-2-4		"Cory Gardner"			X		Pulled wrong ballot
Hinsdale	District Attorney - 7th Judicial District - REP 2-2-7		"Seth D. Ryan"			X		Pulled wrong ballot
Hinsdale	Representative to the 117th United States Cc 2-2-7		"Scott R. Tipton"	"Lauren Boebert"		X		Pulled wrong ballot
Hinsdale	State Board of Education Member - Congress 2-2-7		"Joyce Rankin"			X		Pulled wrong ballot
Hinsdale	State Representative - District 59 - REP 2-2-7		"Marilyn Harris"			X		Pulled wrong ballot
Hinsdale	District Attorney - 7th Judicial District - REP 2-2-11			"Seth D. Ryan"		X		Pulled wrong ballot
Hinsdale	Hinsdale County Commissioner District 1 - RE 2-2-11			"Daniel Scroggins"		X		Pulled wrong ballot
Hinsdale	Representative to the 117th United States Cc 2-2-11		"Lauren Boebert"	"Scott R. Tipton"		X		Pulled wrong ballot
Hinsdale	State Board of Education Member - Congress 2-2-11			"Joyce Rankin"		X		Pulled wrong ballot
Hinsdale	State Representative - District 59 - REP 2-2-11			"Marilyn Harris"		X		Pulled wrong ballot
Hinsdale	United States Senator - REP 2-2-11			"Cory Gardner"		X		Pulled wrong ballot
Hinsdale	District Attorney - 7th Judicial District - REP 2-2-14		"Seth D. Ryan"			X		Pulled wrong ballot
Hinsdale	Hinsdale County Commissioner District 1 - RE 2-2-14		"Daniel Scroggins"			X		Pulled wrong ballot
Hinsdale	Representative to the 117th United States Cc 2-2-14		"Scott R. Tipton"			X		Pulled wrong ballot
Hinsdale	State Board of Education Member - Congress 2-2-14		"Joyce Rankin"			X		Pulled wrong ballot
Hinsdale	State Representative - District 59 - REP 2-2-14		"Marilyn Harris"			X		Pulled wrong ballot

Hinsdale	United States Senator - REP	2-2-14	"Cory Gardner"		X	Pulled wrong ballot
Hinsdale	District Attorney - 7th Judicial District - REP	2-2-19		"Seth D. Ryan"	X	Pulled wrong ballot
Hinsdale	Representative to the 117th United States Cc	2-2-19	"Lauren Boebert"	"Scott R. Tipton"	X	Pulled wrong ballot
Hinsdale	State Board of Education Member - Congress	2-2-19		"Joyce Rankin"	X	Pulled wrong ballot
Hinsdale	State Representative - District 59 - REP	2-2-19		"Marilyn Harris"	X	Pulled wrong ballot
Hinsdale	Hinsdale County Sheriff - REP	2-3-21	"Christopher Kambish"		X	Pulled Wrong Ballot
Hinsdale	State Board of Education Member - Congress	2-3-21	"Joyce Rankin"		X	Pulled Wrong Ballot
Hinsdale	Hinsdale County Commissioner District 1 - RE	2-3-24		"Daniel Scroggins"	X	Pulled wrong ballot
Hinsdale	Hinsdale County Sheriff - REP	2-3-24		"Christopher Kambish"	X	Pulled wrong ballot
Hinsdale	Representative to the 117th United States Cc	2-3-24		"Scott R. Tipton"	X	Pulled wrong ballot
Hinsdale	United States Senator - REP	2-3-24		"Cory Gardner"	X	Pulled wrong ballot
Hinsdale	Representative to the 117th United States Cc	2-4-4	"Lauren Boebert"	"Scott R. Tipton"	X	Pulled wrong ballot
Hinsdale	Representative to the 117th United States Cc	2-4-19	"Scott R. Tipton"	"Lauren Boebert"	X	Pulled wrong ballot
Hinsdale	District Attorney - 7th Judicial District - REP	2-5-12		"Seth D. Ryan"	X	Pulled wrong ballot
Hinsdale	Hinsdale County Commissioner District 1 - RE	2-5-12		"Daniel Scroggins"	X	Pulled wrong ballot
Hinsdale	Representative to the 117th United States Cc	2-5-12		"Scott R. Tipton"	X	Pulled wrong ballot
Hinsdale	State Board of Education Member - Congress	2-5-12		"Joyce Rankin"	X	Pulled wrong ballot
Hinsdale	State Representative - District 59 - REP	2-5-12		"Marilyn Harris"	X	Pulled wrong ballot
Hinsdale	District Attorney - 7th Judicial District - REP	2-5-14	"Seth D. Ryan"		X	Pulled wrong ballot
Hinsdale	Hinsdale County Commissioner District 1 - RE	2-5-14	"Daniel Scroggins"		X	Pulled wrong ballot
Hinsdale	Representative to the 117th United States Cc	2-5-14	"Scott R. Tipton"		X	Pulled wrong ballot
Hinsdale	State Board of Education Member - Congress	2-5-14	"Joyce Rankin"		X	Pulled wrong ballot
Hinsdale	State Representative - District 59 - REP	2-5-14	"Marilyn Harris"		X	Pulled wrong ballot
Hinsdale	Hinsdale County Commissioner District 1 - RE	2-5-15		"Daniel Scroggins"	X	Pulled wrong ballot
Hinsdale	District Attorney - 7th Judicial District - REP	2-6-2		"Seth D. Ryan"	X	Pulled wrong ballot
Hinsdale	Hinsdale County Sheriff - REP	2-6-2		"Christopher Kambish"	X	Pulled wrong ballot
Hinsdale	Representative to the 117th United States Cc	2-6-2	"Lauren Boebert"	"Scott R. Tipton"	X	Pulled wrong ballot
Hinsdale	State Board of Education Member - Congress	2-6-2		"Joyce Rankin"	X	Pulled wrong ballot
Hinsdale	State Representative - District 59 - REP	2-6-2		"Marilyn Harris"	X	Pulled wrong ballot
Hinsdale	United States Senator - REP	2-6-2		"Cory Gardner"	X	Pulled wrong ballot
Hinsdale	District Attorney - 7th Judicial District - REP	2-6-3	"Seth D. Ryan"		X	Pulled wrong ballot
Hinsdale	Hinsdale County Commissioner District 1 - RE	2-6-3	"Daniel Scroggins"		X	Pulled wrong ballot
Hinsdale	Representative to the 117th United States Cc	2-6-3	"Scott R. Tipton"	"Lauren Boebert"	X	Pulled wrong ballot
Hinsdale	State Board of Education Member - Congress	2-6-3	"Joyce Rankin"		X	Pulled wrong ballot
Hinsdale	State Representative - District 59 - REP	2-6-3	"Marilyn Harris"		X	Pulled wrong ballot
Hinsdale	United States Senator - REP	2-6-3	"Cory Gardner"		X	Pulled wrong ballot
Jefferson	United States Senator - LBR	6-139-3	"Raymon Anthony Doane"	"Gaylon Kent"	X	Audit board error
Mineral	District Attorney - 12th Judicial District - DEM	2-3-19	"Robert S. Willett"	"Alonzo Christopher Payne"	X	Audit board error
Otero	State Representative - District 47 - DEM	2-163-4	"Bri Buentello"		X	Voting System Limitation
Otero	State Representative - District 47 - REP - Oter	2-167-17	"Ron Parker"	"Stephanie Luck"	X	Audit board error
Otero	Otero County Commissioner District 1 - REP	2-24-7	"Robert W Oquist"		X	Audit board error
Otero	District Attorney--16th Judicial District - REP	2-59-22		"William Culver"	X	Audit board error
Otero	District Attorney--16th Judicial District - REP	2-85-23		"William Culver"	X	Audit board error
Otero	State Representative - District 47 - REP - Oter	2-126-15	"Stephanie Luck"	"Ron Parker"	X	Audit board error
Otero	Representative to the 117th United States Cc	2-168-3	"Ken Buck"		X	Voting System Limitation
Otero	Otero County Commissioner District 1 - DEM	2-95-14	"Christopher E Moreno"		X	Voting System Limitation

Pueblo	District Attorney--10th Judicial District - DEM 2-245-24	"Jeff Chostner"		X	Voting System Limitation
Rio Blanco	District Attorney--9th Judicial District - REP 102-55-6	"Jefferson J. Cheney"		X	Pulled wrong ballot
Rio Blanco	Representative to the 117th United States Cc 102-55-6	"Scott R. Tipton"	"Lauren Boebert"	X	Pulled wrong ballot
Rio Blanco	Rio Blanco County Commissioner District 3 - I 102-55-6	"Mona I Avey"	"Ty K Gates"	X	Pulled wrong ballot
Rio Blanco	State Board of Education Member - Congress 102-55-6	"Joyce Rankin"		X	Pulled wrong ballot
Rio Blanco	State Representative - District 57 - REP 102-55-6	"Perry Will"		X	Pulled wrong ballot
Rio Blanco	State Senator - District 8 - REP 102-55-6	"Bob Rankin"	"Debra Irvine"	X	Pulled wrong ballot
Rio Blanco	Representative to the 117th United States Cc 102-55-8	"Lauren Boebert"	"Scott R. Tipton"	X	Pulled wrong ballot
Rio Blanco	Rio Blanco County Commissioner District 3 - I 102-55-8	"Ty K Gates"	"Mona I Avey"	X	Pulled wrong ballot
Rio Blanco	State Representative - District 57 - REP 102-55-8		"Perry Will"	X	Pulled wrong ballot
Rio Blanco	State Senator - District 8 - REP 102-55-8	"Bob Rankin"	"Debra Irvine"	X	Pulled wrong ballot
Rio Blanco	Rio Blanco County Commissioner District 3 - I 102-55-13	"Ty K Gates"	"Mona I Avey"	X	Pulled wrong ballot
Rio Blanco	Rio Blanco County Commissioner District 3 - I 102-55-21	"Mona I Avey"	"Ty K Gates"	X	Pulled wrong ballot
Rio Blanco	State Board of Education Member - Congress 102-55-21		"Joyce Rankin"	X	Pulled wrong ballot
Rio Blanco	State Representative - District 57 - REP 102-55-21		"Perry Will"	X	Pulled wrong ballot
Rio Blanco	State Senator - District 8 - REP 102-55-21	"Debra Irvine"	"Bob Rankin"	X	Pulled wrong ballot
Rio Blanco	United States Senator - REP 102-55-21		"Cory Gardner"	X	Pulled wrong ballot
Rio Grande	State Senator - District 35 - DEM 2-43-9	"Carlos R. Lopez"		X	Voting System Limitation
Rio Grande	Representative to the 117th United States Cc 2-97-18	"James Iacino"	"Diane E. Mitsch Bush"	X	Audit board error
Saguache	Saguache County Commissioner District 2 - D 3-23-7	"Charles "Bill" McClure"	"Lynne Thompson"	X	Audit board error
Summit	District Attorney - 5th Judicial District - DEM 4-47-10	"Heidi McCollum"		X	Pulled wrong ballot
Summit	Regent of the University of Colorado - Congre 4-47-10	"Aaron Harber"		X	Pulled wrong ballot
Summit	Representative to the 117th United States Cc 4-47-10	"Joe Neguse"		X	Pulled wrong ballot
Summit	State Senator - District 8 - DEM - Summit Cou 4-47-10	"Arn Menconi"		X	Pulled wrong ballot
Summit	United States Senator - DEM 4-47-10	"John W. Hickenlooper"		X	Pulled wrong ballot
Summit	District Attorney - 5th Judicial District - DEM 4-47-20	"Braden Christopher Angel"	"Heidi McCollum"	X	Pulled wrong ballot
Summit	Regent of the University of Colorado - Congre 4-47-20	"Callie Rennison"	"Dave Gross"	X	Pulled wrong ballot
Summit	State Senator - District 8 - DEM - Summit Cou 4-47-20	"Arn Menconi"	"Karl Hanlon"	X	Pulled wrong ballot
Summit	Summit County Commissioner - District 1 - DI 2-76-10	"Elisabeth Lawrence"		X	Voting System Limitation