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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
OAKLAND DIVISION

IN RE PLAID INC. PRIVACY
LITIGATION

THIS DOCUMENT RELATES TO:
ALL ACTIONS

Master Docket No.: 4:20-cv-03056-DMR

**JOINT STIPULATION AND ORDER
REGARDING THE PRODUCTION OF
ELECTRONICALLY STORED
INFORMATION (“ESI”) AND HARD
COPY DOCUMENTS**

1 **I. PURPOSE**

2 This Stipulation and Order (“Order”) regarding the production of Electronically Stored
3 Information (“ESI”) and Hard Copy Documents (collectively, “Document” or “Documents”) shall
4 govern discovery of Documents in this case as a supplement to the Federal Rules of Civil Procedure,
5 and any other applicable orders and rules. Nothing in this Order is intended to expand or limit the
6 parties’ obligations under the Federal Rules of Civil Procedure. Any disputes arising out of the
7 production of documents subject to this Order shall be resolved according to Federal Rules of Civil
8 Procedure, Local Rule 26, and the Court’s Standing Orders.

9 **II. COOPERATION**

10 The Parties are aware of the importance the Court places on cooperation and commit to
11 cooperate in good faith throughout the matter consistent with this Court’s Guidelines for the
12 Discovery of ESI.

13 **III. PRESERVATION AND IDENTIFICATION OF ESI**

14 The Parties have discussed their preservation obligations and needs and agree that
15 preservation of potentially-relevant ESI will be reasonable and proportionate.

16 1. When a party propounds discovery requests pursuant to Fed. R. Civ. P. 34, the parties agree
17 to phase the production of ESI. Within a reasonable time following receipt of the requesting party’s
18 requests for production of documents, the receiving party shall disclose the names of individuals
19 and/or sources from which the producing party initially plans to collect documents in response to
20 the document requests. The custodians shall be identified by name, title, and job description.
21 Following the initial production, the parties will continue to prioritize the order of subsequent
22 productions as necessary. The Parties shall have a continuing obligation to take reasonable and
23 proportional steps to identify and preserve custodial and non-custodial data sources that may
24 contain information that is relevant and proportional to the needs of the case and to the claims and
25 defenses in this litigation. *See* FRCP 26(b)(1).

26 2. If a producing party is aware of inaccessible data that is likely to contain unique,
27 discoverable ESI that may be relevant to the claims and defenses in this litigation, it will identify
28 the source from which it claims the data is not reasonably accessible to the receiving party.

1 3. Plaid has represented that it maintains dynamic databases which automatically overwrite
2 data that may be relevant and discoverable in this action and that preserving such data in full would
3 impose an undue burden on Plaid. The parties agree to meet and confer and attempt to resolve this
4 issue by June 8, 2021, and, to submit any unresolved dispute to the Court for resolution.

5 a. Examples of data the Parties agree not to preserve include but are not
6 necessarily limited to:

- 7 i. ESI created or received before 1/1/2012 or after final judgment in
8 this action;
9 ii. Deleted, “slack,” fragmented, or unallocated data only accessible by
10 forensics;
11 iii. Random Access Memory (RAM), online access data such as
12 temporary internet files, history, cache, and cookies;
13 iv. Structural files not material to individual file contents (e.g. .CSS,
14 .XSL, .XML, .DTD, etc.).

15 4. The Parties agree to timely meet and confer as needed to resolve any disagreements
16 regarding whether preservation of data from particular sources, in whole or in part, is reasonable
17 and proportional to the needs of this case and to submit any unresolved disputes to the Court for
18 resolution.

19 **IV. SEARCH & REVIEW**

20 1. The parties agree that in responding to an initial Fed. R. Civ. P. 34 request, or earlier if
21 appropriate, they will meet and confer about methods to search ESI in order to identify ESI that is
22 potentially relevant and thus subject to production in discovery and filter out ESI that is not subject
23 to discovery. The Parties will meet and confer to discuss the use of search terms, filters, and date
24 ranges for the purposes of production, and if possible to come to agreed-upon custodians and search
25 terms, though productions of responsive, non-privileged documents may begin before an
26 agreement, if one is possible, has been reached on these items.

27 2. No party will use advanced culling techniques or technology assisted review processes to
28 exclude documents from manual review or production without first conferring with the opposing

1 party. The Parties agree to timely meet and confer as needed to resolve any disagreements
2 regarding whether collection from particular sources is reasonable and proportional to the needs of
3 this case and/or specific discovery requests and to submit any unresolved disputes to the Court for
4 resolution.

5 **V. PRODUCTION FORMATS**

6 The Parties agree to produce documents in the formats set forth in Appendices 1 and 2 to
7 this Order. If particular documents warrant a different format, the parties will cooperate to arrange
8 for the mutually acceptable production of such documents. The parties agree not to degrade the
9 searchability of documents as part of the document production process.

10 **VI. DOCUMENTS PROTECTED FROM DISCOVERY**

11 1. Pursuant to Fed. R. Evid. 502(d), the production of a privileged or work-product-protected
12 document (including both paper documents and electronically stored information), whether
13 inadvertent or otherwise, shall be governed by the protective order entered into in this case.

14 2. If the producing party redacts information from a page, the producing party shall “burn” a
15 white box with visible text indicating that the document was redacted onto the document image
16 over the information it intends to redact. If the producing party redacts a document, the metadata
17 fields must nonetheless be produced to the extent the fields are already populated in the ordinary
18 course, with the exception of email subject, which may be withheld from emails redacted on the
19 basis that the email contains privileged or work-product materials where the email subject itself
20 constitutes privileged or work-product material. Additional metadata fields deemed privileged may
21 be redacted only to the extent necessary to protect the privilege.

22 3. The parties agree to comply with this Court’s standing order for the appropriate scope and
23 terms for privilege logs. Communications may be identified on a privilege log by category, rather
24 than individually, if the parties agree that such communications are logged in sufficient detail for
25 the opposing party to assess whether the assertion of privilege is justified.

26 4. Communications between a party and its counsel in this litigation that post-date the filing
27 of the complaint need not be placed on a privilege log.

28 5. This stipulated agreement set forth in this section does not constitute a concession by any

1 party that any documents are subject to protection by the attorney-client privilege, the work product
2 doctrine or any other potentially applicable privilege or doctrine. This agreement also is not
3 intended to waive or limit in any way either party's right to contest any privilege claims that may
4 be asserted with respect to any of the documents produced except to the extent stated in the
5 agreement.

6 **VII. MODIFICATION**

7 This Order may be modified by a stipulation of the Parties or by the Court for good cause
8 shown.

9 **VIII. MISCELLANEOUS PROVISIONS**

10 **A. Objections Preserved.**

11 Nothing in this Order shall be interpreted to require disclosure of either irrelevant
12 information or relevant information protected by the attorney-client privilege, attorney work-
13 product doctrine, or any other applicable privilege or immunity. Except as provided expressly
14 herein, the parties do not waive any objections as to the production, discoverability, authenticity,
15 admissibility, or confidentiality of Documents and ESI.

16 **B. Technical Variances.**

17 Recognizing that each producing party may experience production issues due to data
18 systems or files that may not be fully compatible with the technical specifications set forth herein,
19 any practice or procedure set forth herein may be varied by agreement of the parties, confirmed in
20 writing, to accommodate such issues and/or where such variance is deemed appropriate to facilitate
21 the timely and economical production of Documents or ESI. No party shall unreasonably object to
22 any such variance.

23 **C. Reproduction as Natives.**

24 The parties agree that to the extent any party seeks production in native format of
25 specifically identified ESI produced originally in TIFF form, the producing party shall respond
26 reasonably and in good faith to any such request.

1 **IT IS SO STIPULATED**, through Counsel of Record.

2
3 Dated: May 14, 2021

/s/ Melissa Gardner

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Counsel for Defendant Plaid Inc.

IT IS ORDERED that the foregoing Agreement is approved.

Dated: May 19, 2021



Honorable Donna M. Ryu

APPENDIX 1
PRODUCTION DELIVERY REQUIREMENTS

I. GENERAL PRODUCTION PROVISIONS

The parties agree that ESI should be produced as TIFF images and in Native format where applicable with accompanying data and image load files. If particular documents warrant a different format, the parties will cooperate to arrange for the mutually acceptable production of such documents.

A. TIFF Image Files.

The parties agree that all other Documents, with the exception of Documents produced in Native Format, will be produced as single-page black and white Group IV TIFF image files of at least 300 dpi resolution with 1 bit depth. Page size shall be 8.5 x 11 inches, unless in the reasonable judgment of the producing party, a particular item requires a different page size. Each image file will use the Bates number of the page as its unique file name. Original document orientation as displayed in the native file should be maintained in the TIFF image (i.e., portrait to portrait and landscape to landscape).

B. Text Files.

Each Document produced under this Order shall be accompanied by a document level text file containing all of the text for that document, not one text file per page. Each text file shall be named to use the Bates number of the first page of the corresponding document. The text files shall be generated by extracted text from native files and OCR text files from hard copy scanned documents as applicable. The .DAT load file shall include a link to the corresponding text file.

C. OCR Text File.

The parties will provide searchable OCR text of any paper or imaged Documents, unless doing so would be impracticable. In the case of impracticability, the producing party will produce the documents as they are kept in the ordinary course of business.

D. Extracted Text Files from ESI.

The parties shall extract the text of each ESI item directly from the ESI native file, where extracted text is reasonably available. For any calendar entries collected and/or processed after the

1 execution date of this Order, fields should be extracted and produced as text.

2 **E. OCR Text for Redacted Documents.**

3 The parties will provide searchable OCR text for any redacted files.

4 **F. Bates Numbering.**

5 1. Each TIFF image produced under this Order should be assigned a Bates
6 number that must: (1) be unique across the entire document production; (2) maintain a constant
7 length of nine numeric digits (including 0-padding) across the entire production; (3) contain only
8 alphanumeric characters, no special characters or embedded spaces; and (4) be sequential within a
9 given Document. The producing party will identify the Bates number range of each production in
10 a cover letter or production log accompanying the production. If a producing party skips a Bates
11 number or set of Bates numbers in a production, the producing party will identify and note the gap
12 in the cover letter or production log accompanying the production.

13 2. The producing party will brand all TIFF images in the lower right-hand
14 corner with its corresponding Bates number, using a consistent font type and size. If the receiving
15 party believes that a Bates number obscures the content of a Document, then the receiving party
16 may request that the Document be produced with the Bates number in a different position.

17 **G. Re-Production of Prior or Other Litigation Documents.**

18 If re-production is required for a set of documents produced in a prior litigation or any other
19 proceeding, or where a prior production of documents or ESI by a party in a prior litigation or any
20 other proceeding is the only reasonably accessible source of those documents or ESI to be produced
21 by a party in this litigation, the producing party may re-produce such documents in the manner in
22 which they were produced in the prior case, including all objective coding or metadata fields
23 required by this protocol to the extent reasonably available to the producing party as part of the
24 productions set. For any such re-production in accordance with this Paragraph, the producing party
25 is not obligated to re-format the prior production in accordance with the production specifications
26 in ESI stipulation, but must provide Bates numbering and confidentiality designations specific to
27 this litigation.

28 **H. Parent-Child Relationships.**

1 Parent-child relationships for all embedded ESI documents (e.g., the association between
2 an attachment and its parent email, or a spreadsheet embedded within a word processing document),
3 must be preserved by assigning sequential Bates numbers to all items within the parent-child group,
4 and identifying those Bates numbers in the relevant ESI metadata and coding fields specified in
5 Appendix 2. For example, if a party is producing an email with embedded attachments, the
6 attachments must be processed and assigned Bates numbers in sequential order, following
7 consecutively behind the parent email. Not all attachments may be produced – for example,
8 privileged or nonresponsive attachments may be removed, but all documents within responsive
9 families will be Bates numbered prior to production.

10 **I. Color Documents.**

11 If an original ESI Document contains color text, markings or graphics, and the receiving
12 party believes it is necessary to view such Document in its original color to understand its full
13 meaning or content, then the receiving party may request that the ESI Document be produced in
14 color format. The producing party shall then reproduce such Document(s) and/or ESI in color JPEG
15 format, or in native format. This section also applies to documents that are produced as TIFF
16 images.

17 **J. Confidentiality Designations.**

18 If a particular Document has a confidentiality designation, the designation shall be stamped
19 on the face of all TIFF images pertaining to such Document, in the lower left-hand corner of the
20 Document, or as close thereto as possible while preserving the underlying image. If the receiving
21 party believes that a confidentiality designation obscures the content of a Document, then the
22 receiving party may request that the Document be produced with the confidentiality designation in
23 a different position. No party may attach to any filing or any correspondence addressed to the Court
24 (including any Magistrate Judge), or any adverse or third party, or submit as an exhibit at a
25 deposition or any other judicial proceeding, a copy (whether electronic or otherwise) of any native
26 format Document produced by any party without ensuring that the corresponding Bates number
27 and confidentiality legend appear in the file name of the document. For each document that is
28 marked confidential, a Confidentiality field will be populated with the word “Confidential” in the

1 .dat file. In the event that the metadata confidentiality designation and the image designation do
2 not match, the parties will assume the highest level of protection exists for the document and agree
3 to notify the producing party of the issue promptly upon becoming aware of it. Also, any documents
4 marked Confidential must be handled in accordance with the Protective Order entered in this case.

5 **II. PRODUCTION OF HARD COPY DOCUMENTS**

6 All hard copy Documents that are scanned will be produced in electronic form. Where
7 necessary and practicable, hard copy Documents in color will be scanned in color to ensure full
8 information is communicated in the scanned copy. Scanned color documents will be provided in
9 JPG file format.

10 **A. Unitization of Paper Document.**

11 To the extent practicable, hard copy Documents shall be unitized using logical document
12 determinations or “LDD.”

13 **B. Identification.**

14 Where a Document or group of Documents has an identification spine, “post-it note,” or
15 any other label, the information on the label shall be scanned and produced to the extent practicable.

16 **C. Custodian Identification.**

17 The parties will utilize reasonable best efforts to ensure that paper records for a particular
18 custodian or department level custodian, which are included in a single production, are produced
19 in consecutive Bates stamp order.

20 **D. Metadata.**

21 The metadata associated with each hard copy Document need only identify the Bates
22 number, the custodian associated with that hard copy Document, and any Confidential Designation
23 or Redaction applied to that Document.

24 **III. PRODUCTION OF “ESI”**

25 **A.** De-NISTING and System Files: ESI productions shall be de-NISTed using the
26 industry standard list of such files maintained in the National Software Reference Library by the
27 National Institute of Standards & Technology. De-NISTED files need not be produced. The parties
28 may additionally exclude from review and production common system files and application

executable files. Additional culling of system file types based on file extension may include, but are not limited to: WINNT, LOGS, DRVS, C++ Program File (c) , C++ Builder 6 (cpp), Channel Definition Format (cdf), Creatures Object Sources (cos), Dictionary file (dic), Executable (exe), Hypertext Cascading Style Sheet (css), JavaScript Source Code (js), Label Pro Data File (IPD), Office Data File (NICK), Office Profile Settings (ops), Outlook Rules Wizard File (rwz), Scrap Object, System File (dll), Temporary File (tmp), Windows Error Dump (dmp), Windows Media Player Skin Package (wmz), Windows NT/2000 Event View Log file (evt), Python Script files (.py, .pyc, .pud, .pyw), Program Installers and the additional file extensions in Appendix 3 that are non-standard, non-readable or non-reviewable file types.

If a party excludes from review a standard, readable, and reviewable file type that is not listed above or in Appendix 3, that party must disclose such exclusion to the other parties. The parties further agree that, notwithstanding the file types listed above and in Appendix 3, no party shall exclude from review or withhold file types that are required to review responsive, non-privileged substantive discovery.

B. Native Files: Certain files types, such as presentation-application files (e.g., MS PowerPoint), spreadsheet-application files (e.g., MS Excel, .csv), and multimedia audio/visual files such as voice and video recordings (e.g., .wav, .mpeg, and .avi), shall be produced in native format. For files produced in native format, the producing party shall provide a single-page TIFF slip-sheet with the applicable Bates stamp indicating that a native item was produced. The corresponding load (.DAT) file shall include a NativeFileLink which provides the relative path linking information for each native file that is produced. In addition, the confidentiality designation will be indicated in the name of the native file where reasonably feasible.

C. Metadata Fields and Processing.

1. ESI shall be processed in a manner that preserves the source native file and relevant metadata without modification, including their existing time, date, and time-zone metadata consistent with the requirements provided in this Order. The parties agree to process all data in Pacific Standard time.

2. **Hidden text.** ESI shall be processed, to the extent practicable, in a manner

1 that preserves hidden columns or rows, hidden text, notes, or worksheets, speaker notes, tracked
 2 changes, redlines and comments. Upon request, a producing party will produce files with any such
 3 information in native format.

4 3. **Compressed Files and Encrypted Files.** Compressed file types (i.e., .CAB,
 5 .GZ, .TAR.Z, .ZIP) shall be decompressed in a reiterative manner to ensure that a zip within a zip
 6 is decompressed into the lowest possible compression resulting in individual files. The producing
 7 party will take reasonable steps, prior to production, to unencrypt any discoverable electronically
 8 stored information that exists in encrypted format (e.g., because password-protected) and that can
 9 be reasonably unencrypted.

10 4. **Microsoft “Auto” Feature and Macros.** For Microsoft Excel (.xls/.xlsx),
 11 Microsoft Word (.doc), and Microsoft PowerPoint (.ppt) documents that contain “auto” features,
 12 (e.g., where documents have an automatically updated date and time in the document), the metadata
 13 associated with such files shall accurately reflect the automatically populated fields (i.e., the
 14 metadata date or other automatically populated field will reflect the date and/or entry for how the
 15 document was used or held in the ordinary course of business).

16 5. **Metadata and Coded Fields.** ESI items shall be produced with all of the
 17 metadata and coding fields set forth in Appendix 2.

18 This Order does not create any obligation to create or manually code fields that are not
 19 automatically generated by the processing of the ESI, or that do not exist as part of the original
 20 metadata of the Document; provided, however, that the producing party must populate, where
 21 possible, the (a) BegBates, (b) EndBates, (c) BegAttach, (d) EndAttach, (e) Custodian,
 22 (f) NativeFileLink fields, if applicable, (g) TextPath, (h) Redaction status, and (i) Confidentiality
 23 designation. These fields should be populated for all produced ESI, as well as paper Documents
 24 converted to electronic form, regardless of whether the fields can be populated pursuant to an
 25 automated process.

26 **IV. DATABASES, STRUCTURED, AGGREGATED OR APPLICATION DATA**

27 1. The Parties will produce documents collected from databases or other structured
 28 databases in a reasonably useable format. If the data cannot be produced in a reasonably useable

format, the parties will meet and confer to address the production format. Prior to or during any such meet and confer, the producing party will provide sufficient information to enable the receiving party to evaluate the best method and format of production. If the parties cannot reach agreement, the matter will be decided by the Court or its designee.

V. REDACTIONS.

A. Redactions:

The parties agree that where ESI items need to be redacted, they shall be produced in TIFF format with each redaction clearly indicated or where TIFF format is not practicable, in redacted native format, as noted below. Any unaffected data fields shall be provided. The redaction of any material for privilege or other reason shall be governed by the applicable rules and case law regarding privilege and the provisions contained in the Protective Order entered in this action. Spreadsheets that are to be produced in native format may be produced with redaction applied directly to the native file itself. If modification of a native file is required for redaction purposes, metadata information associated with that file should remain unchanged, unless it also requires redaction. For each document that is redacted, a Redaction field will be populated with the word "REDACTED" in the .DAT file. Also, the producing party will keep a pristine original copy of the native document.

B. Printing Specifications for Excel and PowerPoint files:

In the event that a party produces Excel and PowerPoint type files in printed TIFF format for redaction and redacted, the following printing options shall be enabled:

Excel Print to TIFF Options

- Unhide columns and rows
- Unhide worksheets
- Autofit columns and rows, settings to be over by columns first and, then down by rows
- Wrap text
- Print gridlines
- Do not apply Autofilter
- Display headings
- Display comments
- Header and Footer filename field handling: Show field code

PowerPoint Print to TIFF Options

- Print notes pages

- Print hidden slides
- Print comments

1. The producing party shall also make reasonable efforts to ensure that any spreadsheets produced only as TIFF images because of redactions are formatted so as to be legible. For redacted items which were originally ESI, all metadata fields noted in this protocol that do not contain privileged or protected information will be provided and will include all non-redacted data. A document's status as redacted does not relieve the producing party from providing all of the metadata required herein.

C. De-duplication and Document Families:

1. ESI shall be de-duplicated globally at the parent level using MD5 hash or SHA-1 hash. For emails, de-duplication may be performed using a hash calculated using combination of metadata fields. Such hash shall, at a minimum, account for all sender and recipient metadata including BCC recipients, the email subject, date sent, and attachment names.

The parties are permitted to produce the longest unique email chain and do not need to separately produce the lesser-included emails unless those lesser-included emails have bcc recipients or unique attachments not included in the longest chain. If a lesser-included email has a bcc recipient or unique attachment, then the lesser-included email must be separately produced with the attachments

If a party produces only inclusive email, the parties agree to redact any privileged content or message component and produce in full the rest of the conversation in the inclusives.

"Near duplicate" documents shall be produced rather than removed. The producing party need only produce a single copy of a particular ESI.

The hash value for each item shall be reflected in the .DAT load file in the HashValue field specified in Appendix 2. In de-duplicating globally, the producing party shall identify custodians who were in possession of a de-duplicated Document in the AllCustodian metadata field specified in Appendix 2. This means that the field "AllCustodian" will be populated showing all custodians who had a copy of the same document which is not being produced because of de-duplication.

2. De-duplication shall not break apart families and shall be performed at a

family level. A document and all other documents in its attachment range, emails with attachments and files with extracted embedded OLE documents all constitute family groups. The producing party agrees that the presence of a custodian's name contained in the "AllCustodian" field in the metadata for a particular document is evidence that the custodian possessed that document in his/her custodial file.

D. Load Files:

The data load file should be in standard Concordance format (.DAT). The .DAT file shall contain a relative path to the corresponding Native file.

Concordance Data Load Files:

The data load file should use standard Concordance delimiters:

- Column - ¶ (ASCII 20);
- Quote - ¢ (ASCII 254);
- Newline - ® (ASCII 174).
- The first line of the .DAT file should contain the field names arranged in the same order as the data is arranged in subsequent lines.
- All date fields should be produced in mm/dd/yyyy format, if possible.
Date fields may be combined date/time fields
- All produced attachments should sequentially follow the parent Document/email.

Sample Concordance .DAT Load File:

```
¢BegBates¢¢¢Begattach¢¢¢Custodian¢¢¢Native Path¢¢¢Extracted Text¢
¢ABC000001¢¢¢ABC000001¢¢¢Sample¢¢¢\VOL001\NATIVES\001\ABC000001.xls¢¢¢TEXT\
001\ABC000001.t
¢¢¢ABC000002¢¢¢ABC000001¢¢¢Sample¢¢¢NATIVES\001\ABC000002.gif¢¢¢TEXT\001\AB
C000002.txt¢
```

The image load file must be in standard Option (.OPT) format and must reference each TIFF file in the corresponding production, and the total number of TIFF files referenced in the load file must match the total number of image files in the production. The total number of Documents

referenced in a production's data load file should match the total number of designated Document breaks in the corresponding image load file for that production. In any deliverable volume, documents should be organized in such a way that each folder in the volume contains 1000 files (each TIFF page or native file is a single file) as one file per folder.

- Every image in the delivery volume should be cross-referenced in the image load file.
- The imageID key should be named the same as the Bates number of the page.
- Load files should not span across media (e.g., CDs, DVDs, hard drives, etc.), i.e., a separate volume should be created for each piece of media delivered.

Sample Concordance/Opticon Image (.OPT) Load File:

MSC000001, MSC001, \VOL001\IMAGES\001\MSC000001.TIF, Y,,, 2

MSC000002, MSC001, \VOL001\IMAGES\001\MSC000002.TIF, ,,,,

MSC000004, MSC001, \VOL001\IMAGES\001\MSC000004.TIF, Y,,, 2

MSC000005, MSC001, \VOL001\IMAGES\001\MSC000005.TIF, ,,,,

OCR/Extracted Text Files:

- OCR or Extracted Text files shall be provided in a separate directory containing Document level text files. The .DAT file shall contain a relative path to the corresponding text file. OCR or Extracted text itself should not be included in the .DAT file:

PROD001\TEXT\001\ABC00015.txt

APPENDIX 2: ESI METADATA AND CODING FIELDS

The chart below describes the metadata fields to be produced, where reasonably available, in generic, commonly used terms which the producing party is to adapt to the specific types of ESI it is producing, to the extent such metadata fields exist associated with the original electronic Documents and are automatically generated as part of the electronic data discovery process. Ambiguities about a metadata field should be discussed with the receiving party prior to processing the subject ESI for production.

Field Name	Field Description
BegBates	First Bates number (production number) of an item
EndBates	Last Bates number (production number) of an item **The EndBates field should be populated for single-page items.
AttachName	File name of the attachment, with any attachments separated by semi-colon.
BegAttach/Group ID	First Bates number of family group.
EndAttach	Last Bates number of attachment range (<i>i.e.</i> , Bates number of the last page of the last attachment)
PgCount	Number of pages in the item
Custodian	Name of person or source from whose/which files the item is produced
AllCustodian	Name of the person(s), in addition to the Custodian, from whose files the item would have been produced if it had not been de- duplicated
FileSize	Size (in kilobytes) of the source native file
SourceFilePath ¹	The directory structure or path where the original file was stored on the party's source computer system, ending in the filename. Any container name (such as ZIP or PST containers) is included in the path. ²

¹ This field may be excluded if the producing party determines it includes information protected by any applicable privilege or immunity.

² This field may be excluded when producing documents from Google Vault, as this field is not supported.

Field Name	Field Description
HashValue	The MD5 or SHA-1 hash value of the item
NativeFileLink	Relative path for documents provided in native format only **The linked file must be named per the BegBates value
SourceParty	Name of entity or party producing the item
RecordType	Indicates item type (e.g., email, edoc, attachment)
FileType	(e.g., Outlook, Adobe Acrobat, MS Word, etc.)
FileExtension	Indicates file extension of the file e.g., .docx, .pptx
DateSent (mm/dd/yyyy)	Date email or calendar item was sent
TimeSent (hh:mmAM/PM)	Time email or calendar item was sent (Date and time fields may be combined)
DateReceived	Date email or calendar item was received
TimeReceived	Time email or calendar item was received (Date and time fields may be combined)
To	The names and/or SMTP email addresses of all recipients that were included on the "To" line of the email or calendar item
From	The name and/or SMTP email address of the sender of the email or calendar item
CC	The names and/or SMTP email addresses of all recipients that were included on the "CC" line of the email or calendar item
BCC	The names and/or SMTP email addresses of all recipients that were included on the "BCC" line of the email or calendar item
Number of Attachments	Number of attached, embedded or grouped items
DateCreated (mm/dd/yyyy)	Date the item was created
TimeCreated (hh:mm AM/PM)	Time the item was created (Date and time fields may be combined)
ModifiedBy	Person who last modified or saved the item, as populated in the metadata or document properties of the native file
LastModDate	Date the item was last modified

Field Name	Field Description
(mm/dd/yyyy)	
LastModTime (hh:mm AM/PM)	Time the item was last modified
Date Last Printed	Date the document was last printed
FileName	The filename of the source native file for an ESI item
Title	Any value populated in the Title field of the source file metadata or item properties
Subject/E-Mail Subject	Any value populated in the Subject field of the source file metadata or document properties (e.g., subject line of email or calendar item)
Author	Creator of the document; any value populated in the Author field of the source file metadata or document properties
TextPath	Full relative path to the location of the document-level text file
Redacted	User-generated field that will indicate redactions. With the word "REDACTED". Otherwise, blank.
Confidentiality	User-generated field that will indicate confidentiality. With the word "CONFIDENTIAL" or "HIGHLY CONFIDENTIAL" or "ATTORNEYS EYES ONLY" applicable; Otherwise, blank
X-RSMF-BeginDate ³	The begin date of the string of messages
X-RSMF-EndDate	The end date of the string of messages
X-RSMF-EventCount	The number of individual messages in a string

³ X-RSMF fields shall be produced only if, and to the extent that, documents are produced in Relativity Short Message Format.

APPENDIX 3: NON-STANDARD OR NON-REVIEWABLE FILE TYPES

The following file types are considered non-standard, non-readable, or non-reviewable file types that may be excluded without further disclosure:

\$P\$; 3DMAP; 3M; ; A; ACCDB; ACL; ACRODATA; AD; AIFC; ANT; AODL; APB; ARD; ARF; ARSC; AS; ASE; AUTOMATICDESTINA; BAK; BCK; BIG; BIN; BINARZZZ; BLA; BLF; BLOG; BRO; C2; CAD; CATDRAWING; CATPART; CATPRODUCT; CC2; CDB; CDF-MS; CDG; CDM; CDR; CDX; CEL; CFS; CGM; CHK; CHM; CLASS; COM; CONTROL-7; CPIO; CPT; CRL; CSB; CSG; CSH; CSS; CST; CSX; CTB; CUSTOZZZ; CWD; DB6EC15298050000; DBF; DBT; DCM; DCT; DEFAULTS-7; DEL; DEX; DGM; DIB; DIR; DLL; DLL\$EA; DMP; DNG; DOWN ZZZ; DRM; DS_STORE; DYLIB; EDB; EL6; EMF; ENC; ENCR; EOT; EPT; ETL; EXE; FDT; FDX; FEED-MS; FEEDSDB-MS; FEV; FIL; FILE; File Extension; FIXML; FLA; FRQ; FSB; FSD; FSF; FT; GERMAN; GLA; GLZA; GR2; GRD; HASH; HCOM; HDR; HDS; HEU; HIR; HIV; HPGL; HTRI; HVS; HXD; HXH; HXW; I01; ICM; ICNS; ID; IDX; IGPI; IGR; IGS; ILL; INDD; INDEX; INFO; INIT; INSTALLED; IPT; ISU; ITDB; ITHMB; ITL; IWA; IXV; JCP; JFM; JNILIB; JOBOPTIONS; JS; JTX; KEY; KEYSTORE; LACCD; LAY; LCK; LDB; LIC; LINUX; LNK; LOCALZZZ; LRU; M3D; M3G; MAP; MCX-7; MDB; META; MKV; MMD-7; MOBI; MODEL; MOM; MOV\$ZZZ; MSI; MSO; MST; NIB; NOP; NRM; NWD; NYC; O; OAB; OBJ; OCX; ODL; ODLGZ; ODLSENT; ODTTF; OGG; OLD; OLE; OMO; ONE; ONECACHE; ONETOC2; OPERATIONS-7; OTC; OTF; OUT; P12; P7S; PAK; PB; PCB; PCK; PCM; PDB; PIC; PICKLE; PKGDAT; PKGX; PLIST; PLT001; PMA; POL; PREVIOUS; PRI; PRO; PRP; PRX; PSB; PTM; PVDB; PVF; PVR; PXM; PYC; PYO; PYRO; QXP; R1297; RBT; RDB; REGTRZZZ; REP; RES; RESOURCES; RLE; RNG; RPMSG; RSC; RVM; SAV; SBI; SCR; SDA; SDC; SDD; SDF; SDG; SDV; SDW; SER; SESSION; SHOCKED; SHS; SINF; SLDASM; SLDPRT; SMF; SNTD; SO; SQLITE; SQLITE3; SQLITZZZ; SQM; SRS; STAT; STH; STL; STORAGE; STORE; STP; STRINGS; SUPP; SVG; SWP; SWZ; SXC; SXI; T80; TAX; TBACCT; TBL; TBRES; TDE; TERATERM; THM; THMX; TMP; TRUSTSTORE; TTC; TTF; UMD; UP_META; USAGE; VBE; VMAS; VOL; VPOL; VPOL_ZZZ; VSDX; VUE; VVS; WBT; WEBARCHIVE; WEBLOC; WEBP; WID; WOFF; XTERM-R6; XTERM-XFREE86; 0; ACP; APW; ASC; DBM; HMX; HYPER; KOA; P7M; PPROF; Q; RPM; SIG; SWO; TEXTCZZZ; TXZ; XPL; XZ; 0 - IZZZ; 00000ZZZ; 0-022ZZZ; ADAT; AMR; ARJ; ARLOLOGX; ASWCS; AWB; BACKUP; BLEND; BZ; CACHE; CAP; CER; CERT; CFE; CONFIG; CRDOWZZZ; CTRL; DAC; DB4; DCA; DEB; DER; DICT; DSK; DSX; DUMP; DVI; DXF; ECONFIG; EMC; ENCRYPT; EPS; EX; FBCINDEX; FBCSEZZZ; FMT; FNM; FRX; FTS; GEMSPEC; GID; GLB; GMO; GPG; GZIP; HB; HLP; HTI; IPK; ISO; JASPER; JIO; JKS; KDB; KERN; KEYTAB; KS; LIB; LINKED; LZ4; M; MMPZ; NODE; NPS; ORC; PARQUET; PARTIAL; PCAP; PCAPNG; PDML; PFL; PGP; PIE; PKG; PKL; PKR; PL; PNM; POD; PP; PS; PWD; PY; QXD; RAM; RDATA; REDO; RENAMED; ROM; RPMNEW; SCC; SCSSC; SH; SI; SOLV; SOLVX; STATE; SVM; SWN; SXW; TABLES; TDB; TFEVENTS; TIM; TIP; TORRENT; TRUSTZZZ; TS; TXO; UN~; VCE; VDX; VERSION; WOFF2; WORKSZZZ; XCF; XPT; XZAA; XZAH; Z02; Z06; ZST

Filer's Attestation

Pursuant to Civil Local Rule 5-1(i)(3), I attest that concurrence in the filing of this document has been obtained from each of the other signatories.

Dated: May 14, 2021

/s/ Melissa Gardner

Melissa Gardner

LIEFF CABRASER HEIMANN & BERNSTEIN, LLP