Horry Ballot Audit Report

Horry Ballot Audit Report Election: Special Republican Primary Audit Date: 10:33:13, Thu Jul 30, 2015

Prec Precinct			EL3	0A			Audi	t		. [
Nber	Name	Total	0pt	i Vo	FI ash	i Vo	0pt	Man	Del ta	Comments
0108	Burgess #1	206	0	206	0	206	0	0	0	. –
0109	Burgess #2	211	0	211	0	211	0	0	0	
0121	Deerfi el d	175	0	175	0	175	0	0	0	
0138	Garden City #1	142	0	142	0	142	0	0	0	
0139	Garden City #2	141	0	141	0	141	0	0	0	
0140	Garden City #3	124	0	124	0	124	0	0	0	
0141	Garden City #4	82	0	82	0	82	0	0	0	
0142	GI enns Bay	121	0	121	0	121	0	0	0	
0165	Marlowe #1	91	0	91	0	91	0	0	0	
0204	Surfsi de #1	263	0	263	0	263	0	0	0	
0205	Surfside #2	218	0	218	0	218	0	0	0	
0206	Surfside #3	151	0	151	0	151	0	0	0	
0207	Surfsi de #4	2	0	2	0	2	0	0	0	
0219	Burgess #3	169	0	169	0	169	0	0	0	
0220	Marlowe #2	193	0	193	0	193	0	0	0	
0221	Burgess #4	148	0	148	0	148	0	0	0	
0222	Mariowe #3	93	0	93	0	93	0	0	0	
Preci ncts	s Total:	2530	0	2530	0	2530	0	0	0	
0750	Absentee	50	15	35	0	35	15	0	0	
0800	Emergency	0	0	0	0	0	0	0	0	
0850	Failsafe	0	0	0	0	0	0	0	0	
0900	Provi si onal	4	4	0	0	0	4	0	0	
0950	Failsafe Provisional	3	3	0	0	0	3	0	0	
Virtual 1	Precincts Total:	57	22	35	0	35	22	0	0	
Grand To	tal :	2587	22	2565	0	2565	22	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 containg no votes: 13
The following precincts have no ballots cast in them: Emergency, Failsafe
This audit is complete and has no exceptions.

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

Horry Ballot Audit Report

Ĭ	EL30A Ivo Ballots	EL155 Ballots	EL152 Ballots
Ī	2565 Delta from EL30A	2565 0 Delta from EL155	2565 0 0
Т		Cast By Voter Cast By Poll Wkr Blank Cast by PW	2565 0 0
		Cancelled Ballots	50
		Wrong Ballot Voter Left AB Voter Left BB Voter Request Printer Problem Terminal Problem Other Reason	0 0 1 10 3 6 30

(AB = After ballot selected by poll worker.) (BB = Before ballot selected by poll worker.)

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

Note: The following machines(s) have audit records but no ballots were cast on them: 5132082
Because they do not have ballots cast, they cannot be matched to a precinct. This is not
an issue as long as the EL30A Ivo Ballots, the EL155 Ballots and the EL152 Ballots match
in the table immdiately above.

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.

Horry Ballot Audit Report

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 Ocounting the number of asterisks in a precint 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 electonically 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 EL3OA 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 highlited 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 nubmer ballots cast in the EL30A match the numbers in the EL155 and the EL152 report. Then there are some statistics pulled from the EL152 repor 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.

Horry Vote Audit

Horry Vote Level Audit Report Election: Special Republican Primary Audit Date: 10:33:54, Thu Jul 30, 2015

Precinct Number / Name			EL30A				Audi t		
Office	Candi date	Party	Total		i Vo	FI ash	i Vo	Del ta	Comments
0108 Burgess #1									
REP - State House of Representatives Dist	106Russell Fry		127	0	127	0	127		0
REP - State House of Representatives Dist	106Sanford Cox Graves		11	0	11	0	11		0
REP - State House of Representatives Dist	106Tyler Servant		40		40	0	40		0
REP - State House of Representatives Dist	TUBROY W SPRINKIE		24	0	24	0	24		U
0109 Burgess #2									
REP - State House of Representatives Dist	106Russell Fry		101		101	0	101		0
REP - State House of Representatives Dist			15		15	0	15		0
REP - State House of Representatives Dist			67		67	0	67		0
REP - State House of Representatives Dist	TOOROY W Sprinkle		26	0	26	0	26		U
0121 Deerfield									
REP - State House of Representatives Dist	106Russell Fry		99		99	0	99		0
REP - State House of Representatives Dist			.5		.5	0	.5		0
REP - State House of Representatives Dist			44 27	0	44 27	0	44 27		0
REP - State House of Representatives Dist	TOOKOY W SPITTIKIE		21	U	21	U	21		U
0138 Garden City #1									
REP - State House of Representatives Dist	106Russell Fry		44		44	0	44		0
REP - State House of Representatives Dist	106Sanford Cox Graves		20		20	0	20		0
REP - State House of Representatives Dist REP - State House of Representatives Dist			45 31		45 31	0	45 31		0
ker - State house of keptesentatives bist	TOOKOY W SPITIKIE		31	U	31	U	31		U
0139 Garden City #2									
REP - State House of Representatives Dist			41		41	0	41		0
REP - State House of Representatives Dist			11		11	0	11		0
REP - State House of Representatives Dist	106Tyler Servant		78 10		78 10	0	78 10		0
REP - State House of Representatives Dist	TOOKOY W SPITIKIE		10	U	10	U	10		U
0140 Garden City #3									
REP - State House of Representatives Dist	106Russell Fry		48		48	0	48		0
REP - State House of Representatives Dist			10		10	0	10		0
REP - State House of Representatives Dist REP - State House of Representatives Dist			45 21		45 21	0	45 21		0
WEI - State House of Mehresentatives Dist	TOURDY W SPITTING		21	U	21	U	21		U

	Horry Vote Audit						
O141 Garden City #4 REP - State House of Representatives Dist 106Russell Fry REP - State House of Representatives Dist 106Sanford Cox Graves REP - State House of Representatives Dist 106Tyler Servant REP - State House of Representatives Dist 106Roy W Sprinkle	44 14 7 16	0 0 0 0	44 14 7 16	0 0 0 0	44 14 7 16	0 0 0 0	
0142 Glenns Bay REP - State House of Representatives Dist 106Russell Fry REP - State House of Representatives Dist 106Sanford Cox Graves REP - State House of Representatives Dist 106Tyler Servant REP - State House of Representatives Dist 106Roy W Sprinkle	54 8 35 23	0 0 0 0	54 8 35 23	0 0 0 0	54 8 35 23	0 0 0 0	
0165 Marlowe #1 REP - State House of Representatives Dist 106Russell Fry REP - State House of Representatives Dist 106Sanford Cox Graves REP - State House of Representatives Dist 106Tyler Servant REP - State House of Representatives Dist 106Roy W Sprinkle	42 5 26 18	0 0 0 0	42 5 26 18	0 0 0 0	42 5 26 18	0 0 0 0	
0204 Surfside #1 REP - State House of Representatives Dist 106Russell Fry REP - State House of Representatives Dist 106Sanford Cox Graves REP - State House of Representatives Dist 106Tyler Servant REP - State House of Representatives Dist 106Roy W Sprinkle	62 19 143 39	0 0 0 0	62 19 143 39	0 0 0 0	62 19 143 39	0 0 0 0	
0205 Surfside #2 REP - State House of Representatives Dist 106Russell Fry REP - State House of Representatives Dist 106Sanford Cox Graves REP - State House of Representatives Dist 106Tyler Servant REP - State House of Representatives Dist 106Roy W Sprinkle	71 23 95 29	0 0 0 0	71 23 95 29	0 0 0 0	71 23 95 29	0 0 0 0	
0206 Surfside #3 REP - State House of Representatives Dist 106Russell Fry REP - State House of Representatives Dist 106Sanford Cox Graves REP - State House of Representatives Dist 106Tyler Servant REP - State House of Representatives Dist 106Roy W Sprinkle	68 4 45 34	0 0 0 0	68 4 45 34	0 0 0 0	68 4 45 34	0 0 0 0	
0207 Surfside #4 REP - State House of Representatives Dist 106Russell Fry REP - State House of Representatives Dist 106Sanford Cox Graves REP - State House of Representatives Dist 106Tyler Servant REP - State House of Representatives Dist 106Roy W Sprinkle	2 0 0 0	0 0 0 0	2 0 0 0	0 * N	lo Audit Da	0 nta expected or fo nta expected or fo nta expected or fo	ound
0219 Burgess #3 REP - State House of Representatives Dist 106Russell Fry	104	0	104	0	104	0	

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REP - State House of Representatives Dist 106Sanford Cox Graves REP - State House of Representatives Dist 106Tyler Servant	Horry Vote Audit 15 42	0	15 42	0	15 42	0	
REP - State House of Representatives Dist 106Roy W Sprinkle	8	0	8	0	8	0	
0220 Marlowe #2 REP - State House of Representatives Dist 106Russell Fry REP - State House of Representatives Dist 106Sanford Cox Graves REP - State House of Representatives Dist 106Tyler Servant REP - State House of Representatives Dist 106Roy W Sprinkle	110 9 43 30	0 0 0 0	110 9 43 30	0 0 0 0	110 9 43 30	0 0 0 0	
0221 Burgess #4 REP - State House of Representatives Dist 106Russell Fry REP - State House of Representatives Dist 106Sanford Cox Graves REP - State House of Representatives Dist 106Tyler Servant REP - State House of Representatives Dist 106Roy W Sprinkle	75 15 46 12	0 0 0 0	75 15 46 12	0 0 0 0	75 15 46 12	0 0 0 0	
O222 Marlowe #3 REP - State House of Representatives Dist 106Russell Fry REP - State House of Representatives Dist 106Sanford Cox Graves REP - State House of Representatives Dist 106Tyler Servant REP - State House of Representatives Dist 106Roy W Sprinkle	43 2 31 16	0 0 0 0	43 2 31 16	0 0 0 0	43 2 31 16	0 0 0 0	
0750 Absentee REP - State House of Representatives Dist 106Russell Fry REP - State House of Representatives Dist 106Sanford Cox Graves REP - State House of Representatives Dist 106Tyler Servant REP - State House of Representatives Dist 106Roy W Sprinkle	17 4 19 10	2 2 7 4	15 2 12 6	0 0 0 0	15 2 12 6	0 0 0 0	
0800 Emergency REP - State House of Representatives Dist 106Russell Fry REP - State House of Representatives Dist 106Sanford Cox Graves REP - State House of Representatives Dist 106Tyler Servant REP - State House of Representatives Dist 106Roy W Sprinkle	0 0 0 0	0 0 0 0	0 0 0 0	0 * N 0 * N	lo Audit D lo Audit D	pata expected o pata expected o pata expected o pata expected o	r found r found
0850 Failsafe REP - State House of Representatives Dist 106Russell Fry REP - State House of Representatives Dist 106Sanford Cox Graves REP - State House of Representatives Dist 106Tyler Servant REP - State House of Representatives Dist 106Roy W Sprinkle	0 0 0 0	0 0 0 0	0 0 0 0	0 * N 0 * N	lo Audit D lo Audit D	Data expected on Data	r found r found
0900 Provisional REP - State House of Representatives Dist 106Russell Fry REP - State House of Representatives Dist 106Sanford Cox Graves REP - State House of Representatives Dist 106Tyler Servant	0 0 4	0 0 4	0 0 0	0 * N	lo Audit 🛭	oata expected o oata expected o cast for this	r found or found

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* in this precient are optical.

				* No Audit Data for optical.
REP - State House of Representatives Dist 106Roy W Sprinkle	0	0	0	0 * No Audit Data expected or found
0950 Failsafe Provisional REP - State House of Representatives Dist 106Russell Fry REP - State House of Representatives Dist 106Sanford Cox Graves	0 2	0 2	0 0	0 * No Audit Data expected or found 0 * All votes cast for this
candi date				* in this preciont are optical.* No Audit Data for optical.
REP - State House of Representatives Dist 106Tyler Servant candidate	1	1	0	0 * All votes cast for this
Candidate				* in this preciont are optical.* No Audit Data for optical.
REP - State House of Representatives Dist 106Roy W Sprinkle There was no unmatched audit data	0	0	0	O * No Audit Data expected or found

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.

Horry Vote Audit

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 Ocounting the number of times a candidate name for a contest appears in a precint 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 electonically 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 precient 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.

Finaly 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

Horry EL30A45A Comparison Report Election: Special Republican Primary Audit Date: 10:34:12, Thu Jul 30, 2015

+EL30AOffice Del ta	EL45A Candi date	Party	Tot	0pt	i Vo	Flash	Tot	0pt	i Vo	Flash
+										
State House of Representatives Dist 106	Russell Fry		1152	2	1150	0	1152	2	1150	0
State House of Representatives Dist 106	Sanford Cox Graves		192	4	188	0	192	4	188	0
State House of Representatives Dist 106	Tyler Servant		856	12	844	0	856	12	844	0
State House of Representatives Dist 106	Roy W Sprinkle		374	4	370	0	374	4	370	0

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.

Horry PEBExceptionsReport

Horry PEB Exceptions Report Election: Special Republican Primary Election date: 07/28/2015 Audit Date: 10:33:13, Thu Jul 30, 2015

i Vo #	Op PEB	Open Time	CI PEB	Close Time	Exception Type	Precinct - Ballots Cast
5116422 5132002	145094 145094	06/22/2015 16: 21: 30 06/22/2015 16: 21: 30 06/22/2015 16: 20: 38 06/22/2015 16: 20: 38	145094 145094	07/28/2015 19: 01: 41 07/28/2015 19: 01: 41 07/28/2015 19: 01: 14 07/28/2015 19: 01: 14	<pre>>>Open Date<< Open Time >>Open Date<< Open Time</pre>	Absentee - 23 Absentee - 23 Absentee - 12 Absentee - 12

The following machines(s) have audit records but no ballots were cast on them: 5132082 Because they do not have ballots cast, they cannot be matched to a precinct.

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 precint machines are opened during the middle of the day several days before the election date of 07/28/2015. So it is normal for these machines to appear on this report with Open Date and Open Time exceptions.

Horry PEB Use Report

Election: Special Republican Primary Audit Date: 10:33:13, Thu Jul 30, 2015

Preci nct	PEBs Used	Comments
Burgess #1 Burgess #2 Deerfield Garden City #1 Garden City #2 Garden City #3 Garden City #4 Glenns Bay Marlowe #1 Surfside #1 Surfside #2 Surfside #3 Surfside #4 Burgess #3 Marlowe #2 Burgess #4 Marlowe #3	143397 119324 135177 158804 149691 139912 187546 154701 145569 229437 145516 124017 112099 153486 151317 155043	
Absentee	145094	

18 precincts processed

The following precinct(s) have no ballots cast in them: Emergency, 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 precints 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.



The audit file package for each election contains six files that are created by the Election Management System, Unity, which is used for elections in South Carolina. These files are used by the audit process created by the South Carolina Election Commission. Each of these text files can be read by any text editor.

The six files are the; EL45A Election Report, EL30A Precinct Report, EL155 Vote Image Log, EL152 Event Log, EL68A System Log and EL68 Manual Entry Log.

EL45A Election Report

The EL45A Election Report is the summary report and shows the grand totals for each contest in the election for the entire county.

Report Header

First line	Indicates the report is a summary, the county, and status of results (unofficial or official)
Second line	Name of election
Third line	Date of election
Fourth line	Date and time the report was created, name of the report and page number
Fifth line	Column titles

The Optical Scan column contains the votes that were cast on paper ballots, the iVotronic column contains the votes that were cast on voting machines, and Flash Data column contains the votes that had to be recovered from the audit data contained on the Flash Cards. This last column will normally be empty as the need to use flash data to count the votes occurs only in very rare situations.



Richland County Official Results SUMMARY REPT-GROUP DETAIL Municipal/Referendum Election November 05, 2013 Run Date:11/12/13 10:16 AM Report EL45A Page 001 TOTAL VOTES Optical Scan iVotronic Flash Data The next section is the election summary... 98.46 PRECINCTS COUNTED (OF 130). REGISTERED VOTERS - TOTAL 247,171 610 30,177 0 30,787 BALLOTS CAST - TOTAL. 12.46 VOTER TURNOUT - TOTAL And the body of the report contains the county wide results of the election... Mayor of Columbia Vote for up to 1 Moe Baddourah 5,594 34.49 5,410 0 Steve Benjamin. 10,402 64.13 10,215 0 Larry A Sypolt. 1.03 152 0 167 15 Write-In.35 1 56 0 387 15,833 16,220 Columbia City Council At Large Vote for up to 1 Tommy Burkett 34.73 5,232 0 5,400 168 Tameika Isaac Devine. 10,068 64.75 207 9,861 3 78 0 Total 15,549 15,171 Columbia City Council Dist. 1 Vote for up to 1 Sam Davis 2,431 69.80 2,390 0 Bruce A Trezevant. 1,041 29.89 28 1,013 0 .32 11 11 0 3,414 Ω 3,483 Total

Columbia City Council Dist. 4 Vote for up to 1



Leona K Plaugh.					2,692	68.48	80	2,612	0
Todd Walter					1,226	31.19	30	1,196	0
Write-In					13	.33	0	13	0
Total .					3,931		110	3,821	0

The EL30A Election Report

The EL30A Election Report is the precinct report. It is similar to the EL45A report but it shows the totals in each precinct for each contest that was included in that precinct. These contests can vary from precinct to precinct depending on the location of the district lines in the county. It is possible that a precinct may include two or more seats in a contest but each voter in that precinct can vote for a candidate for only one district.

Report Header

First line	Indicates the report is a summary, the county, and status of results (unofficial or official)
Second line	Name of election
Third line	Date of election
Fourth line	Date and time the report was created, name of the report and page number
Fifth line	Column titles

The Optical Scan column contains the votes that were cast on paper ballots, the iVotronic column contains the votes that were cast on voting machines, and Flash Data column contains the votes that had to be recovered from the audit data contained on the Flash Cards. This last column will normally be empty as the need to use flash data to count the votes occurs only in very rare situations.



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PREC REPORT-GROUP DETAIL Richland County Unofficial Results Municipal/Referendum Election

age 0101-01

Run Date:11/12/13 10:16 AM	N	ovember 05, 201	3		:	Report EL30A Pag
0101 Ward 1	TOTAL VOTES	% Optical	Scan iVo	tronic Flash	n Data	
The next section is the precinct summ	ary					
REGISTERED VOTERS - TOTAL BALLOTS CAST - TOTAL	231	12.47	0	231	0	
And the body of the report contains the	ne precinct wi	de results of th	e election			
Mayor of Columbia Vote for up to 1						
Moe Baddourah	71	31.28	0	71	0	
Steve Benjamin		66.96	0	152	0	
Larry A Sypolt			0	0	0	
Write-In		1.76	0	4	0	
Total	227		0	227	0	
Columbia City Council At Large Vote for up to 1						
Tommy Burkett		33.18	0	73	0	
Tameika Isaac Devine	144	65.45	0	144	0	
Write-In	3	1.36	0	3	0	
Total	220		0	220	0	

10tal	•	•	•	•	220		U	220	,
COUNTY REFERENDUM									
Vote for up to 1									
Yes, in favor of the question.					156	68.72	0	156	(
No, opposed to the question .					71	31.28	0	71	(
Total					227		Ω	227	(



Followed by the next precinct...

Run Date:11/12/13 10:16 AM

PREC REPORT-GROUP DETAIL Richland County Municipal/Referendum Election

November 05, 2013

Unofficial Results

Report EL30A Page 0102-01

0102 Ward 2	VOTES %	Optical Scan	iVotronic	Flash Data
REGISTERED VOTERS - TOTAL	943	Optical Scan	IVOCIONIC	riasii Data
BALLOTS CAST - TOTAL	111	0	111	0
VOTER TURNOUT - TOTAL	11.77	7		
Mayor of Columbia				
Vote for up to 1				
Moe Baddourah	9 8.18	3 0	9	0
Steve Benjamin	98 89.09	9 0	98	0
Larry A Sypolt	2 1.82	2 0	2	0
Write-In	1 .91		1	0
Total	110	0	110	0
Columbia City Council At Large				
Vote for up to 1				
Tommy Burkett	17 15.89	9 0	17	0
Tameika Isaac Devine	88 82.24	4 0	88	0
Write-In	2 1.87	7 0	2	0
Total	107	0	107	0
COUNTY REFERENDUM				
Vote for up to 1				
Yes, in favor of the question	71 72.45	5 0	71	0
No, opposed to the question	27 27.55		27	0
Total	98	0	98	0

Each precinct is reported separately.



The last precincts in the election contain the "Virtual Precincts": Absentee, Emergency, Failsafe, Provisional and Failsafe / Provisional. When for some reason a voter cannot cast his or her ballot on a voting machine in the precinct to which a voter is assigned, that vote is cast in one of these precincts. Examples of reasons a vote must be cast in a virtual include absentee voting and cases when a voter's right to vote has been challenged in their assigned precinct.

Municipal/Referendum Election November 05, 2013

1	November 05, 2013			
Run Date:11/12/13 10:16 AM			Report EL3	30A Page 0750-01
0750 Absentee				
TOTAL VOTES	% Optical Scan	iVotronic Flash	h Data	
REGISTERED VOTERS - TOTAL	opered bean	TVOCTOTIC TEAST	.i Baca	
BALLOTS CAST - TOTAL	586	1,863	0	
	300	1,003	Ü	
Mayor of Columbia				
Vote for up to 1				
Moe Baddourah	31.81 176	220	0	
Steve Benjamin 823	66.10 178	645	0	
Larry A Sypolt	2.01 15	10	0	
Write-In	.08 1	0	0	
Total 1,245	370	875	0	
Columbia City Council At Large				
Vote for up to 1			_	
Tommy Burkett		232	0	
Tameika Isaac Devine		593	0	
Write-In 5		3	0	
Total 1,190	362	828	0	
Columbia City Council Dist. 1				
Vote for up to 1				
Sam Davis	64.34 41	134	0	
Bruce A Trezevant		67	0	
Write-In		2	0	
Total		203	0	
10td1	09	203	0	
Columbia City Council Dist. 4				
Vote for up to 1				
Leona K Plaugh 173	70.61 79	94	0	



Todd Walter					98 41	28 0	43 1	0	
Total						107	138	0	
PREC REPORT-GROUP DETAIL				Municip	d County al/Refer r 05, 20	endum Elec	ction	Uno	fficial Results
Run Date:11/12/13 10:16 AM									Report EL30A Page 0750-02
0750 Absentee		TOTA	AL VOTES	olo	Optica	ıl Scan	iVotronic	Flash Data	
COUNTY REFERENDUM									
Vote for up to 1									
Yes, in favor of the question.			1,715	71.	73	301	1,414	0	
No, opposed to the question .			676	28.	27	257	419	0	
Total			2,391			558	1,833	0	

The Emergency, Failsafe, Provisional and Failsafe / Provisional precinct reports are identical to the Absentee Report shown above.

The EL68A System Log

The EL68A System Log is a record of every event that occurred in the Election Management System (Unity) from the time that the election database was loaded prior to the election until the time the report was run.

Report Header

First line	Indicates the report is a summary, the county, and status of results (unofficial or official)
Second line	Name of election
Third line	Date of election
Fourth line	Date and time the report was created, name of the report and page number
Fifth line	Column titles



The User column is always blank and Counted Information applies only to certain events or operations contained in the log.

The first entry will always be the date and time that the database was created (loaded on to the Unity machine).

SYSTEM LOG LISTING

Richland County
Municipal/Referendum Election
November 05, 2013

RUN DATE:11/12/13 10:17 AM

ELECTION ID: 40110513

USER DATE TIME

E SYSTEM ACTION OR ERROR INFORMATION

COUNTED INFORMATION

09-26 10:07 am DATABASE CREATED

Here is an example where counted information is included in an event.

```
11-05 07:42 pm
11-05 07:42 pm
```

PRC 0750 PACK RECEIVED VTR (BALS=309 TOT=309) PRC 0850 PACK RECEIVED VTR

The auditor will refer to this log if an exception to the audit is detected by the automatic audit process or a "deeper dive" into the events of an election is required for any reason. It is not part of the automated audit process.

The EL68 Manual Entry Log

The EL68 Manual Entry Log is a record of every manual entry that occurred in the Election Management System (Unity) from the time that the election database was loaded prior to the election until the time the report was run.

Report Header

First line	Indicates the report is the Manual Changes Log Listing and the county
Second line	Name of election
Third line	Date of election
Fourth line	Date and time the report was created and the election ID
Fifth line	Column titles



The Election ID contains eight characters and is NORMALLY the county number and the date of the election in the form of mmddyy.

The User column is always blank, the GRP column indicates the Report Group in which the change was made if applicable. Group 3 is the Optical group, group 4 is the voting machine group.

MANUAL CHANGES LOG LISTING	Sample County Sample Election Samplemonth 1, 2013			
RUN DATE:11/12/13 10:17 AM				ELECTION ID: 40110513
PRECINCT	CANDIDATE	USER	DATE TIME GRP	OLD NEW
0101 Precinct 1	VOTERS		11-05 04:21 pm	0 1,852
0102 Precinct 2			11-05 04:21 pm	0 943
0103 Precinct 3			11-05 04:21 pm	0 1,476

If the candidate column contains the word "VOTERS" and the Old column contains a zero, this is a manual entry for the number of registered voters in the precinct. This is a normal entry performed on Election Day usually sometime between 9 AM and 7 PM. Note that in the example above the word "VOTERS" appears only in the first entry, the subsequent entries are all blank.

In the following example we can see that the same thing happens in the precinct column.

0750 Absentee	BALLOTS CAST - TOTAL	04-08 10:13 ar	n 3	0	3
	Candidate A	04-06 01:04 pr	n 4	0	1
		04-08 10:05 ar	n 3	0	1
		04-08 10:11 ar	n 4	1	0
	Candidate B	04-06 01:04 pr	n 4	10	12
		04-08 10:05 ar	n 3	0	2
		04-08 10:08 ar	n 4	12	22
		04-08 10:11 ar	n 4	22	10

Care must be taken when evaluating a situation where the value was changed more than once. As you can see, manual entries were made for these candidates on 04/06 and 04/08.

On 04/06

- At 1:04 PM Candidate A group 3 (Optical) was set to 1
- And Candidate B group 4 (iVotronic) was changed from 10 to 12



On 04/08

- At 10:05 AM Candidate A group 3 (Optical) was set to 1
- And Candidate B group 3 (Optical) was set to 2
- At 10:08 AM Candidate B Group 4 (iVotronic) 10 votes were manually added to the 12 that were there after the 04/06 manual entry
- At 10:11 AM Candidate B Group 4 (iVotronic) 12 votes were removed, returning the count to 10.
- At 10:13 AM The Total Ballots Cast in Group 3 (Optical) was set to 3.

A review of the EL68A System log indicates that there were 10 iVotronic ballots cast in the Absentee precinct that were electronically read in at 01:02 PM on 04/06. The audit confirmed that all 10 Absentee iVotronic ballots were cast for Johnson when checking the EL30A iVotronic total versus the EL155 Vote Image File.

The EL30A report for the Absentee precinct in this election is below.

0750 Absentee													
								Ι	OTAI	L VOTES	% Optica	al Scan	iVotronic
REGISTERED VO	ΓER	s -	- TO	TAL	٠.					0			
BALLOTS CAST	- T	OTA	AL.				•	•		13		3	10
State House of	Re	o.	Dis	t 6	54								
Seat to Fill		-											
Candidate A										1	7.69	1	0
Candidate B										12	92.31	2	10
Write-In										0		0	0
Total										13		3	10

The above example is why the SEC Audit process automatically creates an exception when it detects that a manual entry was made. The auditor must perform a manual evaluation of the events and confirm that a mistake in the vote count was not made.



EL155 Vote Image Log

The EL155 Vote Image Log is a record of every ballot cast on the iVotronic voting machines in the county.

Report Header

First line	Date and time the report was created the precinct number and name and the the Election ID
Second line	Column titles

The Election ID contains eight characters and is NORMALLY the county number and the date of the election in the form of mmddyy.

The VOTR. column contains the serial number of the iVotronic voting machine upon which the vote was cast, the B/I column contains the Ballot Index which indicates which ballot style that appears in the precinct was used to cast that ballot (Note: the ballot index can be different in each precinct for a ballot style that is common to the precincts.

There is a number before the candidate name that is used to indicate precinct totals for each candidate in the precinct footer at the bottom of the each precinct. In this case candidate 2 is Steve Benjamin who received 37 votes in this precinct and candidate 7 is Tamekia Isaac Devine who received 33 voted in this precinct.

The office that the candidate is seeking is placed in the final column in this report. There is no header for that column.

Note the asterisk (*) in some of the records in this report. This indicates the first record in each ballot. So the ballot image for the first ballot shown in this report voted for Steve Benjamin, Tamekia Isaac Devine and Yes, in favor of the question put forward in the county resolution.



5131060	2 *	2 Steve Benjamin	MUNCOLU Mayor							
5131060	2	7 Tameika Isaac Devine	MUNCOLU City Council At Large							
5131060	2	29 Yes, in favor of the question	COUNTY REFERENDUM							
5131060	2 *	2 Steve Benjamin	MUNCOLU Mayor							
5131060	2	6 Tommy Burkett	MUNCOLU City Council At Large							
5131060	2	29 Yes, in favor of the question	COUNTY REFERENDUM							
5131060	2 *	2 Steve Benjamin	MUNCOLU Mayor							
5131060	2	7 Tameika Isaac Devine	MUNCOLU City Council At Large							
5131060	2	29 Yes, in favor of the question	COUNTY REFERENDUM							
5131060	2 *	1 Moe Baddourah	MUNCOLU Mayor							
5131060	2	6 Tommy Burkett	MUNCOLU City Council At Large							
5131060	2	30 No, opposed to the question	COUNTY REFERENDUM							
5131060	4 *	29 Yes, in favor of the question	COUNTY REFERENDUM							
5131060	3 *	2 Steve Benjamin	MUNCOLU Mayor							
5131060	3	7 Tameika Isaac Devine	MUNCOLU City Council At Large							
5131060	3	10 Sam Davis	CTYCO01 City Council District 1							
5131060	3	29 Yes, in favor of the question	COUNTY REFERENDUM							
5131060	4 *	29 Yes, in favor of the question	COUNTY REFERENDUM							
5131060	4 *	30 No, opposed to the question	COUNTY REFERENDUM							
5131060	2 *	2 Steve Benjamin	MUNCOLU Mayor							
5131060	2	7 Tameika Isaac Devine	MUNCOLU City Council At Large							
5131060	2	29 Yes, in favor of the question	COUNTY REFERENDUM							
5131060	4 *	30 No, opposed to the question	COUNTY REFERENDUM							
5131060	3 *	2 Steve Benjamin	MUNCOLU Mayor							
5131060	3	7 Tameika Isaac Devine								
5131060	3	10 Sam Davis	CTYCO01 City Council District 1							
5131060	3	30 No, opposed to the question	COUNTY REFERENDUM							
5131060	5 *	2 Steve Benjamin	MUNCOLU Mayor							
5131060	5	7 Tameika Isaac Devine	MUNCOLU City Council At Large							
5131060	5	14 Leona K Plaugh	CTYCO04 City Council District 4							
5131060	5	29 Yes, in favor of the question	COUNTY REFERENDUM							
5131060	2 *	2 Steve Benjamin	MUNCOLU Mayor							
5131060	2	7 Tameika Isaac Devine	MUNCOLU City Council At Large							
5131060	2	29 Yes, in favor of the question	COUNTY REFERENDUM							
5131060	4 *	29 Yes, in favor of the question	COUNTY REFERENDUM							
			PRECINCT TOTALS							
CAND VOTE	ES	CAND VOTES CAND VOTES CAND VOTES	CAND VOTES CAND VOTES CAND VOTES CAND VOTES							
1	3	2 37 6 7 7 33	10 11 11 2 14 2 15 1 29 53							
30 1	13									

Although the precinct, voting machine and the votes cast on each ballot can be determined, the order in which the ballots are cast is randomly presented in this report so neither the time of day the ballot was cast nor the voter's identity can be discovered.



The EL152 Event Log

EL152 Event Log is a record of every event or operation that occurred on every iVotronic voting machine used in the election. Each machine is reported sequentially in ascending serial number order. Each event or operation on a machine is reported in chronological order.

Report Header

First line	Date and time the report was created the precinct number and name and the Election ID
Second line	Column titles

The Election ID contains eight characters and is NORMALLY the county number and the date of the election in the form of mmddyy.

The Votronic column contains the serial number of the iVotronic voting machine on which the event occurred, the PEB# column contains the serial number of the PEB (Personal Electronic Ballot, the device that is used to open a terminal session on the voting machine to perform an operation such as allowing a voter to cast his or her ballot), the Type column contains the type of PEB being used, normally SUP.

Date and time are read from an internal clock on each machine that can be set during the set up during the machine configuration prior to each election. If this operation is not performed or performed incorrectly during set up, the time and date will be incorrect.

RUN DATE:01/22/14 10:11 AM ELECTION ID: 42012114

Votronic PEB# Type Date Time Event

5119365 138511 SUP 01/24/2013 15:22:20 0000601 Zero terminal config data
SUP 01/24/2013 15:22:21 0001607 Clear-n-test term flash successful
SUP 01/24/2013 15:22:25 0000116 Select: Configure Terminal
SUP 01/24/2013 15:22:27 0000117 Select: Set Time and Date
SUP 01/24/2013 15:27:27 0001656 Set terminal date and/or time



```
01/24/2013 15:27:45 0000117 Select: Set Time and Date
            01/24/2013 15:27:45
                                  0001656 Set terminal date and/or time
            01/24/2013 15:27:51 0001633 Terminal shutdown
            01/13/2014 13:48:30 0001715 Super PEB type - clear and test
            01/13/2014 13:48:30
                                  0001649 Term - entered service menus
            01/13/2014 13:48:33 0000114 Select: Setup & Configuration Menu
            01/13/2014 13:48:33 0000300 Start password procedure
            01/13/2014 13:49:05 0000116 Select: Configure Terminal
            01/13/2014 13:49:08 0000117 Select: Set Time and Date
            01/13/2014 13:58:08 0001656 Set terminal date and/or time
            01/13/2014 13:58:14 0001633 Terminal shutdown
139391 SUP
            01/21/2014 06:44:12 0002808 Terminal - opening state
       SUP 01/21/2014 06:44:48 0001303 Transfer PEB vote data to terminal
            01/21/2014 06:44:53 0002804 Terminal - blank state
            01/21/2014 06:44:53 0002802 Terminal - open state
            01/21/2014 06:44:54 0002808 Terminal - opening state
            01/21/2014 06:44:54 0001319 Update PEB's terminal record
            01/21/2014 06:44:54 0001303 Transfer PEB vote data to terminal
            01/21/2014 06:44:57 0001210 Transfer terminal vote data to PEB
            01/21/2014 06:45:22 0001211 Terminal votes to PEB successful
            01/21/2014 06:45:30 0002802 Terminal - open state
           01/21/2014 06:45:30 0001672 Terminal Opened
            01/21/2014 06:45:39 0001633 Terminal shutdown
138297 SUP 01/21/2014 07:05:52 0001510 Vote cast by voter
            01/21/2014 07:07:22 0001510 Vote cast by voter
            01/21/2014 07:42:19 0001721 PEB pulled while getting PEB type
            01/21/2014 07:42:19 0002405 Failed to get PEB type
            01/21/2014 07:42:19 0000706 Failed to retrieve EOC from PEB
            01/21/2014 07:42:19 0001635 Terminal shutdown - IPS exit
            01/21/2014 07:44:37 0001510 Vote cast by voter
151046 SUP
            01/21/2014 07:48:47 0001510 Vote cast by voter
            01/21/2014 08:14:40 0001510 Vote cast by voter
138297 SUP
            01/21/2014 08:18:16 0001510 Vote cast by voter
            01/21/2014 08:21:03 0001510 Vote cast by voter
151046 SUP
            01/21/2014 08:22:45 0001510 Vote cast by voter
            01/21/2014 08:26:54 0001510 Vote cast by voter
138297 SUP
            01/21/2014 08:30:02 0001510 Vote cast by voter
            01/21/2014 17:42:22
                                 0001721 PEB pulled while getting PEB type
            01/21/2014 17:42:22 0002405 Failed to get PEB type
            01/21/2014 17:42:22 0002400 PEB access failed
            01/21/2014 17:42:22 0002400 PEB access failed
       UNK 01/21/2014 17:42:24 0002400 PEB access failed
       UNK 01/21/2014 17:42:24 0000706 Failed to retrieve EOC from PEB
138297 SUP 01/21/2014 18:17:34 0001510 Vote cast by voter
       SUP 01/21/2014 18:21:39 0001510 Vote cast by voter
       SUP 01/21/2014 18:32:15 0001510 Vote cast by voter
```



```
151046 SUP 01/21/2014 18:45:32 0001510 Vote cast by voter
        SUP 01/21/2014 18:49:22 0001510 Vote cast by voter
        SUP 01/21/2014 18:54:53 0001510 Vote cast by voter
139391 SUP 01/21/2014 19:00:25 0002810 Terminal - time to close voting
        SUP 01/21/2014 19:00:29 0001626 Close terminal
        SUP 01/21/2014 19:00:29 0002809 Terminal - closing state
        SUP 01/21/2014 19:00:29 0001221 Collect terminal vote data to PEB
        SUP 01/21/2014 19:00:48 0001303 Transfer PEB vote data to terminal
        SUP 01/21/2014 19:00:55 0001208 Merge terminal & PEB vote data
        SUP 01/21/2014 19:00:57 0002802 Terminal - open state
        SUP 01/21/2014 19:00:57 0002803 Terminal - closed state
SUP 01/21/2014 19:00:57 0002809 Terminal - closing state
        SUP 01/21/2014 19:01:01 0001210 Transfer terminal vote data to PEB
        SUP 01/21/2014 19:01:27 0001211 Terminal votes to PEB successful
        SUP 01/21/2014 19:01:27 0001214 Transfer terminal writein data to PEB
        SUP 01/21/2014 19:01:34 0001215 Terminal write-in data to PEB successful
        SUP 01/21/2014 19:01:34 0001222 Terminal vote collection successful
        SUP 01/21/2014 19:01:35 0002803 Terminal - closed state
        SUP 01/21/2014 19:01:35 0001673 Terminal Closed
        SUP 01/21/2014 19:01:43 0001401 Copy terminal flash audit data to CF
        SUP 01/21/2014 19:01:43 0001400 Verify terminal flash audit data
        SUP 01/21/2014 19:01:51 0001416 Copy audit data from TF 1 to CF
```

Each event has an event code and a description of the event. The log segment shown above shows a typical set of events or operations that occur on a single machine during an election. The first message is always "0000601 Zero terminal config data" and the last is always "0001416 Copy audit data from TF 1 to CF".

Note: there are a couple of event sequences that are created by improper insertion of the PEB into the voting machine. Usually the PEB is pulled before it has a chance to handshake properly with the voting machine. Depending of the timing of that pulling, a sequence similar to the sequences below can be generated.

```
SUP 01/21/2014 12:37:46 0002400 PEB access failed  
SUP 01/21/2014 12:37:46 0000706 Failed to retrieve EQC from PEB  
SUP 01/21/2014 12:37:46 0001635 Terminal shutdown - IPS exit  
SUP 01/21/2014 16:03:43 0001720 PEB pulled during PEB block verify  
SUP 01/21/2014 16:03:43 0002210 PEB block CRC error  
SUP 01/21/2014 16:03:43 0001302 Failed to get PEB vote header block  
SUP 01/21/2014 16:03:44 0002400 PEB access failed  
SUP 01/21/2014 16:03:44 0000706 Failed to retrieve EQC from PEB
```



SUP 01/21/2014 16:03:45 0001635 Terminal shutdown - IPS exit

When this happens, the poll worker waits a few seconds and tries again, waiting longer after the insertion and the voting process continues normally. Despite the alarming message "Terminal shutdown - IPS exit" this is not a critical error. It is a message that states that the terminal session initiated by the insertion of the PEB has ended.