



ADMISSIBILITY OF DIGITAL EVIDENCE

Prof. Fred C. Moss

S.M.U. Dedman School of Law

3/09

WHAT IS “DIGITAL EVIDENCE” OR “E.S.I.”?



- **PRE-EXISTING, COMPUTER-STORED INFORMATION IN**
 - **BUSINESS RECORDS**
 - **EMAIL**
 - **WEB PAGES**
 - **CHAT ROOM DISCUSSIONS**
 - **TEXT MESSAGES**
 - **VIDEOS/PHOTOS**

COMPUTER-GENERATED EVIDENCE



- **NOT A RECORD ENTERED BY A HUMAN: E.G.,**
 - **TIME/DATE STAMPS**
 - **INTERNET SERVICE PROVIDER (ISP) INFORMATION ON EMAILS**
 - **METADATA**

EVIDENCE RULES APPLICABLE TO DIGITAL EVIDENCE



- **AUTHENTICATION (R. 901, 902)**
- **RELEVANCE (R. 401)**
- **UNDUE PREJUDICE (R. 403)**
- **HEARSAY (R. 801-804)**
- **BEST EVIDENCE RULE (R. 1001-1009)**

AUTHENTICATION OF DIGITAL EVIDENCE



- **R. 901(a): PROOF “SUFFICIENT TO SUPPORT A FINDING THAT THE MATTER IS WHAT ITS PROPONENT CLAIMS” IT IS.**
- **OR**
- **EVIDENCE FROM WHICH A “REASONABLE JUROR COULD FIND” THAT THE EVIDENCE IS WHAT THE PROPONENT CLAIMS IT TO BE.**

THE INTERTWINED AUTHENTICATION/RELEVANCE ISSUES

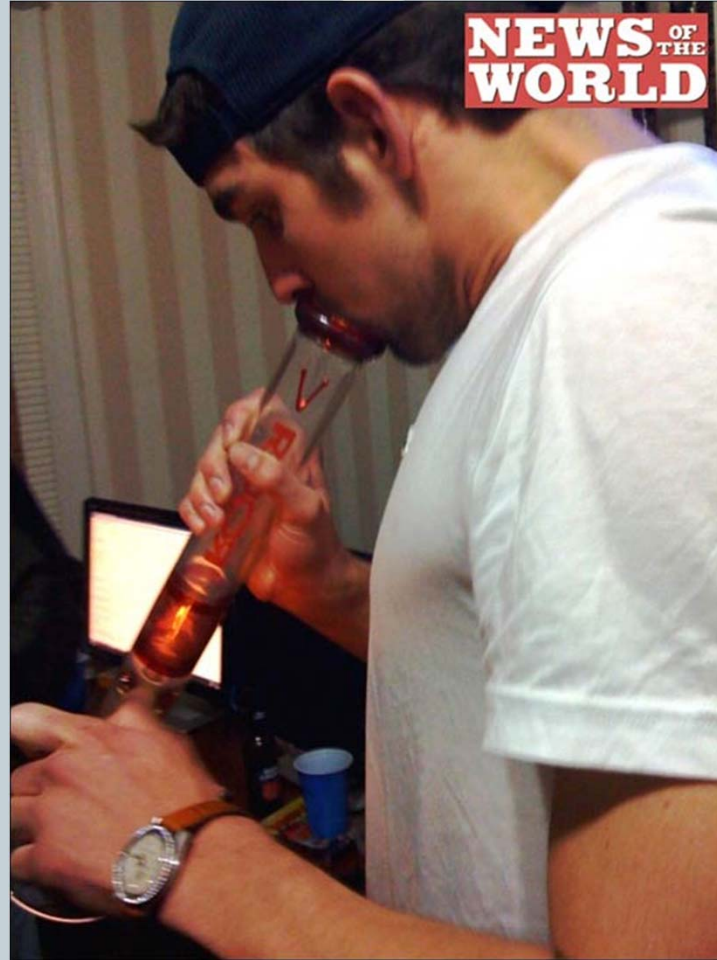


- **“WHAT DOES THE PROPONENT CLAIM THE EVIDENCE IS?”**
 - **EMAIL**
 - ✦ **FROM “X”, OR**
 - ✦ **FROM ‘X’ TO “Y”, OR**
 - ✦ **FROM ‘X’ TO ‘Y’ ON A CERTAIN DATE
(= THE RELEVANCY ISSUE)**

RULE 901: AUTHENTICATING ESI WITH EXTRINSIC PROOF

- **HYPO: ‘X’ IS ON DEFERRED DISPOSITION W/ CONDITION HE NOT USE ILLEGAL SUBSTANCES**
- **“G” THEN EMAILS/SHOWS THE POLICE:**
 - **1. A CELL PHONE PICTURE OF ‘X’ TAKING A “BONG” HIT;**
 - **2. A COPY OF A TEXT MESSAGE FROM ‘X’ TO ‘G’ DESCRIBING HOW HE GOT “WASTED” ON “WEED” LAST WEEKEND;**
 - **3. A TIP TO CHECK OUT ‘X’S “MYSPACE” PAGE WHERE HE DESCRIBES HIS “WASTED” WEEKEND.**

“WHAT A DOPE!”



CELL PHONE PICTURE



- **R. 901(1): TESTIMONY OF PERSON WITH FIRST-HAND KNOWLEDGE, SUCH AS,**
 - **TAKER OF THE PICTURE**
 - **PERSON WHO SAW THE EVENT**

CELL PHONE PICTURE



- **R. 901(4): “APPEARANCE, CONTENTS, SUBSTANCE, INTERNAL PATTERNS, OR OTHER DISTINCTIVE CHARACTERISTICS TAKEN IN CONJUNCTION WITH CIRCUMSTANCES.”**
- **E.G.,**
 - **1. ABSENCE OF FACIAL HAIR WORN ‘TIL RECENTLY,**
 - **2. A NEW BODY PIERCING SHOWN**
 - **3. A RECENT INJURY SHOWN**

TEXT MESSAGE OR EMAIL



- **R. 901(1): TESTIMONY BY A PERSON WITH KNOWLEDGE**
 - **1. IDENTIFIED BY PERSON WHO WROTE AND SENT, OR RECEIVED IT.**
 - **2. EMAIL CAME FROM A COMPUTER THE ALLEGED SENDER/RECEIVER HAD PRIMARY ACCESS TO**

Stewart Adams

From: Stewart Parnell [REDACTED]
Sent: Thursday, August 21, 2008 1:31 PM
To: 'Sammy Lightsey'
Subject: RE: Micro

okay, let's turn them loose then... Stewart

From: Sammy Lightsey [REDACTED]
Sent: Thursday, August 21, 2008 1:27 PM
To: stw.parnell [REDACTED]
Subject: RE: Micro

We divided the retained sample up into Vanigole and Butter. The results Dlabel show the product to be clean and "in spec" for micro analysis. Results attached.

From: Stewart Parnell [REDACTED]
Sent: Thursday, August 21, 2008 12:59 PM
To: 'Sammy Lightsey'
Subject: RE: Micro

any word back yet from Dlabel?

From: Sammy Lightsey [REDACTED]
Sent: Tuesday, August 19, 2008 1:50 PM
To: 'Stewart Parnell'
Subject: Micro

- Samples are pulled every hour during the days production.
- Samples are composited and analyzed for Micros
- Lab used is J.Lack in Albany GA
- Samples pulled on Monday, August 11, 2008 (8224) tested Positive for Salmonella.

R. 901(4): “DISTINCTIVE CHARACTERISTICS”



- **EMAIL ADDRESS KNOWN TO A WITNESS**
- **IDENTIFIABLE EMAIL ADDRESS (fmoss@smu.edu)**
 - **>Plus “judicial notice” that no two people can have the identical yahoo address**
- **SUBSTANCE OF THE MESSAGE UNIQUELY KNOWN TO THE ALLEGED SENDER: “REPLY LETTER” RULE**
- **SUBSEQUENT CONDUCT BY THE ALLEGED SENDER CONSISTENT WITH THE EMAIL.**
- **FOUND ON ALLEGED SENDER’S COMPUTER WITH THE SAME DATE/TIME ON IT.**
- **INFORMATION OBTAINED FROM THE ISP**
- **“CHAIN OF CUSTODY”**

PRINTOUTS OF WEBSITE PAGES



- **THREE QUESTIONS:**
- **1. WHAT WAS ACTUALLY ON THE WEBSITE?**
- **2. DOES THE EXHIBIT OR TESTIMONY ACCURATELY REFLECT IT?**
- **3. IF SO, IS IT ATTRIBUTABLE TO THE OWNER OF THE SITE? (= RELEVANCE)**

RULES MOST LIKELY TO APPLY



- **901(B)(1) (WITNESS WITH PERSONAL KNOWLEDGE)**
- **901(B)(3) (EXPERT TESTIMONY)**
- **901(B)(4) (DISTINCTIVE CHARACTERISTICS)**
- **901(B)(7) (PUBLIC RECORDS)**
- **901(B)(9) (SYSTEM OR PROCESS CAPABLE OF PRODUCING A RELIABLE RESULT)**
- **902(5) (OFFICIAL PUBLICATIONS).**

MYSFACE PAGE TEXT OR VIDEO



- **1. THE INDIVIDUAL USED THE SCREEN NAME IN QUESTION IN CHAT ROOM CONVERSATIONS;**
- **2. WHEN A MEETING WITH THE PERSON USING THE SCREEN NAME WAS ARRANGED, THE INDIVIDUAL SHOWED UP;**
- **3. THAT THE PERSON USING THE SCREEN NAME IDENTIFIED HIMSELF ON LINE AS THE INDIVIDUAL ;**
- **4. THE INDIVIDUAL POSSESSED INFORMATION GIVEN TO THE PERSON USING THE SCREEN NAME;**
- **5. THE HARD DRIVE OF THE INDIVIDUAL'S COMPUTER SHOWS USE OF THE SCREEN NAME.**

DIGITALLY STORED BUSINESS RECORDS



- **R. 901(9): EVIDENCE THAT THE “PROCESS OR SYSTEM” FOR DIGITIZING AND MAINTAINING THE INTEGRITY OF THE RECORDS IS ACCURATE/RELIABLE.**
- **R. 803(6) “PLUS”: TESTIMONY BY CUSTODIAN OR OTHER PERSON COMPETENT TO PROVIDE THE INFORMATION REQUIRED BY R. 803(6), “PLUS” VERIFY THE VALIDITY OF THE COMPUTER SYSTEM.**

BUSINESS WEBSITE PRINTOUTS



- **902(7) – TRADE INSCRIPTIONS = SELF AUTHENTICATING**
- **901(1) - PERSON WITH FIRST HAND KNOWLEDGE**
- **SEE Daimler-Benz Aktiengesellschaft v. Olson, 21 S.W.3d 707 (Tex.App.-Austin, 2000, **dism.**).**

WEB.ARCHIVE.ORG “WAYBACK MACHINE”

Internet Archive Wayback Machine - Windows Internet Explorer

http://web.archive.org/web/*http://generalmotors.com

File Edit View Favorites Tools Help

Google wayback machine Search

Internet Archive Wayback Machine

Note some duplicates are not shown. [See all](#).
 * denotes when site was updated.
 Material typically becomes available here 6 months after collection. [See FAQ](#).

Search Results for Jan 01, 1996 - Aug 22, 2008

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
0 pages	0 pages	4 pages	6 pages	21 pages	13 pages	15 pages	17 pages	30 pages	4 pages	3 pages	2 pages
		Jan 23, 1998 * Jun 15, 1998 * Dec 07, 1998 * Dec 12, 1998	Jan 25, 1999 * Feb 08, 1999 Feb 19, 1999 * Apr 24, 1999 Apr 29, 1999 May 08, 1999	Feb 29, 2000 * Mar 02, 2000 * Mar 03, 2000 Mar 04, 2000 Apr 07, 2000 * Apr 08, 2000 May 10, 2000 * May 11, 2000 May 20, 2000 * Jun 19, 2000 * Jun 21, 2000 * Aug 19, 2000 * Aug 27, 2000 Oct 18, 2000 Oct 19, 2000 Nov 09, 2000 * Nov 15, 2000 Dec 03, 2000 * Dec 06, 2000 Dec 09, 2000	Jan 18, 2001 Mar 09, 2001 Mar 31, 2001 Apr 01, 2001 Apr 05, 2001 Apr 18, 2001 May 16, 2001 * May 17, 2001 May 26, 2001 Jun 20, 2001 Jul 09, 2001 Sep 24, 2001 Dec 02, 2001	Jan 23, 2002 Jan 25, 2002 Mar 28, 2002 Jun 02, 2002 Jun 04, 2002 Jul 21, 2002 Sep 13, 2002 Sep 22, 2002 Sep 24, 2002 Sep 27, 2002 Sep 29, 2002 Nov 24, 2002 * Nov 26, 2002 Nov 27, 2002 Dec 01, 2002	Jan 26, 2003 Feb 03, 2003 Feb 20, 2003 Mar 24, 2003 Mar 27, 2003 Apr 08, 2003 Jun 07, 2003 Jun 18, 2003 Jun 22, 2003 Jul 24, 2003 Jul 24, 2003 Aug 01, 2003 Sep 19, 2003 Oct 11, 2003 Oct 15, 2003 Nov 18, 2003 Nov 26, 2003 Dec 24, 2003	Mar 18, 2004 Apr 10, 2004 May 12, 2004 May 18, 2004 Jun 05, 2004 Jun 08, 2004 Jun 12, 2004 Jun 14, 2004 Jul 13, 2004 Jul 14, 2004 Jul 15, 2004 Jul 17, 2004 Aug 17, 2004 Aug 18, 2004 Aug 22, 2004 Aug 31, 2004 Sep 01, 2004 Sep 02, 2004 Sep 24, 2004 Sep 25, 2004 Oct 29, 2004 Nov 15, 2004 Nov 17, 2004 Nov 25, 2004 Nov 28, 2004 Dec 03, 2004	Feb 06, 2005 Feb 09, 2005 Feb 10, 2005 Feb 14, 2005	Mar 23, 2006 * May 01, 2006 * Oct 19, 2006 *	Jun 20, 2007 Sep 28, 2007

Internet 100%

GOVERNMENT RECORDS



- **SELF-AUTHENTICATION:**
 - **<>902(5) - OFFICIAL PUBLICATIONS / WEBSITES**
<>902(1) - UNDER SEAL,
 - **<>902(2) - SIGNED BY ONE IN AN OFFICIAL CAPACITY WITH THE AGENCY,**
 - **<>902(4) - CERTIFIED COPIES OF PUBLIC RECORDS AUTHENTICATED PER 902 (1) AND (2) (= A BEST EVIDENCE RULE), OR**
- **901(7) - EXTRINSIC EVIDENCE BY A WITNESS WITH KNOWLEDGE OF THE SOURCE OF THE RECORD**

COMPUTER-GENERATED EVIDENCE



- **E.G., AUTOMATED PHONE AND COMPUTER RECORDS AND IDENTIFIERS, ISP LOGS, ATM RECEIPTS/RECORDS, TIME STAMPS, VEHICLE OPERATION DATA, METADATA.**
- **IDENTITY OF THE AUTHOR IS IMMATERIAL**
- **THE QUESTION IS THE ACCURACY OF THE INFORMATION GENERATED BY THE MACHINE**
- **R. 901(9) APPLIES**

HEARSAY AND DIGITAL EVIDENCE – RULES 801-804

- **AUTOMATICALLY GENERATED COMPUTER INFORMATION/DATA IS NOT HEARSAY**
- **E.G., AUTOMATED PHONE AND COMPUTER RECORDS AND IDENTIFIERS, ISP LOGS, TIME STAMPS, ATM RECEIPTS/RECORDS, VEHICLE OPERATION DATA, METADATA**
- **NOT A STATEMENT BY A “PERSON” –
R. 801(b), (d)**

“PERSON”-GENERATED, COMPUTER STORED EVIDENCE

- **WHEN NOT HEARSAY:**
 - **1. NOT OFFERED FOR THE TRUTH OF THE MATTER, E.G.**
 - ✦ **a. TO SHOW EFFECT ON [STATE OF MIND OF] THE RECIPIENT/HEARER**
 - ✦ **b. TO SHOW KNOWLEDGE POSSESSED BY RECIPIENT, OR WHEN THE INFORMATION WAS LEARNED**
 - ✦ **c. PRIOR INCONSISTENT STATEMENT**

“PERSON”-GENERATED, COMPUTER STORED EVIDENCE

- **WHEN OFFERED FOR THE TRUTH OF THE FACT ASSERTED, BUT ADMISSIBLE ANYWAY:**
- **2. MEETS AN EXCEPTION OR EXEMPTION, E.G.**
 - **a. A PARTY “ADMISSION” = AUTHORED BY THE OPPOSING PARTY OR HIS AGENT (R. 801(e)(2))**
 - **b. PRESENT SENSE IMPRESSION – R. 803(1)**
 - **c. EXCITED UTTERANCE (??) – R. 803(2)**
 - **d. STATE OF MIND OF THE DECLARANT – 803(3)**
 - **e. BUSINESS RECORDS – 803(6)**
 - **f. PUBLIC RECORDS – 803(8)**
 - **g. MARKET REPORTS, COMMERCIAL PUBLICATIONS – 803(17)**
 - **h. STATEMENT AGAINST INTEREST – 803(24)**

BEST EVIDENCE RULE – RULE 1001 ET SEQ.



- **REQUIRES THE PROponent OF EVIDENCE TO PRODUCE THE ORIGINAL**
 - **WRITING**
 - **RECORDING, OR**
 - **PHOTOGRAPH**

R. 1001(a): “WRITINGS AND RECORDINGS”



- **“WRITINGS AND RECORDINGS CONSIST OF LETTERS, WORDS, OR NUMBERS OR THEIR EQUIVALENT, SET DOWN BY . . . ELECTRONIC RECORDING, OR OTHER FORM OF DATA COMPILATION.”**

“ORIGINAL”



- **R. 1001(c):**
- **“IF DATA ARE STORED IN A COMPUTER OR SIMILAR DEVICE, ANY PRINTOUT OR OTHER OUTPUT READABLE BY SIGHT, SHOWN TO REFLECT THE DATA ACCURATELY, IS AN ORIGINAL”**
- **“SIMILAR DEVICE” = CELL PHONES, IPODS, BLACKBERRIES, PAGERS**

“SHOWN TO REFLECT THE DATA ACCURATELY”

- **THE EQUIPMENT CAN PERFORM THE FUNCTIONS CLAIMED AND WAS WORKING PROPERLY,**
- **THE COMPUTER USED A RELIABLE PROGRAM THAT CAN DO WHAT IT IS PURPORTED TO HAVE DONE,**
- **QUALIFIED OPERATORS RAN THE EQUIPMENT,**
- **THEY FOLLOWED PROPER INPUT AND OUTPUT PROCEDURES**
- **PRESERVATION OF THE DATA UNTIL PRESENTED IN COURT**

R. 1001(c) - AN 'ORIGINAL' OF A PHOTOGRAPH [& VIDEO RECORDING]

- **“INCLUDES THE NEGATIVE OR ANY PRINT THEREFROM.”**
- **PHOTOS PRINTED FROM COMPUTER???**
- **PHOTOS DOWNLOADED TO DISK???**
- **COURTS TREAT PRINTED COPIES OF DIGITAL VIDEOS/PHOTOS FROM A COMPUTER TO BE “ORIGINALS” THOUGH NOT MADE FROM A “NEGATIVE.” SEE 1001(a).**

EXCEPTION TO THE BEST EVIDENCE RULE: R. 1004

- **“THE ORIGINAL OR A DUPLICATE IS NOT REQUIRED, AND OTHER EVIDENCE OF THE CONTENTS OF A WRITING, RECORDING, OR PHOTOGRAPH IS ADMISSIBLE IF:
(1) ORIGINALS LOST OR DESTROYED. ALL ORIGINALS ARE LOST OR HAVE BEEN DESTROYED, UNLESS THE PROPONENT LOST OR DESTROYED THEM IN BAD FAITH;”**
- **(2) “ORIGINAL NOT OBTAINABLE....”**
- **(3) “ORIGINAL OUTSIDE THE STATE....”**
- **(4) “ORIGINAL IN POSSESSION OF OPPONENT....”**
- **(5) “COLLATERAL MATTER....”**

EXCEPTIONS TO THE BEST EVIDENCE RULE: R. 1005



- **PUBLIC RECORDS:**

“THE CONTENTS OF AN OFFICIAL RECORD [OR RECORDED DOCUMENT], INCLUDING DATA COMPILATIONS OF IN ANY FORM, ... MAY BE PROVED BY COPY, CERTIFIED AS CORRECT IN ACCORDANCE WITH RULE 902....”