UNITED STATES DISTRICT COURT DISTRICT OF MINNESOTA

SCHWAN'S COMPANY and) Case No. 0:20-cv-2157 (JRT/HB)
SCHWAN'S SHARED SERVICES, LLC,	
)
Plaintiffs,	
V.)
RONGXUAN CAI, and)
CONAGRA BRANDS, INC.,)
)
Defendants.)

DECLARATION OF MARK LANTERMAN

- I, Mark Lanterman, declare as follows:
- 1. My name is Mark Lanterman. I am the Chief Technology Officer of Computer Forensic Services ("CFS") located in Minneapolis, Minnesota. CFS and I have been retained by counsel for Plaintiff to forensically preserve and analyze Defendant Cai's personal electronic devices and external media. I submit this declaration in support of Plaintiffs' Motion to Determine the Sufficiency of Defendant Rongxuan Cai's Answers and Objections to Plaintiffs' Requests for Admission and to Compel Interrogatory Answers and Documents from Defendant Rongxuan Cai.

Qualifications

2. Our firm specializes in the analysis of digital evidence in civil and criminal litigation. I have over 25 years of experience in computer forensics and cybersecurity. Prior to

¹ Exhibit 1 to this Declaration contains my curriculum vitae, including a list of cases in which I have testified in the last four years, as well as a list of articles I have written for a number of publications throughout the past 10 years. CFS is compensated at a rate of \$325 per hour during normal business hours and my time is billed at \$475 per hour. CFS's compensation is not dependent upon the outcome of this case.

joining CFS, I was a sworn investigator for the United States Secret Service Electronic Crimes Task Force and acted as its senior computer forensic analyst.

- 3. I am certified by the United States Department of Homeland Security as a "Seized Computer Evidence Recovery Specialist," as well as certified in computer forensics by the National White-Collar Crime Center. Both federal and state court judges have appointed me as a neutral computer forensic analyst or special master.
- 4. I graduated from Upsala College in New Jersey with both a Bachelor of Science and a Master's degree in computer science. I completed my post graduate work in cyber security at Harvard University.
- 5. I am currently adjunct faculty of computer science for the University of Minnesota Technological Leadership Institute's Master of Science and Security Technologies program (MSST). I am also faculty at Hamline University and a professor of cybersecurity at the University of St. Thomas School of Law. I am also faculty for the National Judicial College in Reno, Nevada and the Federal Judicial Center in Washington, D.C.
- 6. I have previously provided training or delivered keynote addresses for the United States Supreme Court; the Eleventh Circuit Federal Judicial Conference; the Eighth Circuit Federal Judicial Conference; the Southern District of Georgia; the Western District of Tennessee; and several state judicial conferences. I delivered the keynote address at the Chief Justices' Conference in Newport, Rhode Island and at Georgetown Law School's advanced e-discovery conference.
- 7. I was appointed by the Minnesota Supreme Court to serve as a member of Minnesota's Lawyers Professional Responsibility Board ("LPRB"). I currently serve as chairman of the LPRB's Opinion Committee.

- 8. I am a co-author of the Minnesota State Bar's e-Discovery Deskbook, and I also write monthly articles for *Minnesota Bench & Bar* magazine.
- 9. CFS is the exclusive, contracted computer forensic service provider for the Hennepin County Sheriff's Office; the Ramsey County Attorney's Office; the Washington County Attorney's Office; as well as the Metropolitan Airports Commission, also known as the Minneapolis/Saint Paul International Airport. CFS is also partnered with the U.S. Secret Service to assist with its electronic investigations.

Analysis of Mr. Cai's Personal Electronic Devices

- 10. CFS was retained by counsel for Plaintiffs to preserve and analyze Mr. Cai's electronic devices in order to determine whether they contain Plaintiff's intellectual property. CFS also assisted with the destruction of identified intellectual property prior to returning the devices to Mr. Cai.
- 11. A summary of the devices provided to CFS by Mr. Cai is listed in Table 1 below:

Device Description	Serial No.	Date Received
		4/29/2021
		4/17/2021
		4/17/2021
		4/17/2021
		4/17/2021
		4/17/2021
		4/17/2021
		4/21/2021

Table 1

12. CFS created forensic images for each of the above-listed devices. Forensic imaging creates a copy of an electronic storage device's data. The resulting copy is known as a "forensic image," and is an accurate representation of a device's data. The process is known as imaging because it is akin to taking a snapshot of the entirety of a device's data, including deleted data.

The imaging process does not alter user data.

I. Identification of Plaintiff's Data

- 13. After preservation, CFS provided detailed listings of the files stored on Mr. Cai's devices to Counsel for Plaintiffs. The file listings included information such as file name, file path (location), timestamps, and a hash value.² These listings did not include any file content (e.g., the body of a Word document). CFS did not provide counsel for Plaintiffs with any documents, files, or content from Mr. Cai's devices.
- 14. From the file listings, counsel for Plaintiffs identified 68,874 files believed to have originated from Schwan's systems. This figure includes multiple instances of the same file (e.g., the same file is on both a thumb drive and a laptop). I deduplicated the 68,874 files, and determined that 39,953 of the files are unique.
- 15. CFS used the 39,953 unique hash values to identify, locate, and subsequently destroy, potential Schwan's intellectual property files across Mr. Cai's devices.

II. "Cloud" data storage repository

- 16. CFS determined that Mr. Cai used Microsoft OneDrive for the storage of some of files identified as originating with Plaintiff. OneDrive is a cloud-based storage solution which enables users to store files and access them from any device connected to the internet.³
- 17. It is possible that copies of the Plaintiff's files may exist on additional systems that Mr. Cai associated with his Microsoft Account.

III. <u>File Deletions</u>

18. It is my understanding that Plaintiffs filed their initial complaint in and around

² A hash value is like a file's fingerprint, and it is unique to the particular file.

³ "Enjoy the freedom to access, edit, and share your files on all your devices, wherever you are." (Available at: https://www.microsoft.com/en-us/microsoft-365/onedrive/online-cloud-storage, last accessed September 9, 2021)

- October 13, 2020. (See, generally, Compl.) During my analysis, I determined that tens of thousands of files had been deleted from Mr. Cai's devices after the complaint was filed.
- 19. Over 13,000 user documents (PDFs, Excel Worksheets, Word Documents, etc.) were deleted from Mr. Cai's Toshiba 500GB External Drive on or after March 17, 2021. About half of the deletions occurred in April 2021. Some of these files appear to represent Schwan's intellectual property, as they make references to "dough", "yeast", "steamed bread", etc.
- 20. Thousands of files were deleted from Mr. Cai's Microsoft Surface after the complaint was filed, and as late as April 2021, shortly before the device was provided to CFS for forensic preservation. The names of several deleted files contain the word "SCHWAN." Additionally, some filenames refer to "Frozen Yeast," "Pepperoni Processing," "Lemon Meringue," among others.
- 21. CFS identified that over 1,000 files were deleted from Mr. Cai's Toshiba 8GB Thumb Drive which occurred after the filing of the initial complaint. The names of some files reference "steamed bread".
- 22. CFS identified the deletion of over 6,000 files from Mr. Cai's SanDisk Cruzer 128GB Thumb Drive after the filing of the initial complaint. The names of some files reference "steamed bread" and "pizza crust", ostensibly representing Schwan's intellectual property.

IV. Identification of Additional External Data Storage Devices

- 23. CFS identified twelve (12) additional external data storage devices (thumb drives, hard drives, etc.) from Mr. Cai's Microsoft Surface which were not produced for forensic preservation and analysis
- 24. Table 2 is a true and accurate representation of the twelve devices, which were previously connected to Mr. Cai's Microsoft Surface, but were not provided to CFS by Mr. Cai.

Name	Serial No.	Date/Time (Central)
		04/25/2021 12:22:00 PM
		03/22/2021 04:44:00 PM
		03/22/2021 04:18:00 PM
		03/13/2021 02:57:00 PM
		02/15/2021 11:16:00 AM
		02/15/2021 11:24:00 AM
		04/16/2021 09:41:00 AM
		03/13/2021 01:06:00 PM
		02/14/2021 08:24:00 PM
		02/14/2021 08:44:00 PM
		04/28/2021 11:32:00 AM
		02/13/2021 04:51:00 PM

Table 2

- 25. I note that, according to Table 2 above, a Toshiba external data storage device, bearing the serial number "was plugged into Mr. Cai's Surface the day before it was provided to CFS.
- 26. I respectfully reserve the right to supplement or amend this declaration should additional information be made available to me, or should additional details be requested.

I declare under penalty of perjury under the law of the United States that the foregoing is true and correct.

Executed this 13th day of September, 2021.

Mark Lanterman