

2007-CDOS-DIE-001-0402

**PREMIER ELECTION
SOLUTIONS
(FORMERLY DIEBOLD)**

**PROJECT
OVERVIEW**

COPY

**2007-CDOS-DIE-001-0402
PROJECT OVERVIEW BINDER “A.2”**

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INTRODUCTION



Introduction

On April 2, 2007, Diebold Election Systems (now known as Premier Election Solutions) approached the Colorado Secretary of State's Office with an application to certify a voting system. The application was accepted by the Voting Systems Certification Program Testing Board (Testing Board). The system was assigned certification number: 2007-CDOS-DIE-001-0402.

The voting system is known by its federal certification name as "GEMS 1-18-24." Federal certification is to the 2002VSS standards, and was obtained on June 27th, 2005 (NASSED#: N-1-06-22-22-001).

The testing board proceeded to evaluate the Diebold voting system during the time period of April 2nd – December 1st. All findings are documented within the binders A – 30, as well as addendum binders 02.1 – 08.1, 13.1, 14.1, 16.1, 19.1, 20.1 – 23.1, 25.1, 25.2, 26.1 and 31.1.

The Project Overview Binders (Binders "A", "A.2", and "B") provides an overview of the findings of the project, and the following additional information:

- Introduction
- System Components
- Recommendation to the Secretary of State
- Restrictions on the use of the voting system suggested by the Testing Board
- Conditions to the Recommendation suggested by the Testing Board
- Additional Comments by the Testing Board
- Independent Audit Reports

During the process of certifying the system, the Testing Board adhered to the procedures outlined by the Voting System Program procedures document. The certification process was led by Michael Chadwell, with Geneice Mathews and Tim Bishop providing the primary cross evaluation. Additional cross check and documentation verification was conducted by Danny Casias with additional coordination by the Program Manager – John Gardner with assistance from Jerome Lovato as necessary.

The testing board evaluated the voting system in accordance with the requirements set forth in Secretary of State Rule 45, as well as applicable elements contained within the laws of the Help America Vote Act, Colorado Revised Statute, multiple sections of Title 1, and Secretary of State Rules as appropriate. All testing results and output which includes extensive video documentation of the evaluation process have been archived and well preserved in accordance with the Voting Systems Program procedures document.

Through the evaluation, the testing board identified a variety of deficiencies within the system which include functionality, security, auditability and documentation requirements. The following sections will address these deficiencies as either a restriction for use (preventing recommendation by the testing board), or a condition for use (allowing the system to be recommended provided conditional elements are adhered to). Restrictions are identified in a one-to-one value. One identified restriction = one failure on the Detail Test Summary.

Conditional elements represent a one-to-many value. The execution of a single condition placed on the use of the system in many cases will address multiple failures as the testing board often experienced failures that exhibited a “daisy chain” effect. One high level failure would trigger many follow up test scenarios. Refer to the **Comments** section of this binder for additional comments on this topic.



Detailed Test Summary

The testing board executed the testing process for the Diebold voting system in the manner prescribed by Rule 45, and the detailed procedures document provided on the Voting Systems Certification Program website (<http://www.elections.colorado.gov/DDefault.aspx?tid=501>).

The outcome of the process involved over 700 functional test evaluations, 4405 detailed line items for document review, and over 90 supplemental tests comprising the sections for application review, demonstration and work on completing the trusted build. The documentation comprised of this test work is evident in over 50 binders generated by the testing board, a multitude of boxes containing evidence generated from devices, ballots, reports, and other findings. In addition to this evidence, over 200 DVD records exist documenting the process of the testing board.

Below is the summary report of test status generated by the testing board regarding the Diebold Voting System evaluation:

Diebold						
	# Requirements	# Passed	# Failed	Binder Status	% Completed	% Passed
Phase I - Application	22	21	0	signed		95.45%
Phase II - Doc. Review	4405	3435	911	signed		77.98%
Phase III - Demo	54	54	0	signed		100.00%
Phase III - Trusted Build	20	20	0	signed		100.00%
Phase III - Functional Test (overall)	700	622	78		100.00%	88.86%
Security	139	115	24			82.73%
System Process	341	309	32			90.62%
Election (pre, ED and post)	220	198	22			90.00%
Independent Audit	1674	1674		Review of Test Board work.		100.00%
Phase IV - Certification Doc.	n/a	n/a	n/a	n/a	n/a	100.00%
Phase V - Qualification Report	n/a	n/a	n/a	n/a	n/a	100.00%

Requirements Status for Colorado Certification of Diebold Voting System

Section Category	Binder #	Category	Statute Code	Section C	Total # of Tests to complete	Status:	DRE	PCOS	CCOS	EMS	Remaining to complete	
Section "A" - Pre Testing	1	Application	E	aa	22	Pass	n/a	n/a	n/a	18	0	
						Pass Conditional	n/a	n/a	n/a	3		
						Suspend	n/a	n/a	n/a	1		
						Fail	n/a	n/a	n/a			
						Not applicable	n/a	n/a	n/a			
	2-6	Documentation Review	D		ab	4405	Pass	804	337	44	49	0
							Pass Conditional					
							Suspend					
							Fail	164	99	332	375	
							Not applicable	794	445	505	457	
	7	Demonstration	A		ac	54	Pass	14	13	13	14	0
							Pass Conditional					
							Suspend					
							Fail					
							Not applicable					
	8	Trusted Build	G		ad	20	Pass	4	4	4	2	0
							Pass Conditional		1	1		
Suspend												
Fail												
Not applicable							1	1	1	1		
9-12	Source Code Review			ae	0	Not applicable	n/a	n/a	n/a	n/a	0	

Requirements Status for Colorado Certification of Diebold Voting System

Section Category	Binder #	Category	Statute Code	Section C	Total # of Tests to complete	Status:	DRE	PCOS	CCOS	EMS	Remaining to complete	
Section "B" - Security Testing	13	System Access		ba	36	Pass	6	4	3	13	0	
						Pass Conditional						
						Suspend						
						Fail		2	2	2		
						Not applicable	1	1	1	1		
	14	Operating System Security			bb	20	Pass				1	0
							Pass Conditional				1	
							Suspend					
							Fail					
							Not applicable	9			9	
	15	Database Security			bc	24	Not applicable	6	6	6	6	0
	16	Removable Media			bd	13	Pass	1	1		1	0
							Pass Conditional					
							Suspend					
							Fail				1	
							Not applicable	2	2	3	2	
	17	Networking and Telecommunications			be	46	Pass	6	2	5	5	0
Pass Conditional												
Suspend												
Fail							4	8	1	4		
Not applicable							2	2	5	2		

Requirements Status for Colorado Certification of Diebold Voting System

Section Category	Binder #	Category	Statute Code	Section C	Total # of Tests to complete	Status:	DRE	PCOS	CCOS	EMS	Remaining to complete	
Section "C" - System Testing	18	System		ca	49	Pass	10	7		20	0	
						Pass Conditional						
						Suspend						
						Fail		2		7		
						Not applicable					3	
	18	System (central count)			cb	11	Pass	n/a	n/a	5	n/a	0
							Pass Conditional	n/a	n/a		n/a	
							Suspend	n/a	n/a		n/a	
							Fail	n/a	n/a	1	n/a	
							Not applicable	n/a	n/a	5	n/a	
	19-20	Ballot Process			cc	152	Pass	23	42	34	25	0
							Pass Conditional	1				
							Suspend					
							Fail	1	2	4	1	
							Not applicable		2	8	9	
	21	Performance			cd	24	Pass	2	2	1	4	0
							Pass Conditional	6	3			
							Suspend					
							Fail			3	2	
							Not applicable				1	
	21	DRE Processing *			ce	24	Pass	17	n/a	n/a	n/a	0
							Pass Conditional		n/a	n/a	n/a	
							Suspend		n/a	n/a	n/a	
							Fail		n/a	n/a	n/a	
							Not applicable	7	n/a	n/a	n/a	
	22	Audits			cf	29	Pass	6	5	4	6	0
							Pass Conditional					
							Suspend					
						Fail		2		1		
						Not applicable	1	1	3			
22	Reports			cg	52	Pass	7	9	9	10	0	
						Pass Conditional						
						Suspend						
						Fail	3	2		1		
						Not applicable	3	3	3	2		

Requirements Status for Colorado Certification of Diebold Voting System

Section Category	Binder #	Category	Statute Code	Section C	Total # of Tests to complete	Status:	DRE	PCOS	CCOS	EMS	Remaining to complete	
Section "D" - Election Day Tests	23	Hardware Diagnostics Testing		da	8	Pass	2	1	1		0	
						Pass Conditional						
						Suspend						
						Fail						
	Not applicable		1	1	2							
	23	Voting			db	65	Pass	15	16	18	7	0
							Pass Conditional					
							Suspend					
							Fail		1	2		
	Not applicable	3	1	1	1							
24	Multi-Page Ballots			dc	6	Pass		2	1	1	0	
						Pass Conditional						
						Suspend						
						Fail						
Not applicable	2											
24	Multiple Languages			dd	4	Pass	1	1	1	1	0	
						Pass Conditional						
						Suspend						
						Fail						
Not applicable												
24	Provisional			de	25	Pass	2	3	3	3	0	
						Pass Conditional			1			
						Suspend						
						Fail	4	1	1	2		
Not applicable	1	2	1	1								
25	V-VPAT			df	28	Pass	26	n/a	n/a	n/a	0	
						Pass Conditional		n/a	n/a	n/a		
						Suspend		n/a	n/a	n/a		
						Fail	1	n/a	n/a	n/a		
Not applicable	1	n/a	n/a	n/a								
25	Accessibility			dg	41	Pass	37	n/a	n/a	n/a	0	
						Pass Conditional		n/a	n/a	n/a		
						Suspend		n/a	n/a	n/a		
						Fail	3	n/a	n/a	n/a		
Not applicable	1	n/a	n/a	n/a								
26	Closing Polls			dh	30	Pass	12	12	n/a	n/a	0	
						Pass Conditional			n/a	n/a		
						Suspend			n/a	n/a		
						Fail	3	3	n/a	n/a		
Not applicable			n/a	n/a								

Requirements Status for Colorado Certification of Diebold Voting System

Section Category	Binder #	Category	Statute Code	Section C	Total # of Tests to complete	Status:	DRE	PCOS	CCOS	EMS	Remaining to complete	
Section "E" - Post Election	27	Post Election Audit *		ea	4	Pass	1	1	1	1	0	
						Pass Conditional						
						Suspend						
						Fail						
	Not applicable											
	27	Recount			eb	8	Pass	2	1	3	1	0
							Pass Conditional	1				
							Suspend					
							Fail					
	Not applicable											
27	Recount (central count)			ec	1	Pass	n/a	n/a		n/a	0	
						Pass Conditional	n/a	n/a		n/a		
						Suspend	n/a	n/a		n/a		
						Fail	n/a	n/a	1	n/a		
Not applicable	n/a	n/a		n/a								
Documentat	28	Video Documentation Log										
	29	Safe Documentation Log										
	30	Other Notes/Logs										

Archive Storage Boxes for the Diebold Voting System Certification Process:



Backup Binders documenting the Diebold Voting System Certification Process – (original binders moved to archive storage upon completion of process):



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COMPONENTS

STATE OF COLORADO
Department of State

1700 Broadway, Suite 270
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director, Elections

Components

As submitted on April 3, 2007, the following components comprise the requested voting system package from Premier Election Systems (formerly Diebold Election Systems):

Component Name	System Function	Version Number
GEMS	Software Application	1.18.24
Accuvote OS Model "D"	Precinct Optical Scanner	1.96.6
Accuvote OS Model "D"	Central Count Optical Scanner	2.0.12
Accuvote TSx Model "C" & "D" w/ V-VPAT	Direct Record Electronic Device	4.6.4
VC Programmer	Voter Card Activation Interface for DRE.	4.6.1
Voter Card Encoder	Hand held Voter Card Activation unit for DRE.	1.3.2
Key Card Tool	Software application used for managing secure keys between DRE voting Devices	4.6.1

Photographs and additional details on each component can be found under test # AA6-P1-605.

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RECOMMENDATION



Recommendation Overview

The approach of the testing board regarding a recommendation is absolute. Any one item outstanding in the **Restrictions** section of the binder (no “conditional use” option discoverable by the testing board) will trigger a “N” value on the **Recommendation** table.

Therefore, for quick understanding of the overall outstanding deficiencies with the system, and to provide a summary of reasons for the “Y” or “N” value in the **Recommendation** table.

The following table provides a high level summary statement of findings by the testing board. These items constitute a summary of the findings in the **Restrictions** section of the project overview binder.

Component (details in the components section)	Recommended to be Certified?	Reason
Software (1-18-24)	No	<ul style="list-style-type: none"> • Failure to prove Federal Testing was conducted • Failure to provide required State Documentation
Precinct Scanner (1.96.6)	No	<ul style="list-style-type: none"> • Failure to provide required State Documentation • Machine mis-feeds were tested outside of acceptable levels
Central Count Scanner (2.0.12)	No	<ul style="list-style-type: none"> • Failure to prove Federal Testing was conducted • Failure to provide required State Documentation • Machine mis-feeds were tested outside of acceptable levels
DRE (4.6.4 C&D)	No	<ul style="list-style-type: none"> • Failure to provide required State Documentation • Paper Record not accessible to blind voters.



Diebold Election Systems Recommendation for voting system application:

2007-CDOS-DIE-001-0402

12/10/07

Binary Assessment (Y/N, with conditionals)

<u>Component</u>	<u>Version</u>	<u>Accuracy</u>	<u>Security</u>	<u>Accessibility</u>	<u>Compliance</u>	<u>Test Board Recommendation</u>
GEMS	1.18.24	Y ³	Y ³	N/A	N ^{1,2}	N
AVOS CC	2.0.12	Y ³	Y ³	N	N ^{1,2}	N
TSX-C	4.6.4	Y ³	Y ³	N	N ²	N
TSX-D	4.6.4	Y ³	Y ³	N	N ²	N
AVOS PC	1.96.6	Y ³	Y ³	N	N ²	N

¹ Colorado Revised Statutes Title 1, Article 5, Section 6 (1-5-608.5) prohibits allowing certification of voting equipment by the Secretary of State if it has not been successfully qualified by a recognized ITA. Additionally, Rule 45.5.1.3 requires voting systems to be compliant with federal requirements.

² Missing/Insufficient state documentation pursuant to Colorado Secretary of State Rule 45.

³ Provided jurisdictions follow additional procedural steps outlined in the **Conditions** section to mitigate the deficiencies of the system as evaluated. Should conditions not be applied or adhered to as indicated in this binder, the testing board would reject the system and modify the value to a "N." This is specifically addressed in the test board comments section of this binder.

Definitions:

Accuracy – correctly reading, displaying, tabulating and reporting votes. (Functional, or Performance)

Security – vote data is protected and maintains integrity throughout system processing. (Audit, Security, or Telecommunications)

Accessibility – voter systems have requisite usability and reliability. (Functional, Accessibility, or Physical Design)

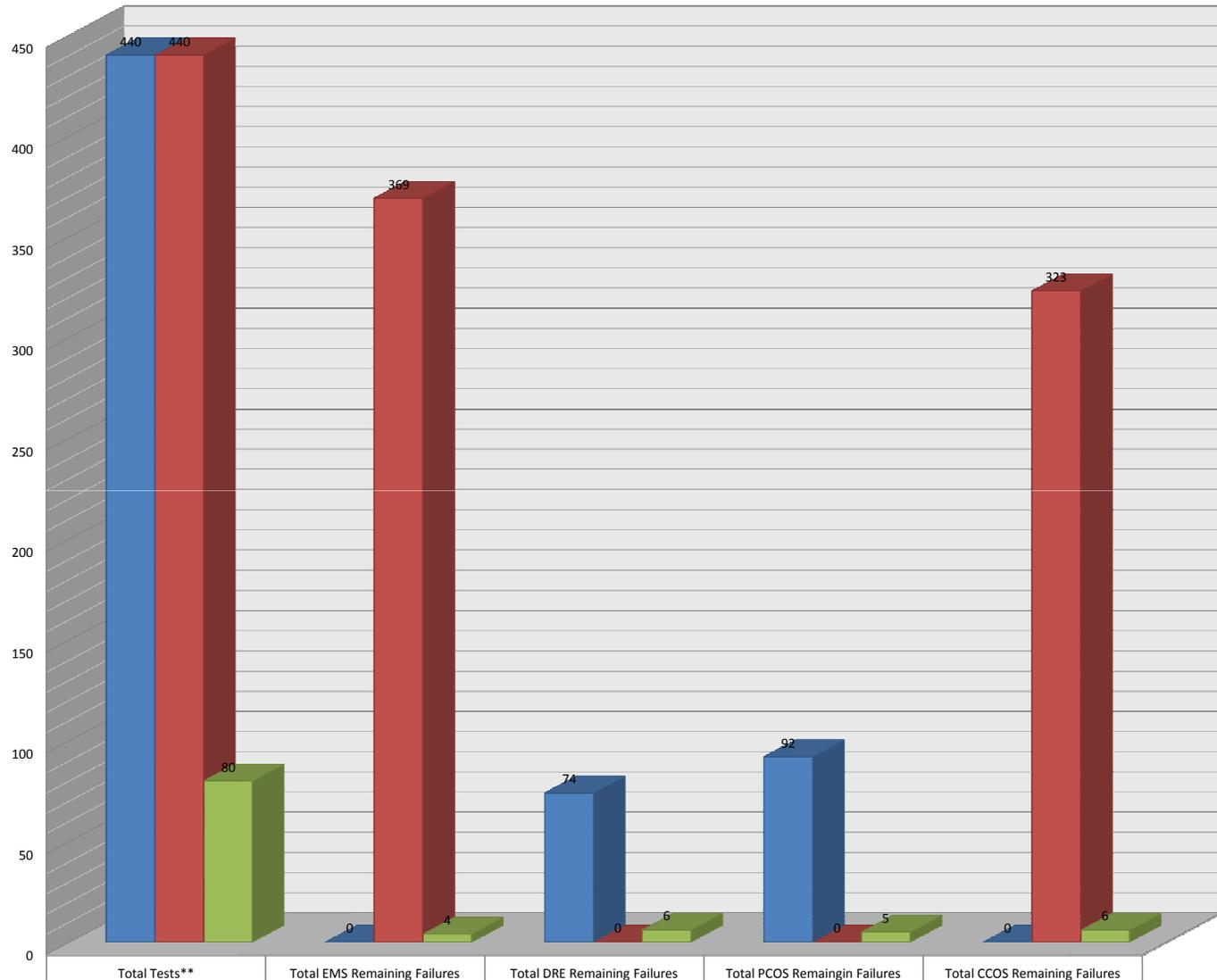
Compliance – systems conform to federal and state requirements for certification and/or documentation. (Documentation)

Diebold Failure Status by Category



	Total Tests	Total EMS Remaining Failures	Total DRE Remaining Failures	Total PCOS Remaining Failures	Total CCOS Remaining Failures
Functional Requirements	521	0	0	1	1
Performance Levels	8	0	0	0	0
Physical design	63	0	0	0	0
Audit Capacity	33	0	0	0	0
Security	453	1	0	0	0
Telecommunications	30	0	0	0	0
Accessibility	41	0	2	0	0

Diebold Documentation Failure Status by Category



	Total Tests**	Total EMS Remaining Failures	Total DRE Remaining Failures	Total PCOS Remaining Failures	Total CCOS Remaining Failures
Total Federal Tested incorrectly*	440	0	74	92	0
Total No Proof (documentation) of Test - Federal	440	369	0	0	323
Total No Proof (documentation) of Test - State	80	4	6	5	6

* Incorrectly tested means the ITA either reported that a required item was not tested, or a required item was tested incorrectly for the device type.

** Total tests has N/A items removed for chart scale.

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RESTRICTIONS



The Testing Board has identified the following items as deficient in the voting system, requiring restriction for use of the voting system components based on the review and testing of the voting system for compliance with state requirements:

Software Restrictions:

GEMS 1.18.24 –

1) Documentation

Insufficient federal/state certification compliance testing and/or documentation, i.e. 2002 VSS requirements matrix.

Rule

Text

CRS 1-5-601.5	Compliance with federal requirements. All voting systems and voting equipment offered for sale on or after May 28, 2004, shall meet the voting systems standards that were promulgated in 2002 by the federal election commission and that may thereafter be promulgated by the federal election assistance commission. Subject to section 1-5-608.2, nothing in this section shall be construed to require any political subdivision to replace a voting system that is in use prior to May 28, 2004.
45.5.1.1	All voting systems shall meet the voting systems standards pursuant to section 1-5-601.5, C.R.S., and Secretary of State Rule 37.3.
45.5.2.4.2	All VSTL qualification reports, test logs, and technical data packages shall be evaluated to determine if the voting system meets the requirements of this rule and have completed the applicable federal certification requirements at the time of State testing. Failure to provide such documentation of independent testing will result in the voting system application being rejected
45.5.2.3.19	(d) The voting system provider shall deliver to the Secretary of State documentation detailing estimated time of operation on battery for each type of optical scanner, ballot imager, DRE, and V-VPAT they provide, assuming continuous use of the devices by voters during an interruption of normal electrical power.
45.5.2.4.1	In addition to other documentation requirements in this rule, the voting system provider shall provide the following documents: (c) Training Manual (and materials);
45.5.2.7.10	Voting systems providers shall document how they plan to monitor and respond to known threats to which their voting systems are vulnerable. This documentation shall provide a detailed description, including scheduling information, of the procedures the voting system provider will use to: (c) Develop responsive updates to the system and/or corrective procedures;

Precinct Count Scanner Restrictions:

AVOS PC Version 1.96.6 –	Rule	Text
1) Functional Requirements Ballot handling errors: misfeeds (<= 1 per 5000) and corrective action reporting. Device tested outside of acceptable criteria.	45.6.2.3.15	The system shall stop and inform operator of ballot handling errors such as misfeeds, damaged ballot, and multiple feeds. Also, give corrective measures to remove the ballot, sort is as unreadable (out stack) and gives a way to restart or recount the uncounted ballots. (Misfeeds =< 1 per 5,000).
2) Documentation	45.5.1.2	All voting system software, hardware, and firmware shall meet all requirements of federal law that address accessibility for the voter interface of the voting system. These laws include, but are not necessarily limited to, (a) the Help America Vote Act.
	45.5.2.3.2	The voting system shall meet the following environmental controls allowing for storage and operation in the following physical ranges: (a) Operating – Max. 95 Degrees Fahrenheit; Min 50 Degrees Fahrenheit, with max. humidity of 90%, normal or minimum operating humidity of 15%. (b) Non-Operating – Max. 140 Degrees Fahrenheit; Min. 4 Degrees Fahrenheit. Non-operating humidity ranges from 5% to 90% for various intervals throughout the day. The material supplied by the voting system provider shall include a statement of all requirements and restrictions regarding environmental protection, electrical service, telecommunications service, and any other facility or resource required for the installation, operation, and storage of the voting system.
	45.5.2.4.1	In addition to other documentation requirements in this rule, the voting system provider shall provide the following documents: (c) Training Manual (and materials);
	45.5.2.7.10	Voting systems providers shall document how they plan to monitor and respond to known threats to which their voting systems are vulnerable. This documentation shall provide a detailed description, including scheduling information, of the procedures the voting system provider will use to: (c) Develop responsive updates to the system and/or corrective procedures;

DRE Restrictions:

TSX(C, D) w/V-VPAT 4.6.4 –

1) Documentation

Rule

Text

- 45.5.1.2 All voting system software, hardware, and firmware shall meet all requirements of federal law that address accessibility for the voter interface of the voting system. These laws include, but are not necessarily limited to,
- (a) the Help America Vote Act, and
 - (c) the Federal Rehabilitation Act. The voting system provider shall acknowledge explicitly that their proposed software, hardware, and firmware are all in compliance with the relevant accessibility portions of these laws.
- 45.5.2.3.2 The voting system shall meet the following environmental controls allowing for storage and operation in the following physical ranges:
- (b) Non-Operating – Max. 140 Degrees Fahrenheit; Min. 4 Degrees Fahrenheit. Non-operating humidity ranges from 5% to 90% for various intervals throughout the day.
- 45.5.2.4.1 In addition to other documentation requirements in this rule, the voting system provider shall provide the following documents:
- (c) Training Manual (and materials);
- 45.5.2.7.10 Voting systems providers shall document how they plan to monitor and respond to known threats to which their voting systems are vulnerable. This documentation shall provide a detailed description, including scheduling information, of the procedures the voting system provider will use to:
- (c) Develop responsive updates to the system and/or corrective procedures;
- 45.5.2.8.2 Documentation of the accessibility of the voting system shall include the following items at a minimum:
- (c) Technology used by the voting system that prevents headset/headphone interference with hearing aids;
- 37.1.4 The voting systems described in the foregoing paragraphs shall produce a record with an audit capacity for such system.
- (d) The paper record shall be accessible for individuals with disabilities including non-visual accessibility for the blind and visually impaired, in a manner that provides the same opportunity for access and participation (including privacy and independence) as for other voters.
- 45.5.2.9.10 The V-VPAT device shall be designed to allow every voter to review, and accept or reject his/her paper record in as private and independent manner as possible for both disabled and nondisabled voters.

2) Accessibility

Central Count Scanner Restrictions:

AVOS CC 2.0.12 –

1) Functional Requirements

Ballot handling errors: misfeeds (<= 1 per 5000) and corrective action reporting. Device tested outside of acceptable criteria.

2) Documentation

Insufficient federal/state certification compliance testing and/or documentation.

Rule

45.6.2.3.15

CRS 1-5-601.5

45.5.1

45.5.2.4.2

45.5.1.2

45.5.2.3.2

45.5.2.4.1

Text

The system shall stop and inform operator of ballot handling errors such as misfeeds, damaged ballot, and multiple feeds. Also, give corrective measures to remove the ballot, sort is as unreadable (out stack) and gives a way to restart or recount the uncounted ballots. (Misfeeds =< 1 per 5,000).

Compliance with federal requirements. All voting systems and voting equipment offered for sale on or after May 28, 2004, shall meet the voting systems standards that were promulgated in 2002 by the federal election commission and that may thereafter be promulgated by the federal election assistance commission. Subject to section 1-5-608.2, nothing in this section shall be construed to require any political subdivision to replace a voting system that is in use prior to May 28, 2004.

All voting systems shall meet the voting systems standards pursuant to section 1-5-601.5, C.R.S., and Secretary of State Rule 37.3.

All VSTL qualification reports, test logs, and technical data packages shall be evaluated to determine if the voting system meets the requirements of this rule and have completed the applicable federal certification requirements at the time of State testing. Failure to provide such documentation of independent testing will result in the voting system application being rejected.

All voting system software, hardware, and firmware shall meet all requirements of federal law that address accessibility for the voter interface of the voting system. These laws include, but are not necessarily limited to,

(a) the Help America Vote Act

The voting system shall meet the following environmental controls allowing for storage and operation in the following physical ranges:

(a) Operating – Max. 95 Degrees Fahrenheit; Min 50 Degrees Fahrenheit, with max. humidity of 90%, normal or minimum operating humidity of 15%.

(b) Non-Operating – Max. 140 Degrees Fahrenheit; Min. 4 Degrees Fahrenheit. Non-operating humidity ranges from 5% to 90% for various intervals throughout the day.

The material supplied by the voting system provider shall include a statement of all requirements and restrictions regarding environmental protection, electrical service, telecommunications service, and any other facility or resource required for the installation, operation, and storage of the voting system.

In addition to other documentation requirements in this rule, the voting system provider shall provide the following documents:

(c) Training Manual (and materials);

AVOS CC 2.0.12 –

(Documentation continued.)

Documentation was not provided by the voting system vendor to allow testing board to evaluate this requirement.

Rule

45.5.2.7.10

Text

Voting systems providers shall document how they plan to monitor and respond to known threats to which their voting systems are vulnerable. This documentation shall provide a detailed description, including scheduling information, of the procedures the voting system provider will use to:
(c) Develop responsive updates to the system and/or corrective procedures;

VC Programmer Restrictions:

Version 4.6.1 – NO RESTRICTIONS

Voter Card Encoder Restrictions:

Version 1.3.2 – NO RESTRICTIONS

Key Card Tool Restrictions:

Version 4.6.1 – NO RESTRICTIONS

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CONDITIONS



Conditions for Use

The Testing Board recommends the Secretary of State adopt the following conditions for use of the voting system. These conditions are required to be in place *should* the Secretary approve for certification any or all of the items indicated in the **COMPONENTS** section. Being that many conditions address the security, auditability and availability of the system component, the testing board would firmly reject any option which removes, replaces or diminishes the conditional requirement and still allow the system to be used and recommended for certification. Any “Y” value in the **Recommendation** table would change to a “N” value with any change to the conditions.

Global Conditions (applies to all components):

- 1) Modem and other telecommunication devices may not be used on any subsystem component - system provider was unable to meet or provide prerequisite FIPS 140/180 certifications.
- 2) Provisional ballots must be processed separately from non-conditional ballots - system subcomponents are unable to functionally differentiate and correctly process to Colorado specific requirements.
- 3) Coordination of Escrow Setup - Upon Certification, voting system manufacturer must coordinate the Escrow of the TRUSTED BUILD software with SOS escrow, or third party escrow service as required by Rule 11 prior to use in Colorado.
- 4) Abstract Report generation - abstracts used for State reporting must come from GEMS Software, or other external solution, rather than from the specific device.
- 5) Trusted Build Verification
Counties shall ensure that hardware, software and firmware purchased for use of the system matches the specifications of VSTL/EAC and/or State Certified and trusted versions, not to the version presented in the vendor documentation.
- 6) Counties using the voting system shall testify through their security plan submission that the voting system is used only on a closed network.

Software Conditions (GEMS 1-18-24):

- 1) System/database/network security hardening.
 - a) Because the voting system operates in a non-restricted system configuration containing open file system access to locate, copy, open and overwrite without detection, election vote content database files outside of election management system application by third-party tools, counties will be required to modify their physical environmental conditions. If the system is approved for certification, counties shall submit plans for approval to the Secretary of State's office on overcoming these conditions through county environmental and/or procedural changes where possible.
 - b) In addition to physical environmental changes, counties shall create a second (or backup) copy of the GEMS database that is created immediately after the point of memory card downloads. The backup copy shall be stored on closed CD Media and documented as matching the master database. This process shall be observed by two election staff members. Chain of custody documents shall be generated for the media, and the media shall be sealed with at least two tamper evident seals and stored in a sealed or lockable transfer case that is stored in a limited access area. AFTER the close of polls, the designated election official shall load the sealed copy of the database onto the server and proceed with uploading memory cards after documenting the loading of the backup master database onto the system. After loading the sealed database copy, the county shall re-secure the database with seals (updating necessary logs) in the limited access location.
 - c) Additionally, to overcome deficiencies in security and auditing of the system, the county will be required to perform increased Election Night and Post Election Audits for this system. All post-election audit data shall process a hand count of paper ballots which shall match the totals report from the specific device, as well as the totals for the GEMS database. Counties shall prepare for this event with one of two methods:

Option #1 – Prepare for the upload of memory cartridges as normal. Print necessary zero report. Upon uploading each individual memory card, print a summary report showing the change in totals from the upload of the memory card. Label the report to match the name/number of the memory card uploaded. Continue to upload memory cards and print totals reports to match. When auditing a specific device, use the difference between the report totals for the memory card selected for the audit and the totals from the immediately preceding memory card report to calculate vote totals generated by the GEMS software.

When memory cards are delivered to the county for upload, the machine generated report shall be delivered for inspection as well. On election night, when the summary report indicated above is created, the difference totals (delta report) are immediately compared to the totals from the report generated by the device at the polling place. If the reports match, the public is ensured that the totals from the polling place match the totals from the county server. If the totals are different, the county is to report the situation (on election night) to the Secretary of State for audit, security and remedy procedures.

During the post election audit process, the totals of the paper record for the specific device are to be hand counted and verified against the electronic record for the device. The canvass board shall report the verification of three totals to match – the paper record of the device, the totals of the electronic vote on the device, and the totals in the central count server; OR

Option #2 – Prepare for the upload of memory cartridges by creating one master default database (containing all memory cards/cartridges). Create individual databases to contain values (upload data) for each separate memory card (or in some instances by batch of ballots – see condition #4b under Central Count devices. Upload memory card/cartridges into master database, and into the specific database created for that memory card (two separate uploads). This process must happen on Election Night and with observation by at least two people. Election summary reports shall be printed from each individual database and manually added together. The totals from the individual databases must match the master database before proceeding. Upon verification that the master and individual databases match, the county can then use the individual reports to conduct a hand count of the paper ballot (or paper record) generated by the device to show that the GEMS totals match. The verification of the separate upload databases verify that the database totals match the field totals on each memory card device, as was designed after the point of Logic and Accuracy testing took place.

2) Ballot-On-Demand restriction.

No provision for ballot reconciliation. This will require counties to have an extra supply of preprinted ballots on hand.

3) Audit Trail Information:

a) Counties will be required to produce certain reports identified in C.R.S. 1-7-509 using an external process which will include at a minimum exporting result from the GEMS software for processing by other methods.

b) Operators of the system shall also be required to maintain logs indicating use of the report printing functions of the software, and detailed information to changes of the system including hardware changes which shall include: insert removable media, remove removable media, modify system hardware drivers, modify system physical hardware, and any other system property changes made by either judges or other trusted staff. Logs shall be maintained physically in a file outside or separate from the database, which is NOT accessible for review and/or modification by user/operator accounts on the system, but that is readily accessible to election officials or other interested party.

4) Performance Deficiencies.

Due to failures in performance, counties shall allow extra time for downloads and uploads of memory card devices. This may impact programming, testing and use of the system on election night. Counties shall ensure trusted staff is properly trained on this issue and accommodating the allowable time required for programming memory devices.

5) Provisional Ballots.

The software is not capable of processing provisional ballots internally to accept federal and state only questions. A procedure outside of the voting system will be required. Additionally, the abstracts and reports created by the software do not meet the requirements of rule 41.6.3(g) and users of the system will be required to generate an abstract outside of the voting system.

Precinct Count Scanner Conditions (1.96.6):

1) Intrusion seals for protection of Trusted Build firmware.

Due to limitations by device to verify Trusted Build once installed, counties will be required to maintain constant seals on voting device memory slot, back panel, and other entry points as indicated by the Secretary of State.

2) External Battery backup (UPS) devices required.

Insufficient internal power reserves to sustain minimum 3 hour continuous operation. Counties shall purchase and use an external power supply that meets or exceeds the vendors' recommendation for the component.

3) Device security accessibility.

a) Device level administrative functions requiring access involving the use of keys, memory cards, Ender cards (closing polls) and passwords must be restricted to single person entry with detailed logs.

b) Due to exposure of passwords, the vendor and the county shall ensure that operators are adequately trained to protect the visibility of the password during use.

4) Ballot/Race conditions simulation.

Additional County testing shall be required to accommodate ballots with conditions from each election.

This shall include ordering a complete set of at least 5 ballots of each style that contain the prescribed design for that election. County officials shall mark each possible position for each race on the ballots. All ballots shall be tested internally prior to the public logic and accuracy test. The goal of the pretest is to ensure that all available positions are counting when marked correctly.

5) Audit trail information:

a) Judges shall be required to include device serial number on all reports regarding use of the device. Additionally, the county shall include the device serial number on applicable reports from the device.

b) Operators of the system shall also be required to maintain logs indicating use of the administrator functions of the device by either judges or other trusted staff.

c) Counties will be required to produce certain reports identified in C.R.S. 1-7-509 using an external process which will include at a minimum exporting result from the GEMS software for processing by other methods.

d) Counties will be required to perform additional post election audit functions for the device to accommodate for security deficiencies. In an effort to increase confidence in the recording of votes by the device, the post-election audit shall include the verification of the hand count of paper ballots to match the totals generated from the GEMS software as indicated in Software condition #1c.

Central Count Scanner Conditions (2.0.12):

1) Intrusion seals for protection of Trusted Build firmware.

Due to limitations by device to verify Trusted Build once installed, counties will be required to maintain constant seals on voting device memory slot, back panel, and other entry points as indicated by the Secretary of State.

2) Ballot processing.

a) Counties will be required to pre-process all folded ballots that are counted by the voting device. Specifically, operators will presort ballots to detect for appearances of holes punched in the ballot. Ballots with holes in them shall be duplicated onto new ballots by a duplication board as required. Operators of the system shall be adequately trained in the processing and understanding of error messages produced by the device which sometimes represent the correct problem and many times do not.

b) In the event of a recount, the county will have the voting system technician on-site to recalibrate the scanning devices to the sensitivity settings required for testing the device as required by Secretary of State Rule 27.4.2(d).

3) External Battery backup (UPS) devices required.

Insufficient internal power reserves to sustain minimum 3 hour continuous operation. Counties shall purchase and use an external power supply that meets or exceeds the vendors' recommendation for the component.

4) Audit trail information:

a) Judges shall be required to include device serial number on all reports regarding use of the device. Additionally, the county shall include the device serial number on applicable reports from the device.

b) Counties will be required to perform additional post election audit functions for the device to accommodate for security deficiencies. In an effort to increase confidence in the recording of votes by the device, the post-election audit shall include a hand count of at least the following amounts of ballots:

Considering the closest race in the election, if the difference between the top two candidates for the race is:

10% or greater, then hand count 60 ballots for every 10,000 cast;
9.00% - 9.99%, then hand count 65 ballots for every 10,000 cast;
8.00% - 8.99%, then hand count 70 ballots for every 10,000 cast;
7.00% - 7.99%, then hand count 80 ballots for every 10,000 cast;
6.00% - 6.99%, then hand count 95 ballots for every 10,000 cast;
5.00% - 5.99%, then hand count 115 ballots for every 10,000 cast;
4.00% - 4.99%, then hand count 140 ballots for every 10,000 cast;
3.00% - 3.99%, then hand count 185 ballots for every 10,000 cast;
2.00% - 2.99%, then hand count 275 ballots for every 10,000 cast;
1.00% - 1.99%, then hand count 550 ballots for every 10,000 cast;
0.01% - 0.99%, then hand count 1200 ballots for every 10,000 cast.

The verification of the hand count of paper ballots shall match the totals generated from the GEMS software as indicated in Software condition #1c. Counties shall load only the master database from the secured storage location for processing the post election audit ballots as indicated in Software Condition #1b. Counties shall prepare database and batches of ballots prior to scanning into system (for election results) to accurately generate reports in batch sizes as necessary for the audit. If the county or system is not capable of accommodating the requirement of batch size after the outcome of the election is revealed, the highest percentage of ballots shall be used for the audit process.

5) Ballot/Race conditions simulation.

Additional County testing shall be required to accommodate ballots with conditions listed. This shall include ordering a complete set of at least 5 ballots of each style that contain the prescribed design for that election. County officials shall mark each possible position for each race on the ballots. All ballots shall be tested internally prior to the public logic and accuracy test. The goal of the pretest is to ensure that all available positions are counting when marked correctly.

6) Network Access/availability.

The voting system must be used with no network connectivity between devices/units and software. Only a closed LAN connection may be used with necessary hardware for port replication and local IP address assignments as tested.

DRE Conditions (TSx 4.6.4 – C and D models):

1) External Battery backup (UPS) devices required.

Insufficient internal power reserves to sustain minimum 3 hour continuous operation. Counties shall purchase and use an external power supply that meets or exceeds the vendors' recommendation for the component.

2) V-VPAT paper record shall be handled per Rule 11.6.

- a) Prescribed paper record is of the thermal type and requires special storage conditions to avoid legibility degradation. Counties shall follow the requirements for handling according to Secretary of State Rule 11 and 43.
- b) Election judges are required to perform the "Printer Test" in between paper changes and verify with one additional judge that the paper has been loaded correctly and is printing according to design which ensures that all machines will have paper records for each vote cast.

3) Accessible distances.

Operators of the system shall be required to provide an accessible solution by operating the device on a separate table. The manufacturer's stand does not meet accessible reaches as outlined in C.R.S. 1-5-704. Counties shall be educated on these measurements and ensuring that the table top solution complies with the requirements.

4) Accessible operation.

Due to the inability for the voter to pause and resume the audio text, election judges shall provide instructions specific to this fact to the voters and operations for repeating the text if text was missed, which shall include details on navigating forward and backwards through the system prompts.

5) Additional Privacy screen required.

Required privacy conditions can not be met with attached device privacy panels without also installing accessory screen made by manufacturer. Counties shall deploy touch screen units in such a manner that voters and judges cannot easily walk behind other voters while processing their vote.

VC Programmer Conditions:

Version 4.6.1 – NONE

Voter Card Encoder Conditions:

Version 1.3.2 – NONE

Key Card Tool Conditions:

Version 4.6.1 – NONE

**2007-CDOS-DIE-001-0402
PROJECT OVERVIEW BINDER “A.2”**

COMMENTS



Test Board Comments

The test board has unveiled a known reality that no computer system is perfect. Additionally, we have discovered and documented that no system can currently meet the requirements of Rule 45 as applied in its strictest sense. Where possible, the testing board attempted to overcome these deficiencies in the form of “conditions for use” of the system – procedural workarounds.

The testing board recognizes that the conditions created are in essence a “last resort” workaround to accommodate requirements that do not meet specific sections of Colorado Revised Statutes 1-5-615. The preference of the testing board would be to have the specific deficiencies addressed with a system solution as required. Given the ability to mitigate deficiencies with procedural workarounds (C.R.S. 1-5-621), the testing board presents conditional use scenarios in the “**Conditions**” section that are directly tied to the recommendation status. Being that many workarounds address the security, auditability and availability of the system component, the testing board would firmly reject any option which removes, replaces or diminishes the conditional requirement and still allow the system to be used and recommended for certification. Any “Y” value in the **Recommendation** table would change to a “N” value with any change to the conditions.

These conditional procedures rely heavily on proper execution by county administrators and/or election judges. While we have faith that these dedicated workers will attempt to perform their duties to the best of their abilities, a majority of the conditions involve a human element which may or may not produce the acceptable outcome. This single factor alone causes concern that a security issue may not be resolvable in a post-election scenario.

Finally, it is of value to point out that the conditions that address security specific events are only addressing the attack scenario of a change in vote totals (refer to Cyber Security Report). The essence of the workaround in this case is to ensure that the vote totals calculated electronically are a match to the paper records. This requires absolute assurance that all paper records exist and are auditable for a successful outcome and high confidence in the report of votes by any given county.

**2007-CDOS-DIE-001-0402
PROJECT OVERVIEW BINDER “A.2”**

AUDIT REPORTS

STATE OF COLORADO
Department of State

1700 Broadway, Suite 270
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director, Elections

The Testing Board delivered the project in the form of electronic files to Glenn Newkirk of InfoSENTRY Services, Inc. for review under the independent audit process. The results of the audit are included herein and attached as part of this section. Audit report related correspondence may be found in Binder "A", Section 7.

Although the auditor specifically stated that no additional action and/or update to the report was necessary, the testing board responded to the audit findings as follows:

Findings 1, 2, 7, 8, 9, and 10– no actions necessary by testing board.

Finding 3 and 5 – independent reproducibility.

The auditor provided helpful detail to the testing board regarding the ability for independent review of the process and evaluation of the system. To address specific concerns, the testing board specifically addressed video records to address a few mis-labeling instances, and provide index records for the compilation of video records. Additionally, specific details were added to the document review binders to provide more specifics on documents that may have been used including page numbers where possible.

The testing board supports the findings that the compilation of written, photo and video records are necessary in the independent reproduction.

Finding 4 – Photo quality and reproduction.

Based on auditor comments, the reproduction process did not provide a clear copy of photographs as identified in the original document set. While the testing board provided an electronic copy of all photographs, the specific mapping of photographs to test numbers was not included. The testing board will work on recreating the electronic evidence to provide test number names to electronic files used for photographs. In the interim, the original master record contains clear original printed photographs.

Finding 6 – Proper number of signature.

The auditor indicated instances of pages missing the required number of signatures. The testing board has evaluated and remedied the problem. Updated test records are located in addendum binders. The instances of missing signatures applied to less than 5 test records.

Additionally, where possible the test board responded to each of the "flagged" items provided by InfoSentry in Attachment 1 of the audit report. Evidence of items that were corrected or modified can be found in the addendum binders of the certification process.



**Audit of the Colorado Department of State's Testing
of Diebold Voting Systems**

For

The Colorado Secretary of State's Elections Division

By

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**05 November 2007
Version 1.0**



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Introduction

The State of Colorado has developed a program to examine and certify voting systems for use in the State's counties. The Colorado Secretary of State has put in place a detailed examination procedure in which staff members of his office have begun examinations of precinct-count optical scan (OS), central-count optical scan (OS), and direct recording electronic (DRE) voting systems and corresponding data transfer and election management systems.

The Secretary has placed detailed descriptions and discussions of the examination and certification program on his office's website at <http://www.elections.colorado.gov>.

As part of the program, the Secretary's office has contracted with independent auditors to review, evaluate, and audit the procedures and outcomes of the examination and certification process. InfoSENTRY Services Inc., an independent technology consulting firm based in Raleigh, North Carolina, was one of the firms selected to serve as voting system test auditor. It assigns certified information technology professionals as key members on all of its project teams.

M. Glenn Newkirk, President of InfoSENTRY Services, Inc., conducted the audit for the firm. Mr. Newkirk has conducted voting systems examinations and audits on most major manufacturer's voting equipment throughout the United States. Mr. Newkirk is a Certified Business Continuity Professional, Certified Software Project Manager, and Certified Business Resilience Auditor.

As part of the audit, the Testing Board provided InfoSENTRY with the following documentation and materials.

1. The complete documentation generated for each voting system (30 binders), presented in both paper¹ and electronic form;
2. Index of all tests conducted during certification;
3. Electronic copies of template databases and complete (populated) databases used by the testing board;
4. Any and all supplemental documentation provided by the voting system vendors;
5. Copies of all applicable video footage recorded during the certification process;
6. The procedures document used by the Secretary of State for testing;
7. Copies of Secretary of State Election Rule 45, other applicable Secretary of State Elections Rules, and Title 1 of the Colorado Revised Statutes.

The Secretary of State's Office required the auditors to provide the following audit statements in the audit reports:

- a. Summary statement(s) for each system, highlighting any issues or inconsistencies with the testing board's evaluation;

¹ InfoSENTRY chose not to receive the paper forms of all of the test results.

- b. Specific statements on any failures of the testing board to comply with its stated objectives;
- c. Specific statements on any items that the independent auditors request the testing board to re-examine;
- d. Any additional reports or statements the independent auditors feel necessary to produce as a result of their review.

The findings and recommendations in this document pertain to the auditor's review of examinations performed on voting systems submitted by Diebold Election Systems, Inc.²

Certification Test Basis and Authority

The Colorado Secretary of State developed its test standards and procedures pursuant to COLORADO SECRETARY OF STATE 8 CCR 1505-1 ELECTION RULES. Specifically, the materials relating to voting systems standards and procedures for certification are in "Rule 45. Rules Concerning Voting System Standards for Certification.'

Subsequently, the Department of State staff developed a test plan to guide the specific application of the certification standards and procedures to systems submitted by each vendor.

Audit Basis and Authority

An audit must have a basis against which the auditor can proceed. The Secretary of State established the basis for conducting this audit from the language in "COLORADO SECRETARY OF STATE 8 CCR 1505-1 ELECTION RULES. Specifically, there is the following language in rule 45.1.16:

"Test Log" means documentation of certification testing and processes which is independently reproducible to recreate all test scenarios conducted by the testing board. The log may include documentation such as: photographs, written notes, video and/or audio recorded notes.

This rule, when combined with the previously fully stated technical and operational standards for certification, provides a sufficient basis on which to conduct an audit. A key phrase in Rule 45.1.16 is "independently reproducible." The key question is whether a person or group operating independently from the testing authority and the objects of the test can follow the Testing Board's processes and scenarios and reasonably produce the same evidentiary trail and conclusions as the testing board.

It is this basis against which this audit proceeded.

² Diebold Election Systems, Inc. has formally changed its corporate name since submitting its systems for examination and certification in Colorado. However because all of the equipment itself and all of the documentation provided to the auditor contains references to the name Diebold, we will use that reference consistently throughout this document.

Audit Scope and Plan

The scope of this audit was the set of tests applied to the voting systems submitted by Diebold to the Colorado Secretary of State for certification. Diebold submitted the following voting systems and voting systems components for certification:

- ❑ GEMS 1.18.24 (Election management system)
- ❑ AVOS CC (Central-count optical scan)
- ❑ TSX-C 4.6.4 (DRE)
- ❑ TSX-D 4.6.4 (DRE)
- ❑ AVOS PC (Precinct-count optical scan)

InfoSENTRY developed the following plan with which to conduct the audit.

1. Review the documentary, video, and photographic evidence for the test process and the individual test.
2. Request additional materials as required.
3. Interview the Testing Board members to discuss specific audit concerns and concerns of the Testing Board.
4. Prepare the Audit Report.

Materials Reviewed

Attachment 1 contains a list of the documents, videos, photographs, and other materials that InfoSENTRY reviewed during the audit. Given the substantial volume of materials, in particular the 120+ DVDs containing videos of beginning-to-end test sessions, it was not possible to review 100% of all of the materials. Some DVD's contained only a few minutes video materials, while others contained several hours of video materials. Instead, InfoSENTRY reviewed the materials as required to meet the mandate of the audit.

Attachment 1 contains a brief description of the nature of our review of each audited document.

For completeness: InfoSENTRY reviewed the document to validate that it was usable, complete, and contained all of the materials that it purported to contain.

Reference: InfoSENTRY reviewed only a specific portion of the document or video to ascertain a specific piece of information.

Partial: InfoSENTRY reviewed portions of the material, but did not review the document in its entirety.

In Entirety: InfoSENTRY entry reviewed the material in its entirety.

After reviewing substantially all of the materials, the audit proceeded to the next phase—an interview with the Testing Board.

Testing Board Interview

InfoSENTRY conducted a telephone interview with six (6) members of the Secretary of State's Testing Board. The interview covered both specific items of the Diebold tests as well as discussions of the general test process.

At the conclusion of the interview, InfoSENTRY provided the Testing Board with a list of additional materials and replacement materials required for the audit. The Testing Board provided those materials shortly after conclusion of the interview.

InfoSENTRY chose not to receive the overall outcome and recommendation of the Testing Board for the individual voting systems and modules until after concluding the documentation review and the Testing Board interview. The purpose of this choice was to avoid having any potential overall knowledge bias introduced into the review of the documentation and individual tests.

Audit Findings

FINDING 01: The Department of State Testing Board operated in material compliance with the specified Colorado rules and procedures in development and application of its test plan for voting systems offered by Diebold.

In reviewing the documentation, video records, and photographic materials provided by the Testing Board, we found clear evidence to indicate that the organization had adhered to the properly adopted rules and procedures for test structure, test documentation, and test reports.

The Department of State staff conducted public demonstrations of the Diebold systems under examination as required. The public demonstration covered points determined to be necessary by the Colorado Department of State's voting systems program staff members. Vendor representatives received spirited questions and comments from the public participants throughout the demonstrations.

The Testing Board prepared a "trusted build" of the voting systems software. However, creation of the trusted build required the vendor to provide additional documentation and to provide additional security assurances that all of the software provided to Colorado was, in fact, the software that the Federal testing authorities had examined previously. In the end, the Testing Board created a "trusted build" that met Colorado's legal requirements.

The Testing Board's primary deviations from its original test plan came as a result of a given system not being fully configured for specific tests. In some instances, a piece of software might be missing or incomplete. In other instances, some required documentation might be incomplete. Such conditions forced the Testing Board to suspend and restart testing many times during the overall test.

Nonetheless, the Testing Board developed sufficient procedures and operations to see that it completed testing as time allowed.

FINDING 02: The combined documentary materials and videos provide “chain-of-custody” evidence that the examiners were examining what they were supposed to be examining.

The Testing Board maintained documentary materials and videos according to industry-standard procedures to assure an adequate "chain-of-custody" for test evidence. Both the documents themselves and videotapes reflect due diligence and caution in document preparation and handling.

These activities extended to the use of tamper-evident seals on voting equipment and on test materials provided to the auditors. The videotapes and photographs provide clearly visible indications of the use of tamper-evident seals during all test phases. Both the test plan and documentation provided by the Testing Board indicate a controlled use of check-in and check-out procedures for test documentation and other controlled-access materials.

FINDING 03: The Testing Board produced test results that are independently reproducible, though it will be difficult for third-party's who are not familiar with voting systems technology and Diebold voting systems to carry out those tests.

There are really two separate questions involved with this finding. First, could the Testing Board reproduce its own results following the same test plans and scripts? The answer to that question is "yes." The bases for this conclusion are (1) our observations of the videotapes and reviews of the documentation and (2) our interviews with the Testing Board members.

The second question is "Could someone not thoroughly familiar with voting systems technology, in general, and with the Diebold voting systems presented for inspection produce the same results?" The answer to that question is "yes, but with some difficulty." A third-party examiner who was unfamiliar with voting systems technology and with the specific Diebold system under consideration would face a substantial learning curve in order to carry out the examination. Such a third-party examiner would also require a substantial amount of time to carry out those examinations, probably well in excess of the amount of time required by the Colorado Testing Board to complete the tests.

A third-party examiner almost certainly would require use of the test documentation, test videos, and test photographs in order to replicate some of the tests. However, because all of those materials are part of the test record, that is not an unacceptable barrier to reproducing the tests and their results.

Finding 04: The audit found only several of the evidentiary photographs to be of such a quality that they were not useful for examination.

There were only a few instances in which the test photographs were not readily viewable. In most instances, these photographs appear to have been of error displays and warning messages in small display screens. They were sometimes only difficult to see and in other instances they were not viewable at all.

We have commented on the specific photographic identifiers that were not viewable in the records associated with the photo evidence CD-ROMs, listed in Attachment 1. These problems with photographs did not significantly impair our ability to judge the results of the tests. However, they represent problems that should be avoided in the future

examinations through closer immediate examinations of photographs when they're taken.

Finding 05: The audit found several instances in which the Testing Board did not provide clear "flash cards" identifying clearly the tests on the videos.

The Testing Board generally did a thorough job of identifying the machines under examination on most of the videos. However, as noted in audit comments in Attachment 1, there were some instances in which it was difficult to determine which machines were being covered by the videos.

There are no remedial steps necessary on the Diebold tests covered by this audit. These problems with video "flash card" identifiers did not significantly impair our ability to judge the results of the tests. However, they represent problems that should be avoided in future examinations through more care with associating clear flash cards with specific tests.

FINDING 06: The audit found only scattered instances in which written tests did not have the mandatory three signatures from Testing Board members.

The test procedures called for three co-signatures on each written test result. The audit found a very small number of a test documents that had only two of the required signatures. These problems with incomplete signatures did not significantly impair our ability to judge the results of the tests.

InfoSENTRY has discussed this matter with the Testing Board director who has undertaken remedy actions.

Finding 07: The Testing Board's primary limitations in fully achieving its stated objectives were (1) time available for testing and (2) completeness of materials provided by Diebold, both of which were beyond the Testing Board's control.

The Testing Board faced an ongoing frustration of time available to complete the tests. This frustration arose in part because of what became an asynchronous structure of the test process. Conducting some tests required completion of predecessor tests. This relationship among tests meant that a nice, sequential, linear set of test numbers and of sequential dates was not possible. If a problem occurred on one test, that problem created a cascading set of problems on downline tests.

A second factor compounded that first difficulty. If a vendor did not have all of the materials, information, or other preconditions ready for a test, that situation might delay several additional downline tests.

The result was a constant pressure of time to complete tests in an orderly, meaningful manner. The Testing Board did a professional job of conducting tests when materials and systems were ready for testing, in spite of these difficulties.

FINDING 08: The examination procedures to meet all voter accessibility requirements provided significant challenges to the Testing Board.

The documentation and discussions with the Testing Board pointed to the substantial challenges faced in testing voter accessibility requirements on the applicable voting systems. There were clear situations in which the rules regarding accessibility should

have provided more specificity and direction in order to allow the Testing Board to create test scripts. It is possible that in the future Colorado will want to examine both its statutes and rules to provide additional clarity for voting system accessibility requirements.

FINDING 09: The audit finds no need to re-examine the systems in order to accept the Testing Board's preliminary findings.

InfoSENTRY was able to use the combination of documentary materials, videos, and photographs to analyze each set of tests and test findings. The audit finds that there is sufficient evidence in the case of each test to support the Testing Board's preliminary findings.

It is likely that the vendor will request a re-examination of those units and systems that the Testing Board gave a failing recommendation. It is very important that the vendor provide full and complete materials and fully configured systems at the beginning of the test period.

FINDING 10: The audit requires no additional materials or reports from the Testing Board in order to accept the Tests Board's preliminary findings.

InfoSENTRY requires no additional materials, reports, or clarifications from the Test Ford in order to understand and accept the Testing Board's preliminary findings. We have had our question's answered concerning specific records and tests.

Audit Conclusions

InfoSENTRY provides the following conclusions for the voting systems presented for examination and certification by Diebold.

- ❑ GEMS 1.18.24 (Election management system). InfoSENTRY concurs with the preliminary findings. These tests presented a seemingly difficult choice to the Testing Board. The Testing Board could have chosen against issuing a "fail" finding because they could not complete the test. In several material tests, the vendor either had not met certain mandatory compliance requirements or had not provided a complete configuration that was ready for testing. The Testing Board could have suspended the Diebold GEMS tests, citing incomplete installation of all required software, missing or incomplete documentation, or other specific compliance shortcomings.

Because GEMS is crucial to the procedures for setting up elections and creating "builds" for use by the other voting devices, this step would have had the effect of suspending all testing on Diebold. The Testing Board chose to proceed as far as they could on all of the individual devices' tests while waiting for the GEMS suspended test items to clear. At some point, the Testing Board had to come to a final conclusion with respect to GEMS. They chose at the end to change the "suspended" items to a "fail" status. That approach is perfectly valid in a test methodology, under the condition that it is applied consistently. In reality, if Diebold does not rectify the problems associated with its GEMS election management software, it will not be able to provide any of the voting devices. Those devices require GEMS for use in an election.

- ❑ AVOS CC (Central-count optical scan). InfoSENTRY concurs with the preliminary findings. The Testing Board's procedures and documentation provide sufficient support for its findings.
- ❑ TSX-C 4.6.4 (DRE) InfoSENTRY concurs with the preliminary findings. The Testing Board's procedures and documentation provide sufficient support for its findings.
- ❑ TSX-D 4.6.4 (DRE) InfoSENTRY concurs with the preliminary findings. The Testing Board's procedures and documentation provide sufficient support for its findings.
- ❑ AVOS PC (Precinct-count optical scan) InfoSENTRY concurs with the preliminary findings. The Testing Board's procedures and documentation provide sufficient support for its findings.

Attachment 1: Materials Examined and Audit Comments



Voting System Certification List of Documentation Reviewed and Audit Comments

Document Title	Document Type	Document Autho	Document date	Review type
2007-CDOS-DIE-001-0402 – Request for Items.	Letter	Gardner, John	31-Aug-07	In entirety
Auditor notes:				
BOX Phase 2.	Test Documentation	Diebold Election	20-Aug-07	Partial
Auditor notes: <i>Contains test planning docs from Diebold and Wylie as well as CDOS materials.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 01: Application.	Test Documentation	CDOS	17-Aug-07	In entirety
Auditor notes: <i>This binder contains materials relating to Diebold's application for testing and certification. The documentation indicates various delays in receiving completed materials and several conditional passes.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 02: Documentation Review.	Test Documentation	CDOS	17-Aug-07	In entirety
Auditor notes: <i>Note that various tests associated with VVSG requirements for documentation reflected occasional suspensions and failures.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 03: Documentation Review.	Test Documentation	CDOS	17-Aug-07	In entirety
Auditor notes: <i>Many of these tests received failing marks because of a lack of documentation at test time. Like the previous documentation review binders, this one contains copies of correspondence between CDOS and Diebold as well as Diebold manuals.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 04: Documentation Review.	Test Documentation	CDOS	17-Aug-07	In entirety
Auditor notes: <i>As with the previous documentation volumes, various tests received a "fail" status because of a lack of an ITA report or a notation that the ITA report did not contain the required information.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 05: Documentation Review.	Test Documentation	CDOS	17-Aug-07	In entirety
Auditor notes: <i>As with the previous documentation volumes, various tests received a "fail" status because of a lack of an ITA report or a notation that the ITA report did not contain the required information.</i>				

Document Title	Document Type	Document Autho	Document date	Review type
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 06: Documentation Review.	Test Documentation	CDOS	17-Aug-07	In entirety
Auditor notes: <i>In Test# AB6-P2-828 (Alteration of voting system audit records), both precinct count and central count devices receive an N/A status. Do these devices not have some type of audit log that would fall within the purview of this test? Test AB6-P2-862 calls for delivery of and review of VSTL logs. Has CDOS established if and when the EAC/VSTLs will make these available? If never, how can this test be required?</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 07: Documentation Review.	Test Documentation	CDOS	17-Aug-07	In entirety
Auditor notes: <i>Tests AC1-P3-102 (DRE), AC2-P3-205 (PCOS), and AC4-P3-104 (Software) all have a "Pass" status. However, Test AC3-P3-310 (CCOS) has a "Pass Conditional" status. All relate to the same requirement and apparently have the same outcome. The documentation for AC3-P3-310 might have additional info about what placed it into the "Conditional" status.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 08: Trusted Build.	Test Documentation	CDOS	17-Aug-07	In entirety
Auditor notes: <i>Some of the scanned versions of the screen dumps were somewhat difficult to read. However, they were decipherable and are most likely easier to read in hardcopy.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 09: Source Code Review.	Test Documentation	CDOS	17-Aug-07	In entirety
Auditor notes: <i>Tests not applicable until after 31 March 2008.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 10: Source Code Review.	Test Documentation	CDOS	17-Aug-07	In entirety
Auditor notes: <i>Tests not applicable until after 31 March 2008.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 11: Source Code Review.	Test Documentation	CDOS	17-Aug-07	In entirety
Auditor notes: <i>Tests not applicable until after 31 March 2008.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 12: Source Code Review.	Test Documentation	CDOS	17-Aug-07	In entirety
Auditor notes: <i>Tests not applicable until after 31 March 2008.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 13: System Access.	Test Documentation	CDOS	17-Aug-07	In entirety
Auditor notes: <i>Some tests did not have a third ("Supervisors") signature. However, at least one of the two other signatures were from senior Test Board members. Not an issue. (See BA1-P3-111)</i>				

Document Title	Document Type	Document Autho	Document date	Review type
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 14: Operating System Security.	Test Documentation	CDOS	17-Aug-07	In entirety
Auditor notes: <i>Various tests were not applicable until 31 March 2008. Others resulted in failure because of missing software or doc.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 15: Database Security.	Test Documentation	CDOS	17-Aug-07	In entirety
Auditor notes: <i>Contains a list of tests not applicable until after 31 March 2008.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 16: Removable Media.	Test Documentation	CDOS	17-Aug-07	In entirety
Auditor notes: <i>Contains numerous inapplicable tests. Some tests resulted in failure because the vendor did not provide required 3rd-party software. This one seems simple for the vendor to rectify</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 17: Networking and Telecommun.	Test Documentation	CDOS	17-Aug-07	In entirety
Auditor notes: <i>Some tests resulted in failure because the vendor did not provide required comm equipment. This one seems simple for the vendor to rectify.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 18a: System System.	Test Documentation	CDOS	21-Aug-07	In entirety
Auditor notes:				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 18b: System System.	Test Documentation	CDOS	20-Aug-07	In entirety
Auditor notes:				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 19a: Ballot Process.	Test Documentation	CDOS	20-Aug-07	In entirety
Auditor notes:				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 19b: Ballot Process.	Test Documentation	CDOS	20-Aug-07	In entirety
Auditor notes:				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 20a: Ballot Process.	Test Documentation	CDOS	20-Aug-07	In entirety
Auditor notes:				

Document Title	Document Type	Document Autho	Document date	Review type
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 20b: Ballot Process.	Test Documentation	CDOS	20-Aug-07	In entirety
Auditor notes::				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 21: Performance DRE Processi.	Test Documentation	CDOS	20-Aug-07	In entirety
Auditor notes:: <i>Included battery tests. Some of the CCOS test documents referred to PCOS results. This is not surprising or unusual, given the configurations and uses of these devices.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 22a: Audits-Reports.	Test Documentation	CDOS	20-Aug-07	In entirety
Auditor notes:: <i>Note that the devices tended to pass the logic, accuracy, computational, and reporting tests, while having less success in other performance measures.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 22b: Audits-Reports.	Test Documentation	CDOS	20-Aug-07	In entirety
Auditor notes::				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 23a: Hardware Diagnostics.	Test Documentation	CDOS	20-Aug-07	In entirety
Auditor notes::				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 23b: Hardware Diagnostics.	Test Documentation	CDOS	20-Aug-07	In entirety
Auditor notes:: <i>More time would have permitted more formal documentation. However, the existing procedural and results documentation give ample, detailed evidence to support the conclusions for all tests.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 23c: Hardware Diagnostics.	Test Documentation	CDOS	20-Aug-07	In entirety
Auditor notes:: <i>Some DB3-P3-302 test photos/scans are not legible in electronic form. Noted central count problems.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 23d: Hardware Diagnostics.	Test Documentation	CDOS	20-Aug-07	In entirety
Auditor notes:: <i>Note that a few of the scanned photos/screen dumps are not readily legible.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 24: Multi Page Ballots.	Test Documentation	CDOS	20-Aug-07	In entirety
Auditor notes::				

Document Title	Document Type	Document Autho	Document date	Review type
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 25a: V-VPAT-Accessibility.	Test Documentation	CDOS	20-Aug-07	In entirety
Auditor notes: <i>Very full set of documentation, photos and videos for these tests.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 25b: V-VPAT-Accessibility.	Test Documentation	CDOS	20-Aug-07	In entirety
Auditor notes: <i>Photos and scan are much clearer in this binder.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 25c: V-VPAT-Accessibility.	Test Documentation	CDOS	20-Aug-07	In entirety
Auditor notes:				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 26: Closing Polls.	Test Documentation	CDOS	20-Aug-07	In entirety
Auditor notes:				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 27: Post Election Audit-Recount.	Test Documentation	CDOS	20-Aug-07	In entirety
Auditor notes:				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 28: Video Documentation.	Test Documentation	CDOS	20-Aug-07	In entirety
Auditor notes: <i>Contains log of videos. Test Team has provided updated/amended documentation files.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 29: Safe Documentation Log.	Test Documentation	CDOS	20-Aug-07	In entirety
Auditor notes: <i>Contains detailed log of access by persons to the SOS test safe. Displays consistent loggin procedure.</i>				
Colorado Department of State Certification Number 2007-CDOS-DIE-001-0402 Binder # 30: Other Notes.	Test Documentation	CDOS	20-Aug-07	In entirety
Auditor notes:				
Diebold Election Services Functional Test Software. Copy DIE 101 2 of 2.	DVD Video	CDOS	04-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems Central Count O.S. DB3 P3 302. Copy DIE 120 5 of 5.	DVD Video	CDOS	26-Jul-07	For completeness
Auditor notes:				

Document Title	Document Type	Document Autho	Document date	Review type
Diebold Election Systems Central Count O.S. DB2 P3 307. Copy DIE 102 4 of 4.	DVD Video	CDOS	11-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems Central Count O.S. DB3 P3 303/307. Copy DIE 112 1 of 1.	DVD Video	CDOS	24-Jul-07	For completeness
Auditor notes:				
Diebold Election Systems Central Count O.S. DB3 P3 304. Copy DIE 103 1 of 2.	DVD Video	CDOS	06-Aug-07	For completeness
Auditor notes:				
<i>Internal video flash label for Precinct O.S. DB2 P3 205. Internal video flash label for DRE DB1 P3 108.</i>				
Diebold Election Systems Central Count O.S. DB3 P3 307. Copy DIE 093 5 of 5.	DVD Video	CDOS	31-Jul-07	For completeness
Auditor notes:				
Diebold Election Systems Central Count O.S. DB3 P3 307. Copy DIE 094 3 of 5.	DVD Video	CDOS	30-Jul-07	For completeness
Auditor notes:				
Diebold Election Systems Central Count O.S. DB3 P3 307. Copy DIE 094 4 of 5.	DVD Video	CDOS	30-Jul-07	For completeness
Auditor notes:				
Diebold Election Systems Central Count O.S. DB3 P3 307. Copy DIE 094 5 of 5.	DVD Video	CDOS	30-Jul-07	For completeness
Auditor notes:				
Diebold Election Systems Central Count O.S. DB3 P3 307. Copy DIE 095 1 of 5.	DVD Video	CDOS	03-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems Central Count O.S. DB3 P3 307. Copy DIE 102 1 of 4.	DVD Video	CDOS	11-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems Central Count O.S. DB3 P3 307. Copy DIE 102 2 of 4.	DVD Video	CDOS	11-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems Central Count O.S. DB3 P3 307. Copy DIE 102 3 of 4.	DVD Video	CDOS	11-Aug-07	For completeness
Auditor notes:				

Document Title	Document Type	Document Autho	Document date	Review type
Diebold Election Systems Central Count O.S. DB3 P3 307. Copy DIE 108 1 of 1. DVD Video	CDOS	26-Jul-07	For completeness	
Auditor notes:: <i>Precinct count machine used for a central count test.</i>				
Diebold Election Systems Central Count O.S. DB3 P3 307. Copy DIE 115 1 of 1. DVD Video	CDOS	30-Jul-07	For completeness	
Auditor notes::				
Diebold Election Systems Central Count O.S. DB3 P3 307. Copy DIE 116 1 of 1. DVD Video	CDOS	26-Jul-07	For completeness	
Auditor notes:: <i>The internal flash label indicates the test# is DB3 P3 302 instead of DB3 P3 307.</i>				
Diebold Election Systems Central Count O.S. DB3 P3 307/303. Copy DIE 122 1 DVD Video	CDOS	25-Jul-07	For completeness	
Auditor notes::				
Diebold Election Systems Central Count O.S. DB3 P3 307/303. Copy DIE 122 2 DVD Video	CDOS	25-Jul-07	For completeness	
Auditor notes::				
Diebold Election Systems Central Count O.S. DB3 P3 307/303. Copy DIE 122 3 DVD Video	CDOS	25-Jul-07	For completeness	
Auditor notes::				
Diebold Election Systems Central Count O.S. DB3 P3 307/303. Copy DIE 122 4 DVD Video	CDOS	25-Jul-07	For completeness	
Auditor notes::				
Diebold Election Systems Central Count O.S./DRE DB3 P3 302. Copy DIE 120 DVD Video	CDOS	26-Jul-07	For completeness	
Auditor notes::				
Diebold Election Systems Central Count O.S./DRE DB3 P3 302. Copy DIE 120 DVD Video	CDOS	26-Jul-07	For completeness	
Auditor notes::				
Diebold Election Systems Central Count O.S./DRE DB3 P3 302. Copy DIE 120 DVD Video	CDOS	26-Jul-07	For completeness	
Auditor notes::				
Diebold Election Systems Central Count O.S./DRE DB3 P3 302. Copy DIE 120 DVD Video	CDOS	26-Jul-07	For completeness	
Auditor notes::				

Document Title	Document Type	Document Autho	Document date	Review type
Diebold Election Systems Central Count O.S./DRE DB3 P3 302. Copy DIE 120 4 of 5.	DVD Video	CDOS	26-Jul-07	For completeness
Auditor notes::				
Diebold Election Systems Central Count O.S./DRE DB3 P3 307. Copy DIE 119 1 of 4.	DVD Video	CDOS	27-Jul-07	Partial
Auditor notes::				
<i>Also contains test and error on DB2 P3 201.</i>				
Diebold Election Systems Central Count O.S./DRE DB3 P3 307. Copy DIE 119 2 of 4.	DVD Video	CDOS	27-Jul-07	For completeness
Auditor notes::				
Diebold Election Systems Central Count O.S./DRE DB3 P3 307. Copy DIE 119 3 of 4.	DVD Video	CDOS	27-Jul-07	For completeness
Auditor notes::				
Diebold Election Systems Central Count O.S./DRE DB3 P3 307. Copy DIE 119 4 of 4.	DVD Video	CDOS	27-Jul-07	For completeness
Auditor notes::				
Diebold Election Systems Central Count O.S./DRE DB3 P3 307/DB1 P3 108. copy DIE 095 2 of 5.	DVD Video	CDOS	03-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems Central Count O.S./DRE DB3 P3 307/DB1 P3 108. Copy DIE 095 3 of 5.	DVD Video	CDOS	03-Sep-07	For completeness
Auditor notes::				
Diebold Election Systems Central Count O.S./DRE DB3 P3 307/DB1 P3 108. Copy DIE 095 4 of 5.	DVD Video	CDOS	03-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems DRE Copy DIE 118 5 of 5.	DVD Video	CDOS	27-Jul-07	For completeness
Auditor notes::				
Diebold Election Systems DRE DB1 P3 101. Copy DIE 092 1 of 5.	DVD Video	CDOS	02-Aug-07	For completeness
Auditor notes::				
<i>The DVD label contains a date of 02 Aug. However, the video's internal flash label contains a verbal description of 09 Aug.</i>				

Document Title	Document Type	Document Autho	Document date	Review type
Diebold Election Systems DRE DB1 P3 101. Copy DIE 092 2 of 5.	DVD Video	CDOS	09-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems DRE DB1 P3 101. Copy DIE 105 3 of 4.	DVD Video	CDOS	07-Aug-07	For completeness
Auditor notes:				
<i>Video also contains Central Count test# DB3 P3 312.</i>				
Diebold Election Systems DRE DB1 P3 101/DB3 P3 307. Copy DIE 109 1 of 1.	DVD Video	CDOS	25-Jul-07	For completeness
Auditor notes:				
Diebold Election Systems DRE DB1 P3 101/O.S. DB3 P3 307. Copy DIE 106 1 of 1.	DVD Video	CDOS	25-Jul-07	For completeness
Auditor notes:				
Diebold Election Systems DRE DB1 P3 108 / Precinct O.S. DB3 P3 307. Copy DIE 094 2 of 5.	DVD Video	CDOS	30-Jul-07	For completeness
Auditor notes:				
<i>Also includes some Central Count testing.</i>				
Diebold Election Systems DRE DB1 P3 108. Copy DIE 094 1 of 5.	DVD Video	CDOS	30-Jul-07	For completeness
Auditor notes:				
<i>Also contains video of DB3 P3 307, Central Count O.S. in the background. Also contains precinct count O.S. in the background.</i>				
Diebold Election Systems DRE DB1 P3 108. Copy DIE 105 1 of 4.	DVD Video	CDOS	08-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems DRE DB1 P3 108. Copy DIE 105 2 of 4.	DVD Video	CDOS	07-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems DRE DB1 P3 108/Central DB3 P3 312. Copy DIE 103 2 of 2.	DVD Video	CDOS	06-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems DRE DB1 P3 110. Copy DIE 092 3 of 5.	DVD Video	CDOS	09-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems DRE DB1 P3 110. Copy DIE 097 1 of 4.	DVD Video	CDOS	11-Aug-07	For completeness
Auditor notes:				

Document Title	Document Type	Document Autho	Document date	Review type
Diebold Election Systems DRE DB1 P3 110. Copy DIE 097 2 of 4.	DVD Video	CDOS	11-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems DRE DB1 P3 110. Copy DIE 104 1 of 5.	DVD Video	CDOS	10-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems DRE DB1 P3 110. Copy DIE 104 2 of 5.	DVD Video	CDOS	10-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems DRE DB1 P3 110. Copy DIE 104 3 of 5.	DVD Video	CDOS	10-Aug-07	For completeness
Auditor notes:				
<i>The video internal flash label refers to test Precinct Count O.S. DB2 P3 201. This internal label appears to be in error.</i>				
Diebold Election Systems DRE DB1 P3 110. Copy DIE 104 4 of 5.	DVD Video	CDOS	10-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems DRE DB1 P3 110. Copy DIE 121 1 of 5.	DVD Video	CDOS	26-Jul-07	For completeness
Auditor notes:				
Diebold Election Systems DRE DB1 P3 110. Copy DIE 121 3 of 5.	DVD Video	CDOS	26-Jul-07	Partial
Auditor notes:				
Diebold Election Systems DRE DB1 P3 110. Copy DIE 121 4 of 5.	DVD Video	CDOS	26-Jul-07	Partial
Auditor notes:				
<i>Video also contains segments of what appears to be Central Count O.S. testing.</i>				
Diebold Election Systems DRE DB1 P3 110. Optical Scanner. Copy DIE 121 2 of 5.	DVD Video	CDOS	26-Jul-07	Partial
Auditor notes:				
Diebold Election Systems DRE DB1 P3 110; O.S/DB2 P3 201. Copy DIE 097 3 of 4.	DVD Video	CDOS	11-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems DRE DB3 P3 307. Copy DIE 105 4 of 4.	DVD Video	CDOS	07-Aug-07	For completeness
Auditor notes:				
<i>Although the DVD label indicates "DRE" the internal flash label indicates a Central Count O.S. test, which is on the video.</i>				

Document Title	Document Type	Document Autho	Document date	Review type
Diebold Election Systems DRE DG1 P3 139. Copy DIE 092 4 of 5.	DVD Video	CDOS	09-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems DRE DG1 P3 139. Copy DIE 092 5 of 5.	DVD Video	CDOS	09-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems DRE Functional Testing Test# DB1 P3 101. Copy DIE DVD Video	DVD Video	CDOS	01-Jun-07	For completeness
Auditor notes::				
<i>Note that the videos confirm the use of appropriate and consistent use of tamper-evident seals on test equipment.</i>				
Diebold Election Systems DRE Functional Testing Test# DB1 P3 101. Copy DIE DVD Video	DVD Video	CDOS	05-Jun-07	For completeness
Auditor notes::				
Diebold Election Systems DRE/Precinct/Central O.S. DB3 P3 302/307. Copy DIE 100 1 of 5.	DVD Video	CDOS	01-Aug-08	For completeness
Auditor notes::				
Diebold Election Systems DRE/Precinct/Central O.S. DB3 P3 302/307. Copy DIE 100 2 of 5.	DVD Video	CDOS	01-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems DRE/Precinct/Central O.S. DB3 P3 302/307. Copy DIE 100 3 of 5.	DVD Video	CDOS	01-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems DRE/Precinct/Central O.S. DB3 P3 302/307. Copy DIE 100 4 of 5.	DVD Video	CDOS	01-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Test Networking/Software. Copy DIE 101 1 of 2.	DVD Video	CDOS	04-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Test: Central Count Test# DB3 P3 307. Copy DIE 031.	DVD Video	CDOS	13-Jun-07	For completeness
Auditor notes::				
<i>Also contains "203" at 2:50pm.</i>				

Document Title	Document Type	Document Autho	Document date	Review type
Diebold Election Systems Functional Test: DRE DB1 P3 110. Copy DIE 048.	DVD Video	CDOS	28-Jun-07	For completeness
Auditor notes:				
Diebold Election Systems Functional Test: DRE DB1 P3 110. Copy DIE 049.	DVD Video	CDOS	29-Jun-07	For completeness
Auditor notes:				
Diebold Election Systems Functional Test: DRE DB1 P3 110. Copy DIE 050.	DVD Video	CDOS	11-Jun-07	For completeness
Auditor notes:				
<i>The video's internal flash header referred to "101" instead of "110" which was on the DVD label.</i>				
Diebold Election Systems Functional Testing Central Count O.S. Copy DIE 069.	DVD Video	CDOS	05-Jul-07	For completeness
Auditor notes:				
<i>There appears to have been an error duplicating this video. It is viewable and usable. However, the DVD internal index info (containing total video length) does not appear. The internal video label and the DVD label do not reference the specific test.</i>				
Diebold Election Systems Functional Testing Central Count O.S. Copy DIE 079.	DVD Video	CDOS	17-Jul-07	For completeness
Auditor notes:				
Diebold Election Systems Functional Testing Central Count O.S. DB3 P3 302.	DVD Video	CDOS	23-Jul-07	For completeness
Copy DIE 087.				
Auditor notes:				
<i>The video's internal flash label references test# DB2 P3 302 instead of the DB3 P3 302 on the DVD label.</i>				
Diebold Election Systems Functional Testing Central Count O.S. DB3 P3 305.	DVD Video	CDOS	16-Jul-07	For completeness
Copy DIE 081.				
Auditor notes:				
Diebold Election Systems Functional Testing Central Count O.S. DB3 P3 305.	DVD Video	CDOS	20-Jul-07	For completeness
Copy DIE 084.				
Auditor notes:				
Diebold Election Systems Functional Testing Central Count O.S. DB3 P3 305.	DVD Video	CDOS	19-Jul-07	For completeness
Copy DIE 085.				
Auditor notes:				
Diebold Election Systems Functional Testing Central Count O.S. DB3 P3 307.	DVD Video	CDOS	11-Jul-07	For completeness
Copy DIE 057.				
Auditor notes:				

Document Title	Document Type	Document Autho	Document date	Review type
Diebold Election Systems Functional Testing Central Count O.S. DB3 P3 307. Copy DIE 062.	DVD Video	CDOS	26-Jun-07	Partial
Auditor notes:: <i>This DVD contains camera footage for both precinct count and central count testing. The Precinct Count test identification on the internal video flash card is DB2 P3 201 at 3 hrs. 3 min. 21 secs. into the video.</i>				
Diebold Election Systems Functional Testing Central Count O.S. DB3 P3 307. Copy DIE 075.	DVD Video	CDOS	12-Jul-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing Central Count O.S. Test# DB2 P3 203. Copy DIE 021.	DVD Video	CDOS	01-Jun-07	For completeness
Auditor notes:: 8:40am				
Diebold Election Systems Functional Testing Central Count O.S. Test# DB3 P3 307 #DB1 P3 101 #DB2 P3 203. Copy DIE 022.	DVD Video	CDOS	01-Jun-07	Partial
Auditor notes:: <i>Also contains AccuVote DRE testing. Problems at 3hrs+ re" AVPM. The main DVD label title can sometimes be a bit confusing. This one referred to central count OS testing. It also contained DRE testing. However, the test number identifiers are correct.</i>				
Diebold Election Systems Functional Testing Central Count O.S. Test# DB3 P3 307. Copy DIE 023.	DVD Video	CDOS	01-Jun-07	For completeness
Auditor notes:: <i>Beginning internal flash header missing on video. Video appears to involve the central county O.S. referenced on the video label.</i>				
Diebold Election Systems Functional Testing Central Count O.S. Test# DB3 P3 307. Copy DIE 051.	DVD Video	CDOS	19-Jun-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing Central Count O.S. Test# DB3 P3 307. Copy DIE 053.	DVD Video	CDOS	21-Jun-07	In entirety
Auditor notes::				
Diebold Election Systems Functional Testing Central Count O.S./DRE Test# DB3 P3 307. Copy DIE 052.	DVD Video	CDOS	20-Jun-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing Central/Precinct Count O.S. DB2 P3 201. Copy DIE 074.	DVD Video	CDOS	10-Jul-07	For completeness
Auditor notes:: <i>The internal video flash label also refers to test# DB2 P3 201 for the precinct count O.S. A second internal video flash label refers to test DB3 P3 307 for the central count O.S.</i>				

Document Title	Document Type	Document Autho	Document date	Review type
Diebold Election Systems Functional Testing Central/Precinct Count O.S. DB2 P3 202/DB3 P3 305. Copy DIE 082.	DVD Video	CDOS	18-Jul-07	For completeness
Auditor notes:				
Diebold Election Systems Functional Testing Central/Precinct Count O.S. DB3 P3 307/DB2 P3 203. Copy DIE 056.	DVD Video	CDOS	22-Jun-07	For completeness
Auditor notes:				
Diebold Election Systems Functional Testing DB1 P3 101. Copy DIE 033.	DVD Video	CDOS	05-Jun-07	For completeness
Auditor notes:				
Diebold Election Systems Functional Testing DB1 P3 101. Copy DIE 040.	DVD Video	CDOS	06-Jun-07	For completeness
Auditor notes:				
Diebold Election Systems Functional Testing DB3 P3 307. Copy DIE 036.	DVD Video	CDOS	11-Jun-07	For completeness
Auditor notes: Internal flash header label says DB1 P3 101.				
Diebold Election Systems Functional Testing DB3 P3 307. Copy DIE 037.	DVD Video	CDOS	20-Jun-07	For completeness
Auditor notes: Internal video flash header said "1427"				
Diebold Election Systems Functional Testing DRE 3 DB1 P3 101. Copy DIE 032.	DVD Video	CDOS	19-Jun-07	For completeness
Auditor notes: The date on the internal flash card video header says 12 June instead of the 19 June on the DVD label.				
Diebold Election Systems Functional Testing DRE DB1 P3 101. Copy DIE 034.	DVD Video	CDOS	19-Jun-07	For completeness
Auditor notes:				
Diebold Election Systems Functional Testing DRE DB1 P3 101. Copy DIE 038.	DVD Video	CDOS	21-Jun-07	For completeness
Auditor notes:				
Diebold Election Systems Functional Testing DRE DB1 P3 101. Copy DIE 058.	DVD Video	CDOS	25-Jun-07	For completeness
Auditor notes: DVD internal flash label indicated 22 June instead of 25 June. The audio portion of the recording noted the discrepancy.				
Diebold Election Systems Functional Testing DRE DB1 P3 101. Copy DIE 065.	DVD Video	CDOS	21-Jun-07	For completeness
Auditor notes:				

Document Title	Document Type	Document Autho	Document date	Review type
Diebold Election Systems Functional Testing DRE DB1 P3 108. Copy DIE 086.	DVD Video	CDOS	23-Jul-07	Partial
Auditor notes::	<i>The video also contains some unreferenced tests and operations on the central count and precinct count O.S.</i>			
Diebold Election Systems Functional Testing DRE DB1 P3 110. Copy DIE 059.	DVD Video	CDOS	09-Jul-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing DRE DB1 P3 110. Copy DIE 060.	DVD Video	CDOS	10-Jul-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing DRE DB1 P3 110. Copy DIE 061.	DVD Video	CDOS	11-Jul-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing DRE DB1 P3 110. Copy DIE 068.	DVD Video	CDOS	02-Jul-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing DRE DB1 P3 110. Copy DIE 072.	DVD Video	CDOS	06-Jul-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing DRE DB1 P3 110. Copy DIE 076.	DVD Video	CDOS	12-Jul-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing DRE DB1 P3 110. Copy DIE 077.	DVD Video	CDOS	13-Jul-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing DRE DB1 P3 110. Copy DIE 078.	DVD Video	CDOS	16-Jul-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing DRE DF1 P3 109. Copy DIE 066.	DVD Video	CDOS	26-Jun-07	Partial
Auditor notes::	<i>The videos show testers routinely following test scripts and planned procedures.</i>			
Diebold Election Systems Functional Testing DRE DF1 P3 109. Copy DIE 064.	DVD Video	CDOS	25-Jun-07	For completeness
Auditor notes::				

Document Title	Document Type	Document Autho	Document date	Review type
Diebold Election Systems Functional Testing DRE DG1 P3 101. Copy DIE 054.	DVD Video	CDOS	06-Jul-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing DRE DG1 P3 101. Copy DIE 055.	DVD Video	CDOS	09-Jul-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing DRE DG1 P3 101. Copy DIE 067.	DVD Video	CDOS	28-Jun-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing Optical Scanner. Copy DIE 111 5	DVD Video	CDOS	10-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing Optical Scanner. Copy DIE 114 1	DVD Video	CDOS	10-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing Optical Scanner. Copy DIE 121 5	DVD Video	CDOS	26-Jul-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing Optical Scanner. Copy DIE 122 5	DVD Video	CDOS	25-Jul-07	In entirety
Auditor notes::				
<i>Central Count testing.</i>				
Diebold Election Systems Functional Testing Optical Scanner/DRE DB1 P3	DVD Video	CDOS	24-Jul-07	For completeness
108. Copy DIE 090.				
Auditor notes::				
<i>An internal video flashcard label also referred to tes# DB1 P3 108 on this DVD.</i>				
Diebold Election Systems Functional Testing Optical Scanner/DRE DB3 P3	DVD Video	CDOS	23-Jul-07	For completeness
303/DB1 P3 108. Copy DIE 089.				
Auditor notes::				
<i>RED FLAG RED FLAG. At approximately 2hrs. 23 mins, an internal flash card appears with a reference to Sequoia testing.</i>				
Diebold Election Systems Functional Testing Optical Scanners. Copy DIE 110 1	DVD Video	CDOS	11-Aug-07	For completeness
Auditor notes::				

Document Title	Document Type	Document Autho	Document date	Review type
Diebold Election Systems Functional Testing Optical Scanners. Copy DIE 110 2 of 3.	DVD Video	CDOS	11-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing Optical Scanners. Copy DIE 110 3 of 3.	DVD Video	CDOS	11-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing Precinct Count O.S. Copy DIE 071.	DVD Video	CDOS	05-Jul-07	For completeness
Auditor notes::				
<i>The DVD label and the internal flash label do not reference a specific test.</i>				
Diebold Election Systems Functional Testing Precinct Count O.S. Copy DIE 088.	DVD Video	CDOS	23-Jul-07	For completeness
Auditor notes::				
<i>Neither the DVD label nor the internal video flash label refer to the test#. However, the test coordinator verbally refers to test# DB2 P3 202.</i>				
Diebold Election Systems Functional Testing Precinct Count O.S. DB2 P3 201. Copy DIE 063.	DVD Video	CDOS	27-Jun-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing Precinct Count O.S. DB2 P3 202. Copy DIE 080.	DVD Video	CDOS	17-Jul-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing Test# DB1 P3 101. Copy DIE 026.	DVD Video	CDOS	06-Jun-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing Test# DB1 P3 101. Copy DIE 027.	DVD Video	CDOS	07-Jun-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing Test# DB1 P3 101. Copy DIE 028.	DVD Video	CDOS	08-Jun-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Testing Test# DB1 P3 101. Copy DIE 030.	DVD Video	CDOS	11-Jun-07	For completeness
Auditor notes::				
<i>Internal flash label says DB3 P3 307. (The 307 could be 301. Difficult to read.) The test was for the central count OS.</i>				
Diebold Election Systems Functional Testing Test# DB2 P3 203. Copy DIE 029.	DVD Video	CDOS	08-Jun-07	For completeness
Auditor notes::				

Document Title	Document Type	Document Autho	Document date	Review type
Diebold Election Systems Functional Tests DB2 P3 203. Copy DIE 047.	DVD Video	CDOS	19-Jun-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Tests: Central County DB3 P3 307. Copy DIE 041.	DVD Video	CDOS	25-Jun-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Tests: DB1 P3 101. Copy DIE 044.	DVD Video	CDOS	07-Jun-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Tests: DB1 P3 101. Copy DIE 045.	DVD Video	CDOS	08-Jun-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Tests: DB3 P3 110. Copy DIE 043.	DVD Video	CDOS	26-Jun-07	For completeness
Auditor notes::				
The video's internal flash header has "101" instead of "110."				
Diebold Election Systems Functional Tests: DB3 P3 110. Copy DIE042.	DVD Video	CDOS	25-Jun-07	For completeness
Auditor notes::				
Diebold Election Systems Functional Tests: DF1 P3 113. Copy DIE 046.	DVD Video	CDOS	27-Jun-07	For completeness
Auditor notes::				
Video did not have internal flash header information at the beginning. At 30 minutes the internal flash header card referred to DF1 P3 128. June 27. It is possible that the initial test on the video was for 113 and the remainder of the video was for 128.				
Diebold Election Systems Functional Tests: DRE DB3-P3-101/110, DF1-P3-105, DF1-P3-103, DF1-P3-124, DF1-P3-123, DF1-P3-120, DF1-P3-125. Copy DIE 035.	DVD Video	CDOS	20-Jun-07	For completeness
Auditor notes::				
Includes central count OS test.				
Diebold Election Systems Functional Tests: Precinct Count DB1 P3 101/201. Copy DIE 039.	DVD Video	CDOS	22-Jun-07	For completeness
Auditor notes::				
Internal Flash Header Label says DRE, not precinct count. The test is in fact of both DRE and precinct count (in background and foreground). The label is not incorrect, just incomplete.				
Diebold Election Systems O.S. DB3 P3 201. Copy DIE 097 4 of 4.	DVD Video	CDOS	11-Aug-07	For completeness
Auditor notes::				

Document Title	Document Type	Document Autho	Document date	Review type
Diebold Election Systems Optical Scanner DB3 P3 307. Copy DIE 095 5 of 5.	DVD Video	CDOS	03-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems Optical Scanner DB3 P3 307. Copy DIE 113 1 of 1.	DVD Video	CDOS	08-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems Precinct Count O.S. DB2 P3 202. Copy DIE 083.	DVD Video	CDOS	20-Jul-07	For completeness
Auditor notes:				
Diebold Election Systems Precinct Count O.S. DB3 P3 307. Copy DIE 099 1 of 4.	DVD Video	CDOS	07-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems Precinct Count O.S. DB3 P3 307. Copy DIE 099 2 of 4.	DVD Video	CDOS	07-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems Precinct Count O.S. DB3 P3 307. Copy DIE 099 3 or 4.	DVD Video	CDOS	07-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems Precinct Count O.S. DB3 P3 307. Copy DIE 099 4 of 4.	DVD Video	CDOS	07-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems Precinct Count O.S./DRE DB1 P3 101. Copy DIE 098 1 of 2.	DVD Video	CDOS	09-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems Precinct Count O.S./DRE DB2 P3 201/DB1 P3 101. Copy DIE 098 2 of 2.	DVD Video	CDOS	09-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems Precinct O.S. Copy DIE 091 1 of 5.	DVD Video	CDOS	02-Aug-07	For completeness
Auditor notes:				

Document Title	Document Type	Document Autho	Document date	Review type
Diebold Election Systems Precinct O.S. Copy DIE 091 5 of 5.	DVD Video	CDOS	02-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems Precinct O.S. Copy DIE 104 5 of 5.	DVD Video	CDOS	10-Aug-07	For completeness
Auditor notes::				
<i>The DVD also contains a DRE test.</i>				
Diebold Election Systems Precinct O.S. DB2 P3 201. Copy DIE 107 1 of 1.	DVD Video	CDOS	13-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems Precinct O.S. DB2 P3 201. Copy DIE 111 1 of 5.	DVD Video	CDOS	10-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems Precinct O.S. DB2 P3 201. Copy DIE 111 2 of 5.	DVD Video	CDOS	10-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems Precinct O.S. DB2 P3 201. Copy DIE 111 3 of 5.	DVD Video	CDOS	10-Aug-07	For completeness
Auditor notes::				
<i>All five of the DIE 111 DVD copies were present although entered out of sequence as they occurred in the DVD set.</i>				
Diebold Election Systems Precinct O.S. DB2 P3 201. Copy DIE 111 4 of 5.	DVD Video	CDOS	10-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems Precinct O.S. DB3 P3 307. Copy DIE 096 1 of 3.	DVD Video	CDOS	08-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems Precinct O.S. DB3 P3 307. Copy DIE 096 2 of 3.	DVD Video	CDOS	08-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems Precinct O.S. DB3 P3 307. Copy DIE 096 3 of 3.	DVD Video	CDOS	08-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems Precinct O.S. DRE DB3 P3 307. Copy DIE 093 4 of 5.	DVD Video	CDOS	31-Jul-07	For completeness
Auditor notes::				

Document Title	Document Type	Document Autho	Document date	Review type
Diebold Election Systems Precinct O.S./DRE DB3 P3 307, DB3 P3 302. Copy DIE 091 2 of 5.	DVD Video	CDOS	02-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems Precinct O.S./DRE DB3 P3 307, DB3 P3 302. Copy DIE 091 3 of 5.	DVD Video	CDOS	02-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems Precinct O.S./DRE DB3 P3 307. Copy DIE 093 1 of 5.	DVD Video	CDOS	31-Jul-07	For completeness
Auditor notes:				
Diebold Election Systems Precinct O.S./DRE DB3 P3 307/DB1 P3 108. Copy DIE 093 2 of 5.	DVD Video	CDOS	31-Jul-07	For completeness
Auditor notes:				
Diebold Election Systems Precinct O.S./DRE DB3 P3 307, DB3 P3 302. Copy DIE 091 4 of 5.	DVD Video	CDOS	02-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems Precinct O.S./DRE DB3 P3 307. Copy DIE 093 3 of 5.	DVD Video	CDOS	31-Jul-07	For completeness
Auditor notes:				
Diebold Election Systems Precinct/Central Count O.S. DB3 P3 201/307. Copy DIE 118 1 of 5.	DVD Video	CDOS	27-Aug-07	For completeness
Auditor notes:				
Diebold Election Systems Precinct/Central Count O.S. DB3 P3 201/307. Copy DIE 118 2 of 5.	DVD Video	CDOS	27-Jul-07	For completeness
Auditor notes:				
Diebold Election Systems Precinct/Central Count O.S. DB3 P3 201/307. Copy DIE 118 3 of 5.	DVD Video	CDOS	27-Jul-07	For completeness
Auditor notes:				
Diebold Election Systems Precinct/Central Count O.S. DB3 P3 201/307. Copy DIE 118 4 of 5.	DVD Video	CDOS	27-Jul-07	For completeness
Auditor notes:				

Document Title	Document Type	Document Autho	Document date	Review type
Diebold Election Systems Precinct/Central Count O.S. DB3 P3 307/302 Copy DIE 117 1 of 1.	DVD Video	CDOS	01-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems Precinct/Central O.S. Copy DIE 100 5 of 5.	DVD Video	CDOS	01-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems Public Demonstration 05-04-07: Copy DIE 001.	DVD Video	CDOS	04-May-07	Partial
Auditor notes::				
<i>Test AB6-P2-440 and AB6-P2-441 in Binder 04, Diebold's touchscreen device, precinct count optical scan device, central count optical scan device, and GEMS software all received "fail" status indications. These tests trace back to 2005 VVSG 4.2.1 (Size), 2002 VSS 3.3.1, 2005 VVSG 4.2.2 (Weight), and 2002 VSS 3.3.2. The reasons stated for the "fails" status were either that the ITA report did not contain information regarding the size or weight or that there was no ITA report. It was factually correct for all four voting devices and for GEMS that the documentation was lacking or missing. However, in the case of GEMS, it might have been more appropriate to issue a "Not Applicable" status because the GEMS software is not likely to have the kind of size or weight mentioned in the 2005 VVSG or the 2002 VSS.</i>				
Diebold Election Systems Public Demonstration 05-04-07: Copy DIE 002.	DVD Video	CDOS	04-May-07	For completeness
Auditor notes::				
<i>Reviewed for content.</i>				
Diebold Election Systems Public Demonstration 05-04-07: Copy DIE 003.	DVD Video	CDOS	04-May-07	For completeness
Auditor notes::				
Diebold Election Systems Public Demonstration 05-04-07: Copy DIE 004.	DVD Video	CDOS	04-May-07	For completeness
Auditor notes::				
Diebold Election Systems Public Demonstration 05-10-07: Copy DIE 005.	DVD Video	CDOS	10-May-07	For completeness
Auditor notes::				
Diebold Election Systems Public Demonstration 05-10-07: Copy DIE 006.	DVD Video	CDOS	10-May-07	For completeness
Auditor notes::				
Diebold Election Systems Public Demonstration 05-10-07: Copy DIE 007.	DVD Video	CDOS	10-May-07	For completeness
Auditor notes::				
Diebold Election Systems Public Demonstration 05-10-07: Copy DIE 008.	DVD Video	CDOS	10-May-07	For completeness
Auditor notes::				

Document Title	Document Type	Document Autho	Document date	Review type
Diebold Election Systems Public Demonstration 05-10-07: Copy DIE 009.	DVD Video	CDOS	10-May-07	For completeness
Auditor notes:				
Diebold Election Systems Public Demonstration 05-10-07: Copy DIE 010.	DVD Video	CDOS	10-May-07	For completeness
Auditor notes:				
Diebold Election Systems Public Demonstration 05-10-07: Copy DIE 011.	DVD Video	CDOS	10-May-07	For completeness
Auditor notes:				
Diebold Election Systems Public Demonstration 05-10-07: Copy DIE 012.	DVD Video	CDOS	10-May-07	For completeness
Auditor notes:				
Diebold Election Systems Public Demonstration 05-25-07: Copy DIE 017.	DVD Video	CDOS	25-May-07	Partial
Auditor notes:				
<i>DVD label says Diebold Public Demo 25 May. Video flash header says ESS 25 May 07 3A. "State Board of Elections"</i>				
Diebold Election Systems Trusted Build p.2: Copy DIE 013.	DVD Video	CDOS	23-May-07	For completeness
Auditor notes:				
<i>Video beginning says TB part 2A. That is not on the label.</i>				
Diebold Election Systems Trusted Build p.2: Copy DIE 015.	DVD Video	CDOS	23-May-07	Partial
Auditor notes:				
<i>Label says Part 2. Video beginning says Part 4B. A great deal of video focusing going on. Audio still good.</i>				
Diebold Election Systems Trusted Build p.2: Copy DIE 016.	DVD Video	CDOS	23-May-07	Partial
Auditor notes:				
<i>DVD Label says Pt. 2 for 23 May. Video internal flash header says 23 May, 1B. Then, at about 40 minutes, a flash card came up with 23 May, 1A.</i>				
Diebold Election Systems Trusted Build p.3: Copy DIE 018.	DVD Video	CDOS	29-May-07	For completeness
Auditor notes:				
<i>DVD label says Trusted Build pt. 3, 29 May. Video internal header says Diebold TB Pt. 3, 29 May 2A. Appears to be okay.</i>				
Diebold Election Systems Trusted Build p.3: Copy DIE 019.	DVD Video	CDOS	29-May-07	For completeness
Auditor notes:				
<i>A sign attached to another camera in the room corroborates the content and the date on the label. A-okay.</i>				
Diebold Election Systems Trusted Build p.3: Copy DIE 020.	DVD Video	CDOS	29-May-07	For completeness
Auditor notes:				
<i>Video internal flash header corresponds to the DVD label. A-okay.</i>				

Document Title	Document Type	Document Autho	Document date	Review type
Diebold Election Systems Trusted Build. Copy DIE 123 1 of 4.	DVD Video	CDOS	18-Aug-07	For completeness
Auditor notes:: RED FLAG RED FLAG Internal video flash label indicates the video is of a Sequoia test.				
Diebold Election Systems Trusted Build. Copy DIE 123 2 of 4.	DVD Video	CDOS	18-Aug-07	For completeness
Auditor notes::				
Diebold Election Systems Trusted Build. Copy DIE 123 3 of 4.	DVD Video	CDOS	18-Aug-07	Partial
Auditor notes:: Video contains verbal references to Sequoia.				
Diebold Election Systems Trusted Build. Copy DIE 123 4 of 4.	DVD Video	CDOS	19-Aug-07	Partial
Auditor notes:: CD visible in the video references Diebold. Comments refer to the Sequoia trusted build. Verify that these 4 DVDs are for Diebold TB.				
Diebold Election Systems Trusted Build: Copy DIE 014, 1of2.	DVD Video	CDOS	23-May-07	Partial
Auditor notes:: The label says part 2 on 23 May 2007. However, the beginning of the tape says Part 3B on 23 May 2007. Indicates camera 3.				
Diebold Election Systems Trusted Build: Copy DIE 014, 2of2.	DVD Video	CDOS	23-May-07	Partial
Auditor notes::				
Diebold Functional Testing Precinct Count O.S. DB2 P3 201. Copy DIE 073.	DVD Video	CDOS	09-Jul-07	For completeness
Auditor notes::				
Diebold Functional Testing Precinct Count O.S. Test# DB2 P3 201. Copy DIE 070.	DVD Video	CDOS	06-Jul-07	For completeness
Auditor notes::				
Photo Evidence Record DIE 07/23/07-07/27/07.	Photos	CDOS		In entirety
Auditor notes::				
Photo Evidence Record DIE 07/23/07-07/27/07.	Photos	CDOS	27-Jul-07	In entirety
Auditor notes::				
Photo Evidence Record DIE 07/30/07-08/04/07.	Photos	CDOS		In entirety
Auditor notes:: Photos unviewable: Photo Evidence Record 072707DIE1.jpg 072707DIE2.jpg 072707DIE3.jpg 072707DIE7.jpg				

Document Title	Document Type	Document Autho	Document date	Review type
Photo Evidence Record DIE 07/30/07-08/04/07.	Photos	CDOS	04-Aug-07	In entirety
Auditor notes:				
Photo Evidence Record DIE 08/06/07-08/10/07	Photos	CDOS		In entirety
Auditor notes:				
Photo Evidence Record DIE 08/06/07-08/10/07.	Photos	CDOS	10-Aug-07	In entirety
Auditor notes:				
Photo Evidence Record DIE 08/11/07-08/17/07.	Photos	CDOS		In entirety
Auditor notes:				
Photo Evidence Record DIE 08/11/07-08/17/07.	Photos	CDOS	17-Aug-07	In entirety
Auditor notes:				
Secretary of State 2007-CDOS-DIE-001-0402 Ballots: BOX DIE 1CA.		CDOS	21-Aug-07	
Auditor notes:				
Secretary of State 2007-CDOS-DIE-001-0402 Ballots: BOX DIE 1CA2P.	Test Documentation	CDOS	21-Aug-07	Partial
Auditor notes:				
Secretary of State 2007-CDOS-DIE-001-0402 Ballots: BOX DIE 1CO.	Test Documentation	CDOS	21-Aug-07	Partial
Auditor notes:				
Secretary of State 2007-CDOS-DIE-001-0402 Ballots: BOX DIE 1CO2P.	Test Documentation	CDOS	21-Aug-07	Partial
Auditor notes:				
Secretary of State 2007-CDOS-DIE-001-0402 Ballots: BOX DIE 1PA.	Test Documentation	CDOS	21-Aug-07	Partial
Auditor notes:				

Document Title	Document Type	Document Autho	Document date	Review type
Secretary of State 2007-CDOS-DIE-001-0402 Ballots: BOX DIE 1PASP.	Test Documentation	CDOS	21-Aug-07	Partial
Auditor notes:: Contains test ballots.				
Secretary of State 2007-CDOS-DIE-001-0402 Ballots: BOX DIE 1PO.	Test Documentation	CDOS	21-Aug-07	Partial
Auditor notes:: Contains test ballots.				
Secretary of State 2007-CDOS-DIE-001-0402 Ballots: BOX DIE 1RA.	Test Documentation	CFOS	21-Aug-07	Partial
Auditor notes:: Contains test ballots.				
Secretary of State 2007-CDOS-DIE-001-0402 Ballots: BOX DIE 1RCOL.	Test Documentation	CDOS	21-Aug-07	Partial
Auditor notes:: Contains test ballots.				
Secretary of State 2007-CDOS-DIE-001-0402 Ballots: BOX DIE 2PA .	Test Documentation	CDOS	21-Aug-07	Partial
Auditor notes:: Contains test ballots.				
Secretary of State 2007-CDOS-DIE-001-0402 Ballots: BOX DIE 2PASP .	Test Documentation	CDOS	21-Aug-07	Partial
Auditor notes:: Contains test ballots.				
Secretary of State 2007-CDOS-DIE-001-0402 Ballots: BOX DIE 3RA.	Test Documentation	CDOS	21-Aug-07	Partial
Auditor notes:: Contains test ballots.				
Secretary of State2007-CDOS-DIE-001-0402 Evidence: Box 1.	Test Documentation	CDOS	20-Aug-07	Partial
Auditor notes:: Dvd contains various tapes and printouts produced during tests.				
Secretary of State2007-CDOS-DIE-001-0402 Evidence: Box 2.	Test Documentation	CDOS	20-Aug-07	Partial
Auditor notes:: Test DB1-P3-110 materials.				
Secretary of State2007-CDOS-DIE-001-0402 Evidence: Box 3.				
Auditor notes::				
Secretary of State2007-CDOS-DIE-001-0402 Evidence: Box 4.	Test Documentation	CDOS	20-Aug-07	Partial
Auditor notes:: Assorted test products. Evidence Bag Seal Logs.				

Document Title	Document Type	Document Autho	Document date	Review type
Secretary of State2007-CDOS-DIE-001-0402 Evidence: Box 5.	Test Documentation	CDOS	20-Aug-07	Partial
Auditor notes: <i>Contains evidence bag seal logs, test documentation, printed tapes, and reports for various tests.</i>				
Secretary of State2007-CDOS-DIE-001-0402 Evidence: Box 6.	Test Documentation	CDOS	20-Aug-07	Partial
Auditor notes: <i>Contains evidence bag seal logs, test documentation, ballots, printed tapes, and reports for various tests.</i>				
Secretary of State2007-CDOS-DIE-001-0402 Evidence: Box 7.		CDOS	20-Aug-07	Partial
Auditor notes: <i>Contains evidence bag seal logs, test documentation, tally sheets, and reports for various tests.</i>				
Secretary of State2007-CDOS-DIE-001-0402 Evidence: Box 8.	Test Documentation	CDOS	20-Aug-07	Partial
Auditor notes: <i>Contains evidence bag seal logs, test documentation, ballot stubs, printed tapes, and reports for various tests.</i>				