

Metadata and Social Media

William H. Stafford Inn of Court

Team Ashenafi-Richardson

November 19, 2015



Metadata

Operating System

File

Metadata

Operating System Data - Windows Tracks time files

- Modified
- Accessed
- Created

File Name	Date Modified	Date Created
Test Document.docx	Today, 8:03 AM	Today, 8:01 AM
Screen Caps	Feb 12, 2014, 4:57 PM	Feb 12, 2014, 1:17 PM
Image Size.jpg	Feb 12, 2014, 12:54 PM	Feb 12, 2014, 12:54 PM
Saved.jpg	Feb 12, 2014, 12:53 PM	Feb 12, 2014, 12:53 PM
IMG_2029 - Copy.JPG	Feb 12, 2014, 12:50 PM	Today, 7:56 AM
IMG_2029.JPG	Feb 12, 2014, 12:50 PM	Feb 12, 2014, 12:50 PM
[BOOT]	Aug 18, 2013, 11:04 PM	Aug 18, 2013, 11:04 PM
WXPE	Aug 18, 2013, 11:04 PM	Aug 18, 2013, 11:04 PM
MiniPE	Aug 18, 2013, 11:04 PM	Aug 18, 2013, 11:04 PM
Boot	Aug 18, 2013, 11:04 PM	Aug 18, 2013, 11:04 PM
memdisk	Aug 18, 2013, 10:46 PM	Aug 18, 2013, 11:04 PM
syslinux.cfg	Nov 19, 2009, 3:04 AM	Aug 18, 2013, 11:04 PM
WINNT.XPE	Apr 8, 2009, 4:18 AM	Aug 18, 2013, 11:04 PM
ldntldr	Mar 1, 2008, 4:54 AM	Aug 18, 2013, 11:04 PM
NTDETECT.COM	Mar 4, 2007, 12:00 PM	Aug 18, 2013, 11:04 PM

Metadata

File Data

Data stored by software such as MS Word, Excel

JOHN D. SAWICKI

1883 Folkstone Road, Tallahassee, FL 32312 | 850-766-7447 | john@forensicdatacorp.com

PROFESSIONAL EXPERIENCE

Forensic Data Corp., Tallahassee, Florida

Forensic Computer Scientist

2011-Present

John Sawicki founded Forensic Data Corp in 2011, to provide computer forensics services to organizations in Florida. As a forensic computer scientist, Sawicki provides computer forensics, e-discovery and data recovery services to companies, law firms, and government agencies throughout the southeastern United States. With his broad range of experience and knowledge of both legal processes and technology, Sawicki is uniquely qualified to provide skilled computer forensics and e-discovery assistance. As a seasoned attorney with experience representing employers in labor and employment litigation in state and federal court, and counseling employers in employment related matters, Sawicki brings a distinctive perspective to computer forensics investigations and e-discovery matters. Sawicki's unique abilities allow him to assist with the discovery process from preparation for discovery conferences through trial.

Carson & Adkins, Tallahassee, Florida

Attorney, Labor and Employment Litigation

2007-2012

Properties ▾

Size	156KB
Pages	4
Words	891
Total Editing Time	15 Minutes
Title	Curriculum vitae
Tags	Add a tag
Comments	Add comments
Template	Normal
Status	Add text

Status	Add text
Categories	Add a category
Subject	Specify the subject
Hyperlink Base	Add text
Company	Specify the company

Related Dates

Last Modified	2/26/2014 12:35 PM
Created	2/26/2014 12:10 PM
Last Printed	8/1/2006 1:47 PM

Related People

Manager

Specify the manager

Author



John D. Sawicki

Add an author

Last Modified By



John Sawicki

Related Documents



Open File Location

Document Properties

Description

Security

Fonts

Initial View

Custom

Advanced

Description

File: JDS.Curriculum vitae.pdf

Title: Microsoft Word - JDS.Curriculum vitae.docx

Author: John Sawicki

Subject:

Keywords:

Created: 9/20/13, 9:18:55 AM

[Additional Metadata...](#)

Modified: 9/20/13, 9:18:55 AM

Application: Word

Advanced

PDF Producer: Mac OS X 10.8.4 Quartz PDFContext

PDF Version: 1.3 (Acrobat 4.x)

Location: Main SSD:Users:john1:Dropbox:FDC:

File Size: 81.50 KB (83,461 Bytes)

Page Size: 8.50 x 11.00 in

Number of Pages: 3

Tagged PDF: No

Fast Web View: No

Description
Illustrator
Advanced

Advanced

- ▼ XMP Core Properties (xmp, <http://ns.adobe.com/xap/1.0/>)
 - xmp:CreatorTool: Word
- ▼ PDF Properties (pdf, <http://ns.adobe.com/pdf/1.3/>)
 - pdf:Producer: Mac OS X 10.8.4 Quartz PDFContext
- ▼ Dublin Core Properties (dc, <http://purl.org/dc/elements/1.1/>)
 - ▼ dc:creator (seq container)
 - [1]: John Sawicki
 - ▼ dc:title (alt container)
 - [x-default]: Microsoft Word - JDS.Curriculum vitae.docx

Mobile Devices



Mobile Devices

Pictures

Exif Data

- Geo Location
- Camera data

Home Layout Tables Charts SmartArt Formulas Data Review

Edit Font Alignment Number Format Cells

Fill Calibri (Body) 12 A- A- Wrap Text General Normal

B I U Merge % .0 .00 .00

M1728 fx

	A	B	C	D	E	F	G	I	J
1	Type	Date Sent (UTC)	Date (UTC)	To	From	Date Read (UTC)	Content	iMessage	Handle ID
2068	sent	2/8/13 0:29	2/8/13 0:29	17703674171			Was the material, rental and consumables \$375,000?	TRUE	57
2069	read		2/8/13 0:30		17703674171	2/8/13 0:30	Material alone is 70K	TRUE	57
2070	read		2/8/13 0:30		17703674171	2/8/13 0:30	Crane 70k	TRUE	57
2071	read		2/8/13 0:37		17703674171	2/8/13 0:45	Consumable 30-50 depending on tooling requirements	TRUE	57
2072	read		2/8/13 0:38		17703674171	2/8/13 0:45	Impossible.	TRUE	57
2073	read		2/8/13 0:38		17703674171	2/8/13 0:45	Even if we just look at labor. They are saying we are tri	TRUE	57
2074	read		2/8/13 0:38		17703674171	2/8/13 0:45	Travel, iron workers, labor and Perdiem. Only	TRUE	57
2075	read		2/8/13 0:38		17703674171	2/8/13 0:45	You still can't get to 350	TRUE	57
2076	sent	2/8/13 1:11	2/8/13 1:11	13366550317			Shahene, when you have time tomorrow I would like t	TRUE	33
2077	read		2/8/13 1:18		13366550317	2/8/13 1:21	Let me talk to Ryan	TRUE	33
2078	sent	2/8/13 1:29	2/8/13 1:29	13366550317			OK, I just want to verify the scope and who providing v	TRUE	33
2079	sent	2/8/13 1:30	2/8/13 1:30	13366550317			Also replacing wall plate and angle where needed. This	TRUE	33
2080	sent		2/8/13 3:14	+18508430805,+17703674171			Y'all through eating?	TRUE	0
2081	read		2/8/13 3:56		17703674171	2/8/13 4:13	Up?	TRUE	57
2082	sent	2/8/13 16:03	2/8/13 16:03	13366550317			Shahene, let me know when we can discuss, if not tod	TRUE	33
2083	sent	2/8/13 16:18	2/8/13 16:17	18508430805			Have you left Brunswick ?	TRUE	22
2084	read		2/8/13 16:17		18508430805	2/8/13 16:31	Yes	TRUE	22
2085	read		2/8/13 16:55		13366550317	2/8/13 17:00	4-Oct	TRUE	33
2086	sent	2/8/13 17:02	2/8/13 17:02	17703674171			Call me when you can	TRUE	57
2087	read		2/8/13 21:55		17703674171	2/8/13 22:14	Conference call number States 1-866-906-9888 Intern	TRUE	57
2088	sent	2/9/13 2:00	2/9/13 2:00	18508430102			When are you up in San Antonio?	TRUE	64
2089	read		2/9/13 3:07		18508430102	2/9/13 12:23	Tomorrow I have not done any good so far drew a bad	TRUE	64
2090	sent	2/9/13 13:41	2/9/13 13:41	18508430102			When did you feed the cows last?	TRUE	64
2091	read		2/9/13 13:41		18508430102	2/9/13 13:43	Wednesday	TRUE	64

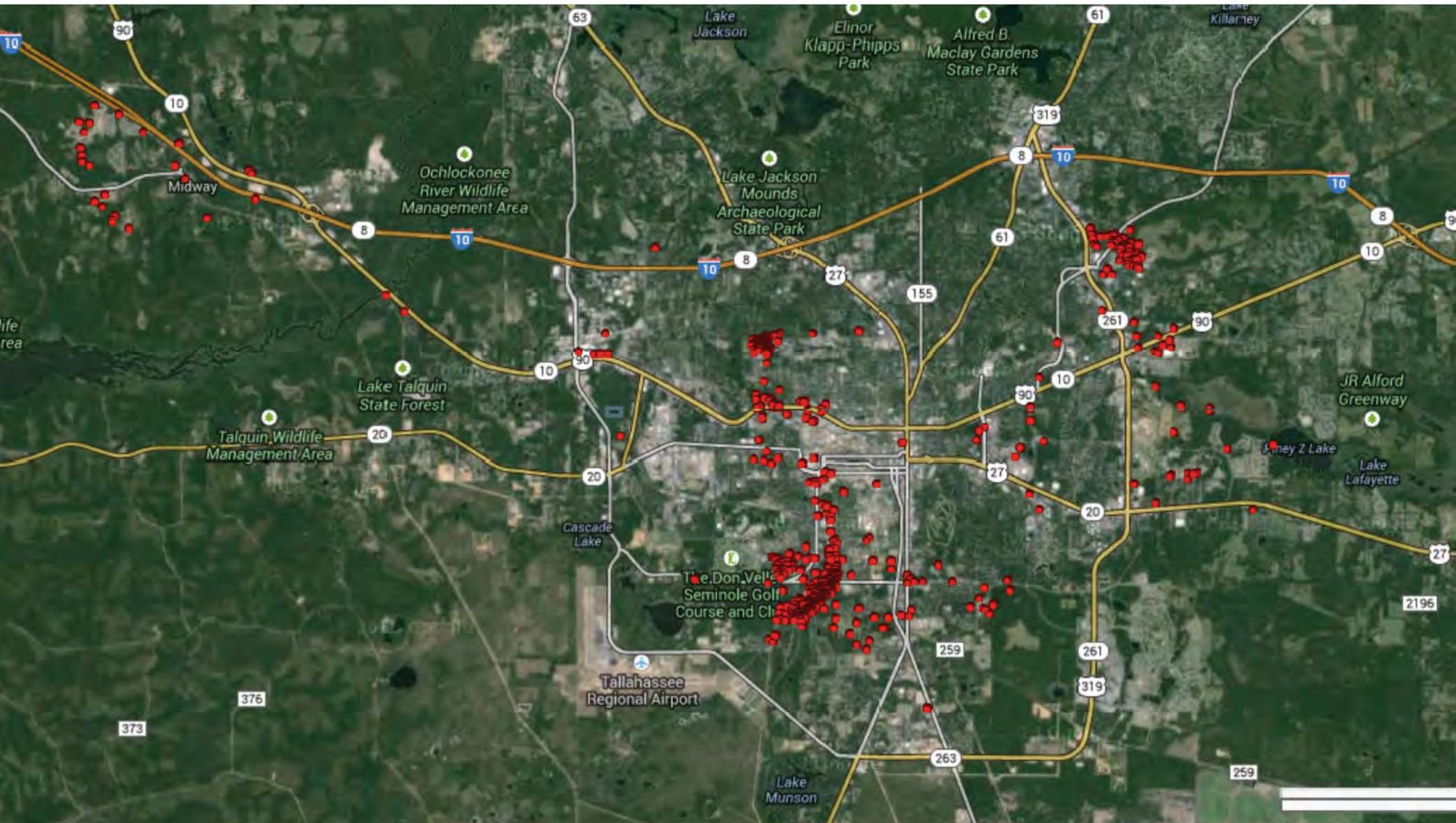


Edit						
Font		Alignment				
Calibri (Body) 12		abc				
B I U						
C1 Phone Type						
	A	B	C	D	E	F
1	☞"Call Details"	Number	Phone Type	Duration	Date (UTC)	
2	Regular	8508435291	Incoming	0:01:03	2/15/13 20:10	
3	Regular	8508430805	Incoming	0:14:28	2/15/13 22:28	
4	Outgoing, Regular	3865382588	Outgoing	0:04:41	2/15/13 22:42	
5	Regular	8508432994	Incoming	0:00:31	2/16/13 15:54	
6	Regular	8508432994	Incoming	0:00:39	2/16/13 17:41	
7	Outgoing, Regular	4077386444	Outgoing	0:02:13	2/16/13 17:43	
8	Outgoing, Regular	8508432994	Outgoing	0:00:33	2/16/13 17:45	
9	Regular	8508436120	Incoming	0:00:00	2/16/13 19:09	
10	Outgoing, Regular	8508432994	Outgoing	0:00:28	2/16/13 19:11	
11	Regular	8508432994	Incoming	0:01:17	2/16/13 19:11	
12	Regular	8508435291	Incoming	0:03:03	2/16/13 19:27	
13	Regular	8508435291	Incoming	0:00:03	2/16/13 20:10	
14	Regular	8508430805	Incoming	0:05:21	2/17/13 17:01	
15	Outgoing, Regular	8508380556	Outgoing	0:00:32	2/17/13 17:56	
16	Outgoing, Regular	8508435291	Outgoing	0:00:26	2/18/13 19:31	
17	Regular	7703674171	Incoming	0:00:00	2/18/13 19:36	
18	Outgoing, Regular	8508435291	Outgoing	0:00:48	2/18/13 19:56	
19	Outgoing, Regular	17703674171	Outgoing	0:31:36	2/18/13 20:03	
20	Regular	8508430102	Incoming	0:00:00	2/18/13 21:26	
21	Regular	8508432994	Incoming	0:00:31	2/18/13 22:37	
22	Regular	3863252001	Incoming	0:00:00	2/19/13 14:39	
23	Regular	3863252001	Incoming	0:00:00	2/19/13 19:23	
24	Regular	3863252001	Incoming	0:04:34	2/19/13 21:05	
25	Outgoing, Regular	3366550317	Outgoing	0:00:35	2/19/13 22:43	
26	Outgoing, Regular	8508432994	Outgoing	0:00:35	2/19/13 22:45	
27	Regular	8508432994	Incoming	0:00:00	2/19/13 22:51	
28	Outgoing, Regular	8508432994	Outgoing	0:07:44	2/19/13 22:51	
29	Outgoing, Regular	8508430102	Outgoing	0:04:34	2/19/13 22:59	
30	Outgoing, Regular	8506737698	Outgoing	0:00:54	2/19/13 23:04	
31	Outgoing, Regular	8508432994	Outgoing	0:00:43	2/20/13 0:01	
32	Regular	8503711875	Incoming	0:00:28	2/20/13 13:06	

A	B	C	D	E	F	G	H	I	J	ME
Apple	iPhone4,1	iPhone 4S	1	Activated	C39H6MA2DTC1	iBoot-1537.9	6.1.1	10B145	3.4.02	

G	H	I	J	K	L	M	N	O	P	Q
Root	Product Vers	Build Versior	Base Band Version	MEID	Root Access	Bluetooth Address	Model	Display Nam	Date and Tim	TimeZ
Root-1537.9	6.1.1	10B145	3.4.02	9.9E+13	FALSE	0c:77:1a:93:47:e5	MD236LL/A	MAM161	0000.00.00	1 Ameri

Date Time	Record type	Calling	Called	IMEI	IMSI	Duration	LAC_CID	LAT	LNG	E 164
2008/06/16 08:46:34	MOBILE ORIGINATING SMS	14076199286	16319025443	011191000751570	310410151370745	0	41-27216-22292	28.5028444	-81.2863333	14047259320
2008/06/16 11:43:12	MOBILE TERMINATING SMS	1697722	14076199286	011191000751570	310410151370745	0	41-27216-22292	28.5028444	-81.2863333	14047259320
2008/06/16 11:47:30	MOBILE TERMINATING	16319025443	14076199286	011191000751570	310410151370745	1115	41-27216-22292	28.5028444	-81.2863333	14047259320
2008/06/16 11:52:51	MOBILE TERMINATING SMS	1697722	14076199286	011191000751570	310410151370745	0	41-27216-21781	28.4547222	-81.2636111	14047259320
2008/06/16 12:53:31	MOBILE ORIGINATING SMS	14076199286	16319025443	011191000751570	310410151370745	0	41-27216-22292	28.5028444	-81.2863333	14047259320
2008/06/16 12:55:31	MOBILE TERMINATING SMS	16319025443	14076199286	011191000751570	310410151370745	0	41-27216-22292	28.5028444	-81.2863333	14047259320
2008/06/16 13:00:35	MOBILE TERMINATING	16319025443	14076199286	011191000751570	310410151370745	829	41-27216-21781	28.4547222	-81.2636111	14047259320
2008/06/16 13:26:41	MOBILE ORIGINATING SMS	14076199286	14074829293	011191000751570	310410151370745	0	41-27216-22292	28.5028444	-81.2863333	14047259320
2008/06/16 13:27:04	MOBILE TERMINATING SMS	14074629293	14076199286	011191000751570	310410151370745	0	41-27216-22292	28.5028444	-81.2863333	14047259320
2008/06/16 13:44:54	MOBILE ORIGINATING	14076199286	19543289214	011191000751570	310410151370745	2164	41-27216-22292	28.5028444	-81.2863333	14047259320
2008/06/16 14:52:53	MOBILE TERMINATING	14074629293	14076199286	011191000751570	310410151370745	873	41-27216-22292	28.5028444	-81.2863333	14047259320
2008/06/16 15:04:06	MOBILE TERMINATING	14074033564	14076199286	011191000751570	310410151370745	28	41-27216-22292	28.5028444	-81.2863333	14047259320
2008/06/16 15:23:30	MOBILE TERMINATING SMS	1697724	14076199286	011191000751570	310410151370745	0	41-27216-22292	28.5028444	-81.2863333	14047259320
2008/06/16 15:35:05	MOBILE TERMINATING SMS	1697722	14076199286	011191000751570	310410151370745	0	41-27216-22292	28.5028444	-81.2863333	14047259320
2008/06/16 15:35:56	MOBILE ORIGINATING	14076199286	16319025443	011191000751570	310410151370745	22	41-27216-22292	28.5028444	-81.2863333	14047259320
2008/06/16 15:39:59	MOBILE TERMINATING SMS	1697723	14076199286	011191000751570	310410151370745	0	41-27216-22292	28.5028444	-81.2863333	14047259320
2008/06/16 16:10:41	MOBILE ORIGINATING	14076199286	14076710000	011191000751570	310410151370745	34	41-27216-22292	28.5028444	-81.2863333	14047259320
2008/06/16 16:11:25	MOBILE ORIGINATING	14076199286	14078084731			0				14047259310
2008/06/16 16:11:49	MOBILE ORIGINATING	14076199286	14078084731	011191000751570	310410151370745	3	41-27216-21787	28.4547222	-81.2636111	14047259320
2008/06/16 16:13:04	MOBILE ORIGINATING	14076199286	14078084731			0				14047259310
2008/06/16 16:13:29	MOBILE ORIGINATING	14076199286	14078084731	011191000751570	310410151370745	2	41-27216-22292	28.5028444	-81.2863333	14047259320
2008/06/16 16:14:48	MOBILE ORIGINATING	14076199286	14076710000	011191000751570	310410151370745	88	41-27216-22291	28.5028444	-81.2863333	14047259320
2008/06/16 16:18:51	MOBILE ORIGINATING SMS	14076199286	16319025443	011191000751570	310410151370745	0	41-27201-21712	28.5444	-81.2767472	14047259310
2008/06/16 16:19:18	MOBILE TERMINATING SMS	16319025443	14076199286	011191000751570	310410151370745	0	41-27201-21712	28.5444	-81.2767472	14047259310
2008/06/16 16:19:47	MOBILE ORIGINATING	14076199286	16319025443	011191000751570	310410151370745	58	41-27201-21712	28.5444	-81.2767472	14047259310
2008/06/16 16:21:32	MOBILE ORIGINATING	14076199286	14074629293			0				14047259320
2008/06/16 16:21:58	MOBILE ORIGINATING	14076199286	14074629293	011191000751570	310410151370745	75	41-27201-21711	28.5444	-81.2767472	14047259310
2008/06/16 16:25:24	MOBILE ORIGINATING	14076199286	14078084731	011191000751570	310410151370745	3	41-27201-20342	28.5653389	-81.2958361	14047259310
2008/06/16 16:53:33	MOBILE TERMINATING SMS	132685187	14076199286	011191000751570	310410151370745	0	41-27201-20341	28.5653389	-81.2958361	14047259310
2008/06/16 17:57:57	MOBILE TERMINATING SMS	11	14076199286	011191000751570	310410151370745	0	41-27201-20723	28.6039167	-81.2875111	14047259310
2008/06/16 18:31:47	MOBILE ORIGINATING	14076199286	14078084731			0				14047259320
2008/06/16 18:52:10	MOBILE ORIGINATING	14076199286	14078084731	011191000751570	310410151370745	3	41-27201-20723	28.6039167	-81.2875111	14047259310



/Volumes/NO NAME/DCIM/100D3200/DSC_0183.MOV

▼ General

Complete name	/Volumes/NO NAME/DCIM/100D3200/DSC_0183.MOV
Format	MPEG-4
Format profile	QuickTime
Codec ID	qt
File size	153 MiB
Duration	53s 153ms
Overall bit rate	24.1 Mbps
Encoded date	UTC 2014-08-22 06:07:26
Tagged date	UTC 2014-08-22 06:07:26
NCDT	NCTG

▼ Video

▼ Video

ID	1
Format	AVC
Format/Info	Advanced Video Codec
Format profile	High@L4.0
Format settings, CABAC	Yes
Format settings, ReFrames	2 frames
Codec ID	avc1
Codec ID/Info	Advanced Video Coding
Duration	53s 153ms
Bit rate	22.6 Mbps
Width	1 920 pixels
Height	1 080 pixels
Display aspect ratio	16:9
Frame rate mode	Constant
Frame rate	29.970 fps

ID	2
Format	PCM
Format settings, Endianness	Little
Format settings, Sign	Signed
Codec ID	sowt
Duration	53s 153ms
Bit rate mode	Constant
Bit rate	1 536 Kbps
Channel(s)	2 channels
Channel positions	Front: L R
Sampling rate	48.0 KHz
Bit depth	16 bits
Stream size	9.73 MiB (6%)
Language	English
Encoded date	UTC 2014-08-22 06:07:26
Tagged date	UTC 2014-08-22 06:07:26

Twitter

Exif Data





Exif Data

IMG_2030.JPG

Type Tag Or Value To Search

Summary Exposure GPS Details

General:

- Kind: JPEG image
- Size: 2416871 bytes (2360 KB on disk)
- Name: IMG_2030
- Where: /Users/John/Desktop/IMG_20...
- File Create: Jan 27, 2014 11:06:21 PM
- Modified: Jan 27, 2014 11:06:21 PM



Image Create Date: Sep 29, 2013

Image Create Time: 13:40 PM

Image Size: 3264 x 2448

Camera: Apple iPhone 5s

Description:

Photographer:

Copyright:

Inbox (46605 message

General:

Kind: JPEG image

Size: 2416871 bytes (2360 KB on disk)

Name: IMG_2030

Where: /Users/John/Desktop/IMG_20... 

File Create: Jan 27, 2014 11:06:21 PM

Modified: Jan 27, 2014 11:06:21 PM

Summary**Exposure****GPS****Details****Image Create Date:** Sep 29, 2013**Image Create Time:** 13:40 PM**Image Size:** 3264 x 2448**Camera:** Apple iPhone 5s**Description:****Photographer:****Copyright:**

IMG_2030.JPG

Q Type Tag Or Value To Search

Summary Exposure GPS Details

General:

Kind: JPEG image
Size: 2416871 bytes (2360 KB on disk)
Name: IMG_2030
Where: /Users/John/Desktop/IMG_20...
File Create: Jan 27, 2014 11:06:21 PM
Modified: Jan 27, 2014 11:06:21 PM



Shutter Speed: 1/2053 sec
Aperture: f/2.20
Sensitivity: ISO 40
Flash: Did not fire

Shooting Mode: Automatic
Metering: Matrix
Focus:
Sensor: One chip area

Subject Distance:
Focal Length: 4 mm
35mm Equiv: 30 mm
Digital Zoom:

White Balance: Auto
Contrast:
Saturation:
Sharpness:

Inbox (46605 message



IMG_2030.JPG

🔍 Type Tag Or Value To Search

General:

Kind: JPEG image
Size: 2416871 bytes (2360 KB on disk)
Name: IMG_2030
Where: /Users/John/Desktop/IMG_20...
File Create: Jan 27, 2014 11:06:21 PM
Modified: Jan 27, 2014 11:06:21 PM

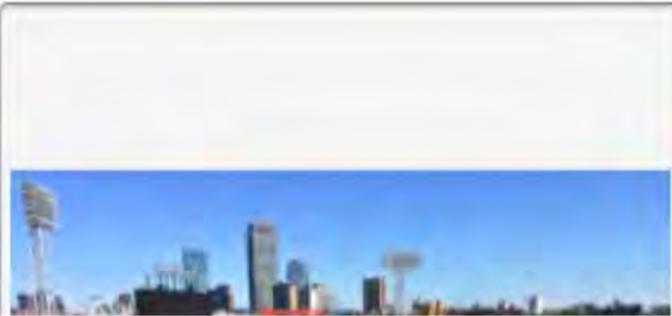
Summary Exposure GPS Details

Shutter Speed: 1/2053 sec
Aperture: f/2.20
Sensitivity: ISO 40
Flash: Did not fire

Shooting Mode: Automatic
Metering: Matrix
Focus:
Sensor: One chip area

Subject Distance:
Focal Length: 4 mm
35mm Equiv: 30 mm
Digital Zoom:

White Balance: Auto



Exif Data

IMG_2030.JPG

Type Tag Or Value To Search

Summary Exposure **GPS** Details

General:

- Kind: JPEG image
- Size: 2416871 bytes (2360 KB on disk)
- Name: IMG_2030
- Where: /Users/John/Desktop/IMG_20...
- File Create: Jan 27, 2014 11:06:21 PM
- Modified: Jan 27, 2014 11:06:21 PM



GPSVersion:

- GPS.AltitudeRef: 0
- GPS.Altitude: 2624/541
- GPS.LatitudeRef: N
- GPS.Latitude: 42° 20' 49"
- GPS.LongitudeRef: W
- GPS.Longitude: 71° 5' 51"



Google

Locate Self Standard **Satellite** Hybrid

Type Tag Or Value To Search

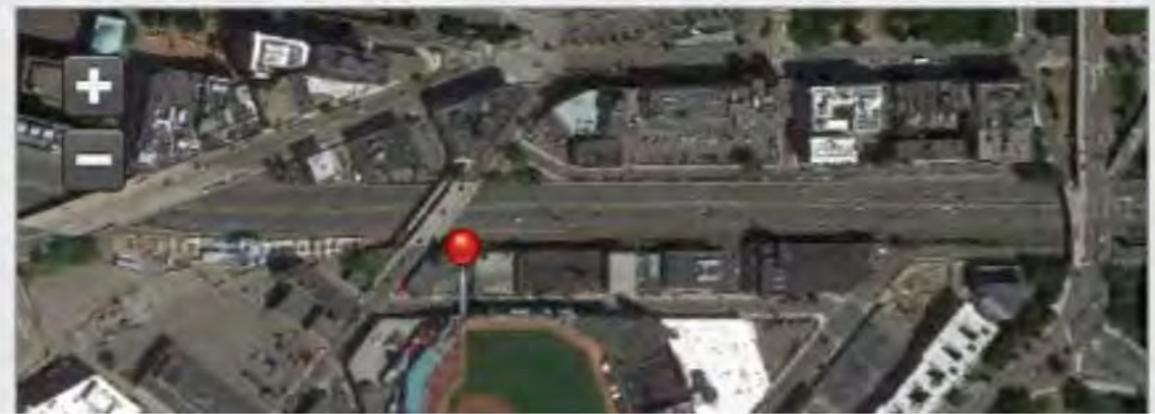
General:

Kind: JPEG image
 Size: 2416871 bytes (2360 KB on disk)
 Name: IMG_2030
 Where: /Users/John/Desktop/IMG_20...
 File Create: Jan 27, 2014 11:06:21 PM
 Modified: Jan 27, 2014 11:06:21 PM

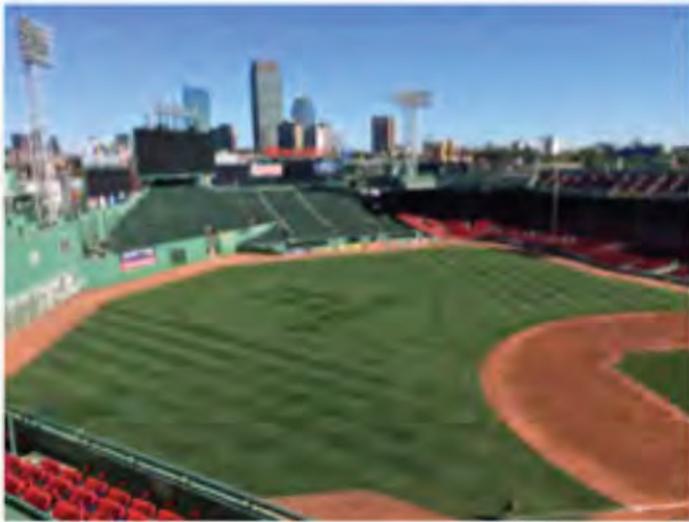


Summary Exposure **GPS** Details

GPSVersion:
GPS.AltitudeRef: 0
GPS.Altitude: 2624/541
GPS.LatitudeRef: N
GPS.Latitude: 42° 20' 49"
GPS.LongitudeRef: W
GPS.Longitude: 71° 5' 51"



Modified: Jan 27, 2014 11:06:21 PM



GPS.Latitude: 42° 20' 49"

GPS.LongitudeRef: W

GPS.Longitude: 71° 5' 51"



Locate Self

Standard

Satellite

Hybrid

Exif Data

IMG_2030.JPG

Type Tag Or Value To Search

Summary Exposure GPS Details

General:

Kind: JPEG image
Size: 2416871 bytes (2360 KB on disk)
Name: IMG_2030
Where: /Users/John/Desktop/IMG_20...
File Create: Jan 27, 2014 11:06:21 PM
Modified: Jan 27, 2014 11:06:21 PM



Tag	Value
EXIF	
Exif.Image.Make	Apple
Exif.Image.Model	iPhone 5s
Exif.Image.Orientation	1
Exif.Image.XResolution	72/1
Exif.Image.YResolution	72/1
Exif.Image.ResolutionUnit	2
Exif.Image.Software	7.0
Exif.Image.DateTime	2013:09:29 13:40:54
Exif.Image.YCbCrPositioning	1
Exif.Image.ExifTag	198
Exif.Photo.ExposureTime	1/2053
Exif.Photo.FNumber	11/5
Exif.Photo.ExposureProgram	2
Exif.Photo.ISOSpeedRatings	40
Exif.Photo.ExifVersion	48 50 50 49
Exif.Photo.DateTimeOriginal	2013:09:29 13:40:54
Exif.Photo.DateTimeDigitized	2013:09:29 13:40:54
Exif.Photo.ComponentsConfiguratio	1 2 3 0
Exif.Photo.ShutterSpeedValue	14514/1319
Exif.Photo.ApertureValue	7983/3509
Exif.Photo.BrightnessValue	4911/488
Exif.Photo.MeteringMode	5
Exif.Photo.Flash	0
Exif.Photo.FocalLength	103/25
Exif.Photo.MakerNote	65 112 112 108 101 32 105 79
Exif.Photo.SubSecTimeOriginal	485
Exif.Photo.SubSecTimeDigitized	485
Exif.Photo.FlashpixVersion	48 49 48 48
Exif.Photo.ColorSpace	1

Inbox (46605 messag

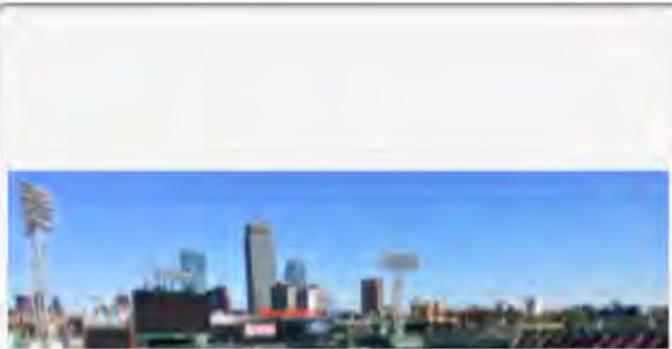


IMG_2030.JPG

🔍 Type Tag Or Value To Search

General:

Kind: JPEG image
Size: 2416871 bytes (2360 KB on disk)
Name: IMG_2030
Where: /Users/John/Desktop/IMG_20...
File Create: Jan 27, 2014 11:06:21 PM
Modified: Jan 27, 2014 11:06:21 PM



Summary Exposure GPS **Details**

Tag	Value
EXIF	
Exif.Image.Make	Apple
Exif.Image.Model	iPhone 5s
Exif.Image.Orientation	1
Exif.Image.XResolution	72/1
Exif.Image.YResolution	72/1
Exif.Image.ResolutionUnit	2
Exif.Image.Software	7.0
Exif.Image.DateTime	2013:09:29 13:40:54
Exif.Image.YCbCrPositioning	1
Exif.Image.ExifTag	198
Exif.Photo.ExposureTime	1/2053
Exif.Photo.FNumber	11/5
Exif.Photo.ExposureProgram	2
Exif.Photo.ISOSpeedRatings	40
Exif.Photo.ExifVersion	48 50 50 49
Exif.Photo.DateTimeOriginal	2013:09:29 13:40:54
Exif.Photo.DateTimeDigitized	2013:09:29 13:40:54
Exif.Photo.ComponentsConfiguratio	1 2 3 0
Exif.Photo.ShutterSpeedValue	14514/1319



Exif.Photo.ExposureTime	1/2053
Exif.Photo.FNumber	11/5
Exif.Photo.ExposureProgram	2
Exif.Photo.ISOSpeedRatings	40
Exif.Photo.ExifVersion	48 50 50 49
Exif.Photo.DateTimeOriginal	2013:09:29 13:40:54
Exif.Photo.DateTimeDigitized	2013:09:29 13:40:54
Exif.Photo.ComponentsConfiguratio	1 2 3 0
Exif.Photo.ShutterSpeedValue	14514/1319
Exif.Photo.ApertureValue	7983/3509
Exif.Photo.BrightnessValue	4911/488
Exif.Photo.MeteringMode	5
Exif.Photo.Flash	0
Exif.Photo.FocalLength	103/25
Exif.Photo.MakerNote	65 112 112 108 101 32 105 79
Exif.Photo.SubSecTimeOriginal	485
Exif.Photo.SubSecTimeDigitized	485
Exif.Photo.FlashpixVersion	48 49 48 48
Exif.Photo.ColorSpace	1

Inbox (46605 messages)

Exif Data

IMG_2030.JPG

Type Tag Or Value To Search

Summary Exposure GPS Details

General:

Kind: JPEG image
Size: 2416871 bytes (2360 KB on disk)
Name: IMG_2030
Where: /Users/John/Desktop/IMG_20...
File Create: Jan 27, 2014 11:06:21 PM
Modified: Jan 27, 2014 11:06:21 PM



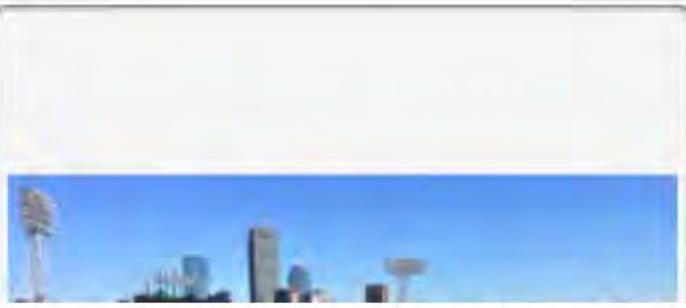
Tag	Value
EXIF	
Exif.Photo.ColorSpace	1
Exif.Photo.PixelXDimension	3264
Exif.Photo.PixelYDimension	2448
Exif.Photo.SensingMethod	2
Exif.Photo.SceneType	1
Exif.Photo.CustomRendered	3
Exif.Photo.ExposureMode	0
Exif.Photo.WhiteBalance	0
Exif.Photo.FocalLengthIn35mmFilm	30
Exif.Photo.SceneCaptureType	0
Exif.Photo.LensSpecification	103/25 103/25 11/5 11/5
Exif.Photo.LensMake	Apple
Exif.Photo.LensModel	iPhone 5s back camera 4.12mm f/
Exif.Image.GPSTag	1516
Exif.GPSInfo.GPSLatitudeRef	N
Exif.GPSInfo.GPSLatitude	42/1 20/1 4956/100
Exif.GPSInfo.GPSLongitudeRef	W
Exif.GPSInfo.GPSLongitude	71/1 5/1 5192/100
Exif.GPSInfo.GPSAltitudeRef	0
Exif.GPSInfo.GPSAltitude	2624/541
Exif.GPSInfo.GPSTimeStamp	17/1 40/1 5433/100
Exif.GPSInfo.GPSImgDirectionRef	T
Exif.GPSInfo.GPSImgDirection	17897/174
Exif.Thumbnail.Compression	6
Exif.Thumbnail.XResolution	72/1
Exif.Thumbnail.YResolution	72/1
Exif.Thumbnail.ResolutionUnit	2
Exif.Thumbnail.JPEGInterchangeFor	1812
Exif.Thumbnail.JPEGInterchangeFor	9812

CF and Edisco

🔍 Type Tag Or Value To Search

General:

Kind: JPEG image
 Size: 2416871 bytes (2360 KB on disk)
 Name: IMG_2030
 Where: /Users/John/Desktop/IMG_20...
 File Create: Jan 27, 2014 11:06:21 PM
 Modified: Jan 27, 2014 11:06:21 PM



Summary Exposure GPS **Details**

Tag	Value
EXIF	
Exif.Photo.ColorSpace	1
Exif.Photo.PixelXDimension	3264
Exif.Photo.PixelYDimension	2448
Exif.Photo.SensingMethod	2
Exif.Photo.SceneType	1
Exif.Photo.CustomRendered	3
Exif.Photo.ExposureMode	0
Exif.Photo.WhiteBalance	0
Exif.Photo.FocalLengthIn35mmFilm	30
Exif.Photo.SceneCaptureType	0
Exif.Photo.LensSpecification	103/25 103/25 11/5 11/5
Exif.Photo.LensMake	Apple
Exif.Photo.LensModel	iPhone 5s back camera 4.12mm f/
Exif.Image.GPSTag	1516
Exif.GPSInfo.GPSLatitudeRef	N
Exif.GPSInfo.GPSLatitude	42/1 20/1 4956/100
Exif.GPSInfo.GPSLongitudeRef	W
Exif.GPSInfo.GPSLongitude	71/1 5/1 5102/100



Exif.Photo.WhiteBalance	0
Exif.Photo.FocalLengthIn35mmFilm	30
Exif.Photo.SceneCaptureType	0
Exif.Photo.LensSpecification	103/25 103/25 11/5 11/5
Exif.Photo.LensMake	Apple
Exif.Photo.LensModel	iPhone 5s back camera 4.12mm f/
Exif.Image.GPSTag	1516
Exif.GPSInfo.GPSLatitudeRef	N
Exif.GPSInfo.GPSLatitude	42/1 20/1 4956/100
Exif.GPSInfo.GPSLongitudeRef	W
Exif.GPSInfo.GPSLongitude	71/1 5/1 5192/100
Exif.GPSInfo.GPSAltitudeRef	0
Exif.GPSInfo.GPSAltitude	2624/541
Exif.GPSInfo.GPSTimeStamp	17/1 40/1 5433/100
Exif.GPSInfo.GPSImgDirectionRef	T
Exif.GPSInfo.GPSImgDirection	17897/174
Exif.Thumbnail.Compression	6
Exif.Thumbnail.XResolution	72/1
Exif.Thumbnail.YResolution	72/1
Exif.Thumbnail.ResolutionUnit	2
Exif.Thumbnail.JPEGInterchangeFor	1812
Exif.Thumbnail.JPEGInterchangeFor	9812

WinHex - [New Recording.m4a]

File Edit Search Navigation View Tools Specialist Options Window Help



File Edit

New Recording.m4a

Offset	0	1	2	3	4	5	6	7	8	9	A	B
00009D50	00	00	00	A7	00	00	00	E0	00	00	00	C0
00009D60	00	00	00	B2	00	00	00	C2	00	00	00	B0
00009D70	00	00	00	A3	00	00	00	A4	00	00	00	B0
00009D80	00	00	00	C1	00	00	00	C6	00	00	00	B0
00009D90	00	00	00	BA	00	00	00	AD	00	00	00	B0
00009DA0	00	00	00	B3	00	00	00	AD	00	00	00	A0
00009DB0	00	00	00	A1	00	00	00	97	00	00	00	90
00009DC0	00	00	00	99	00	00	00	91	00	00	00	90
00009DD0	00	00	00	97	00	00	00	9F	00	00	00	90
00009DE0	00	00	00	99	00	00	00	96	00	00	00	90
00009DF0	00	00	00	72	00	00	00	16	00	00	00	10
00009E00	00	00	00	00	00	00	00	01	00	00	00	20
00009F10	75	64	74	61	00	00	01	5F	60	65	74	60

What about email?

File List

<input checked="" type="checkbox"/>	Subject	Name	To	From
<input type="checkbox"/>	Memorial Day Weekend Clear...	Memorial Day Week...		l.com>
<input type="checkbox"/>	Mercury Motor	Mercury Motor	ale.craigslis...	n@gmail.com>
<input type="checkbox"/>	Mercury Motor	Mercury Motor	ale.craigslis...	n@gmail.com>
<input type="checkbox"/>	Merry Christmas (in July)!	Merry Christmas (in...		.zulily.com>
<input type="checkbox"/>	Merry Christmas! Enjoy a styli...	Merry Christmas! En...		members.jossan
<input type="checkbox"/>	Merry Christmas! Our Favorite...	Merry Christmas! O...		ohls.com>
<input type="checkbox"/>	Merry Monday! Up to 30% off ...	Merry Monday! Up t...		.com>
<input type="checkbox"/>	MESSAGE FROM F.B.I. AGENTS	MESSAGE FROM F.B...	ssed	e.co.zw
<input type="checkbox"/>	Miami: South Beach 4-Star Ma...	Miami: South Beach...		s@email.travelz
<input type="checkbox"/>	Michael Lemoine's birthday is t...	Michael Lemoine's b...	pn@gmail.c...	+kjdm-_mwwh1
<input type="checkbox"/>	Michael Lemoine added a new...	Michael Lemoine ad...	pn@gmail.c...	+kjdm-_mwwh1

rd Time (From local machine)



CC	BCC	Submit Time	Delivery Time
		5/23/2014 1:42:50 PM (2014-05-23...	5/23/2014 1:42:52 PM (2014-05-23 17:42:52 UTC)
n>		1/20/2014 9:42:45 AM (2014-01-20...	1/20/2014 9:42:45 AM (2014-01-20 14:42:45 UTC)
n>		1/20/2014 9:42:45 AM (2014-01-20...	1/20/2014 9:42:45 AM (2014-01-20 14:42:45 UTC)
		7/25/2013 9:06:51 AM (2013-07-25...	7/25/2013 9:06:53 AM (2013-07-25 13:06:53 UTC)
sand...		12/25/2013 10:57:17 AM (2013-12-...	12/25/2013 11:01:24 AM (2013-12-25 16:01:24 UTC)
		12/25/2013 4:53:38 AM (2013-12-2...	12/25/2013 5:16:55 AM (2013-12-25 10:16:55 UTC)
		12/15/2014 5:26:45 AM (2014-12-1...	12/15/2014 7:56:31 AM (2014-12-15 12:56:31 UTC)
		6/7/2015 8:55:18 AM (2015-06-07 ...	6/7/2015 11:33:13 AM (2015-06-07 15:33:13 UTC)
elzoo...		3/26/2015 10:19:46 AM (2015-03-2...	3/26/2015 10:19:50 AM (2015-03-26 14:19:50 UTC)
wh1i...		1/4/2014 4:09:05 PM (2014-01-04 ...	1/4/2014 4:09:07 PM (2014-01-04 21:09:07 UTC)
wh1i...		8/31/2014 7:54:58 AM (2014-08-31...	8/31/2014 7:54:59 AM (2014-08-31 11:54:59 UTC)

Social Media

“*[I]t should now be a matter of professional competence for attorneys to take the time to investigate social networking sites.*”

Griffin v. Maryland, (Maryland Court of Special Appeals, May 2010)

Facebook

Metadata Field	Description
CreatedTime	The UTC date/time the item was created
Tags	The tag(s) which have been applied to the item
fb_item_type	
UserName	Display name of poster/author of a Facebook post
Type	Identifies item as Message, Photo, Video, etc.
Message	The actual searchable text for the item
Likes	The number and name of users who liked the item
Account Name	The Facebook account name to which the item belongs
MD5 Hash 	The applicable MD5 hash value for the item
Ingestion	The UTC date/time the item was ingested
Deliverable Exports	If assigned during creation of the deliverable
Account Id	Unique ID of the users account
UserID	Unique ID (tied to UserName) of the user
Caption	The link (or caption) for a particular post
Collection Type	Indicates the type of account used to create the item

UserID	Unique ID (tied to UserName) of the
Caption	The link (or caption) for a particular p
Collection Type	Indicates the type of account used to
Comments Number	The number of comments indexed fo
Connector Type	The scanner/social media type (Face
Description	The description of the users activity
Indexing Status	Indicates if the item was successfully
ParentURI	Parent URI - sub items are tracked to
post_id	Unique ID number of the item
PostLink	The URL of the item
Recipient ID's	All recipients of a message listed by u
Recipient Name	All recipients of a message listed by n
Scan Target Id	The ID of the originator of the item
Source	The URL for photos which reside dire
To	Name of user whom a wall post is di
ToID	Unique ID of user whom a wall post
UserImage	URL where user profile image is locat

Metadata Ethics

Professional Ethics of the Florida Bar

Opinion 06-2

September 15, 2006

- A lawyer sending an electronic document must take care to ensure the confidentiality of all information contained in the document, including metadata.
- A lawyer receiving an electronic document should not try to obtain information from metadata that the lawyer knows is not intended for the receiving lawyer.
- A lawyer who inadvertently receives information via metadata in an electronic document should notify the sender of the information's receipt.

Professional Ethics of the Florida Bar
Opinion 06-2
September 15, 2006

(Cont.)

- You really have an obligation to maintain requisite knowledge and skill for competent representation via continuing study and education.

Removing Metadata

How do you get rid of metadata?

MS Word

1. Open the document that contains the metadata you need removed.
2. Choose File > Properties. Select the "Summary" tab in the "Properties" box. Clear any content from each text box and press "OK."
3. Choose "Tools" and "Options" from the toolbar.
4. Select "User Information" in the "Options" dialog box. Clear each field that contains personal information.
5. Select "Security" and check "Remove personal information from file properties on save."
6. Select "Save" and uncheck "Allow fast saves." Click "OK" when completed.
7. Click on "File" and "Save" in the toolbar to re-save the Word document.

Word Perfect

1. File > Save without metadata

PDF Files

1. Choose Tools > Protection > Remove Hidden Information. Found items are listed in the Remove Hidden Information panel with a selected check box beside each item.
2. Ensure that the check boxes are selected only for the items that you want to remove from the document.
3. Click Remove to delete selected items from the file, and click OK.
4. Choose File > Save, and specify a filename and location. If you don't want to overwrite the original file, save the file to a different name, location, or both.

The selected content is permanently removed when you save the file. Should you close the file without saving it, you will need to repeat this process, making sure to save the file.

Metadata Questions?