

Berkeley Ballot Audit Report
 Election: 2017 State House Dist 99 General
 Audit Date: 11:18:40, Fri Jan 19, 2018

Prec		Precinct		-----EL30A-----			
-----Audit-----							
Nber	Name	Total	Opt	iVo	Flash		
iVo	Opt	Man	Delta	Comments			
0012	Daniel Island 1	310	0	310	0		
310	0	0	0				
0013	Daniel Island 2	229	0	229	0		
229	0	0	0				
0021	Hanahan 2	120	0	120	0		
120	0	0	0				
0022	Hanahan 3	146	0	146	0		
146	0	0	0				
0023	Hanahan 4	120	0	120	0		
120	0	0	0				
0061	Daniel Island 3	256	0	256	0		
256	0	0	0				
0062	Daniel Island 4	333	0	333	0		
333	0	0	0				
0063	The Village	185	0	185	0		
185	0	0	0				
0064	Yellow House	100	0	100	0		
100	0	0	0				
0068	Hanahan 5	189	0	189	0		
189	0	0	0				
0077	Foster Creek 2	182	0	182	0		
182	0	0	0				
0078	Foster Creek 3	121	0	121	0		
121	0	0	0				
0082	Sedgefield 2	0	0	0	0		
0	0	0	0				
Precincts Total:		2291	0	2291	0		
2291	0	0	0				
0750	Absentee	54	48	6	0		
6	48	0	0				
0800	Emergency	2	2	0	0		
0	2	0	0				
0850	Failsafe	0	0	0	0		
0	0	0	0				
0900	Provisional	2	2	0	0		
0	2	0	0				
Virtual Precincts Total:		58	52	6	0		
6	52	0	0				
Grand Total:		2349	52	2297	0		
2297	52	0	0				

NOTE: Any manual entries shown on this report are supported by the Manual Entry log (EL68).

Auditor's Comments:

Total number of iVotronic ballots cast containig no votes: 8
 The following precincts have no ballots cast in them: Sedgefield 2, Failsafe

This audit is complete and has no exceptions.

Status of ERM Reports
EL30A is marked Official
EL45A is marked Official

EL30A iVo to EL155 to EL152 Cross Check and Cancelled Ballots.

EL30A Ivo Ballots	EL155 Ballots	EL152 Ballots
2297	2297	2297
Delta from EL30A	0	0
Delta from EL155		0
Cast By Voter		2294
Cast By Poll Wkr		3
Blank Cast by PW		0
Cancelled Ballots		4
Wrong Ballot		0
Voter Left AB (AB = After ballot selected by poll worker.)		0
Voter Left BB (BB = Before ballot selected by poll worker.)		0
Voter Request		2
Printer Problem		2
Terminal Problem		0
Other Reason		0

Number of audio (ADA) events in this election: 0

How to read this report.

This is the ballot level report. It compares the number of ballots cast in the tabulation report, the EL30A with the number of ballots cast in the audit data.

The values read from the EL30A report are reported in four categories; Total, Optical (Opt), iVotronic (iVo) and Flash. None of these values on each line are calculated but parsed from the actual report. The total lines are the calculated sums of the individual precince line values.

The Opt totals are the total number of ballots cast on paper ballots that were scanned into the optical scanner and transferred to the tabulation computer via memory stick or ZipDisk (depending on the type of device, M100 or M650 used to scan the ballots.) Optical totals should exist only in some but not all of the Virtual Precincts at the bottom of the table.

The iVo totals are the results gathered from the PEBs (Personal Electronic Ballot) which are used to open and close an iVotronic voting machine and, after the polls have closed, gather the ballots cast for transmission to the tabulation system.

The Flash totals are the totals that are read from the flash cards in the rare event that the ballots cannot be copied from the machine to the PEB or from the PEB to the tabulating machine.

The values on the Audit side come from the iVotronic audit data that is read from the flash cards as part of the audit process. That process combines the individual machine data into two master audit files, the EL155 Vote image log and the EL152 iVotronic event log. The EL155 contains a record of all the votes cast on a ballot. The vote images indicate the machine counting the number of asterisks in a precinct we get the number of ballots cast in that precinct. That number should always match the number in the iVo column on the EL30A side of the report.

Optical ballots do not have electronically readable audit files. So if the audit data iVotronic total does not match the EL30A Total value, the auditor is prompted to read the paper report from the optical scanner and enter the total ballots cast into the auditing program.

If the sum of the audit iVotronic and Optical ballots cast still do not match the EL30A total value, then the audit software reads the EL68 Manual Entry log for any changes made in that precinct to either the iVo or Opt totals by the CEC staff. It displays any manual entries to the auditor for inclusion into the totals. If accepted by the auditor these entries are automatically added to the Man column from the Manual Entry log.

Finally, the audit software calculates the Delta value which should be zero unless the sum of the iVo, the Opt and the Man do not match the EL30A Total column. If the Delta is greater than zero then audit data is missing. A comment will be placed on that line in the report indicating missing audit data. If the Delta value is less than zero then there are more ballots in the audit data than there are in the tabulated data and a comment will be placed on that line in the report.

Wherever possible, the audit system will attempt to indicate where the difference is by displaying the iVotronic machine numbers and the number of ballots cast on that machine that exist in the audit data. In the case of missing tabulated data, it might be possible to identify a machine that has the same number of ballots cast as the delta value and that number and ballot count will be highlighted with a < sign. If there is a non zero Delta value there will be an entry by the auditor explaining the variance.

Finally, there is a EL30A iVo to EL155 to EL152 Cross Check and Cancelled Ballots table in the report. This table should indicate that the number ballots cast in the EL30A match the numbers in the EL155 and the EL152 report. Then there are some statistics pulled from the EL152 report that indicate how many

ballots were cast by the voter and the number cast by the poll worker. Lastly the number of ballots that were cancelled and the reason they were cancelled. It should be noted that the reason cancelled is chosen from a pull down menu presented to the poll worker when a ballot is cancelled, there is no way to validate the poll worker's choice.

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Berkeley Vote Level Audit Report
 Election: 2017 State House Dist 99 General
 Audit Date: 11:19:34, Fri Jan 19, 2018

Precinct Number / Name					Audit		Party
EL30A					Candidate		
Office	Total	Optical	iVo	Flash	iVo	Delta	Comments

0012 Daniel Island 1							
#####							
#####							
State House of Rep Dist 99					Cindy Boatwright		(DEM)
83	0	83	0	83	0		
State House of Rep Dist 99					Nancy Mace		(REP)
225	0	225	0	225	0		
State House of Rep Dist 99					Write-In		
2	0	2	0	2	0		

0013 Daniel Island 2							
#####							
#####							
State House of Rep Dist 99					Cindy Boatwright		(DEM)
118	0	118	0	118	0		
State House of Rep Dist 99					Nancy Mace		(REP)
110	0	110	0	110	0		
State House of Rep Dist 99					Write-In		
0	0	0	0	0	* No Audit Data expected or found		

0021 Hanahan 2							
#####							
#####							
State House of Rep Dist 99					Cindy Boatwright		(DEM)
37	0	37	0	37	0		
State House of Rep Dist 99					Nancy Mace		(REP)
82	0	82	0	82	0		
State House of Rep Dist 99					Write-In		
0	0	0	0	0	* No Audit Data expected or found		

0022 Hanahan 3							
#####							
#####							
State House of Rep Dist 99					Cindy Boatwright		(DEM)
28	0	28	0	28	0		

State House of Rep Dist 99 Nancy Mace (REP)
115 0 115 0 115 0
State House of Rep Dist 99 Write-In
1 0 1 0 1 0

0023 Hanahan 4

State House of Rep Dist 99 Cindy Boatwright (DEM)
56 0 56 0 56 0
State House of Rep Dist 99 Nancy Mace (REP)
62 0 62 0 62 0
State House of Rep Dist 99 Write-In
0 0 0 0 * No Audit Data expected or found

0061 Daniel Island 3

State House of Rep Dist 99 Cindy Boatwright (DEM)
126 0 126 0 126 0
State House of Rep Dist 99 Nancy Mace (REP)
130 0 130 0 130 0
State House of Rep Dist 99 Write-In
0 0 0 0 * No Audit Data expected or found

0062 Daniel Island 4

State House of Rep Dist 99 Cindy Boatwright (DEM)
140 0 140 0 140 0
State House of Rep Dist 99 Nancy Mace (REP)
193 0 193 0 193 0
State House of Rep Dist 99 Write-In
0 0 0 0 * No Audit Data expected or found

0063 The Village

State House of Rep Dist 99 Cindy Boatwright (DEM)
91 0 91 0 91 0
State House of Rep Dist 99 Nancy Mace (REP)
94 0 94 0 94 0
State House of Rep Dist 99 Write-In
0 0 0 0 * No Audit Data expected or found

0064 Yellow House

State House of Rep Dist 99 Cindy Boatwright (DEM)
40 0 40 0 40 0
State House of Rep Dist 99 Nancy Mace (REP)
59 0 59 0 59 0
State House of Rep Dist 99 Write-In
1 0 1 0 1 0

0068 Hanahan 5

State House of Rep Dist 99 Cindy Boatwright (DEM)
33 0 33 0 33 0

State House of Rep Dist 99 Nancy Mace (REP)
155 0 155 0 155 0
State House of Rep Dist 99 Write-In
1 0 1 0 1 0

0077 Foster Creek 2

State House of Rep Dist 99 Cindy Boatwright (DEM)
72 0 72 0 72 0
State House of Rep Dist 99 Nancy Mace (REP)
107 0 107 0 107 0
State House of Rep Dist 99 Write-In
1 0 1 0 1 0

0078 Foster Creek 3

State House of Rep Dist 99 Cindy Boatwright (DEM)
57 0 57 0 57 0
State House of Rep Dist 99 Nancy Mace (REP)
63 0 63 0 63 0
State House of Rep Dist 99 Write-In
1 0 1 0 1 0

0082 Sedgfield 2

State House of Rep Dist 99 Cindy Boatwright (DEM)
0 0 0 0 * No Audit Data expected or found
State House of Rep Dist 99 Nancy Mace (REP)
0 0 0 0 * No Audit Data expected or found
State House of Rep Dist 99 Write-In
0 0 0 0 * No Audit Data expected or found

0750 Absentee

State House of Rep Dist 99 Cindy Boatwright (DEM)
18 18 0 0 * All votes cast for this candidate

* in this precicnt are optical.

* No Audit Data for optical.

State House of Rep Dist 99 Nancy Mace (REP)
36 30 6 0 6 0
State House of Rep Dist 99 Write-In
0 0 0 0 * No Audit Data expected or found

0800 Emergency

State House of Rep Dist 99 Cindy Boatwright (DEM)
1 1 0 0 * All votes cast for this candidate

* in this precicnt are optical.

* No Audit Data for optical.

State House of Rep Dist 99 Nancy Mace (REP)
1 1 0 0 * All votes cast for this candidate

* in this precinct are optical.

* No Audit Data for optical.

State House of Rep Dist 99 Write-In
0 0 0 0 * No Audit Data expected or found

0850 Failsafe

#####

State House of Rep Dist 99 Cindy Boatwright (DEM)

0 0 0 0 * No Audit Data expected or found

State House of Rep Dist 99 Nancy Mace (REP)

0 0 0 0 * No Audit Data expected or found

State House of Rep Dist 99 Write-In

0 0 0 0 * No Audit Data expected or found

0900 Provisional

#####

State House of Rep Dist 99 Cindy Boatwright (DEM)

0 0 0 0 * No Audit Data expected or found

State House of Rep Dist 99 Nancy Mace (REP)

2 2 0 0 * All votes cast for this candidate

* in this precinct are optical.

* No Audit Data for optical.

State House of Rep Dist 99 Write-In
0 0 0 0 * No Audit Data expected or found

There was no unmatched audit data

How to read this report.

This is the vote level report. It compares the number of votes cast for each candidate in the tabulation report with the number of ballots cast in the audit data for each candidates in each precinct.

The tabulated values as read from the EL30A report are reported in four categories; Total, Optical (Opt), iVotronic (iVo) and Flash. None of these values on each line are calculated but parsed from the actual report. In the EL30A report all Write-in votes are added together and reported as one candidate name - Write-in. The EL30A does not report individual Write-in candidates.

The Opt totals are the total number of votes cast on paper ballots that were scanned into the optical scanner and transferred to the tabulation computer via memory stick or ZipDisk (depending on the type of device, M100 or M650 used to scan the ballots.) Optical totals should exist only in some but not all

of the Virtual Precincts at the bottom of the table.

The iVo totals are the results gathered from the PEBs (Personal Electronic Ballot) which are used to open and close an iVotronic voting machine and, after the polls have closed, gather the ballots cast for transmission to the tabulation system.

The Flash totals are the totals that are read from the flash cards in the rare event that the ballots cannot be copied from the machine to the PEB or from the PEB to the tabulating machine.

The values on the Audit side come from the iVotronic audit data that is read from the flash cards as part of the audit process. That process combines the individual machine data into a master audit file, the EL155 Vote image log.

The EL155 contains a record of all the votes cast on a ballot. The vote images indicate the machine. Counting the number of times a candidate name for a contest appears in a precinct we get the number of votes cast in that precinct for that candidates. That number should always match the number of votes cast for that candidate in that contest in the iVo column on the EL30A side of the report.

Optical ballots do not have electronically readable audit files. So if the audit data iVotronic total votes does not match the EL30A iVo value one of two things will occur. The first is if the iVotronic tabulated is zero and the Total tabulated votes match the tabulated Optical votes the following comment is made in the Audit side of the report; All votes cast for this candidate in this precinct are optical No Audit Data for optical, or secondly, if the iVotronic total is not zero, a notation indicating which data Audit data. In the event a candidate or the combined Write-in candidates did not receive any votes in a precinct the EL30A will report a zero vote count. If there are no votes for this candidate in a precinct in the audit data, the following comment will be placed into the audit report by the auditing software; No Audit Data expected or found.

Finally the audit software will search the audit data for any votes that were not found on the EL30A report. If it finds some, it will report those vote totals by contest, candidate name and precinct. if it does not find any unmatched audit data it will report; There was no unmatched audit data

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Audit Date: 11:19:41, Fri Jan 19, 2018

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+-----EL30A-----+-----EL45A-----+
+
Office                               Candidate                               Party
|   Tot   Opt   iVo   Flash |   Tot   Opt   iVo   Flash |   Delta
|
-----
-+-----+-----
-+
State House of Rep Dist 99           Cindy Boatwright           (DEM)
900   19   881   0   900   19   881   0   0
State House of Rep Dist 99           Nancy Mace                 (REP)
1434  33  1401   0  1434  33  1401   0   0
State House of Rep Dist 99           Write-In
7     0    7     0    7     0    7     0   0
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How to read this report.

This is EL30A EL45A Crosscheck Report. It sums each candidates vote totals in each precinct in the EL30A Precinct Detail Report and compares it to the EL45A Election Summary Report that contains the tabulated total for each candidate in the county.

The values read from the EL30A report are reported in four categories; Total, Optical (Opt), iVotronic (iVo) and Flash. None of these values on each line are calculated but parsed from the actual report. The total lines are the calculated sums of the individual precince line values.

The Opt totals are the total number of votes cast on paper ballots that were scanned into the optical scanner and transferred to the tabulation computer via memory stick or ZipDisk (depending on the type of device, M100 or M650 used to scan the ballots.) Optical totals should exist only in some but not all of the Virtual Precincts at the bottom of the table.

The iVo totals are the results gathered from the PEBs (Personal Electronic Ballot) which are used to open and close an iVotronic voting machine and, after the polls have closed, gather the ballots cast for transmission to the tabulation system.

The Flash totals are the totals that are read from the flash cards in the rare event that the ballots cannot be copied from the machine to the PEB or from the PEB to the tabulating machine.

The values read from the EL45A report are reported in same four categories; Total, Optical (Opt), iVotronic (iVo) and Flash as the EL30A. Like the EL30A they are parsed from the actual EL45A report.

The summary candidate totals are compared against the calculated sums for each candidate from, the EL30A report. Each of the values in each line on the EL30A side must match the same value on the EL45A side and the Delta value must be zero.

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Berkeley PEB Use Report
Election: 2017 State House Dist 99 General
Audit Date: 11:18:40, Fri Jan 19, 2018

Precinct	PEBs Used	Comments
Daniel Island 1	144688	
Daniel Island 2	144688	
Hanahan 2	155752	
Hanahan 3	125581	
Hanahan 4	229791	
Daniel Island 3	118431	
Daniel Island 4	118431	
The Village	117696	
Yellow House	117696	
Hanahan 5	125581	
Foster Creek 2	142634	
Foster Creek 3	119509	
Absentee	125515	

13 precincts processed

The following precinct(s) have no ballots cast in them: Sedgefield 2, Failsafe

Note: if there are no ballots cast in a precinct the machines in that precinct cannot be identified so these precinct(s) will not appear in this report.

How to read this report.

This is the PEB Used report. It lists the precincts found in the Audit data and lists all the PEBs that were used by the poll workers to open and close the iVotronic machines in that precinct.

If more than one PEB is used to open and close all the iVotronic machines in a precinct, then the County Election Commission must read ALL the PEBs used in that precinct to assure that they have collected all the ballots from that precinct. A county whose report shows a precinct that has machines open or closed by more than one PEB should double check the Ballot Audit Report against the iVotronic paper tapes and the Poll Book to make sure that all the ballots have been collected and tabulated.

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Berkeley PEB Exceptions Report
Election: 2017 State House Dist 99 General
Election date: 01/16/2018
Audit Date: 11:18:40, Fri Jan 19, 2018

iVo #	Op PEB	Open Time	Cl PEB	Close Time	Exception
5128497	125515	12/15/2017 09:15:26	125515	01/16/2018	
19:03:19	>>Open Date<<	Absentee - 4			
5128497	125515	12/15/2017 09:15:26	125515	01/16/2018	
19:03:19	Open Time	Absentee - 4			
5135600	125515	12/15/2017 09:15:35	125515	01/16/2018	
19:02:49	>>Open Date<<	Absentee - 2			
5135600	125515	12/15/2017 09:15:35	125515	01/16/2018	
19:02:49	Open Time	Absentee - 2			

How to read this report.

This is the PEB Exceptions Report. It checks for the following conditions in the iVotronic Event log;

- 1: A machine that was opened and closed by different PEBs
- 2: A Machine that was not opened on Election Date - could be either an absentee or test machine
- 3: A Machine that was not closed on Election Date - could have had problem closing
- 4: A Machine that was not opened by 7 am - note most Absentee machines will show up here
- 5: A Machine that was closed before 7pm - polls close at 7 PM
- 6: A Machine that was not closed ever.
- 7: A machine that has no ballots cast on it.

Each of the events above detected are reported on a separate line, each line contains the following information:
iVotronic machine number, Opening PEB Number, Open Time, Closing PEB Number, Closing Time, the Exception Type and the Precinct and the Ballots Cast on that machine.

Absentee and Failsafe precinct machines are opened during the middle of the day several days before the election date of 01/16/2018. So it is normal for these machines to appear on this report with Open Date and Open Time exceptions.