

Damaged Technology

HaystackID Demonstrates That Even Data On a Damaged iPhone Can Be Recovered

Destruction of evidence is a common issue that can entangle many defendants and even attorneys. In years past, investigators were unable to recover burnt records and destroyed files. In today's digital landscape, however, that's not always the case. HaystackID has exceptional technical expertise allowing us to often recover data that otherwise would have been lost.

Background: *Individual focus on each unique project.* HaystackID takes on many types of challenges in working with our diverse clients. One such complex project involved an inoperable, severely damaged iPhone that potentially contained critical evidence in a criminal case involving domestic abuse.

HaystackID Responds: *Repairing the phone's hardware.* The forensic team first had to overcome the physical failure of the device. HaystackID's clean room engineer removed the severely corroded printed circuit board (PCB) assembly and ran it through multiple cycles in an ultrasonic cleaner. Next, the PCB was hand cleaned in isopropyl alcohol with an acid brush and swapped into a new iPhone housing.

Solution: *Finding the right software keys to unlock buried information.* Once this software was properly loaded, it was set to acquire a bit-to-bit forensic image of the device's file system. The device's partition was acquired with no errors to Mac disk image format, DMG. The investigator then used [Elcomsoft](#) to get the device keys and keychain data necessary to decrypt the user partition

The device, PCB and new housing were then sent to the HaystackID forensic lab for imaging. The investigator used the Elcomsoft iOS Forensic Toolkit 115 on the latest Mac OSX. After connecting the smartphone to the computer and placing it into device firmware update mode, the investigator was able to load Elcomsoft's RamDisk.

Outcome: *Full decryption achieved.* The user.dmg image was successfully decrypted into another Mac disk image format named user-decrypted.dmg with MD5 hash authentication. HaystackID decided to provide the iPhone image in its native format because [EnCase](#) and [BlackLight](#) by [BlackBag Technologies](#) support iOS file systems, while DMG images are the native format for iOS and Mac investigations.

About HaystackID

HaystackID is a specialized eDiscovery services firm that helps corporations and law firms find, listen, and learn from data when they face complex, data-intensive investigations and litigation. With an earned reputation for mobilizing industry-leading computer forensics, eDiscovery, and attorney document review experts, HaystackID's Forensics First, Early Case Insight, and ReviewRight services accelerate and deliver quality outcomes at a fair and predictable price.

HaystackID serves more than 500 of the world's leading corporations and law firms from North American and European locations. Our combination of expertise and technical excellence, coupled with a culture of white glove customer service, makes us the alternative legal services provider that is big enough to matter but small enough to care. **Learn more today at [HaystackID.com](#).**