

# Mobile Phone Evidence at Trial: Obtaining and Admitting Call Logs, Text Messages, and Location Data

TUESDAY, MAY 4, 2021

1pm Eastern | 12pm Central | 11am Mountain | 10am Pacific

Today's faculty features:

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# Larry Lieb, CASA

- I. Michigan P.I. License #3701206704
- II. Cellebrite Advanced Smartphone Analytics (CASA) Examiner
- III. Fluent in Japanese. Performed Forensic Collections in Japan.
- IV. Worked in Computer Forensics and Electronic Discovery since 1998
- V. Qualified as a computer forensic expert in both Federal and State courts



# Smartphones are Basically Big File Cabinets

## Smartphones are basically big file cabinets

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## All Smartphones Contain 10 Basic Cabinet Drawers

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1. Contacts
2. Call Records
3. Voice Messages
4. Email and Text Messages
5. Documents
6. Calendar
7. Internet Browsing History
8. Songs, Photographs and Movies
9. WiFi History
10. Social Media (Facebook, Instagram et al)

## By Default, Some Cabinet Drawers are Locked

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Apple and Google sell their phones with *inaccessible-to-the-end-user locked drawers* as a security measure. Only Google or Apple own and have access to the keys that can unlock your phone's locked drawers.

Some end-users choose to remove this security measure by “Jail Breaking” or “Rooting” their phones.

Jail Breaking/Rooting is the process of changing all of the locks and keys to your phone which will allow one to access all locked cabinet drawers.

## Contents of the Locked Drawers

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- I. Sensitive information such as passwords and credit card information.
- II. Some categories of deleted information.
- III. System files that support the normal usage of the smartphone.

“Jailbreaking” or “Rooting” a phone can allow a malicious application to access the content of these formerly locked drawers!

## Some Deleted Evidence Can Be Recovered From The Unlocked Drawers

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- I. iPhones store incoming and outgoing SMS text and iMessage messages in a file called **SMS.db**.
- II. The “SMS.db” file is stored in one of the iPhone’s “unlocked” drawers.
  - I. When an end user “deletes” an iMessage, the “deleted” message is not destroyed, but simply made invisible to the end user. Forensic tools can recover these deleted messages easily.

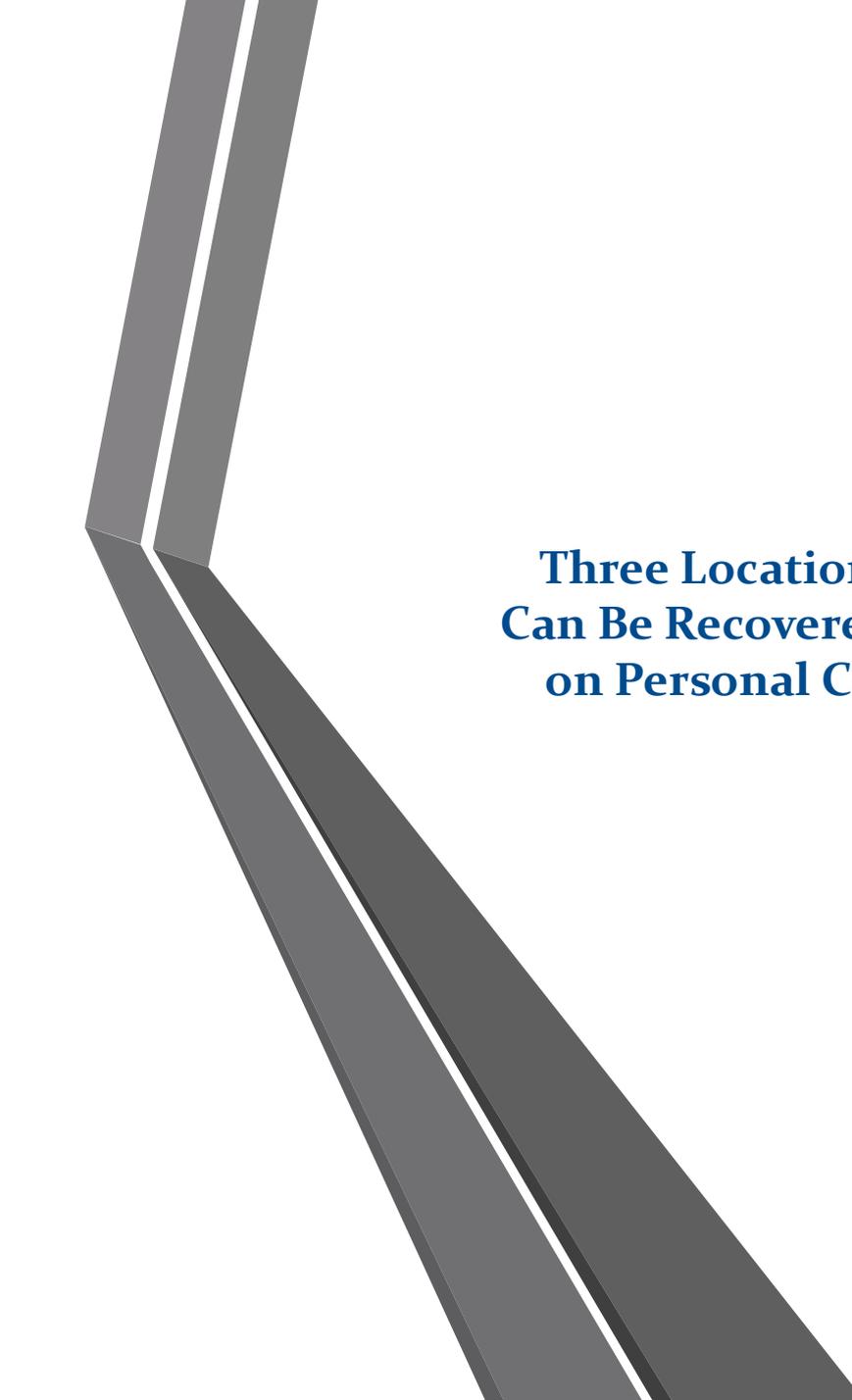
## Practice Point

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Laptop and desktop computer hard drives do not come from the factory with locked and inaccessible to the end user drawers. This allows for forensic search and recovery of all possible deleted information.

Smartphones come with inaccessible locked drawers as security measures to protect the phone owners.

The amount of evidence, such as some deleted information, that can be recovered with forensic tools is more limited with smartphones.



**Three Locations From Which Smartphone Evidence  
Can Be Recovered: The Device Itself, Mobile Backups  
on Personal Computers and Mobile Backups in The  
Cloud**

## A Complete Backup of One's iPhone in iTunes or Apple's iCloud

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iDevices are backed up to Apple's iCloud storage by default.

iTunes file cabinet drawer locations on computers:

- I. **Mac:** ~/Library/Application Support/MobileSync/Backup/
- II. **Windows XP:** \Documents and Settings\username\Application Data\Apple Computer\MobileSync\Backup\
- III. **Windows Vista, Windows 7, Windows 8 & Windows 10:**  
\Users\username\AppData\Roaming\Apple Computer\MobileSync\Backup\

## Examples of Evidence Stored in iTunes and iCloud Mobile Backups

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- I. Photos, Contacts, Calendar, Internet Browsing History, Notes, Call history, Messages (iMessage and carrier SMS or MMS pictures and videos), Voice memos, Network settings (saved Wi-Fi hotspots, VPN settings, and network preferences), Email account passwords, Wi-Fi passwords, and passwords you enter into websites and some apps, Map bookmarks, recent searches, and the current location displayed in Maps.

(<http://support.apple.com/kb/ht4946>)

## Practice Point

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Even if your client's former employee took their personal iPhone and/or iPad with them when they left to work for a competitor, if the employee synchronized their personal iDevice with your client's computer while working for your client, you have access to that iDevice; no subpoena required! Forensic software can recover deleted voice messages as well as deleted text messages from Mobile Backups.



## Examples of Smartphone File Cabinet Drawer Contents

## Photograph Drawer Details

Source	Title	File Time	GPS Time	Exif Time	Pixels	Kind	Camera
All	IMG_2116.JPG	04/14/2014 21:10:49 CDT		2014:04:14 21:10:48 Local	7.6 MP	JPEG Image	Apple iPhone 4S
Bookmarked	https__3A__2...	04/11/2014 16:05:51 CDT		2010:11:13 23:14:49 Local	0.0 MP	JPEG Image	SONY DSC-W350
Camera Roll	IMG_2030.JPG	04/02/2014 19:23:42 CDT	2014:03:26 06:02:12	2014:03:26 15:02:13 Local	7.6 MP	JPEG Image	Apple iPhone 4S
Messages	IMG_2010.JPG	04/01/2014 19:30:54 CDT		2014:04:01 19:15:08 Local	7.6 MP	JPEG Image	Apple iPhone 5s
Thumbnails	IMG_1973.JPG	03/27/2014 06:52:01 CDT		2014:03:27 20:52:01 Local	7.6 MP	JPEG Image	Apple iPhone 4S
App: Boom Beach	IMG_1972.JPG	03/27/2014 06:51:50 CDT		2014:03:27 20:51:50 Local	7.6 MP	JPEG Image	Apple iPhone 4S
App: Candy Crush	IMG_1966.JPG	03/27/2014 06:38:20 CDT		2014:03:27 20:38:20 Local	7.6 MP	JPEG Image	Apple iPhone 4S
App: Clash of Clans	IMG_1960.MOV	03/25/2014 17:27:41 CDT		2014-03-26T07:27:11+0900		QuickTime Video	Apple iPhone 4S
App: ESPN TC	IMG_1959.MOV	03/25/2014 17:26:58 CDT		2014-03-26T07:26:30+0900		QuickTime Video	Apple iPhone 4S
App: Facebook	IMG_1956.MOV	03/24/2014 22:16:28 CDT		2014-03-25T12:15:52+0900		QuickTime Video	Apple iPhone 4S
App: FindMyiPhone	https__3A__2...	03/17/2014 07:00:21 CDT	2010:08:29 16:03:33	2010:08:29 16:03:36 Local	0.0 MP	JPEG Image	Apple iPhone 3G
App: Football	IMG_1893.MOV	03/14/2014 21:24:27 CDT		2014-03-14T21:23:31-0500		QuickTime Video	Apple iPhone 4S
App: Instagram	IMG_1828.JPG	02/22/2014 22:51:42 CST		2014:02:22 22:51:41 Local	7.6 MP	JPEG Image	Apple iPhone 4S
App: Messenger	IMG_1803.JPG	02/13/2014 08:26:18 CST		2014:02:13 08:26:18 Local	7.6 MP	JPEG Image	Apple iPhone 4S
App: Pandora	IMG_1802.JPG	02/13/2014 08:22:02 CST		2014:02:13 08:22:01 Local	7.6 MP	JPEG Image	Apple iPhone 4S
App: Photo Vault	IMG_1801.JPG	02/13/2014 08:21:39 CST		2014:02:13 08:21:39 Local	7.6 MP	JPEG Image	Apple iPhone 4S
App: Skyward	IMG_1728.MOV	01/27/2014 22:48:57 CST		2014-01-27T22:47:44-0600		QuickTime Video	Apple iPhone 4S
App: Snapchat	IMG_1693.JPG	01/20/2014 14:26:44 CST	2014:01:19 21:58:07	2014:01:19 10:40:27 Local	2.0 MP	JPEG Image	Apple iPhone 4
App: Sonos	IMG_1649.JPG	01/10/2014 21:17:16 CST		2014:01:10 21:17:16 Local	7.6 MP	JPEG Image	Apple iPhone 4S
App: Swamp	IMG_1645.JPG	01/10/2014 11:07:19 CST		2014:01:10 11:07:19 Local	7.6 MP	JPEG Image	Apple iPhone 4S
App: Twitter	IMG_1606.JPG	01/09/2014 16:09:13 CST		2014:01:07 13:15:55 Local	1.2 MP	JPEG Image	Apple iPhone 4S
App: Vine	IMG_1606.JPG.a...	01/09/2014 16:09:11 CST		2014:01:07 13:15:55 Local	1.2 MP	JPEG Image	Apple iPhone 4S
App: YouTube	IMG_1606.JPG	01/09/2014 16:09:10 CST		2014:01:07 13:15:55 Local	7.6 MP	JPEG Image	Apple iPhone 4S
App: iFunny	IMG_0882.JPG.a...	01/08/2014 17:01:09 CST		2013:06:22 23:27:34 Local	3.4 MP	JPEG Image	Apple iPhone 4S
App: iReddit	IMG_1605.JPG	01/07/2014 13:14:34 CST		2014:01:07 13:14:16 Local	3.0 MP	JPEG Image	Apple iPhone 4S

## Call Records Drawer

•	Time	To/From	Number	Duration
☎	08/06/2012 09:00:01 CDT	Sean Connery	(202) 587-5600	00:10:34
☎	08/05/2012 14:35:34 CDT	--	(410) 822-1000	00:01:03
☎	08/05/2012 11:40:28 CDT	--	(410) 819-3215	00:00:41
☎	08/04/2012 16:27:11 CDT	--	(585) 733-7175	00:00:02
☎	08/04/2012 13:06:12 CDT	Roger Moore	(410) 714-3774	00:00:17
☎	08/03/2012 20:31:12 CDT	--	(850) 462-1648	00:00:24
!	08/03/2012 18:36:17 CDT	--	(850) 462-1648	00:00:00

## Text Message Drawer

•	🗨️	Time	Number	Text
✓	🗨️	08/05/2012 20:44:46 CDT	(410) 253-7272	Ok I'll wait
✓	🗨️	08/05/2012 20:44:33 CDT	(410) 253-7272	Hey I'm not at home. I'll be there soon. Door is open
✓	🗨️	08/05/2012 20:43:59 CDT	(410) 253-7272	Dude I'm coming over now
✓	🗨️	08/04/2012 22:17:36 CDT	(410) 253-7272	Ok call or text me tomorrow
✓	🗨️	08/04/2012 22:17:18 CDT	(410) 253-7272	Yeah maybe tomorrow
✓	🗨️	08/04/2012 22:16:55 CDT	(410) 253-7272	Dude you didn't show up
✓	🗨️	08/04/2012 17:20:01 CDT	(571) 263-5462	BOOYAH
✓	🗨️	08/04/2012 17:19:48 CDT	(571) 263-5462	I told her that I LEGALLY started working at 15
✓	🗨️	08/04/2012 17:19:18 CDT	(571) 263-5462	She started again about how she worked at 11

# Location Based Evidence

## Photos and Facebook Message Locations

Time	Type	Summary	Latitude	Longitude
10/21/2012 10:59:46 CDT	Camera (image)	Image IMG_1266.jpeg	41.9297 N	-87.7893 W
10/21/2012 11:02:58 CDT	Camera (image)	Image IMG_1267.jpeg	41.9297 N	-87.7893 W
10/21/2012 11:03:04 CDT	Camera (image)	Image IMG_1270.jpeg	41.9297 N	-87.7893 W
12/28/2012 20:28:31 CST	Camera (image)	Image IMG_0653.jpeg	25.8557 N	-81.0198 W
11/25/2013 11:20:44 CST	Camera (image)	Image IMG_1357.JPG	41.8935 N	-87.8002 W
01/20/2014 14:26:44 CST	Camera (image)	Image IMG_1693.JPG	40.0065 N	-105.2670 W
03/17/2014 07:00:21 CDT	Camera (image)	Image https_3A_2F_2Fpbs.twimg.com_2Fprofile_images_2F1812302355_2FcarE...	34.0542 N	-118.2503 W
04/02/2014 19:23:42 CDT	Camera (image)	Image IMG_2030.JPG	34.3165 N	136.8063 E
04/29/2014 08:52:13 CDT	Facebook (message)	Facebook message to ██████: Neither are mine	41.8915 N	-87.7890 W
04/29/2014 08:53:14 CDT	Facebook (message)	Facebook message to ██████: I forgot all about this chat	41.8910 N	-87.7889 W
04/29/2014 08:53:54 CDT	Facebook (message)	Facebook message to ██████: I hate you	41.8906 N	-87.7891 W
04/29/2014 08:54:38 CDT	Facebook (message)	Facebook message to ██████: Fair enough	41.8906 N	-87.7891 W
04/29/2014 09:07:38 CDT	Facebook (message)	Facebook message to ██████: ████ you'd look amazing in them	41.8906 N	-87.7891 W
04/29/2014 09:08:43 CDT	Facebook (message)	Facebook message to ██████: Ya you will	41.8906 N	-87.7891 W
05/03/2014 13:51:19 CDT	Facebook (message)	Facebook message to ██████: ████ yall on I can chill	41.8978 N	-87.7837 W
05/03/2014 13:51:44 CDT	Facebook (message)	Facebook message to ██████: ████s gimme a ride	41.8978 N	-87.7837 W
05/03/2014 13:55:23 CDT	Facebook (message)	Facebook message to ██████: Good good. ████ slide me a ride if you're going to ██████s	41.8978 N	-87.7837 W
05/03/2014 13:58:36 CDT	Facebook (message)	Facebook message to ██████: One sec	41.8978 N	-87.7836 W
05/03/2014 18:04:00 CDT	Facebook (message)	Facebook message to ██████: Atta boy	41.8699 N	-87.8007 W
05/04/2014 00:39:37 CDT	Facebook (message)	Facebook message to ██████: 71 followers 71 following I have been sanctified	41.8978 N	-87.7837 W

## Map Queries

Query	Query Vicinity	Query Latitude ▲	Query Longitude
Mulligans auto body	North Point, MD	38.7174 N	-76.1372 W
Mulligans auto body	Indian Harbor, MD	38.7495 N	-76.2945 W
Bozman, MD	Glebe Villa, MD	38.7897 N	-76.0662 W
7292 bozman neavitt rd	Leeds Landing, MD	38.7980 N	-76.1641 W
Albrights gun shop	Glebe Villa, MD	38.7993 N	-76.0577 W
Body shop	Glebe Villa, MD	38.8139 N	-76.0039 W

## Location Based Evidence War Story

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Investigation of client's former employee's iPhone revealed multiple meetings at opponent's headquarters in the months prior to former employee's resignation.

Signing into a Wifi network creates a time/date/location stamp on a workstation

## Location Based Evidence Practice Point

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Forensic analysis of two apparently unrelated parties' smartphones and laptop computers could reveal location based evidence that could establish a relationship does in fact exist.

Example: Party A's smartphone connected to the Starbuck's WiFi in Party B's office building on dates both parties were at the same address.

# Obtaining and Admitting Cell Phone Evidence at Trial

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# My Background



- Shareholder in Litigation Practice Group
  - Co-chair, Cyber Security and Data Privacy Practice Group
- Complex, high-stakes business litigation in state and federal court
  - Multi-district litigation
  - Class actions
  - Business tort
  - Product liability and toxic tort
  - Employment
- Overseen dozens of electronic discovery projects, both internally and externally hosted, with billions of documents.



**Winning  
case**

**Avoiding  
malpractice**

# ABA Model Rules of Professional Conduct

## Rule 1.1

A lawyer shall provide competent representation to a client. Competent representation requires the legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation.

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# ABA Model Rules of Professional Conduct

## Comment 8

To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology, engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject.

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# It's Not Just Cell Phones, it's the Internet of Things



**There are more than 46 billion  
electronic devices connected to  
the Internet.**

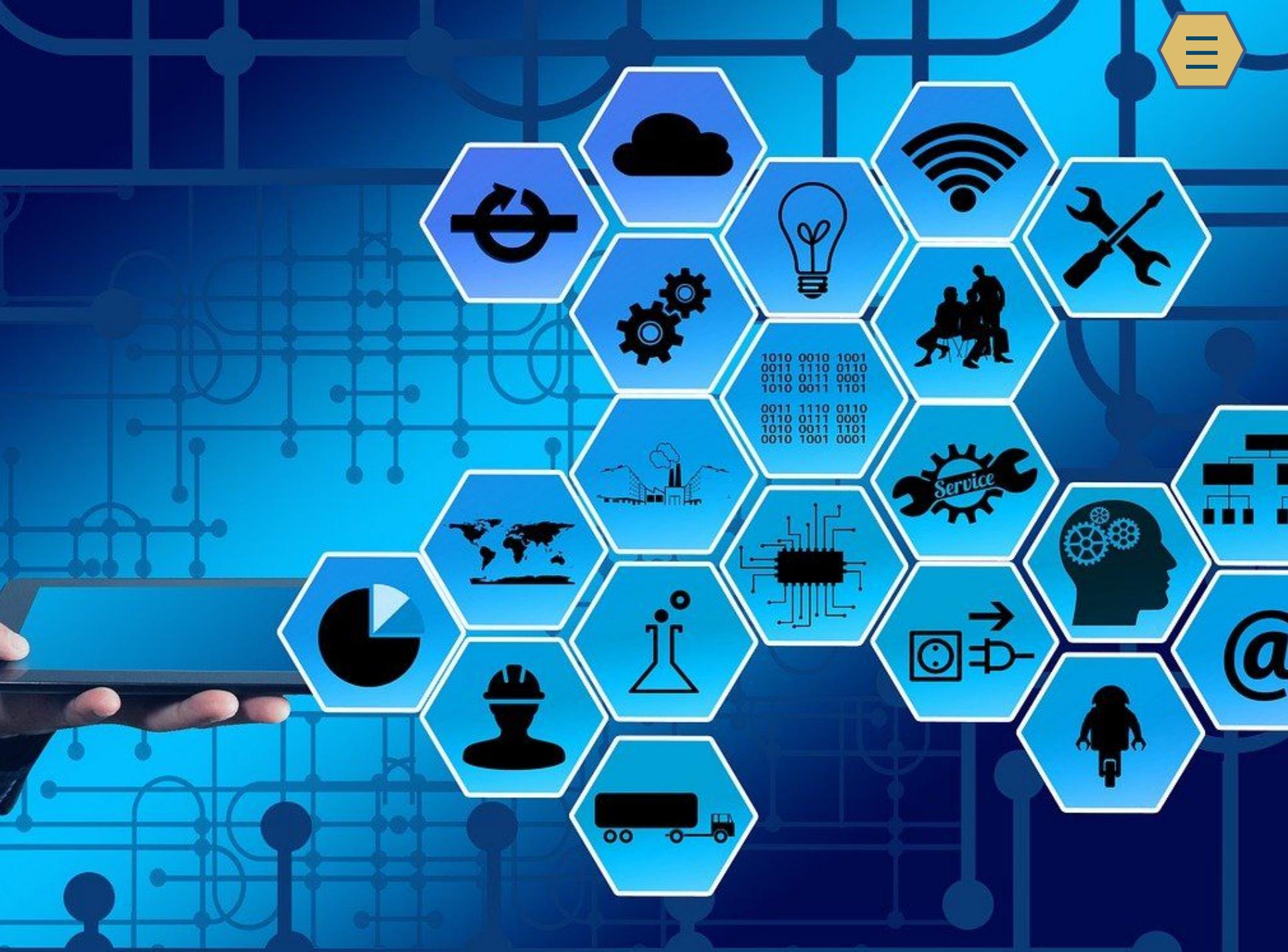


# How many do your clients use?

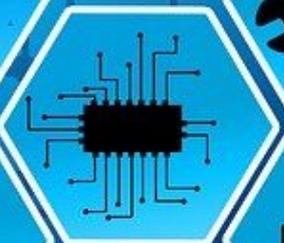


**The duty to be tech competent  
requires you to know your  
clients and their ESI.**





1010 0010 1001  
0011 1110 0110  
0110 0111 0001  
1010 0011 1101  
  
0011 1110 0110  
0110 0111 0001  
1010 0011 1101  
0010 1001 0001



A hand is shown holding a tablet on the left side of the image. The background is a dark blue grid with various icons. A vertical column of ten hexagonal icons is positioned in the center. From top to bottom, the icons are: a cloud, a circular arrow, two interlocking gears, a factory with smokestacks, a world map, a pie chart, a person wearing a hard hat, a flask with a bubble, and a semi-truck. At the top right, there is a yellow hexagon with a black 'X' inside.

X

## Mobile Devices

Smart phones  
Tablets

## Wearable Devices

Fitbit  
Apple Watch

## Smart Homes

Ring Doorbell  
Nest thermostat  
August locks  
Wemo plugs  
Smart toothbrush  
Smart refrigerator  
Smart smoke/water  
detectors

more

A hand is shown holding a tablet on the left side of the image. The background is a dark blue grid with various icons. A vertical column of ten hexagonal icons is highlighted in a lighter blue. From top to bottom, the icons are: a cloud, a circular arrow, two interlocking gears, a factory with smoke, a world map, a pie chart, a person wearing a hard hat, a flask with a bubble, and a truck. At the top right, there is a yellow hexagon with a white 'X' inside.

X

## Smart Workplaces

Smart badges  
Keyless access  
Biometrics readers

## Smart Vehicles

Infotainment Systems  
GPS  
Steering wheel sensors

## Smart Cities

Highway sensors  
Connected traffic lights

more

A hand holding a tablet with a grid of hexagonal icons representing various industries and technologies. The icons include a refresh symbol, a cloud, gears, a factory, a world map, a pie chart, a person with a hard hat, a flask, and a truck. The background is a blue grid with circuit-like patterns.

X

## Connected Retail

Beacons  
Inventory management  
Marty the Robot

## Smart Clothing

Workout gear  
Custom jeans

## Virtual Assistants

Alexa  
Amazon Echo  
Google Home



# Mobile Devices

*Icon made by Freepik  
from [www.Flaticon.com](http://www.Flaticon.com)*



# Smart Phones

*Image courtesy of Patrisyu  
at Freedigitalphotos.net*



# Tablets

*Image courtesy of Patrisyu  
at Freedigitalphotos.net*



“A forensic search of a mobile device . . . can reveal a wealth of data about a user’s day-to-day life.”

“Apple’s iPhone keeps track of where you go – and saves every detail of it to a secret file on the device, including latitude and longitude data and timestamps for up to a year.”

*United States v. Saboonchi*, Crim. Case No. PWG-13-100, 2014 U.S. Dist. LEXIS 47665 at \*4 (D. Md. Apr. 7, 2014).



“The term ‘cell phone’ is itself misleading shorthand; many of these devices are in fact minicomputers that also happen to have a capacity to be used as a telephone. They could just as easily be called cameras, video players, rolodexes, calendars, tape recorders, libraries, diaries, albums, televisions, maps, or newspapers.”

- *Riley v. California*, No. 13-132 (U.S. June 25, 2014).



“The sum of an individual’s private life can be reconstructed through a thousand photographs labeled with dates, locations, and descriptions.”

- *Riley v. California*, No. 13-132 (U.S. June 25, 2014).



- Internet browsing history
- Historic location information, which can reconstruct someone's specific movements down to the minute, not only around town but also within a particular building.
- Apps, offering a range of tools for managing detailed information about all aspects of a person's life. (33 apps/user)

- *Riley v. California*, No. 13-132 (U.S. June 25, 2014).



# 1 GB



# Capacity

64 GB



4 Million  
pages

Capacity



# Text Messages



## Preservation Issues

The failure to preserve text messages can give rise to a spoliation sanction.

When the defendant failed to do so, the Court allowed the Plaintiff to introduce into evidence its litigation hold and the Defendants' failure to preserve the text messages.

- *Christou v. Beatport, LLC*, C.A. No. 10-cv-02912-RBJ-KMT, 2013 U.S. Dist. LEXIS 9034 (D. Colo. Jan. 23, 2013).



## Preservation Issues

College student was charged with rape.

IK I forced it. I'm sorry.

DB

I get it. I wouldn't want anything to do with me, either. I'm sorry I fucked up. I hope you don't think of me as a bad guy.

DB

- *Commonwealth v. Ballard*, 99 Mass. App. Ct. 1119 (Mass. Ct. App. 2021)



## Preservation Issues

“You have heard evidence suggesting that the defendant may have deleted text messages from his phone. If the Commonwealth has proven that the defendant did such conduct, you may consider whether such actions indicate feelings of guilt by the defendant and, whether, in turn, such feelings of guilt may tend to show actual guilt on the charges.”

- *Commonwealth v. Ballard*, 99 Mass. App. Ct. 1119 (Mass. Ct. App. 2021)



# SMS Messaging Services



# Facebook Messenger

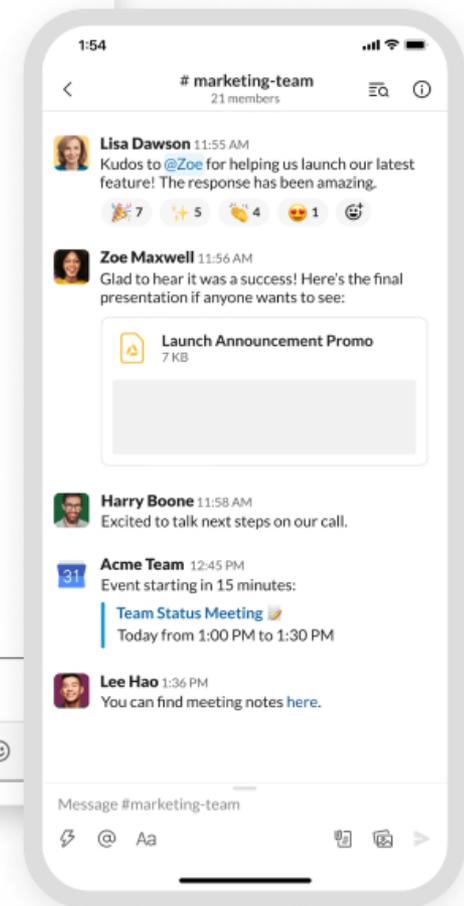
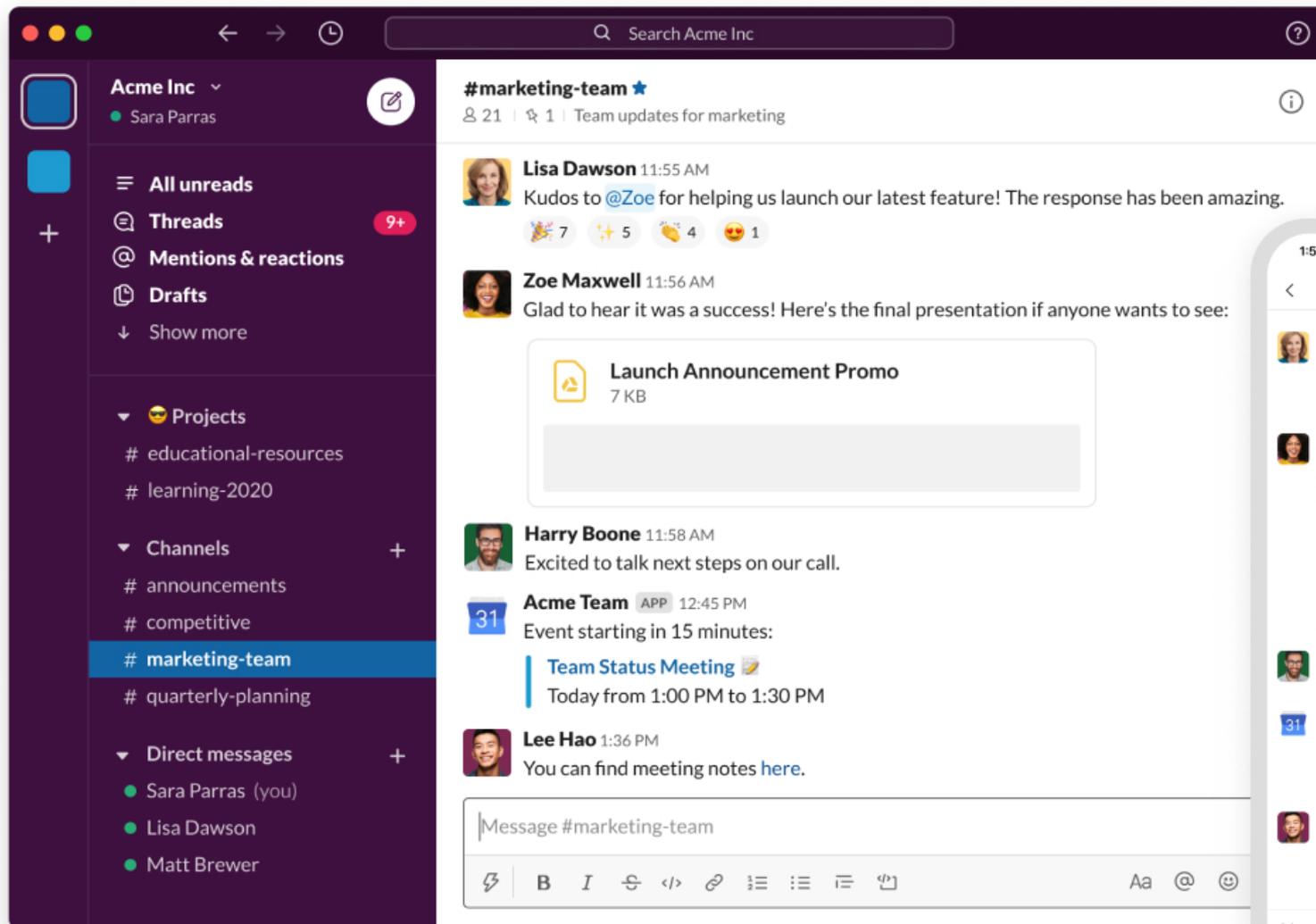


Maybe my case will bring in some \$

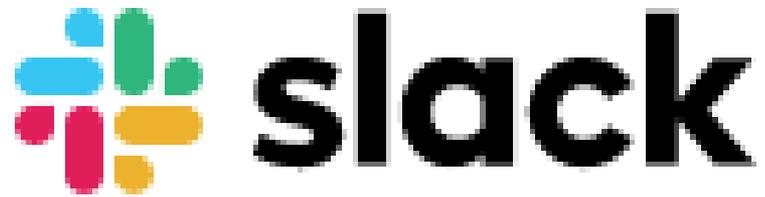
# Facebook Messenger



# GPS Data



# Business Communications Platforms



- Slack
- Teams
- Ring Central, Fuze, etc.

## Business Communications Platforms



- Court granted motion to compel production of Slack communications.
- Proportionality analysis
  - Defendant submitted declaration from computer forensics firm showing with a cost estimate of ~ \$22,000 to collect and review Slack data.
  - Plaintiff estimated it would cost between \$110,000 to \$225,000 based on a blended attorney rate of \$400/hr.

- *Benebone LLC v. Pet Qwerks, Inc.*, 8:20-cv-00850-AB-AFMx, 2021 U.S. Dist. LEXIS 43449 (C.D. Cal. Feb. 18, 2021)

# Business Communications Platforms



# Wearables

*Image courtesy of Franky242 at  
Freedigitalphotos.net Icon made by  
lcongeek26 from www.Flaticon.com*



- Fitness tracking bands (Fitbit)
- Smart Watches (Apple watch)
- Google Glasses
- Smart Badge and other worker productivity tools

# Wearables

*Image courtesy of  
Franky242 at  
istockphoto.com*



Wearables are the “functional equivalent of a ‘black box’ for the human body.

- Monitor and record physical activity, heart rate, skin temperature, respiratory rate, exercise, food, weight and sleep.

- Carol Michel and Rick Sager, *Wearable Fitness Devices: A New Frontier In Discovery*, Law 360 (March 28, 2016).

# Wearables



- A personal injury case in Canada was the first to use Fitbit data.
- The plaintiff, a personal trainer, introduced her Fitbit data to show her activity levels were lower than the baseline for someone her age.

- Kate Crawford, *When Fitbit is the Expert Witness*, The Atlantic (Nov. 19, 2014).

# Wearables



- In a criminal case in Pennsylvania, Fitbit data was used to demonstrate that the complaining witness had falsified report of rape.

- Jacob Gershman, *Prosecutors Say Fitbit Device Exposed Fibbing in Rape Case*, The Wall Street Journal (Apr. 21, 2016).

# Wearables



8 MINUTE READ

## How Fitbit Became The Next Big Thing In Corporate Wellness

Is the new requirement to climbing the corporate ladder that you count all the steps?



# Wearables



- “By 2020, more than 75 million wearables will permeate the workplace.”
- “By 2018, 2 million employees will be *required* to wear health and fitness tracking devices *as a condition of employment.*”

- PriceWaterhouseCoopers, The Wearable Life 2.0: Connected living in a wearable world, at 7

68

# Wearables

68



# Smart Homes



ring



Nest

# Video Doorbells



# Video Doorbells

# Whose Data Is It Anyway?

Two types of cases

- Client is individual
- Client is a corporation

# Preservation Obligation

## Fed. R. Civ. P. 34.

(a) In general. A party may serve on any other party a request within the scope of Rule 26(b):

(1) to produce and permit the requesting party or its representative to inspect, copy, test or sample the following items in the responding party's **possession, custody, or control . . .**

# Preservation Obligation

## Fed. R. Civ. P. 45.

(a)(1)(A) Requirements – In General. Every subpoena must:

...

(iii) command each person to whom it is directed to do the following at a specified time and place: ...  
produce designated documents, electronically stored information, or tangible things in that person's **possession, custody, or control**; or permit the inspection of premises; and

# When Client is an Individual

**Ownership:** Plaintiff maintained that she did not have possession, custody or control over her cell phone records because the bill was in her husband's name. Court held that because she and her husband were legally married, she had possession, custody and control over the records.

*Fox v. Pittsburg State Univ.*,  
2016 U.S. Dist. LEXIS 2259, \*7-8 (D. Kan. Jan. 8, 2016).

# When Client is a Corporation

**Work phones:** A company controls the text messages of its employees on work phones, as well as the emails of its employees via company email accounts.

**Personal phones:** A company does not possess or control the text messages from the personal phones of its employees and may not be compelled to disclose text messages from employees' personal phones.

*Lulumiere v. Willow Springs Care, Inc.*,  
2017 U.S. Dist. LEXIS 216041, \*5-6 (E.D. Wash. Sept. 18, 2017).

# When Client is a Corporation

**Work phones:** Company maintained custody and control over employee personal mobile devices which were company owned.

**Personal phones:** A company does not possess or control company data present on employee-owned personal mobile devices, even when company had a policy that all information and emails on employee devices remained the sole property of the company.

*H.J. Heinz Co. v. Starr Surplus Lines Ins. Co.,*  
2015 U.S. Dist. LEXIS 184222, \*12-13 (W.D. Penn. July 28, 2015).

# When Client is a Corporation

## Personal phone, monthly service reimbursed by company:

Cell phones at issue were owned by employees.

Employees used their personal cell phones to talk, email and send text messages for work-related matters.

Company reimbursed a portion of its employees' monthly bills for their personal cell phones.

In the company's Employee Handbook, the company retained right to access confidential and proprietary company information on employees' personal devices but the text messages sought were not confidential and proprietary.

# When Client is a Corporation

“As cell phones, smart phones, and similar mobile devices are personal property, it follows that the owners of such devices generally enjoy the full panoply of ‘fundamental’ property rights recognized by Texas law. That cluster of rights necessarily includes the right to possess, use, or transfer the property, and to exclude others.”

Nothing in the at-will employment relationship alters an employer’s or an employee’s traditional rights to possess their respective property to the exclusion of the other.

# When Client is a Corporation

Partial reimbursement of monthly cell phone bills did not, by itself, alter the employment relationship in a way that gave the company a right to possess its employees text messages on personal cell phones.

Court held the company did not have possession, custody or control of the text messages.

*In re Sun Coast Res. Inc.*,  
562 S.W.3d 138 (Tex. Ct. App. 2018)

# When Client is a Corporation

**Does the client have possession, custody or control of the cell phone?**

- Who paid for the phone?
- Who pays for the data plan?
- Does the company have a policy that makes all text messages company property?
- Does the company have a policy about use of its wireless network?
- Does the employee use text messages or apps for business?

# How Do You Preserve?

- Litigation hold instruction
- Faraday bag? Prevents phone from receiving signals and blocks remote wiping.
- Data extraction

# Limiting search/production of cell phone data by agreement

- Rule 26(f): parties can agree to:
  - Not search cell phones
  - Defer searches of cell phones.
  - Limit searches of cell phones.

# Sample ESI Protocol Language

The Parties agree that to the extent the Producing Party has reason to believe that responsive or relevant ESI of the following types, or located on the following sources, exist and are in the possession, custody, or control of the Producing Party, such relevant ESI must be preserved and responsive ESI produced as required by the Federal Rules of Civil Procedure, but only as it relates to the following individuals who have been identified as Key Personnel,

1. Voicemails;
2. Text messages (*e.g.*, SMS or MMS), iMessages, and similar mobile messages;
3. Instant messages (*e.g.*, Jabber, Lync, AOL instant message);
4. Mobile devices (*e.g.*, cell phones, iPads, etc.);
5. Personal computers and personal email; and
6. Social media sites.

# Challenges with Reviewing Cell Phone Extractions

- Usually not suitable for traditional discovery review platforms.
- Extraction report in Text file or Excel file
- Concerns about personal nature of contents

# Challenges with Reviewing Cell Phone Extractions



## Extraction Report

Apple iPhone

### Summary

<b>Connection Type</b>	Cable No. 210
<b>Extraction start date/time</b>	4/15/2014 11:15:20 AM -04:00
<b>Extraction end date/time</b>	4/15/2014 12:49:42 PM -04:00
<b>Extraction Type</b>	File system
<b>Selected Manufacturer</b>	Apple
<b>Selected Device Name</b>	iPhone 5S
<b>Unit Identifier</b>	UFED S/N 5905625
<b>Unit Version</b>	3.0.0.310
<b>UFED Physical Analyzer version</b>	3.9.8.7
<b>Examiner name</b>	FTI Consulting

# Challenges with Reviewing Cell Phone Extractions

160 5	<p><b>Participants:</b> [REDACTED]</p> <p><b>Source:</b> iMessage: + [REDACTED]</p> <p><b>Start Time:</b> 5/8/2013 23:15:19(UTC+0)</p> <p><b>Last Activity:</b> 5/8/2013 23:15:19(UTC+0)</p> <p><b>Body file:</b> <a href="#">chat-1605.txt</a></p>	<p>5/8/2013 11:15:19 PM(UTC+0), + [REDACTED] ==&gt;</p> <p>Where are you we have a seat for you</p>	Yes
160 6	<p><b>Participants:</b> + [REDACTED]</p> <p><b>Source:</b> iMessage: + [REDACTED]</p> <p><b>Start Time:</b> 5/8/2013 23:19:59(UTC+0)</p> <p><b>Last Activity:</b> 5/8/2013 23:19:59(UTC+0)</p> <p><b>Body file:</b> <a href="#">chat-1606.txt</a></p>	<p>5/8/2013 11:19:59 PM(UTC+0), [REDACTED] ==&gt;</p> <p>Right side third row from the front</p>	Yes

# Options for Reviewing Cell Phone Extractions

- Filter by phone number of certain contacts
- Apply search terms

A man in a dark blue suit and tie is shown from the chest up, holding a black tablet computer. He is pointing at the screen with his right index finger. The background is a vibrant blue gradient with the word "FUTURE" repeated in white, semi-transparent letters in various orientations and sizes, creating a sense of depth and movement.

# Considerations for the Future

# ADMITTING ELECTRONIC CELL PHONE INFORMATION INTO EVIDENCE

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**Washington, D.C. 20007**

**(202) 787 - 1312**

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# My Background

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- Federal Law Clerk, EDVA 1983-84
- Practicing Trial Lawyer for 37 Years
- Extensive Experience Handling Complex Commercial Litigation in Federal Courts Across the Country, Including:
  - Patent Infringement Cases
  - Trademark and Copyright Cases
  - Antitrust Cases (including *Twombly v. Bell Atlantic*)
  - Trade Secrets Cases
  - Employment Cases
  - Corporate Governance/Shareholder Cases
- Frequent CLE Lecturer Around the Country, Often with Sitting Federal Judges



# Discussion Topics

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- I. Authenticity
  - A. FRE 901
- II. Potential Objections
  - A. Hearsay
  - B. Rule 403
  - C. Best Evidence Rule
  - D. Others?
- III. Self-Authenticating Evidence
  - A. New FRE Rule 902(14)
  - B. Notice Requirement
  - C. Chain of Custody Evidence/Witnesses No Longer Necessary?
- IV. Use of Expert Witnesses
- V. Examples of Trial Exhibits



# Authenticity

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- Authenticity Is the First Hurdle to Clear
- FRE 901(a):
  - The proponent must produce evidence sufficient to support a finding that the item is what the proponent claims it to be.
- Free 901(b):
  - Examples:
    - Testimony of a witness with knowledge
    - Comparison by an expert witness
    - Distinctive characteristics and the like
    - Evidence about a telephone conversation
    - Evidence about a process or system



# Potential Objections

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**A. Hearsay**

**B. FRE 403 - Prejudicial v. Probative Value**

**C. Best Evidence Rule**

**D. Others?**



# Self-Authenticating Evidence

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## A. FRE Rule 902(14)- Effective December 1, 2017:

- Certified Data Copied from an Electronic Device, Storage Medium, or File. Data copied from an electronic device . . . if authenticated by a process of digital identification, as shown by a certification of a qualified person that complies with the certification requirements of Rule 902(11) or (12).
- The proponent also must meet the notice requirements of Rule 902(11).



# Self-Authenticating Evidence (Con't.)

---

## **B. Notice Requirement - From FRE 902(11):**

- Before the trial or hearing, the proponent must give an adverse party reasonable written notice of the intent to offer the record – and must make the record and certification available for inspection – so that the party has a fair opportunity to challenge them.



# Self-Authenticating Evidence (Con't.)

---

**Are Chain of Custody Evidence/Witnesses  
No Longer Necessary?**



# Use of Expert Witnesses

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- FRE 901(b)(3) - Authentication:
  - The following are examples of evidence that satisfies the authentication requirement:
  - (3) *Comparison by an Expert Witness*. A comparison with an authenticated specimen by an expert witness.

## Use of Expert Witnesses (Con't.)

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- **Certificate Per FRE 902(14):**
  - “ . . . as shown by a certification of a qualified person that complies with the certification requirements of Rule 902(11) or (12).”



# Use of Expert Witnesses (Con't.)

---

**Evidence Regarding Hashing/Chain of Evidence?**



# Use of Expert Witnesses (Con't.)

---

**Other Uses of Expert Witnesses to Admit  
Cell Phone Data?**



# Trial Exhibit - Email

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**From:** cjohnson@abctech.com  
**Sent:** Thursday, March 11, 2010 11:40 AM  
**To:** rrobertson@abctech.com  
**Subject:** New Developments

Robert: I have spoken with Vladimir and he has indicated that the '888 patent was issued to MicroTech last week, so we are going to need to decide whether to “cut and run,” or “stay the course” as to our polymeric hyperbolic infusion process.

# Trial Exhibit – Email (Con’t.)

---

**From:** rrobertson@abctech.com  
**Sent:** Thursday, March 11, 2010 11:42 AM  
**To:** cjohnson@abctech.com  
**Subject:** New Developments

Thanks Charlie – in the immortal words of Ronald Reagan – “Stay the Course” and “Damn the Torpedoes.”

---

**From:** Johnson, Charles  
**Sent:** Thursday, March 11, 2010 11:40 AM  
**To:** Robertson, Robert  
**Subject:** New Developments

Robert: I have spoken with Vladimir and he has indicated that the ‘888 patent was issued to MicroTech last week, so we are going to need to decide whether to “cut and run,” or “stay the course” as to our polymeric hyperbolic infusion process.

# Trial Exhibit – Email (Con't.)

---

---

**From:** cjohnson@abctech.com  
**Sent:** Thursday, March 11, 2010 11:45 AM  
**To:** vkalinski@abctech.com  
**Subject:** New Developments

Thanks Vladimir, I have spoken to Robert and he stated as follows:  
“In the immortal words of Ronald Reagan. – ‘Stay the Course’ and ‘Damn the Torpedoes’.”

---

**From:** vkalinski@abctech.com  
**Sent:** Thursday, March 11, 2010 11:30 AM  
**To:** cjohnson@abctech.com  
**Subject:** New Developments

Charles: The ‘888 patent was issued to MicroTech last week, so we are going to need to decide whether to “cut and run,” or “stay the course” as to our polymeric hyperbolic infusion process.

# Trial Exhibit – Email (Con't.)

---

**From:** vkalinski@abctech.com  
**Sent:** Thursday, March 11, 2010 11:50 AM  
**To:** cjohnson@abctech.com  
**Subject:** New Developments

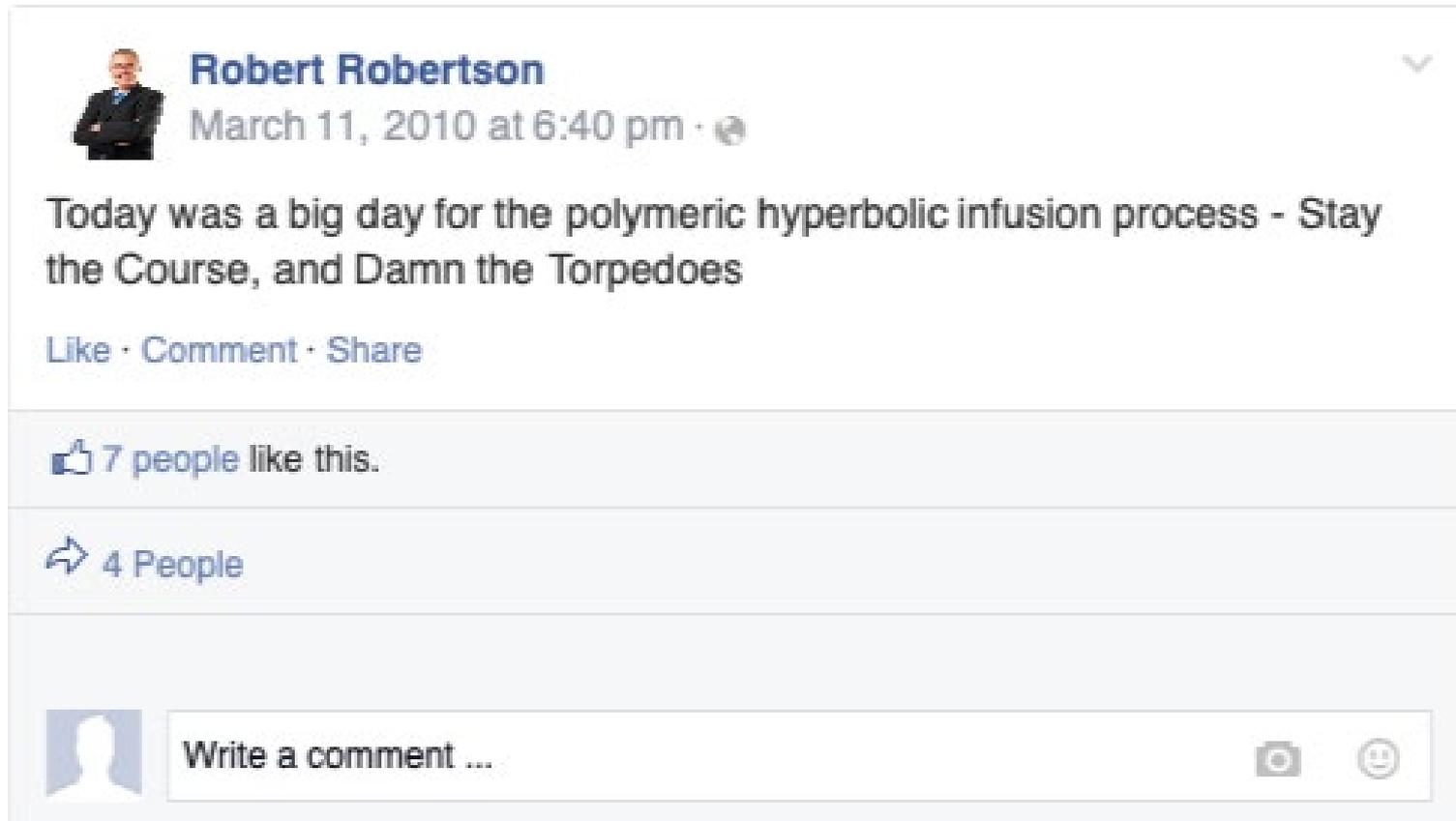
Should we let the world know that the CEO of MicroTech has been accused of sexual abuse?

---

**From:** cjohnson@abctech.com  
**Sent:** Thursday, March 11, 2010 11:45 AM  
**To:** vkalinski@abctech.com  
**Subject:** New Developments

Thanks Vladamir, I have spoken to Robert and he stated as follows:  
“In the immortal words of Ronald Regan. – ‘Stay the Course’ and ‘Damn the Torpedoes’.”

# Trial Exhibit – Facebook Post - ABCTech Co.



A screenshot of a Facebook post. At the top left is a profile picture of a man in a suit. To his right is the name "Robert Robertson" in bold blue text, and below it, the date and time "March 11, 2010 at 6:40 pm" followed by a globe icon. The main text of the post reads: "Today was a big day for the polymeric hyperbolic infusion process - Stay the Course, and Damn the Torpedoes". Below the text are the interaction options "Like · Comment · Share". Underneath that, it says "7 people like this." with a thumbs-up icon. Below that, it says "4 People" with a share icon. At the bottom is a comment box with a placeholder "Write a comment ..." and icons for adding photos and emojis.

**Robert Robertson**  
March 11, 2010 at 6:40 pm · 🌐

Today was a big day for the polymeric hyperbolic infusion process - Stay the Course, and Damn the Torpedoes

Like · Comment · Share

👍 7 people like this.

↪ 4 People

Write a comment ... 📷 😊

# Trial Exhibit – Instagram Post



ZJay • Follow  
New York, NY



Liked by **Deyonce** and **200K** others

[View all 16k comments](#)



Add a comment...

12/12/13 9:48pm



# Trial Exhibit – Twitter Post



# Trial Exhibit – Twitter Post (Con't.)



# Trial Exhibit – Cell Site Analysis

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CASE# 50-MM-110931

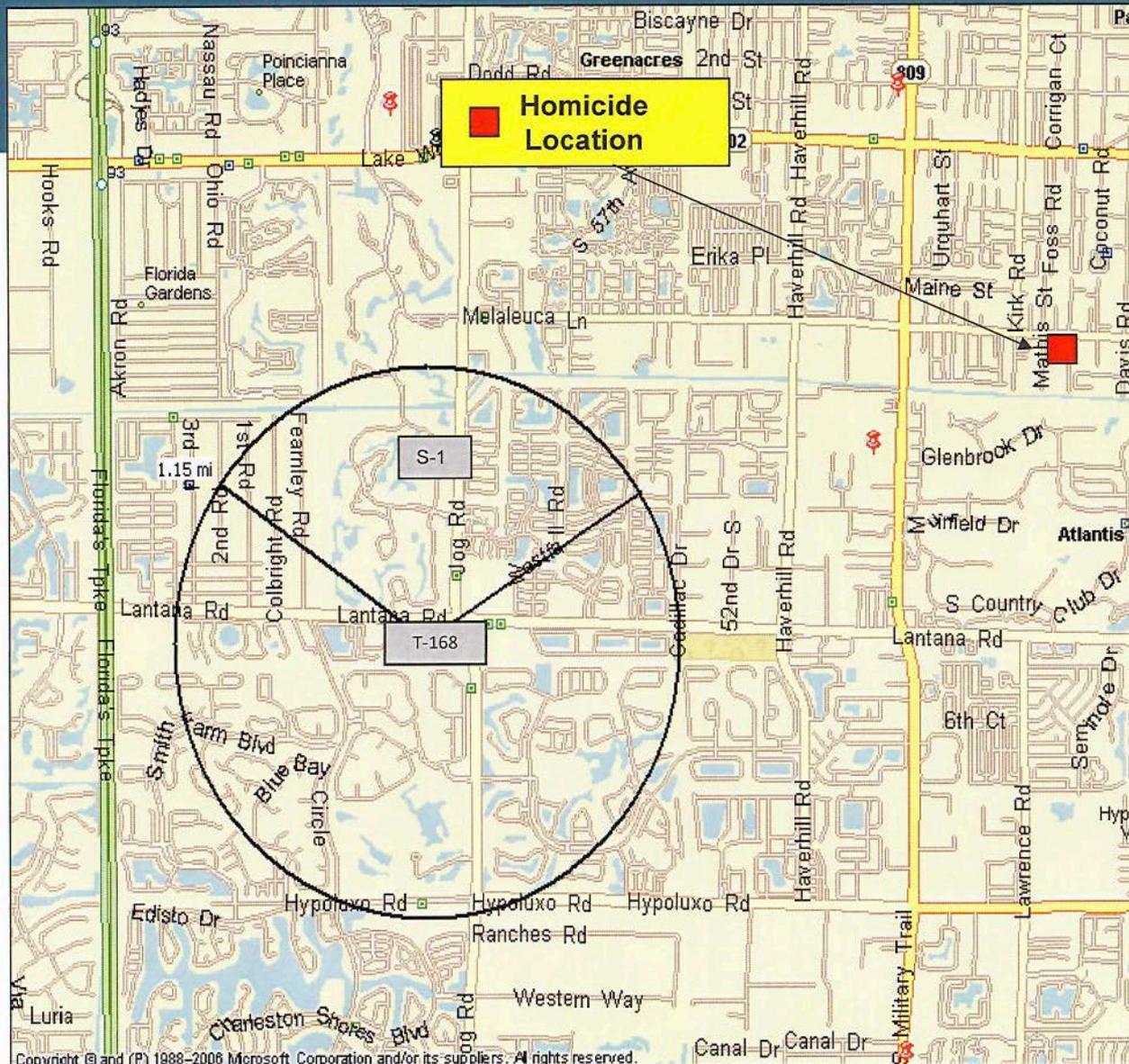
TARGET# 561-574-8987

Date Range: 2/21/2009-2/22/2009

Time Range: 1:00 PM (2/21/2009) to 3:00 PM (2/22/2009)



# Call Activity From 1:00 PM to 5:18 PM (2/21/2009)



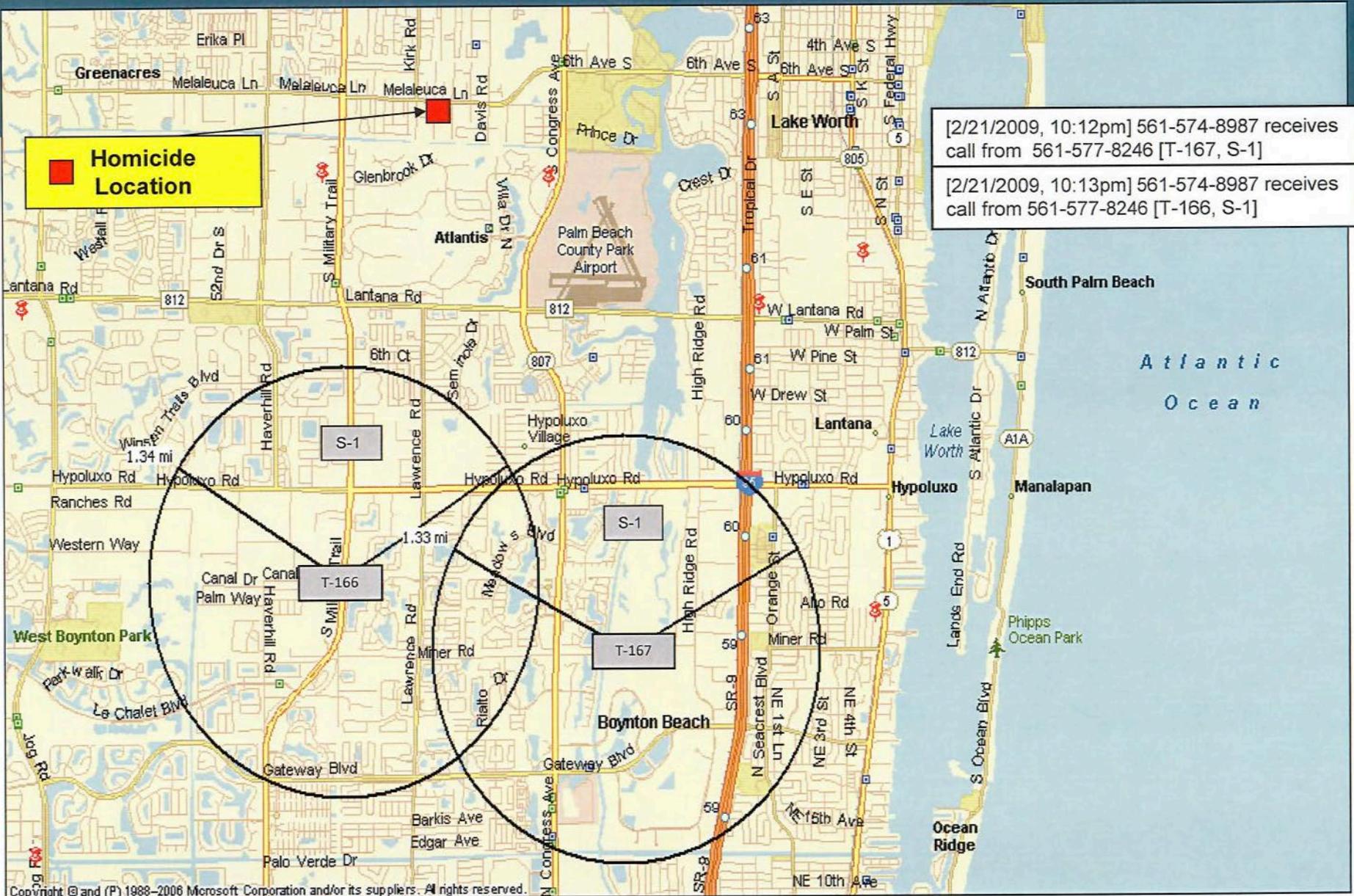
[2/21/2009, 1:00 pm] 561-574-8987 receive call from 800-955-6600 [T-168, S-1]
[2/21/2009, 2:23 pm] 561-574-8987 calls 561-574-5719 [T-168, S-1]
[2/21/2009, 2:33 pm] 561-574-8987 calls 561-577-8246 [T-168, S-1]
[2/21/2009, 2:34:13 pm] 561-574-8987 calls 561-577-8246 [T-168, S-1]
[2/21/2009, 2:34:15 pm] 561-574-8987 calls 561-574-5719 [T-168, S-1]
[2/21/2009, 3:41 pm] 561-574-8987 receive call from 561-255-1568 [T-168, S-1]
[2/21/2009, 4:09 pm] 561-574-8987 receive call from 561-255-1568 [T-168, S-1]
[2/21/2009, 4:22 pm] 561-574-8987 receive call from 800-955-6600 [T-168, S-1]
[2/21/2009, 4:54 pm] 561-574-8987 receive call from 561-255-1568 [T-168, S-1]
[2/21/2009, 5:13:15 pm] 561-574-8987 calls 561-255-1568 [T-168, S-1]
[2/21/2009, 5:13:59 pm] 561-574-8987 calls 561-574-5719 [T-168, S-1]
[2/21/2009, 5:18:19 pm] 561-574-8987 calls 561-574-5719 [T-168, S-1]
[2/21/2009, 5:38 pm] 561-574-8987 receive call from 561-255-1568 [T-168, S-1]
[2/21/2009, 5:45 pm] 561-574-8987 calls 561-574-5719 [T-168, S-1]

# Call Activity From 6:54 PM (2/21/2009)



\*Cell site data pertains to target phone # 561-574-8987

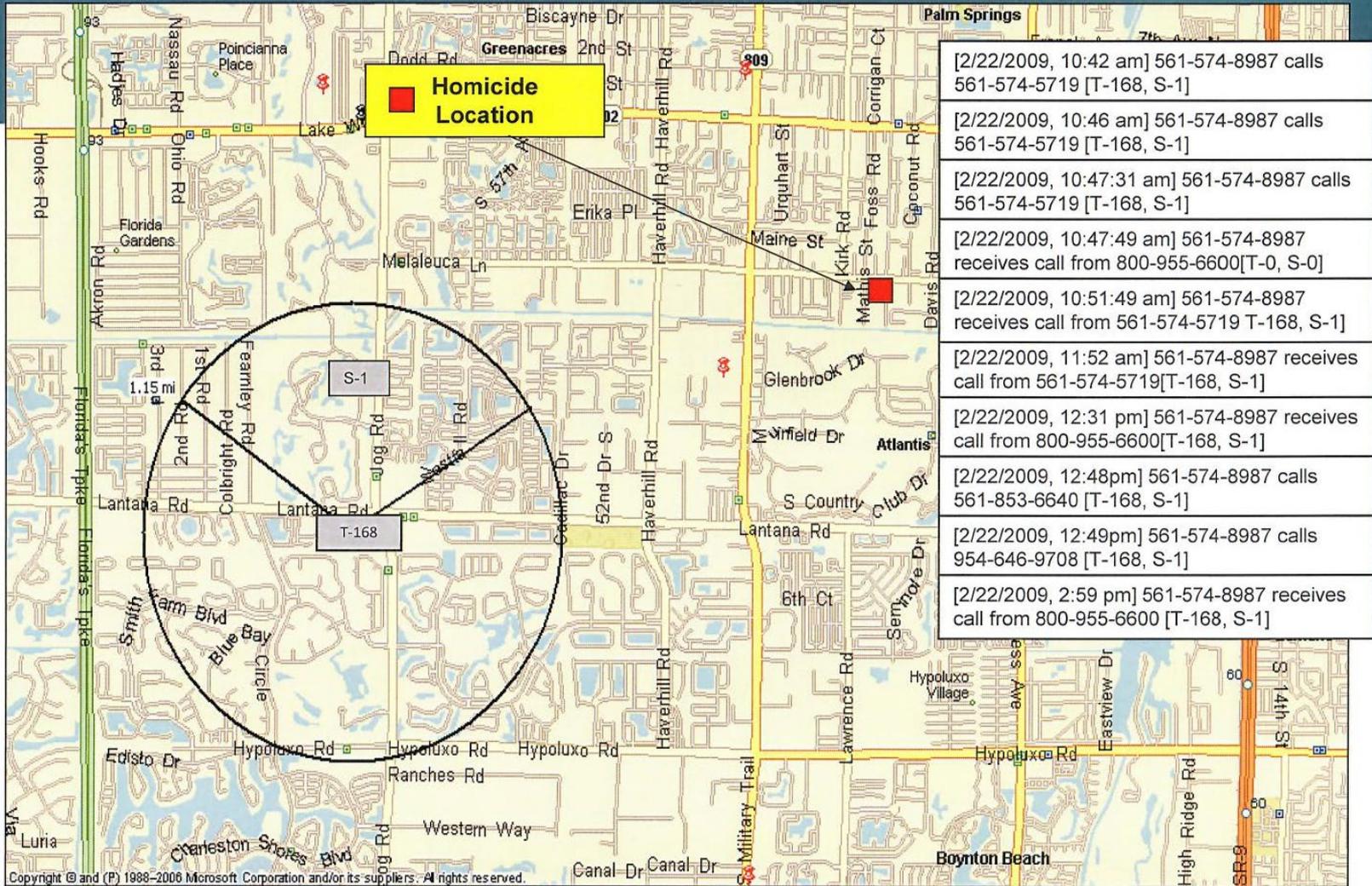
# Call Activity From 10:12 PM to 10:13 PM (2/21/2009)



\*Cell site data pertains to target phone # 561-574-8987

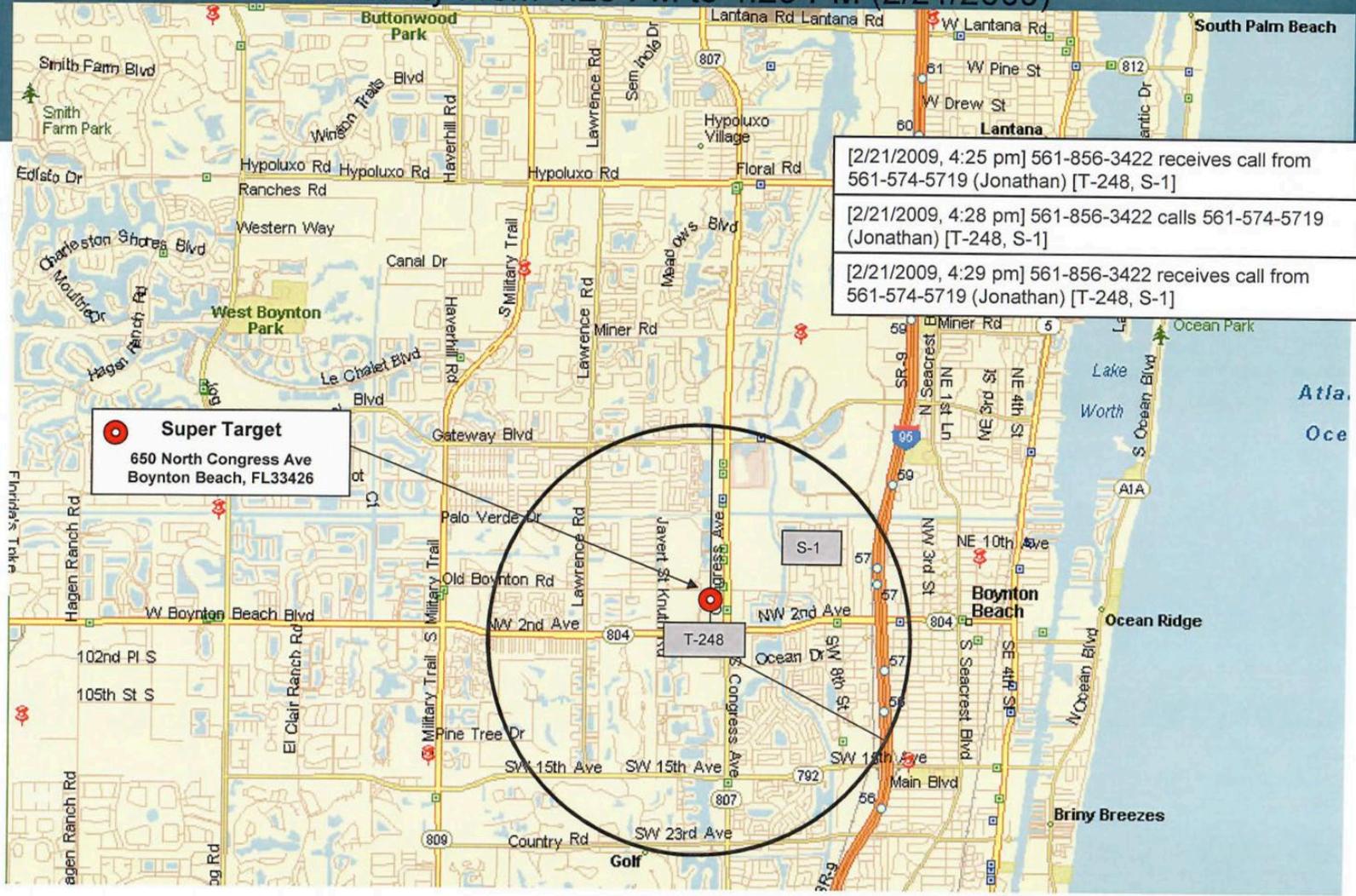


## Call Activity From 10:42 AM to 2:59 PM (2/22/2009)



**\*Cell site data pertains to target phone # 561-574-8987**

## Call Activity From 4:25 PM to 4:29 PM (2/21/2009)



\*Cell site data pertains to target phone # 561-856-3422

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# QUESTIONS?

