

# Conservative Leadership Poll Analysis

Perry Kundert

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An open letter to the Conservative party of Canada, to perform an independent and open analysis of the poll tabulation for the 2020 Conservative Party leadership election.

Since this poll tabulation was performed on Dominion Voting Systems equipment, there can be no confidence in the vote without analyzing the raw image data. PDF

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## 1 To: Conservative Party of Canada

Mr. Scott Lamb, President  
Conservative Party of Canada  
1720-130 Albert St.  
Ottawa, Ontario K1P 5G4

## **2 Dear Mr. Lamb;**

Recent evidence indicating the possibility of incorrect/fraudulent operation of Dominion Voting Systems tabulation equipment has surfaced in the 2020 US Presidential election. These systems were used in the recent 2020 Conservative leadership election.

In order to ensure that the results of the recent 2020 Conservative leadership election cannot be questioned, I hereby officially request access to the saved ballot images stored by the Dominion Voting Systems equipment used in the election.

### **2.1 Proposal**

I will develop and run an image analysis suite confirming the results tabulated by the Dominion Voting Systems equipment was correct. This package of software source-code, virtual machines and its input data sets will be made publicly available, and will be simple for anyone with some basic computer expertise to download, review and verify for correctness, and re-run on their own computer equipment.

### **2.2 Approach**

These raw ballot images are saved, by default, by the Dominion Voting Systems ballot tabulating machines. I can (if necessary) provide simple scripts to ensure that any identifying information is removed from the images before they are released.

By collecting the images from every ballot cast, and performing image analysis to extract the data, it is feasible to 1) re-tabulate and confirm the results of the election, and B) detect a number of potential fraud/error scenarios.

Unfortunately, the design and implementation of the Dominion Voting Systems equipment is fundamentally and deeply flawed. These flaws prevent any real cryptographically verifiable assurance that no alteration of the ballot image and/or miscalculation of the polling occurred after the instant the image was originally scanned. This one fact alone should have eliminated the use of Dominion Voting Systems equipment by the Conservative party, or any other Canadian organization, by the way.

## 2.3 Results

Regardless of these impediments, the data that remains – the raw ballot images saved by the tabulators – can be analyzed to detect and eliminate a wide variety of remaining attacks. A non-exhaustive list is:

1. Ballot count confirmation. Every ballot presented must be accurately accounted for, whether it was counted or marked as spoiled. Claims of lost/stuffed ballots can be rejected.
2. Incorrect tabulation. Claims of algorithmic transfer of votes from one candidate to another can be tested and falsified.
3. Evidence of post-scan image modification can be detected, ensuring that no ballot image was scanned and then modified before tabulation.
  - Most images are stored using a compressing (lossy) image compressions scheme (eg. JPEG). Modification of such images usually result in characteristic changes in these compression artifacts around the location of modification (due to re-compression w/ a mixture of previously compressed data plus the newly placed, uncompressed image data).
  - Scanning of images is necessarily done at the resolution of the physical scanning equipment. High-frequency edges in the original image are "blurred" characteristically, making the original optics and digitization hardware identifiable. Later modification to such scanned images will occur digitally, and will have detectably different encoding of these high-frequency image components (eg. edges). This makes the modification of even losslessly-encoded (eg. PNG, TIFF) scanned images detectable.
4. Ballot stuffing. Ballots filled out by independent humans have identifiable features, while ballots marked by automated equipment – or even multiple ballots marked by the same person in a sequential procedure – can be identified, even if mixed in with hundreds of thousands of other ballots. Confirmation that the vast majority of ballots were independently marked by distinct individual voters can be attained.

## 2.4 Summary

I hereby officially request access to the August 21, 2020 Conservative leadership election raw ballot image data (anonymized, if necessary), to confirm

that Dominion Voting Systems equipment was not abused to manipulate the leadership election results.

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-pjk

Perry Kundert, President

Dominion Research & Development Corp.

(NO relationship to Dominion Voting Systems!)

+1-780-970-8148

### 3 PS:

My background is in electromagnetic signal analysis, statistical data analysis, electronic communications protocol reverse-engineering and thermodynamic system analysis, design and engineering. This background, and the types of interesting signal data being uncovered in the outputs of Dominion Voting Systems poll data in the US election gives me confidence that any potential issues in the Conservative leadership election can be quickly confirmed or denied. Alternatively, the absence of reconfirmation of the leadership election poll tabulation results by independent analysis may soon result in a reduction in confidence in the Conservative party leadership and processes.

Every Conservative party member is, I believe, most interested in ensuring that the Conservative party is above reproach. Even the worst-case outcome – that someone, inconceivably, interfered with the polling process – is something that every well-meaning member of the party would want to come to light.

Thank you for your serious consideration of this proposal.