

# Filed ESI Protocols

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UNITED STATES DISTRICT COURT  
MIDDLE DISTRICT OF FLORIDA  
ORLANDO DIVISION

L-3 COMMUNICATIONS CORPORATION, )  
doing business as L-3 LINKABIT, )

Plaintiff, )

vs. )

Case No.: 6:13-cv-1481-Orl-36TBS

SPARTON CORPORATION and )  
SPARTON ELECTRONICS FLORIDA, INC., )

Defendants. )

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**ELECTRONIC DISCOVERY PROTOCOL AND  
OTHER DISCOVERY AGREEMENTS AND ORDER**

L-3 Communications Corporation, doing business as L-3 Linkabit, and Sparton Corporation and Sparton Electronics Florida, Inc., desire to establish a protocol for electronic discovery and certain aspects of discovery generally in the above-captioned Litigation.

Therefore, in consideration of their mutual promises, the parties agree as follows:

1. **Scope of Search:** The parties have served document requests in the Litigation, and those document requests served to date are attached hereto as Exhibits 1 (Plaintiff) and 2 (Defendants). Unless otherwise stated in response to a specific document request, the parties have agreed that the obligations to respond to the document requests shall be satisfied by conducting the electronic searches for specified terms ("Electronic Document Search") and by conducting searches of categories of the parties' respective repositories of hard copy documents. For each term that a party is required by this Electronic Discovery Protocol to search, the parties will perform the search in all accessible locations of their respective electronic files that are likely to contain responsive documents, not to include back-up tapes or other inaccessible media

(“Electronic Document Search”). The term “Electronic Document” means any document existing in electronic form including, without limitation, word processing files (*e.g.*, Microsoft Word), computer presentations (*e.g.*, PowerPoint slides), stand-alone Databases (*e.g.*, Access), spreadsheets (*e.g.*, Excel), e-mails (*e.g.*, Outlook), Portable Document Format files (*e.g.*, Adobe), documents residing on web portals (*e.g.*, eLicense), together with the Metadata associated with each such document. By performing the Electronic Document Searches, the parties shall be deemed to have satisfied any electronic data search obligations set forth in the respective document requests. Additionally, a party may request to delete a term(s), based upon the number of documents generated by such term as set forth in more detail at paragraph 3, and if the parties cannot agree, the Court shall decide the issue. Nothing herein prohibits a party from filing additional discovery requests. After the production of documents from accessible sources, if a receiving party demonstrates a particularized need for a search of a backup tape or tapes and/or other inaccessible media, the parties will meet and confer, without prejudice to the right of the producing party to object to same, or the right of the producing party to request that costs with respect to the restoration, search and production of the backup tapes and/or other inaccessible media be shifted to the requesting party.

2. **Time Period:** Unless otherwise provided for a particular term, all Electronic Document Searches conducted pursuant to this Electronic Discovery Protocol will be performed on databases reasonably believed to include data generated or modified during the time period of September 1, 2009 through the date of the filing of this action (September 24, 2013) (the “Time Period”). All electronic data that was not generated or modified during the Time Period shall be deemed non-responsive unless it is a sub-part (*e.g.*, email attachment) of data that was created or modified within the Time Period. Certain terms on the Electronic Document Searches may have

a modified (i.e., a shorter, circumscribed) time period. For those terms, a search shall be conducted with the applicable modified time period.

3. **Search Terms:** Within seven (7) business days after execution of this Electronic Discovery Protocol, the parties will exchange initial search terms and any applicable modified (i.e., circumscribed) time periods with respect to same, if other than the Time Period herein, and will agree to the following:

- (a) **Objections:** Each party must have a good faith basis for objection to the other party's enumerated search terms.
- (b) **Scope of search terms:** Focused search terms, rather than overbroad ones, shall be used. For the purposes of this Electronic Discovery Protocol, absent a showing of good cause, a search term returning more than 500 megabytes of data is presumed to be overbroad.

4. **Form of Search:** The parties will apply the search terms to the entirety of all emails and all attachments, as well as other Electronic Documents. Where a search term contains multiple words, the search for that term is to be performed with quotations around the entire group of words. For example, for the term "Statement of Work", the parties will search all three words together – the parties will not search "Statement", "of", and "Work" individually and/or by utilizing two of those words.

5. **No Waiver:** By agreeing to perform the Electronic Document Searches set forth herein, no party waives its right to object to producing documents pursuant to a particular document request or to oppose any such objection. This Agreement does not create any additional obligation to produce documents, but rather, simply sets forth the Protocol that the parties will

utilize to perform the search for electronic documents that are potentially responsive to the document requests, preserving all objections to such requests.

6. **De-Duplication:** The Producing Party will take reasonable steps to globally de-duplicate production documents based on the MD5 Hash Code prior to delivery to the Receiving Party, however, metadata indicating all duplicate custodians of production documents shall also be produced, as specified herein.

7. **Form of Production:** The parties will produce all documents as Group IV single page tiff format files imaged at 300 dpi, with the exception of stand-alone Databases (*e.g.*, Access), spreadsheets (*e.g.*, Excel), slide presentations (*e.g.*, PowerPoint); video files; and audio files, which will be produced in native format. Each tiff file should have a unique name matching the Bates number labeled on the corresponding page. The tiffs should be grouped in an IMAGES folder with no more than 500 tiffs per each subdirectory. Color documents will be provided upon request, by Bates range, within ten (10) business days of receipt of the request. Subject to allowable privilege bases, the parties will produce documents generated by the searches and responsive to one or more discovery requests regardless of how the custodian came into possession of the document. Documents shall be deemed to be generally produced as they are maintained in the ordinary course of business.

8. **Production format to Plaintiff:** Documents should be provided with (a) a delimited data file (.dat), and (b) an image load file (.OPT. and/or .LFP). Each TIFF in a production must be referenced in the corresponding image load file. The total number of documents referenced in a production's data load file should match the total number of designated document breaks in the Image Load files in the production. The delimiters in the data load file should include:

- (a) Description Symbol ASCII Character
- (b) Field Separator ¶ 20
- (c) Quote Character ¢ 254
- (d) Newline ® 174
- (e) Multiple field entries ; 059

9. **Production format to Defendants:** Data should be provided in a Summation-like format (Concordance load files with standard delimiters and .dii and .opt log files for images) in a DATA folder. OCR/Extracted Text should be provided in a TEXT folder with document level text files named after Bates Start with no more than 500 .txt files per subdirectory.
10. **Documents in Hard Copy:** All documents that exist in hard copy shall be produced as black and white images at not less than 300 dpi resolution and shall be saved and produced in Group IV compression single-page .tiff format files along with an associated Load File signifying document breaks. Each .tiff shall bear a Bates Number. A separate file containing the Bates ranges for each named custodian will also be produced. The document's electronic image must convey the same information as if the subject document was produced in a hard copy form. Documents shall be generally produced as they are maintained in the ordinary course of business, including maintaining, to the extent possible with reasonable production steps, the documents and attachments or affixed notes as they existed in the original when creating the image file. Reasonable efforts shall be used to scan the pages or images at or near their original size and so that the print or image appears straight, and not skewed. Physically oversized originals, however, will appear reduced. Sometimes reducing image size may be necessary in order to display Bates Numbers without obscuring text.

11. **Decryption and Reviewability:** Reasonable efforts will be made to ensure that all documents shall be decrypted. With respect to production of documents in native format, the parties will seek to honor reasonable requests for assistance in determining passwords and/or acquisition of proprietary software, licenses, and technical information to review files produced in native format.

12. **Document Metadata:** The parties will produce extracted metadata for each document in the form of a .dat file, and include the following fields, to the extent such fields are available in the original document in its native format:

Field	Description
Bates_Begin	The bates label of the first page of the document
Bates_End	The bates label of the last page of the document
Attach_Begin	The bates label of the first page of a family of documents (e.g., email and attachment)
Attach_End	The bates label of the last page of a family of documents
Sent_Date	For email, the sent date of the message
Sent_Time	For email, the sent time of the message converted to GMT
Email_Author	The sender of an email message (email FROM)
Recipient	The recipients of an email message (email TO)
CC	The copyee(s) of an email message (email CC)
BCC	The blind copyee(s) of an email message (email BCC)
Custodian	The custodian in whose file the document was found, including all Duplicate Custodians
Datercvd	Date received
Datesent	Date sent
Subject	E-mail subject
Author	The person who created the document
Modifier	The person who last modified the document
Created	The creation date of the document
Last_Modified	The last modified date of the document
Title	The title of the document
File_Name	The name of the file
File_Extension	The file extension of the document
MD5Hash	The MD5 Hash Value of the document
Message_ID	The Message ID of the email and/or attachment
Mailstore	The name of the Mailstore in which the email and/or attachment is contained
File_Size	The size of the file
File_Path	Original file path, including folder location if the document is contained in a Mailstore
Number_Pages	The number of pages in the document

The parties shall take reasonable steps to preserve all Metadata contained in Electronic Documents,

including but not limited to those categories above. After reviewing the initial .tiff production, if a specific need exists, a Receiving Party can request additional Metadata for certain documents by specifying the documents by Bates Number and/or Bates Number range.

13. **Parent-Child Relationships:** Where appropriate, parent-child relationships (the association between an attachment and its parent document) shall be preserved.

14. **Special File Types:** Upon review of documents produced in .tiff format, any party may request that specific files be produced in native format if they reasonably require viewing in their native format for a full understanding of their content and meaning. Such requests shall neither be unreasonably made nor unreasonably refused, provided that the parties agree that wholesale production of native files is not contemplated under this Electronic Discovery Protocol.

Notwithstanding the foregoing, the parties agree to produce spreadsheets in native format.

15. **Privilege Logs:** Following the production of documents, and consistent with any entered case schedule and applicable law, the parties agree that each shall provide the other parties with a privilege log. With regard to Electronic Documents, the privilege logs shall contain information regarding any responsive document generated by the Electronic Document Searches but which was not produced, in whole or in part, on the grounds that the withheld document or partial document is protected from disclosure by the attorney-client privilege or attorney work-product doctrine. Privilege logs shall be provided with the degree of specificity required by the Federal Rules of Civil Procedure, Middle District of Florida Local Rules, applicable procedural rules, and the Case Management and Scheduling Order entered in this action.

16. **Confidentiality:** This Electronic Discovery Protocol is subject to agreements contained in the Confidentiality Stipulation and Order entered into by the parties (the "Confidentiality Stipulation") including provisions regarding inadvertent production of information subject to an

allowable privilege or other protection. All confidential or protected documents produced will be electronically branded in accordance with the Confidentiality Stipulation in this Action. Additionally, Production Media containing Protected Material under the Confidentiality Stipulation will include a label bearing the following: **“NOTICE: Contains confidential documents which may not be viewed or disseminated except as provided by the Confidentiality Stipulation.”**

17. **Representations, Warranties, Covenants and Acknowledgments:** The parties hereby make the following representations, warranties, covenants and acknowledgments, as may be applicable, to induce all parties to enter into this Electronic Discovery Protocol:

- (a) The signatories represent that they have all requisite legal authority to enter into this Electronic Discovery Protocol on behalf of, and to bind, the respective parties.

18. **Reservation of Rights:** The parties each reserve all of their rights to challenge any document productions made or to be made in this action. Except as agreed herein, this Electronic Discovery Protocol is agreed to without prejudice to the parties’ ability to challenge discovery requests made during the action. Additionally, this Agreement shall have no effect on the determination of any claims or defenses raised or to be raised by the parties in this action, or otherwise.

19. **Joint Drafting:** This Electronic Discovery Protocol is, and shall be deemed to be, the product of joint drafting, and shall not be construed against any party as the drafter thereof.

20. **Modification:** This Electronic Discovery Protocol may be modified, amended, or supplemented by a written agreement executed by all of the parties’ attorneys, and without the need for a modification of the existing Court Order.

21. **Counterparts and Signatures:** This Electronic Discovery Protocol may be executed in any number of counterparts, and duplicates of this Electronic Discovery Protocol collectively containing the signatures of all the parties shall constitute the Electronic Discovery Protocol. The exchange of copies of the Electronic Discovery Protocol and of signature pages by facsimile or other electronic transmission shall constitute effective execution and delivery of this Electronic Discovery Protocol as to the parties and may be used in lieu of the original Electronic Discovery Protocol for all purposes. Signature pages of the parties transmitted by facsimile or other electronic transmission shall be deemed to be their original signatures for all purposes.

22. **Headings:** The headings used in this Electronic Discovery Protocol have been inserted for convenience of reference only and do not define or limit its provisions.

**SO ORDERED:**

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Thomas B. Smith, M.J.

DATED this \_\_\_ day of May, 2014.

**STIPULATED AND AGREED:**

ON BEHALF OF PLAINTIFF:

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**FOR THE NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION**

*IN RE BROILER CHICKEN ANTITRUST  
LITIGATION*

This Document Relates To: All Actions

Case No. 1:16-cv-08637

**ORDER REGARDING SEARCH  
METHODOLOGY FOR  
ELECTRONICALLY STORED  
INFORMATION**

This Order Regarding Search Methodology for Electronically Stored Information (“Search Methodology Order”) shall govern the Parties in the above-captioned case whether they currently are involved or become so in the future, and any related actions that may later be consolidated with this case (collectively, the “Litigation”).

**I. DOCUMENT SOURCE DISCLOSURES**

A. **Transparency:** With the goal of permitting requesting Parties an appropriate level of transparency into a producing Party’s electronic search process, without micromanaging how the producing Party meets its discovery obligations and without requiring the disclosure of attorney work product or other privileged information, the Parties will endeavor to be reasonably transparent regarding the universe of documents subject to targeted collections or culling via search terms and/or TAR/CAL.

**B. Pre-Search Deduplication & Culling of Collected Data:**

1. **De-Duplication:** Before running either of the Search Processes below in ¶ II, data should be de-duplicated by hash value across all agreed or Court-ordered document custodians.
2. **Email Threading:** If the producing Party’s search software has the capability, then the producing Party may choose to only include inclusive emails in the data set subject to the Keyword and/or TAR/CAL Search Process, including the data set against which keyword searches are tested. A producing Party will disclose whether or not they are testing search terms in a set of data that excludes non-inclusive emails. Non-inclusive emails do not need to be searched, reviewed, or produced in this matter. *See* ESI Protocol, Dkt. 459, ¶ IV(D)(1).
3. **Email Domains:** Should the requesting Party want certain email domains excluded from the data set against which search terms are tested, the

requesting Party must provide a list of such domain names to the producing Party ahead of the producing Party's testing of search terms. Likewise, if the producing Party identifies domains that it believes should be eliminated, it will produce a list of those domain names to the requesting Party. *See* ESI Protocol, ¶ IV(D)(2). Plaintiffs' analysis to date of the Florida AG productions made by certain Defendants indicates there are a large variety of industry email newsletters that can be culled (*i.e.*, excluded from a Defendant's review and production of documents) where there are no internal forwards of such documents after their receipt. Plaintiffs agree to provide a list of these domain names prior to Defendants undertaking a search of their data.

4. **Targeted Collections:** Only documents a producing Party intends to subject to electronic searching parameters should be included in the data set against which search terms are tested. As an example, a centralized, non-custodial folder of responsive Agri Stats reports that a party intends to produce in its entirety (to the extent not privileged) should not be included in the data set against which search terms are tested.
5. **Exception Reporting:** For any documents not otherwise identified as system or operating files, the producing Party must disclose processing exceptions that are unresolved at the end of the discovery period, such as documents that cannot be opened due to encryption or other issues.
6. **Disclosure of Other Culling Parameters Required:** A producing Party is permitted to cull data using the agreed-upon custodial and non-custodial sources, agreed-upon date parameters, and agreed-upon search terms (if applicable), and a producing Party is permitted to remove known system or operating files, such as those that appear on the National Software Reference Library (NSRL) hash list. As such, the Parties may cull entire file directories from computer hard drives that contain Program Files, Program Data, SWTOOLS, Windows Operating System files, etc. For those excluded directories, the Parties will only conduct searches on user-created content that is reviewable and likely to yield relevant content. To the extent a producing Party elects to use additional culling parameters, those parameters will be disclosed.

## **II. SEARCH METHODS**

The following TAR/CAL and Keyword Search Processes govern how collected data may be electronically culled in this matter.

### **A. TAR/CAL Search Process:**

1. **Use of Search Terms with TAR/CAL:**
  - a. No later than December 22, 2017, the requesting Party will propose to a producing Party a limited number of Document

Custodians for whom, across their email only, it requests that no search term pre-culling be used prior to applying TAR/CAL during the review process. However, the other data culling parameters described in ¶ I(B) may be applied to these Document Custodians, including to their email.

- b. No later than January 12, 2018, the Parties will meet and confer on any issues or disputes regarding the requesting Party's proposals.

2. **Producing Party TAR/CAL Disclosures:**

- a. No later than January 19, 2018, a producing Party that elects to use TAR/CAL will disclose the following information regarding its use of a TAR/CAL process: (a) the name of the TAR/CAL software and vendor, (b) a general description of how the producing Party's TAR/CAL process will work, including how it will train the algorithm, such as using exemplars, keyword search strings, or some other method, (c) a general description of the categories or sources of the documents included or excluded from the TAR/CAL process, and (d) what quality control measures will be taken.

3. **Requesting Party Response:**

- a. Within 7 days of receiving a producing Party's TAR/CAL Disclosures, the requesting Party may raise with the producing Party any concerns with the proposed TAR/CAL process or categories of documents that it proposes should be excluded from the TAR/CAL process. A requesting Party may also propose any exemplars it proposes be used to train a TAR/CAL tool or narrow keyword search strings it proposes be used to generate exemplars to train a TAR/CAL tool. A producing Party retains the right to reject and oppose any such requests, subject to resolution by the Special Master and/or the Court.

- 4. **Cooperation:** The Parties agree to work together in good faith to resolve any differences that they may have over the producing Party's use of TAR/CAL and its processes, recall, and validation proposals. If an agreement cannot be timely reached, then the Parties agree to raise this issue with the Special Master and to follow her direction absent the showing of good cause to the contrary, and subject to the Parties' rights to petition the Court for review of or relief from any decision or guidance provided by the Special Master.

B. **Keyword Search Process:**

- 1. **Iterative Process:** Developing efficient keyword search terms is an iterative process and will require transparent and cooperative efforts by both the producing and requesting Party; however, it is important to set

certain limits in order to effectively and efficiently manage time and expense.

2. **Search Software Disclosures:** No later than January 12, 2018, the producing Parties will disclose any search software they have decided to use (including version number) and that software's default stop/noise words and search language syntax. Additionally, the Parties should use best efforts to disclose information that answers these questions regarding their search tool:

- a. What stop words have been excluded from the index (if different than the default stop words for the tool)?
- b. Can searches be constrained by upper- and lowercase?
- c. Can numbers and single letters be searched?
- d. Are there characters that cannot be searched or are treated as spaces or ignored?
- e. How are diacritics resolved?
- f. Can searches be run on metadata fields?
- g. Are proximity-limited search terms subject to an evaluation order, e.g., will terms structured X w/5 Y yield hits if the text reads Y w/5 X?
- h. Does the tool offer synonym searching?
- i. How does the tool account for common misspellings?

3. **First Phase Search Term Proposals:**

- a. *Producing Party Proposes an Initial Set of Search Terms:* No later than January 19, 2018, the producing Party will propose a set of search terms. The producing Party's proposal will include, to the extent known, semantic synonyms and common spellings of the keywords proposed. Where a producing Party seeks to exclude false positives (aka, "noise hits") by modifying or excluding certain keywords, then it will supply contextual examples of such false positives to explain why they must be excluded.
- b. *Requesting Party's Proposed Revisions:* Within 12 days of receiving the initial proposed search terms, the requesting Party will provide any proposed revisions to the producing Party's search terms.

- c. *Producing Party Provides Information Sufficient to Support Its Objections:* Within 8 days of receipt of the requesting Party's proposed revisions, the producing Party will provide information sufficient to support its objections to specific search terms, which could include, for example, estimates of the incremental number of false positive hits and the incremental number of true positive hits introduced by the disputed search terms, as well as examples of the false positive hits.
- d. *Cooperation:* The producing Party and the requesting Party will work together in good faith to reasonably narrow the number of documents returned via search term hits and narrow the number of irrelevant documents captured as a result of the search terms. To the extent any disputes remain concerning the sufficiency of the producing Party's information in support of its objections and/or the use of specific search terms after good faith negotiations have occurred, either Party may request the assistance of the Special Master in resolving such disputes.

4. **Second Phase Search Term Proposals:**

- a. *Requesting Party Proposes an Additional Set of Search Terms:* The Parties agree that Plaintiffs collectively and Defendants collectively may propose additional search terms to a producing Party one time. No later than May 14, 2018 (60 days after the Court-ordered March 15, 2018 deadline for "Rolling Production of Documents, Prioritizing Custodians as Agreed by the Parties or Ordered by the Court" (Dkt. 574)), the requesting Party may propose a set of additional search terms. The requesting Party will explain generally the basis for the additional requested terms, which could include, for example, identifying by Bates number exemplar documents that support the request.
- b. *Producing Party Provides Information Sufficient to Support Its Objections:* No later than 10 days after the requesting Party provides an additional set of proposed search terms, the producing Party will provide information sufficient to support its objections to specific additional search terms, which could include, for example, estimates of the incremental number of false positive hits and the incremental number of true positive hits introduced by the disputed additional search terms, as well as examples of the false positive hits.
- c. *Requesting Party and Producing Party Will Meet and Confer Regarding Requesting Party's Proposed Additional Search Terms:* No later than 15 days after the requesting Party proposes an additional set of search terms, the Parties will meet and confer

regarding any disputes or counter-proposals regarding the additional search terms. To the extent any disputes remain concerning the sufficiency of the producing Party's information in support of its objections and/or the use of specific additional search terms after good faith negotiations have occurred, either Party may request the assistance of the Special Master in resolving such disputes.

- d. *Good Cause Inability of a Party to Meet the Deadlines Imposed in this Order:* While it is expected that the Parties shall make their best efforts to comply with the deadlines set forth in this Order, it is conceivable that technical (or other) issues or unanticipated volumes may interfere with a Parties' best efforts to comply. Should a Party anticipate that for good cause it may be unable to meet a deadline set forth in this Order, the Party shall promptly raise the issue with the other Parties, explain the reason for the inability to timely comply, and negotiate a reasonable extension for compliance. If the Parties are unable to immediately agree upon a revised deadline for compliance, they shall promptly raise the issue with the Special Master or the Court for resolution. This provision shall not be construed as blanket permission for a Party to modify or extend the deadlines agreed to by the Parties and set forth in this Order without good cause, but rather, to recognize that when dealing with search and review of large volumes of electronically stored information, there are sometimes legitimate, unanticipated challenges that may interfere with a Party's best efforts to fulfill its obligations and therefore, to afford the Parties reasonable flexibility and mutual accommodation should such eventuality occur.

### **III. VALIDATION PROTOCOL**

- A. The review process should incorporate quality-control and quality-assurance procedures to ensure a reasonable production consistent with the requirements of Federal Rule of Civil Procedure 26(g). Once a producing Party reasonably believes that it has produced or identified for production substantially all responsive non-privileged documents, it shall conduct validation according to the sampling protocol described below and in Appendix A. This Validation Protocol shall apply to the review process regardless of whether technology-assisted review ("TAR") or exhaustive manual review ("manual review") was used by the producing Party.
- B. The Document Collection ("Collection") is defined as including all documents identified for review for responsiveness and/or privilege following the application of keywords or other culling criteria. This Validation Protocol assumes that the completeness or adequacy of the Collection has already been established. For purposes of the three putative plaintiff classes' validation requirements under this

Validation Protocol, the Collection refers to the combined set of documents of a particular proposed class of plaintiffs, rather than to each individual named representative of a particular class of plaintiffs.

- C. The Collection shall be partitioned into the following two or three Subcollections, for manual review or for TAR processes, respectively:
1. Documents identified by the review as responsive to at least one Request for Production, including any privileged documents, but not including family members of responsive documents, unless those family members are deemed to be responsive in their own right (“Subcollection C(1)”);
  2. Documents coded as non-responsive by a human reviewer, regardless of how the documents were selected for review (e.g., by TAR, manual review, or otherwise) (“Subcollection C(2)”);
  3. Documents excluded from manual review as the result of a TAR process (“Subcollection C(3)”). If the review process involved only manual review and no TAR, the Collection will not include Subcollection C(3).
- D. A sample shall be drawn consisting of the following:
1. 500 documents selected at random from Subcollection C(1) (“Subsample D(1)”);
  2. 500 documents selected at random from Subcollection C(2), if TAR was used, otherwise 2,500 documents selected at random from Subcollection C(2), if manual review was used (“Subsample D(2)”);
  3. 2,000 documents selected at random from Subcollection 1(c) if TAR was used (“Sample D(3)”). If TAR was not used, there will be no Subsample D(3).
- E. Should a producing Party believe that the sample sizes specified in Paragraph III(D) would be disproportionate or unduly burdensome under the circumstances, that Party shall promptly raise the issue with the requesting Party. To the extent a dispute remains concerning the sample sizes to be used after good faith negotiations have occurred, either Party may request the assistance of the Special Master in resolving such dispute.
- F. The sample of 3,000 documents comprised of the documents from Subsamples D(1), D(2), and, if TAR was used, D(3), shall be combined into a single Validation Sample, with no indication of the Subcollection from which the documents were derived or how they were previously coded. The Validation Sample shall be reviewed and coded by a subject matter expert (“SME”) who is knowledgeable about the subject matter of the litigation. This should be an attorney who is familiar with the RFPs and the issues in the case. During the course of the review of the Validation Sample, the SME shall not be provided

with any information concerning the Subcollection or Subsample from which any document was derived or the prior coding of any document. The intent of this requirement is to ensure that the review of the Validation Sample is blind; it does not preclude a Party from selecting as SMEs attorneys who may have had prior involvement in the original review process.

- G. Once the coding in Paragraph III(F) has been completed, the producing Party shall prepare a table listing each of the 3,000 documents in the Validation Sample. For each document, the table shall include:
1. the Bates number of the document (for documents produced), or a control/identification number (for non-produced documents);
  2. the Subsample from which the document came (i.e., D(1), D(2), or, if TAR was used, D(3));
  3. the SME's responsiveness coding for the document (i.e., responsive or non-responsive);
  4. the SME's privilege coding for the document (i.e., privileged or not privileged). If the document is coded as non-responsive, a privilege determination need not be made. All documents in the Validation Sample coded as privileged shall be included on the producing Party's Privilege Log, as per the requirements set forth in ¶ VI of ESI Protocol (Dkt. 459).
  5. for putative class plaintiffs, the named class representative associated with the document.
- H. The following items shall be provided to the requesting Party and to the Special Master:
1. the table described in Paragraph III(G);
  2. a copy of each responsive, non-privileged document in the Validation Sample that was not previously produced or identified for production to the requesting Party;
  3. the statistics and recall estimate detailed in Appendix A to this Order.
- I. Once the requesting Party has received and has had an opportunity to review the items described in Paragraph III(H) and Appendix A, the Parties shall meet and confer to determine whether or not the Parties agree that the recall estimate, and the quantity and nature of the responsive documents identified through the sampling process, indicate that the review is substantially complete. If the recall estimate and the samples indicate that Subcollections C(2) and/or C(3) still contain a substantial number of non-marginal, non-duplicative responsive documents as compared to Subcollection C(1), the review and quality assurance process shall continue, and the validation process shall be repeated, as warranted.

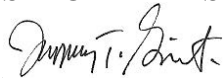
If the parties are unable to agree on whether the review is substantially complete, or whether the validation process must be repeated, the Special Master shall render a decision, subject to the Parties' rights to petition the Court for review of or relief from any decision or guidance provided by the Special Master.

SO ORDERED.

Dated: January 3, 2018

/s/ Maura R. Grossman  
MAURA R. GROSSMAN  
SPECIAL MASTER

Dated: January 3, 2018

  
HON. JEFFREY T. GILBERT  
U.S. MAGISTRATE JUDGE

## APPENDIX A

### Method of Recall Estimation

An estimate of recall shall be computed to inform the decision-making process described in III(H) of the Validation Protocol; however, the absolute number in its own right shall not be dispositive of whether or not a review is substantially complete. Also of concern is the novelty and materiality (or conversely, the duplicative or marginal nature) of any responsive documents identified in Subsamples D(2) and/or D(3). The estimate of recall shall be derived as described below, depending on whether or not the review process involved the use of TAR. It should be noted that, when conducted by an SME pursuant to Paragraph III(F) of the Validation Protocol, a recall estimate on the order of 70% to 80% is consistent with, but not the sole indicator of, an adequate (i.e., high-quality) review. A recall estimate somewhat lower than this does not necessarily indicate that a review is inadequate, nor does a recall in this range or higher necessarily indicate that a review is adequate; the final determination also will depend on the quantity and nature of the documents that were missed by the review process.

#### **Recall Estimation Method for a Review Process Involving TAR:**

The number of responsive documents found  $\approx$  the size of Subcollection C(1)  $\times$  the number of responsive docs in Subsample D(1)  $\div$  500.

The number of responsive documents coded incorrectly  $\approx$  the size of Subcollection C(2)  $\times$  the number of responsive documents in Subsample D(2)  $\div$  500.

The number of responsive documents not reviewed  $\approx$  size of Subcollection C(3)  $\times$  the number of responsive documents in Subsample D(3)  $\div$  2,000.

Estimated recall  $\approx$  the number of responsive documents found  $\div$  (the number of responsive documents found + the number of responsive documents coded incorrectly + the number of responsive documents not reviewed).

#### **Recall Estimation Method for a Review Process Involving Manual Review:**

The number of responsive documents found  $\approx$  the size of Subcollection C(1)  $\times$  the number of responsive documents in Subsample D(1)  $\div$  500.

The number responsive documents coded incorrectly  $\approx$  the size of Subcollection C(2)  $\times$  the number of responsive documents in Subsample D(2)  $\div$  2,500.

Estimated recall  $\approx$  the number of responsive documents found  $\div$  (the number of responsive documents found + the number of responsive documents coded incorrectly).

**IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF GEORGIA  
ATLANTA DIVISION**

IN RE EQUIFAX, INC. CUSTOMER  
DATA SECURITY BREACH  
LITIGATION

MDL DOCKET NO. 2800  
1:17-md-2800-TWT

ALL ACTIONS

**STIPULATION AND ORDER FOR THE PRODUCTION OF  
DOCUMENTS AND ESI**

This Stipulated Protocol for Producing Documents and ESI (the “ESI Protocol”) shall govern the production of documents and electronically stored information (“ESI”) by the parties in the above-captioned litigation.

The ESI Protocol shall govern productions made by any third party who is subpoenaed in this action unless otherwise agreed to by the issuing party and the third party. Accordingly, the ESI Protocol shall be attached to any subpoena issued in this action.

**I. Production of Documents Originating as Paper**

1. **TIFFs.** Documents should be produced as single-page, black and white, group IV TIFFs imaged at 300 dpi. Bates numbers, confidentiality designations (in accordance with the protective order governing the case), and redactions (to the extent they are necessary) should be burned into the image.

Original document orientation shall be maintained (*i.e.*, portrait to portrait and landscape to landscape) where reasonably possible. TIFF image files should be provided in an “Images” folder.

Documents containing color need not be produced in color. However, the parties will consider reasonable requests for reproduction of color document if an original document contains color necessary to understand the meaning or content of the document. Any documents produced in color should be produced in JPG format.

2. **Unitizing Documents.** In scanning paper documents, the parties will utilize logical unitization of documents such that distinct documents may not be merged into a single record, and single documents may not be split into multiple records (*i.e.*, paper documents should be logically unitized). For example, documents stored in a binder, folder, or similar container (each a “container”) should be produced in the same order as they appear in the container. The front cover of the container should be produced immediately before the first document in the container. The back cover of the container should be produced immediately after the last document in the container. The parties will undertake reasonable efforts to, or have their vendors, logically unitize documents in accordance with the requirements of this paragraph, but

nothing in this paragraph shall require the parties to undertake efforts to unitize documents that would be unduly burdensome. The parties agree to meet and confer to address situations in which a party believes that documents have not been properly unitized.

3. **Parent-Child Relationships.** The parties shall undertake reasonable efforts to preserve parent-child relationships within a document family (the association between an attachment and its parent document). The child document(s) should be consecutively produced immediately after the parent document. The parties shall undertake reasonable efforts to produce each document with the production number for the first and last page of that document in the “BegBates” and “EndBates” fields of the data load file and with the “BegAttach” and “EndAttach” fields listing the production number for the first and last page in the document family. Nothing in this paragraph shall require the parties to undertake unduly burdensome efforts to preserve parent-child relationships within a document family for hard copy documents. The parties agree to meet and confer to address situations in which a party believes that parent-child relationships have not been adequately preserved.

4. **Optical Character Recognition.** The producing party shall provide optical character recognition (“OCR”) text files for all documents

originating as paper. Text files should be in Unicode [UTF-8] format. All references below to ‘Unicode’ are synonymous with UTF-8. To the extent that documents have been run through OCR software, the full text shall be provided on a document-level in an appropriately formatted text file (.txt) that is named to match the first bates number of the document. Text files should be provided in a “Text” folder. To the extent that a document is redacted, the text files should not contain the text of the redacted portions.

5. **Unique IDs.** Each TIFF image should have a unique filename, which corresponds to the Bates number of that page. The filename should not contain any blank spaces and should be zero-padded (*e.g.*, ABC000000001). A single prefix with a fixed width should be used for each producing party, along with a fixed-width numerical portion. If a Bates number or set of Bates numbers is skipped in a production, the producing party will so note in a cover letter or production log accompanying the production. Bates numbers will be unique across the entire production and prefixes will be consistent across all documents a party produces in the litigation.

6. **Data Load Files.** Documents shall be provided with: (a) a delimited data file (.dat, .csv, or .txt) [Unicode]; and (b) an image load file (.lfp, .opt, or .dii), as detailed in Appendix 1.

## **II. Production of ESI**

8. **TIFFs.** Documents should be produced as single-page, black and white, group IV TIFFs imaged at 300 dpi. Whenever it is practical to do so, the document's original orientation should be maintained (*i.e.*, portrait to portrait and landscape to landscape). Bates numbers, confidentiality designations (in accordance with the protective order governing the case), and redactions (to the extent they are necessary) should be burned into the image. TIFF image files should be provided in an "Images" folder.

9. **Extracted Text Files.** For each document, a single Unicode text file shall be provided along with the image files and metadata. The text file name shall be the same as the Bates number of the first page of the document. File names shall not have any special characters or embedded spaces. Electronic text must be extracted directly from the native electronic file to the extent reasonably available unless the document is an image file or contains redactions. In these instances a text file created using OCR should be produced in lieu of extracted text.

10. **Unique IDs.** Each image should have a unique filename, which corresponds to the Bates number of that page. The filename should not contain any blank spaces and should be zero-padded (*e.g.*, ABC-000001), taking into

consideration the estimated number of pages to be produced. If a Bates number or set of Bates numbers is skipped in a production, the producing party will so note in a cover letter or production log accompanying the production. Bates numbers will be unique across the entire production and prefixes will be consistent across all documents a party produces in the litigation.

11. **Parent-Child Relationships.** The relationship between attachments, enclosures, embedded files, and/or exhibits to any parent document shall be preserved. The child-document should be consecutively produced immediately after the parent-document. Each document shall be produced with the production number for the first and last page of that document in the “BegBates” and “EndBates” fields of the data load file and with the “BegAttach” and “EndAttach” fields listing the production number for the first and last page in the document family.

12. **Native Format.** Excels, PowerPoints, delimited text files, audio files, video files, and additional documents of a type which cannot be reasonably converted to useful Tiff images shall be produced as native files along with extracted text and metadata identified in Appendix 2. Natively produced documents should include a Bates-numbered TIFF image placeholder stating that the document has been produced in native format.

13. The requesting party may ask for certain other documents and/or databases initially produced in TIFF format to be produced in their native format in the event that the TIFF format is not reasonably usable. The requesting party shall identify the documents by their Bates numbers and the documents should be produced in their unaltered native format, provided, however, that the producing party shall not be required, absent extraordinary circumstances, to produce any redacted files in native format.

14. To the extent that the information in a native file must be redacted, the producing party may produce TIFF images with burned in redactions in lieu of a native file and TIFF placeholder image. The producing party shall make reasonable efforts to ensure redacted TIFF images of native files are legible and usable. If redacting TIFF images and to the extent that any of the following can be automated, the producing party, or its e-discovery vendor, should make reasonable efforts to: (1) reveal hidden rows, columns, or sheets prior to converting the document to TIFF; (2) clear any filters that may conceal information; (3) adjust column widths and row heights to avoid numbers or other text content being truncated or appearing as “#####”; (4) ensure that column and row headings print; (5) ensure that the tab name appears in the header or footer of the document; (6) process comments so that they are

produced at the end of the spreadsheet; and (7) process spreadsheets so that they print across then down. If good cause exists, requesting party may ask the producing party to manually undertake the foregoing for certain documents identified by Bates number by the requesting party to the extent the document was originally produced with concealed information. The producing party shall not unreasonably deny such a request.

15. **Request for Native Files.** Other than the file types referenced in paragraph 12 above, a producing party need not produce documents in native format. If good cause exists for the receiving party to request production of certain documents in native format, the receiving party may request production in native format by providing (1) a list of the Bates numbers of documents it requests to be produced in native format; and (2) an explanation of the need for reviewing such documents in native format. The producing party shall not unreasonably deny such requests. In the event the producing party agrees to produce documents in native format, the producing party shall produce an overlay to ensure that the “NativeLink” entry in the data load file indicates the relative file path to each native file in such production, and all extracted text and applicable metadata fields set forth in Appendix 2. Documents and overlays shall be produced within 21 days of the request unless the request is reasonably

denied or the parties agree to a different time. The parties shall meet and confer concerning any request for native files before seeking Court intervention. In the event the Court orders a producing party to produce documents in native format, documents and overlays shall be produced within 14 days of the order or such other time as the Court may order.

16. **Tracked Changes and Comments.** To the extent that a document contains tracked changes or comments, the document should be imaged showing tracked changes and comments.

17. **Password Protected Files.** The producing party shall produce passwords for any password-protected files to the extent the passwords are reasonably available.

18. **Embedded Documents.** If reasonably possible, embedded ESI documents (*e.g.* a spreadsheet embedded within a word processing document) will be extracted, produced as independent document records and related back to the respective top level parent document (*e.g.*, standalone file, email message, *etc.*) via the BegAttach and EndAttach fields referenced in Appendix 2. Related documents will be produced within a continuous Bates range. Nothing in this paragraph will require a party to extract or produce information from an embedded or attached internet link.

19. **Data Load Files.** Documents shall be provided with: (a) a delimited data file (.dat, .csv, or .txt) [Unicode] and (b) an image load file (.lfp, .opt, or .dii) as detailed in Appendix 1. Nothing in this Order will limit the parties from discussing load file changes throughout the course of the litigation.

20. **Metadata.** Appendix 2 sets forth the metadata fields that must be produced to the extent that metadata exists for a particular document subject to the limitations discussed below. To the extent that metadata does not exist, is not reasonably accessible or available, or would be unduly burdensome to collect, nothing in this ESI Protocol shall require any party to extract, capture, collect or produce such data. The parties are not obligated to populate manually any metadata fields except those fields marked with an “X” in the “Must Be Populated” field in Appendix 2, provided that the metadata exists, is reasonably accessible or available, and would not be unduly burdensome to collect.

21. **Deduplication.** Documents should be deduplicated at the family-group level provided that the producing party identifies the additional custodians in an Additional Custodian field. A party may also de-duplicate “near-duplicate” email threads as follows: in an email thread, only the final-in-time document need be produced, assuming that all previous emails in the thread are contained within the final message and provided that the software used to identify these

“near- duplicate” threads is able to identify any substantive differences to the thread such as changes in recipients (*e.g.*, side threads, subject line changes), selective deletion of previous thread content by sender, *etc.* Where a prior email contains an attachment, that email and attachment shall not be removed as a “near-duplicate.”

### **III. Production of Databases and Other Structured Data**

22. The parties shall meet and confer prior to the production of reasonably accessible structured data ESI to ensure such ESI is produced in a reasonable, proportional, mutually agreeable, and reasonably useable format.

### **IV. Processing of Third-Party Documents**

23. A party that issues a non-party subpoena (“Issuing Party”) shall include a copy of this ESI Protocol as an attachment to the subpoena and request that the non-party produce documents in accordance with the specifications set forth herein.

24. The Issuing Party may request that the non-party simultaneously produce documents to the Issuing Party and all other parties. If the non-party produces documents only to the Issuing Party, to the extent practical given the data volume, productions by a non-party should be produced by the Issuing Party to all other parties within seven days.

25. Nothing in this ESI Protocol is intended to or should be interpreted as narrowing, expanding, or otherwise affecting the rights of the parties or non-parties to object to a subpoena.

## **V. Miscellaneous Provisions**

26. The following specifications govern the production of all documents regardless of source, unless otherwise noted in this ESI Protocol:

27. **Custodian or Originating Source.** The custodian or originating source shall be identified in the Custodian field of the database load files. Documents found in the possession of a natural person (or on a natural person's hardware or storage media) should be produced in such fashion as to identify the natural person. Documents found in the possession of a department, group, entity, or other common facility (*e.g.*, office, file room, archive, network storage, file share, back-up, hard drive, *etc.*) should be produced in such a fashion as to identify the department, group, entity, or facility. A producing party shall use a uniform description of a particular custodian across productions.

28. **Foreign Language.** Foreign language text files and metadata should be delivered with the correct encoding to enable the preservation of the documents' original language.

29. **Dates.** All documents shall be processed so as to show the date and time in UTC or Eastern Standard Time.

30. **Search Terms and Technology Assisted Review.** The parties have begun to meet and confer as directed by the Court relating to the process of searching for documents responsive to discovery, including, specifically, the identification of any search terms and custodians to the extent they are necessary in responding to specific discovery requests. The Court expects that the parties will continue to meet and confer on this issue as necessary to ensure that discoverable, responsive, non-privileged documents are identified and produced as efficiently as possible. In addition, the parties are directed to meet and confer with regard to any proposed use of technology assisted review (“TAR”) and the terms of any additional case management orders that may be needed to address issues relating to searches of electronically stored information.

31. **Production Media.** The preferred means of producing documents is via secure FTP or secure file share. However, documents may also be produced via CD, DVD, flash drive, or hard drive if (a) the size of the production exceeds the size limitations applicable to the producing party’s secure FTP or file share or (b) if the interest of preserving the confidentiality of the information produced outweighs the speed and efficiency of producing documents via secure

FTP or secure file share. To the extent possible, physical media should be write protected before it is produced.

32. **Naming Convention for Production Media.** Whether produced via secure FTP, file share, or physical media, the files produced should be combined into a compressed file such as .zip, .rar, *etc.* The compressed file should be named so as to indicate the producing party, the date of the production, and the sequence of the production (*e.g.*, “Equifax Production 20180508-001”). If the production is made using physical media, the media should be labeled to include (a) text referencing that it was produced in *In re: Equifax, Inc. Customer Data Security Breach Litigation*, MDL DOCKET NO. 2800 1:17-md-2800-TWT; (b) the Bates Number range of the materials contained on the media; (c) and the filename(s) of the compressed file(s) contained on the media such as the example included above.

33. **Replacement Productions.** Any replacement production will be transmitted with a cover letter or email to identify the production as a replacement and cross-reference the BegBates and EndBates of the documents being replaced. If the replacement production is being transmitted by physical media, the media shall include the phrase “Replacement Production.”

34. **Inability to Produce Metadata.** If the producing party is unable to produce metadata for a particular field, it will provide an explanation of that inability if requested by the receiving party.

35. **Encrypted Data.** To the extent data is encrypted before it is produced, the producing party shall contemporaneously transmit the credentials necessary to decrypt the data.

36. **Non-Waiver.** Nothing in this ESI Protocol shall be interpreted to require disclosure of irrelevant information or relevant information protected by the attorney-client privilege, work-product doctrine, or any other applicable privilege or immunity. The parties do not waive any objections to the production, discoverability, admissibility, or confidentiality of documents.

37. **Protective Order.** All productions are subject to the Protective Order entered by the Court in this Action.

38. **Good Faith Resolution of Disputes.** The parties shall make good faith efforts to comply with and resolve any differences concerning compliance with this ESI Protocol. If a producing party, notwithstanding their good faith efforts, cannot comply with any material aspect of this ESI Protocol or if compliance with such material aspect would be unreasonable, such party shall inform the requesting party in writing a reasonable time before the date of

production as to why compliance with the ESI Protocol is impossible or unreasonable. No party may seek relief from the Court concerning compliance with the ESI Protocol unless it has conferred in good faith with the affected parties.

DATED: August 9, 2018

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*Financial Institution Plaintiffs' Steering  
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IT IS SO ORDERED.

Date: August 10, 2018

/s/Thomas W. Thrash  
Thomas W. Thrash  
United States District Judge

## **APPENDIX 1: PRODUCTION MEDIA AND LOAD FILE FORMATS**

### **Production Media**

- The Producing Party shall produce documents on readily accessible, computer or electronic media including CD-ROM, DVD, external hard drive (with standard PC compatible interface or access to a secure Online Repository agreed upon by the parties) or via secure FTP site. Each piece of Production Media shall be assigned a production number or other unique identifying label corresponding to the date of the production of documents on the Production Media. The Producing Party shall accompany all document productions with a transmittal cover letter identifying by Bates Number the documents produced.

### **Image Load Files**

- Production image load files shall have all corresponding images logically grouped together;
- Production volumes should only include one image load file per production volume;

- The name of the image load file shall mirror the name of the delivery volume, and should have an .lfp, .opt or .dii<sup>1</sup> extension (*e.g.*, ABC001.lfp);
- The volume names shall be consecutive (*i.e.*, ABC001, ABC002, *et seq.*);
- The load file shall contain one row per TIFF or JPG image;
- Every image in the delivery volume shall be contained in the image load file;
- The image key shall be named the same as the Bates number of the page;
- Load files shall ***not*** span across media (*e.g.*, CDs, DVDs, hard drives, *etc.*), *i.e.*, a separate volume shall be created for each piece of media delivered.

### Metadata Load Files

- The metadata load file shall use the following delimiters:
  - Column Delimiter: ASCII character (020)
  - Text Qualifier: þ ASCII character (254);
  - New line: Registered sign - ® (ASCII 174).
- Data for documents shall be produced in only one data load file throughout the productions, unless that document is clearly noted as being a replacement document or if supplemental custodian information is provided;
- The first line shall contain the field names in the order of the data set forth in Appendix 2;

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<sup>1</sup> If a .dii file is produced, the accompanying metadata load file shall be separate from the .dii file and not contained within the .dii file itself.

- Metadata fields that are not applicable to a document shall still be populated in the data load file with Empty Quotes, eg |^^|^^, *etc*;
- A carriage-return line-feed shall be used to indicate the start of the next record;
- Load files shall ***not*** span across media (*e.g.*, CDs, DVDs, hard drives, *etc.*); a separate volume shall be created for each piece of media delivered;
- The name of the metadata load file shall mirror the name of the delivery volume, and shall have a .dat, .csv or .txt extension (*i.e.*, ABC001.dat);

The volume names shall be consecutive (*i.e.*, ABC001, ABC002, *et seq.*).

**Appendix 2**  
**ESI Metadata and Coding**  
**Fields**

<b>Field</b>	<b>Description</b>	<b>Must Be Populated</b>
BegBates	Beginning Bates number of the document	X
EndBates	Ending Bates number of the document	X
BegAttach	Beginning Bates number of the attached documents	X
EndAttach	Ending Bates number of the attached documents	X
AttachRange	Bates number of the first page of the parent document to the bates number of the last page of the last attachment “child” document	X
Page Count	Total number of pages in the document	X
Attachment Count	Indicates the number of attachments to the parent document	X
Custodian	Natural person, group, department, entity, <i>etc.</i> in whose possession the document was found Custodian names, including those listed within the “Additional Custodian” field, should be uniform and unambiguous per Custodian.	X
Additional Custodian	Other natural person(s), group(s), department(s), entity(ies), <i>etc.</i> in whose possession the document was found if duplicate versions of the document are not produced	X
File Size	Size in kilobytes (KB) of the document	X
NativeLink	Relative file path to each native document in the production (This field will be produced with all native ESI).	
TextPath	The relative path to the corresponding OCR or extracted text file included with a production volume	X
Hash Value	MD5 or SHA-1 Hash value, unique document identifier	X
Confidential	“Confidential” to indicate that the document has been designated Confidential. “Highly Confidential” to indicate that the document has been designated Highly Confidential. Otherwise, this field should be null.	X
Redacted	Yes or No indication of whether the document at issue is redacted.	X

<b>Field</b>	<b>Description</b>	<b>Must Be Populated</b>
Author	Author field extracted from the metadata of the native file	X
From	Email sender	X
Agent ID	If the item was created by someone on behalf of the email account owner, ID of the agent who created/sent the item	
To	Person to whom an email is addressed	X
CC	Recipient(s) of “carbon copies” of the email message	X
BCC	Recipient(s) of “blind carbon copies” of the email message	X
Subject	Subject field extracted from the metadata of the native file	X
Date Sent	Date the email message was sent (produced in MM/DD/YYYY format)	X
Time Sent	Time the email message was sent (produced in HH:MM AM/PM)	X
Importance	For emails, “High,” “Low,” or “Normal” (or equivalent if an email client other than Outlook was used); Null if no value selected	X
Sensitivity	For Outlook (or equivalent) emails, “Normal,” “Private,” “Personal,” or “Confidential”; Null if no value selected	
Follow Up Flag	System data; Null if no status	
Read Status	Read or Unread	
Has Attachments	Indicates that an email has attachments	X
Email Folder Path	The original email folder	
File Type	Email, attachment, individual file, paper, <i>etc.</i>	X
File Extension	File extension of document (.msg, .doc, .xls, <i>etc.</i> )	X
File Name	Name of original file	X
Original Path	The original file path for non-email ESI	

<b>Field</b>	<b>Description</b>	<b>Must Be Populated</b>
Title	Title of a non-email document (Microsoft Title field)	X
Date Created	For non-emails (produced in MM/DD/YYYY format)	X
Time Created	For non-emails (produced in HH:MM AM/PM format)	X
Date Last Modified	For non-emails (produced in MM/DD/YYYY format)	X
Time Last Modified	For non-emails (produced in HH:MM AM/PM format)	X
Date Last Accessed	For non-emails (produced in MM/DD/YYYY format)	X
Time Last Accessed	For non-emails (produced as HH:MM AM/PM)	X
Last Modified By	Person who last modified a document	X
Track Changes	“Yes” to indicate that the document includes tracked changes. Otherwise, this field should be null.	X
Marginalia	For hard-copy documents, yes or no indication of whether the document at issue contains handwritten notations, notes, or marginalia	

**UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

SPRING PHARMACEUTICALS, LLC,

*Plaintiff,*

v.

RETROPHIN, INC., MARTIN SHKRELI,  
MISSION PHARMACAL COMPANY AND  
ALAMO PHARMA SERVICES, INC.,

*Defendants.*

Civil Action

No. 18-cv-04553

**AGREEMENT REGARDING DISCOVERY OF ELECTRONICALLY STORED  
INFORMATION AND HARD COPY DOCUMENTS AND [PROPOSED] ORDER**

To expedite the exchange of electronically stored information (“ESI”) and Hard Copy Documents in these actions, pursuant to this Court’s authority and with the consent of the Parties, the following Order Governing Protocol for Discovery of Electronically Stored Information and Hard Copy Documents (“ESI Protocol”) shall apply in these actions.

**IT IS HEREBY ORDERED:**

**I. DEFINITIONS**

1. “Documents” shall have the same definition as set forth in Federal Rule of Civil Procedure (“Fed. R. Civ. P.”) 34.
2. “Electronically stored information” or “ESI,” as used herein, means and refers to computer-generated information or data, stored in or on any storage media located on computers, file servers, disks, tape, USB drives, or other real or virtualized devices or media, as such information is defined in the Federal Rules of Civil Procedure, including Rule 34(a).
3. “Native Format” means and refers to the format of ESI in which it was generated and/or as used by the Producing Party in the usual course of its business and in its regularly conducted activities. Where ESI is not stored in a portable native format, a usable exported format will suffice.
4. “Load/Unitization file” means an electronic file containing information identifying a set of paper-scanned images or processed ESI and indicating where

individual pages or files belong together as documents, including attachments, and where each document begins and ends. A Load/Unitization file will also contain data relevant to the individual Documents, including extracted and user-created metadata.

5. “Extracted Text” means the text electronically extracted from a Document, and includes all header, footer and document body information when reasonably available.

6. “OCR text” means text generated through an Optical Character Recognition Process.

7. “Media” means an object or device, including but not limited to a disc, tape, computer or other device, whether or not in the Producing Party’s physical possession, on which data is or was stored.

8. “Parties” means or refers collectively to the named Plaintiff and Defendants in the above-captioned matter, as well as any later added plaintiffs and defendants. “Party” shall refer to a plaintiff or defendant, individually.

9. “Producing Party” means or refers to a Party in the above-captioned matter from which production of ESI or hard copy documents are sought.

10. “Requesting Party” means or refers to a Party in the above-captioned matter seeking production of ESI or hard copy documents.

## **II. COST CONTAINMENT**

1. Files Deleted Prior to Preservation Duty. For the avoidance of doubt, the Parties shall not be obligated under this Order to produce or preserve ESI that was deleted or lost prior to the date upon which the duty to preserve ESI arose.

2. Types of ESI That Need Not Be Preserved or Searched. The Parties agree that there is no need to preserve or collect ESI from the following sources which are deemed not likely to contain relevant information and to be not reasonably accessible:

- a) Voice mails that are not automatically transcribed and delivered to a custodian’s e-mail address;
- b) random access memory (RAM), temporary files, or other ephemeral data;
- c) on-line access data such as temporary internet files, histories, caches, cookies, etc.;
- d) deleted, slack, fragmented, or other data accessible only by forensics;

- e) data in metadata fields that are frequently updated automatically, such as last-opened dates, except as specified in this Order (the metadata fields identified in **Exhibit 1**);
- f) dynamic fields of databases or log files that are not retained in the usual course of business;
- g) information from handsets, mobile devices, personal digital assistants, and tablets that is duplicative of information that resides in a reasonably accessible data source, and;
- h) personal computers and personal e-mail not used for any business activities.

3. Automatically Saved Versions of Documents. The Parties agree that with respect to documents that automatically save, only the most recent version of such documents existing at the time of collection need to be searched and, if relevant, produced, in light of the burden of searching and producing prior versions of each document. The Parties agree to meet and confer regarding reasonable requests made in good faith for the production of prior versions of a specific document. For the avoidance of doubt, this provision does not exempt from production any manually saved versions of such documents.

### **III. PRODUCTION**

#### **A. De-duplication of Production**

1. General. The Parties shall use reasonable, good faith efforts to avoid the production of duplicate ESI following industry-standard practices for MD5 or SHA-1 hash comparison.
2. Exact Duplicates. To the extent that exact duplicate documents (based on MD5 or SHA-1 hash values) reside within a Party's ESI data set, each Party may produce only a single copy of a responsive document or record. Where any such documents have attachments, hash values must be identical for both the document-plus-attachment as well as for any attachment standing alone. Loose electronic documents will not be compared to email or email attachments for deduplication.
3. No Manual Review. No Party shall identify and/or eliminate electronic duplicates by manual review or some method other than by use of the technical comparison using MD5 or SHA-1 hash values outlined above. The Producing Party can either de-duplicate documents within custodians, or across custodians. To the extent a Party de-duplicates non-email documents across custodians, the Party shall populate a field of data that identifies each custodian who had a copy of the produced document (the "Duplicate Custodian" field) in addition to a separate field of data identifying the custodian whose document is produced.

**B. Paper Production Format**

1. Production. All paper documents shall be produced as static images: The images will be in black-and-white, single page, 300 DPI, Group IV\* .TIFF images, .TXT format and standard load files, which can be used with commercially available litigation software packages, and the Default Production Fields as described in Exhibit 1. Hard copy color paper documents will be produced in grayscale in TIFF format. The Parties will accommodate reasonable requests for production of specific images in color to the extent available. Producing such Paper Documents in such form does not change their character from Paper Documents into ESI.
2. Unitization. If a document is more than one page, to the extent possible, the unitization of the document and any attachments or affixed notes should be maintained as it existed when collected by the Producing Party. Parties may unitize their documents using either physical unitization (*i.e.*, based on physical binding or organizational elements present with the original paper documents like staples, clips and binder inserts) or logical unitization (*i.e.*, a manual review of the paper to determine what logically constitutes a document like page numbers or headers). If unitization cannot be reasonably maintained, the original unitization should be documented in the data load file or otherwise electronically tracked if reasonably possible.

**C. ESI Production Format**

1. General. The following provisions shall generally govern the production format and procedure for ESI and are subject to the other provisions contained herein.
2. Production of ESI (both Native and Non-Native). All responsive ESI except that which is produced in Native Format pursuant to Section C.3 should be produced in black-and-white, single page, 300 DPI, Group IV\* .TIFF images with corresponding extracted full text or text generated via OCR pursuant to paragraph C.2.c. below, and affiliated metadata as identified in Exhibit 1. All productions will include these additional specifications:
  - a. a load file for images;
  - b. delimited load files (.dat and .opt) containing a field with the full path and filename to native files produced on the delivery media and the metadata fields Identified in Exhibit 1 (for ESI);
  - c. document-level .txt files for all documents containing extracted full text or OCR text if extracted text is not available or if the document has been redacted;
  - d. Bates number branding and Confidentiality designation (if any) on the face of the image;
  - e. all hidden text (*e.g.*, track changes, hidden columns, comments, notes, markups, etc.) will be expanded, extracted, and rendered in the TIFF file;

this specifically includes, but is not limited to, the inclusion of any notes or comments contained within any PowerPoint slides/presentations that are produced in TIFF format; and

- f. Each of the Metadata and coding fields set forth in Exhibit 1 which can be extracted from a Document shall be produced for that Document. The Parties are not obligated to populate manually any of the fields in Exhibit 1 if such fields cannot be reasonably extracted from a Document, with the exception of Default Production Fields that are generated in the course of collection, review and production.

3. Production of Native Format ESI.

- a) Responsive spreadsheets (e.g., Excel, Lotus, Google Sheets, Csv, etc.) and media files (e.g. Wav, Mp4, etc.) shall be produced in Native Format, except where such files are redacted. For Google documents, production of an export in a comparable format such as an Excel will constitute a native production. A TIFF placeholder embossed with the corresponding confidentiality designation and Bates number shall be produced for all ESI produced in Native Format. Native files that require redaction may be produced as TIFF images with OCR Text Files in lieu of a native file provided that the TIFF renderings are manually formatted for optimal review. Responsive ESI produced in Native Format shall be produced with all Metadata contained in or associated with that file to the extent technologically possible consistent with Section C.2. Nothing in this protocol shall limit a Party's ability to elect to produce other forms of responsive ESI in Native Format.

- b) Extracted Text taken from native files will be provided at a document level. There will be one text file per document, using the same name as the beginning Bates number (Document ID) of the document. The text file associated with any redacted document will exclude redacted text (i.e., the Producing Party will OCR the redacted image of the unstructured ESI and replace the original extracted text).

- c) No Party may attach to any pleading or any correspondence addressed to the Court, Special Master, or any adverse or third Party, or submit as an exhibit at a deposition or any other judicial proceeding, a copy of any native format document produced by any Party without ensuring that either the corresponding slip sheet is attached to the document or the corresponding Bates number and confidentiality legend, as designated by the Producing Party, appears on the document.

4. Request for Documents in Native Format. If a Party reasonably concludes that production in Native Format of any document(s) initially produced in TIFF format is necessary (e.g., to decipher the complete meaning, context, or content, to determine if there is any important use of color in the document, etc.), such Party may request production of the original document in Native Format. The Parties

agree to meet and confer in good faith with respect to any such request. Reasonable requests for specific documents in Native Format accompanied by a reasonable explanation for the request shall not be refused.

5. Appearance and Content. No document may be intentionally manipulated to change how the source document would have appeared if printed out to a printer attached to a computer viewing the file, without prior agreement of the Requesting Party, except as necessary to comply with this Order (*e.g.*, necessary to expand and render hidden text as provided in Section C.2.e or to protect individually identifiable health information as required by the Health Insurance Portability and Accountability Act of 1996 (HIPAA) or to redact privileged or otherwise protected information). Therefore, subject to any appropriate redaction, each document's electronic image shall convey the same information and image as the original document. The Parties shall meet and confer in an attempt to resolve any complaints about the legibility of individual documents.

6. Color. The Parties will accommodate reasonable requests made in good faith for the production of specific color images originally produced in greyscale TIFF format to the extent available and where reasonably necessary to decipher the complete meaning, context, or content of the documents on a case by case basis.

7. Load File. The Producing Party shall provide a Load File to accompany the native files and TIFF images that are produced, to facilitate the use of the produced images by a document management or litigation support system as described above.

a) Load files shall contain the parent/child (*e.g.*, Email/Attachment, Memo/Attachment, Letter/Enclosure) relationships of documents, when possible.

b) For all produced documents, a standard Opticon image load file indicating document boundaries and location of images will accompany the images. The fields that should be included are detailed in Exhibit 1.

c) When producing a multi-page document, images for the document should not span multiple directories.

8. Document Numbering for TIFF Images. Each page of a document produced as TIFF images shall have a legible, unique Document Number electronically "burned" onto the image at a location that does not obliterate, conceal or interfere with any information from the source document (*i.e.*, the "Bates Label"). Each file produced in Native Format shall be associated with a unique Document Number included on the TIFF placeholder provided with the native file. The Document Number for each document shall be created so as to identify the Producing Party and the Document Number. Each Party shall have a unique identifying document identifier prefix. Each page of each production shall have a unique number of eight digits. The unused digits of the unique number shall be filled with placeholder zeros (0) to facilitate electronic sorting of the documents.

9. Organization of Production. A Producing Party shall organize its production of documents originally existing in hard copy as they are kept in the ordinary course of business, taking care to scan and produce folders, redwelds, binder-covers and maintain other organizational structure. Such materials should be produced as independent documents and be produced before the documents that were contained in these elements to the extent reasonably accomplishable by the above-addressed unitization, (e.g., the file folder should have a Bates Label immediately before the documents contained in the file folder). The Producing Party will provide the name of the custodian who had possession of the document when it was collected. A custodian can include an employee or person's name, a department, or an archive storage if the document was stored in archive when the Party's duty to preserve was triggered; provided, however, to the extent that archived files include custodial information, it shall be provided.

10. Family Relationships of Electronic Files. Parent-child relationships between ESI (e.g., the association between an attachment and its parent e-mail, or a spreadsheet embedded within a word processing document), must be preserved by assigning sequential Bates numbers to all files within a parent-child group, and by providing accurate attachment ranges for those files in the metadata fields required. If all family members are not included in the production, the Producing Party will identify any missing family members via a placeholder image bearing text sufficient to explain why the Document was not produced.

11. Email Suppression. In the course of its review and production, a Party may suppress and not review or produce lower included emails provided that they produce all top level emails of any email branch, any lower included emails that have attachments, if responsive, and any responsive email that includes unique content not included elsewhere in a produced email string. A party may reasonably request production of an individual lower included email or emails from a produced email string, and any such reasonable requests shall not be refused where the document is available within the Producing Party's document collection.

12. Production Media. Documents shall be produced via secure FTP site or an external hard drive or flash drive for productions that are too large for expedient FTP transfer pursuant to paragraph 13, or such other readily accessible computer or electronic media as the Parties may hereafter agree upon (the "Production Media"). Each piece of Production Media shall include a unique identifying label and cover letter including the following information:

- a) Name of the Litigation and its case number;
- b) Name of the producing Party;
- c) Date of the production (mm/dd/yyyy);
- d) Volume number;
- e) Bates Number range;

f) Confidentiality Designation; and

g) Notes regarding any irregularities in the production (*e.g.*, whether it is replacement Production Media (see below)).

13. Production Media (FTP Sites). Producing Parties shall produce initially via an FTP site for production volumes equal to or less than 15 GB on the date of the production. Production volumes of a larger size than 15 GB may be produced by FTP in the process described above or via an external hard drive or flash drive pursuant to paragraph 11. Any replacement Production Media shall cross-reference the original Production Media, clearly identify that it is a replacement, and cross-reference the Bates Number range that is being replaced. Producing Parties may encrypt their Production Media and, if so, shall provide a key to decrypt the Production Media in a separate communication.

14. Time. When processing non-email ESI for review and for production in TIFF format, the Producing Party will instruct its vendor to turn off any automatic date stamping. When processing ESI, GMT should be selected as the time zone and the Producing Party will note the time zone used in its processing. To the extent that a Party has already processed ESI using a different time zone, the Producing Party will note the time zone used in its processing. In such instance, a Party may consistently produce all ESI processed using the same time zone. When a metadata field includes a date and/or time, it shall be provided in the following format: mm/dd/yyyy HH:mm:ss.

15. Redactions. To the extent that a responsive document contains (a) privileged content, (b) personally identifiable information, (c) other personal or financially sensitive information that is protected by US or foreign data protection laws, (d) or non-responsive Commercially Sensitive Business Information (as those terms are used in the Protective Order), the Producing Party may produce that document in a redacted form. Any redactions shall be clearly indicated on the face of the document and each page of the document from which information is redacted shall bear a designation that it has been redacted. The designation shall make clear the reason for the redaction (*e.g.*, “Redacted Privileged” or “Redacted DP Information” or “Redacted Commercially Sensitive Business Information”). Where a document contains both privileged and non-privileged responsive content, the Producing Party shall, to the extent possible, redact the privileged material and produce the remainder of the document as redacted. Non-responsive, Commercially Sensitive Business Information may be redacted from a document only if the document can be redacted without obscuring otherwise responsive information. The Parties agree to meet and confer in good faith to attempt to resolve any dispute arising under this paragraph. If redactions within a native spreadsheet become necessary, the parties will meet and confer to discuss a proposed process and provide a means to identify such documents within a production.

16. Non-Responsive Attachments. The Parties agree that fully non-responsive attachments to responsive parent documents need not be produced. For such fully

non-responsive attachments, a placeholder slip-sheet endorsed “Withheld Non-Responsive” will be produced to capture the family relationship.

#### **D. Structured Data Format**

1. To the extent a response to discovery requires production of discoverable electronic information contained in a database and it cannot reasonably be produced in either Excel or .csv format, in advance of producing such information, the Parties agree to meet and confer-regarding the format of the production (*e.g.*, commercial database, or some other agreed-upon format). If the structured data exists in a proprietary database format, and an exportable electronic file cannot be created in a reasonably usable format, then the Parties will meet and confer regarding utilizing the proprietary software to generate the production in an alternative format or other options.

#### **E. Confidentiality of Produced ESI**

1. Native and Non-Native Format. Responsive ESI, whether produced as TIFF images or in Native Format, shall be produced pursuant to the terms of the Protective Order. Any objections to production shall otherwise be made pursuant to the Federal Rules of Civil Procedure or the Federal Rules of Evidence. If the Producing Party is producing ESI in TIFF Format subject to a claim that it is protected from disclosure under any protective agreement or confidentiality order, or any agreement entered into or Order issued in this matter, the word “CONFIDENTIAL” or “HIGHLY CONFIDENTIAL - ATTORNEYS’ EYES ONLY” or “HIGHLY CONFIDENTIAL - OUTSIDE COUNSEL EYES ONLY” shall be burned electronically on each page of such document. The Producing Party should also include in the flat file (.txt or .dat) a designation that the document is protected and the level of protection, as required by any protective order or agreement.

2. Native Format. If the Producing Party is producing ESI in Native Format subject to a claim that it is protected from disclosure under any protective agreement or confidentiality order, or any agreement entered into or Order issued in this matter, then the designation may be included in the filename and shall be burned electronically on to the TIFF placeholder or where not produced with a TIFF placeholder, the storage device (*e.g.*, CD, USB, or hard drive) containing such native ESI data shall be labeled with the designation “CONFIDENTIAL” or “HIGHLY CONFIDENTIAL - ATTORNEYS’ EYES ONLY” or “HIGHLY CONFIDENTIAL - OUTSIDE COUNSEL EYES ONLY”. The Producing Party should also include in the flat file (.txt or .dat) a designation that the document is protected and the level of protection, as required by the Protective Order.

#### **IV. MISCELLANEOUS**

1. Variance. Any practice or procedure set forth herein may be varied by agreement of the Parties without order of the Court. Failure of the Parties to agree on any modifications for

good cause shown may be raised with the Court as necessary and in accordance with the Federal Rules of Civil Procedure and the Local Civil Rules.

**V. PRIVILEGE**

1. 502(d) Order. The terms of the 502(d) Order governing the production of privileged information govern this Order as well.

**VI. PRIVILEGE LOGS AND CHALLENGES**

**A. Privileged Documents That Need Not Be Logged**

1. General. The Parties agree that the following privileged documents and ESI (“privileged material”) need not be logged or indexed:

- a) privileged material dated after October 23, 2018; and
- b) privileged material created or received by counsel of record or outside attorneys advising in this matter and their associated attorneys and support staff, including paralegal and secretarial personnel.

2. Preservation of Privileged Materials. Notwithstanding the above stipulation, all privileged material should be preserved in the event of a later dispute with respect to the propriety of any privilege claim or the sufficiency of the privilege log. The Parties agree that they will confer at a later time to determine whether any other categories of privileged documents can be excluded from the logging requirement and attempt to agree on formats designed to reduce the burden associated with privilege log drafting, such as “categorical” or “metadata only” privilege logs.

**B. Format of Privilege Log**

1. General. The privilege log shall be produced as a searchable PDF file.

**C. Contents of Privilege Log**

1. General. If the parties are unable to agree on an alternative logging format as described in IX.A.2. above, documents withheld from production that a Party believes are covered by an attorney-client privilege and/or work product protection, which are not specifically excluded above, should be logged on a privilege log on a document-by-document basis, except as identified below. Consistent with Fed. R. Civ. P. 26(b)(5), the following information should be provided (as applicable) in the privilege log for each document: (1) unique document identification number; (2) document type; (3) family relationship; (4) date; (5) author; (6) each recipient broken out separately to provide email To, CC and BCC info; (7) privilege or protection claimed; and (8) description of the subject matter of the document or

electronically stored information sufficient to enable the requesting party to assess the validity of the privilege claim.

2. Email Strings. For those documents that contain a series of e-mail communications in a single document (“email string”), it shall be sufficient to log the ‘string’ without separate logging of each included communication, but reference to the document as an “email string” should be made in the document description field of the log; and to the extent that different emails within the email string are protected by different privilege bases, the log shall separately identify that within the email string certain emails are subject to one particular privilege claim and other emails within the string are subject to a different privilege claim. Email strings that are not privileged in their entirety should be redacted if they contain responsive, non-privileged content. The parties will meet and confer if a Receiving Party requests additional information to validate the claim of protection for a specific email string. Such information shall not be withheld upon good cause shown for the request.

3. Identification of Counsel. All counsel or their employees (or direct reports for in-house counsel) involved in purportedly privileged communications or work product shall be identified as such in the privilege log.

#### **D. Challenges to Privilege Log**

1. General. If a Requesting Party believes in good faith that one or more items in a Producing Party’s privilege log should be produced and are inappropriately being withheld, then it shall raise the issue as to each log entry with the Producing Party in writing with reasonably sufficient detail so that the Producing Party may understand the Requesting Party’s complaint. Within ten (10) business days, the Producing Party shall respond in writing. If the response does not satisfy the Requesting Party, then the Parties shall meet and confer and if the dispute as to the privileged nature of the material cannot be resolved, then the Requesting Party may seek relief from the Court as to the specific log entries raised with the Producing Party. Nothing in this procedure to challenge a Party’s privilege log modifies the Producing Party’s burden to establish the privileged nature of the withheld document.

### **VII. OBJECTIONS**

1. General. The Parties do not waive any objections to the relevance, responsiveness, production, discoverability, possession, custody, control, or confidentiality of Documents, including (without limitation) objections regarding the burden, over-breadth, or relevance of document requests related to Documents. Nothing in this Stipulated Order shall be interpreted to require the disclosure of irrelevant information, relevant information that is overly burdensome, or relevant information protected by the attorney-client privilege, work product immunity, or any other applicable privilege or immunity or is otherwise not discoverable.

2. No Waiver of Rights Regarding Review. By entering this Order, a Party is not giving up its right to review its documents for privilege or any other reason (including to identify non-responsive documents) and the existence of this Order cannot be used to compel a Party to produce documents without review. Moreover, this Order does not mean that the cost of review should not be considered in whether any particular discovery is disproportionate (*i.e.*, that the marginal benefit of the discovery is not as great as the marginal cost of said discovery including review).

3. Disputes. The Parties will meet and confer in an attempt to resolve any objections if necessary.

**IT IS SO STIPULATED, THROUGH COUNSEL OF RECORD**

Respectfully submitted this 22nd day of May, 2019.

/s/ David E. Dahlquist

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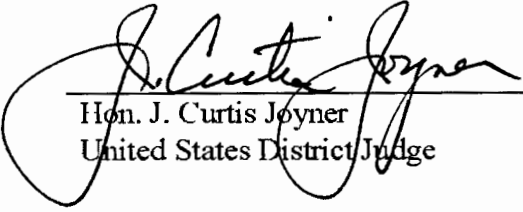
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**PURSUANT TO STIPULATION, IT IS SO ORDERED**

Dated: \_\_\_\_\_

May 23, 2019

  
\_\_\_\_\_  
Hon. J. Curtis Joyner  
United States District Judge

**EXHIBIT 1****DOCUMENT PRODUCTION FORMAT SPECIFICATIONS**

It is proposed that documents be exchanged in an electronic format. The following information outlines proposed production specifications. To the extent the production format specifications listed below conflict with the terms of the ESI Protocol set forth above, the ESI Protocol shall control.

**A. Format**

Produced documents will be provided as black and white, Group IV single page TIFF images, 300 DPI, named the same as the Bates number (without embedded spaces or special characters). Color images will be provided in jpg/jpeg format. Parties will produce all non-redacted spreadsheet (*e.g.*, Excel, Lotus, Google Sheets, CSV, etc.) files and media files (*e.g.* Wav, Mp4, etc) in Native format. As standard practice, no other native files will be produced. Other native files will only be provided as the parties may agree (on an individual document-by-document basis) or as the Court may order.

**B. Load File Specifications**

In order to facilitate loading the images into document review software, a standard image load file indicating document boundaries and location of images will accompany the images. The load file will be in an Opticon compatible format.

**C. OCR**

Machine generated OCR created from scanned images or redacted documents will be provided at a document level. There will be one OCR text (.txt) file per document, named the same as the beginning Bates number (Document ID) of the document. The OCR text file associated with any redacted document will exclude redacted text.

**D. Extracted Text**

The extracted text taken from the native file will be provided at a document level. There will be one extracted text file per document, named the same as the beginning Bates number (Document ID) of the document. The extracted text file associated with any redacted document will be replaced with an OCR text file which excludes redacted text.

**E. Default Production Fields**

The following default fields will be provided for all documents in the production.

<b><u>FIELD NAME</u></b>	<b><u>DESCRIPTION</u></b>
Begin Bates	Beginning Bates Number
End Bates	Ending Bates Number

Bates Range	Bates Range for Email
BeginAttachment	Beginning Bates Number of a Family Group
End Attachment	Ending Bates Number of a Family Group
Att Count	Number of attachments to an email
Attachment Name	The file name(s) of all attachments.
ParentID	Bates Number of the Parent Email (populated for attachments only)
Child ID	Bates Number of the Attachment (s) (populated for Parent Emails only)
Custodian	The original custodian from whom the Document was collected. For documents from centralized repositories where custodian name is unavailable, identifying source information should be provided.
Duplicate Custodian	Names of all other custodians who possessed the document (non-email only).

#### **F. Metadata Fields**

The following metadata fields will be exchanged. Specific metadata associated with redacted documents may be withheld from the production if the metadata field is likely to contain privileged or protected information, subject to the requesting party's right to seek production.

<b><u>FIELD NAME</u></b>	<b><u>DESCRIPTION</u></b>
Subject	Subject Line of the Email
File Name	Name of the File as maintained in the ordinary course
File Extension	File Extension
Sent Date	Email Sent Date
Received Date	Email Received Date
Created Date	Date File was Created
Modified Date	Date File was Last Modified
Author	Author of the Application file
From	Sender of an Email
To	Recipients of the Email
CC	CC's of the Email
BCC	BCC's of the Email
File Type	Email, Spreadsheet, Word Processing Document, etc.
File Path	Location of the file or email as it is maintained in the ordinary course
Record Type	Type of file – Email, attachment, or eFile

Email Sent Time	Time email was sent
Email Received Time	Time email was received
File Created Time	Time application file was created
Native File	Native files named after the Bates number, e.g., E00001.xls (in contrast to File Name which is the original name of the file) and their path on the delivery media.
MD5 Hash	Value commonly used to de-duplicate files or identify duplicates

Metadata will be provided in a flat file (.txt or .dat). Each line will begin with the fields Beg Bates and End Bates. Please use default Concordance delimiters, as follows:

- Field delimiter - ASCII character 20 (¶)
- Text delimiter - ASCII character 254 (þ)
- Newline indicator - ASCII character 174 (®)

#### **G. Native Production Format**

Native files will be produced only to the extent described in this Order, as the parties may agree, or as the Court may order. If native files are produced, their formatting will be as follows:

- Native files will not be produced for any redacted document, except that natively redacted Excel or Google Sheets documents are acceptable so long as the original metadata (less redacted text) is preserved and produced and the redacted documents can easily be identified in a party's production.
- Native files will be produced with a Bates stamped image indicating that the file was produced natively.
- Native files will be named the same as the beginning Bates number (Document ID) as the Bates stamped image.
- Where documents are produced in native form, a full path to the native document must be included in the Native File field in the production load file.

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

**IN RE: GENERIC PHARMACEUTICALS  
PRICING ANTITRUST LITIGATION**

**MDL 2724  
16-MD-2724**

**THIS DOCUMENT RELATES TO:**

**HON. CYNTHIA M. RUFÉ**

***ALL ACTIONS***

**PRETRIAL ORDER NO. 95  
(ESI PROTOCOL)**

**AND NOW**, this 12th day of July 2019, upon consideration of the Report and Recommendation of the Special Discovery Master for ESI, to which no objections were filed, the prior rulings of the Court, and the agreement of the parties, the Court hereby enters the following protocol governing the identification and production of electronically stored information (“ESI”) and other documents.

**1. DEFINITIONS**

- 1.1 “Archival Storage” and “Archival Systems” mean long-term repositories for the storage of records that preserve the content of the Documents or data stored therein, prevent or track alterations to such Documents or data, and control access to electronic records.
- 1.2 “Archival Data” means information maintained for Archival Storage that is not immediately accessible to a user of a computer system.
- 1.3 “Backup Media” refers to magnetic tapes, CDS, DVDS, hard drives or other storage onto which Backup Systems store electronic information.

- 1.4 “Backup Systems” refers to computer systems used to store copies of electronic information on Backup Media to permit recovery of the information in the event of loss or damage to the original data.
- 1.5 “Agreed Custodian” shall mean any individual of a Producing Party as identified and agreed by the parties during a meet and confer as having possession, custody, or control of potentially relevant information, Documents, or ESI.
- 1.6 “Potential Custodian” shall mean any individual of a Producing Party that may have possession, custody, or control of potentially relevant information, Documents, or ESI.
- 1.7 “Custodial Data Source” means any data source used for business purposes in or on which an Agreed Custodian or Potential Custodian may store potentially relevant Documents, ESI or Hard Copy Documents, whether or not created or generated by an Agreed Custodian or Potential Custodian, including but not limited to personal computers, laptops, tablets, email (whether stored locally or centrally), mobile devices, shared network servers, shared or individual network folders, cloud storage systems, structured data systems, or social media.
- 1.8 “Document” shall have the meaning contemplated by Federal Rule of Civil Procedure 34(a)(1)(A).
- 1.9 “Document Family” means a collection of pages or files maintained together constituting a logical single communication of information, but consisting of more than a single stand-alone record. Examples include a fax cover, the faxed letter, and an attachment to the letter - the fax cover being the “Parent,” and the letter and

attachment being a “Child,” or an email and associated attachments, or a presentation with embedded files.

- 1.10 “Email” means an electronic means for communicating written information that is deliverable to designated recipients at specific addresses associated with particular Internet domains.
- 1.11 “ESI” is an abbreviation of “electronically stored information” and shall have the same meaning and scope as it has in Federal Rule of Civil Procedure 34(a)(1)(A).
- 1.12 “Extracted text” or “Full Text” means the text extracted from a Native Document, and includes all header, footer and document body information when available. A “Text File” is a file containing the full text of native files extracted directly from the native file, or, in the case of Hard Copy Documents or scanned PDF documents, subject to OCR, a file containing the text resulting from the OCR.
- 1.13 “Hard Copy Document” means a Document that was maintained in paper form.
- 1.14 “Load File” means an electronic file that is used to import all required production information into a Document database, including, if available, Document images, Full Text or OCR text, Native Format files where required by this ESI Protocol, and reasonably available Metadata, as well as information indicating Document breaks, and Document relationships such as those between an Email and its attachments. For files produced as TIFF images, each page of a Document shall be electronically saved as an image file. The Producing Party shall produce a unitization file, a type of load file, for all produced Documents in accordance with the specifications provided in Exhibit A.

- 1.15 “Metadata” means structured information about ESI that is created by the file system or application, embedded in the Document and sometimes modified through ordinary business use. Metadata of the ESI describes, inter alia, the characteristics, origins, usage and validity of the ESI.
- 1.16 “Native Format” means the format of ESI in the application in which such ESI was originally created.
- 1.17 “Network” or “Shared Storage Systems” shall mean any data storage device accessible to multiple users remotely over a computer network.
- 1.18 “Non-Custodial Data Source” means any data source that is not kept or maintained by any particular Agreed Custodian or Potential Custodian but which may contain potentially relevant Documents or ESI, including data sources used by any department, business unit, or division of a Producing Party, and Shared Storage Systems that may contain potentially relevant information, such as electronic mail systems, Backup Systems or Backup Media, or Archival Systems or Archival Storage.
- 1.19 “OCR” means the optical character recognition technology used to read paper Documents or electronic images of Documents and output such Documents to a searchable text format. The latter text is also referred to as the “OCR text” or simply “OCR.”
- 1.20 “Production” or “Produced” includes any exchange of Documents or ESI by a Producing Party, whether voluntarily or in response to a formal or informal request.

- 1.21 “Producing Party” means any party or third party that produces Documents pursuant to this ESI Protocol.
- 1.22 “Receiving Party” means any party or third party that receives information, Documents, or ESI produced in the MDL.
- 1.23 “Requesting Party” means any party to the MDL that requests production of information, Documents, or ESI in the MDL.
- 1.24 “Responsive Document” means any Document or ESI that a Producing Party produces in response to any discovery request or subpoena served in or in connection with the MDL, subject to the limitations set forth in the Federal Rules of Civil Procedure, the Local Rules, or Court order.
- 1.25 “Search Term” means a word or a combination of words or phrases designed to capture potentially relevant ESI, and includes strings of words and phrases joined by proximity and Boolean connectors or other syntax.
- 1.26 “Static Image” means or refers to a representation of ESI produced by converting a native file into a standard image format capable of being viewed and printed on standard computer systems.
- 1.27 “Tagged Image File Format” or “TIFF” refers to the CCITT Group IV graphic file format for storing bit-mapped images of ESI or Hard Copy Documents.
- 1.28 “TAR” (Technology-Assisted Review) means a process for prioritizing or coding a collection of ESI using a computerized system, using algorithms or systematic rules, that harnesses human judgments of subject matter expert(s) on a smaller set of Documents and then extrapolates those judgments to the remaining Documents in the collection. TAR systems generally incorporate statistical models and/or

sampling techniques to guide the process and to measure overall system effectiveness.

1.29 “Structured data” means data that resides in a fixed field within a record or file, or stored in a structured format, such as databases (such as Oracle, SQL, Access) or data sets, according to specific form and content rules as defined by each field of the database.

1.30 “Unstructured data” refers to free-form data which either does not have a data structure or has a data structure not easily readable by a computer without the use of a specific program designed to interpret the data, including but not limited to, word processing documents, slide presentations, email, PDFs, spreadsheets, and webpages, blogs, image files, instant messages, audio and video files, and others of similar variable format.

## 2. **SCOPE**

2.1 The procedures and protocols set forth in this ESI Protocol shall govern the search, disclosure, and format of Documents and ESI produced for use in the MDL to the extent available. This ESI Protocol does not define the scope of production, nor the relevance of any particular information. Nothing in this ESI Protocol establishes any agreement as to either the temporal or subject matter scope of discovery in the MDL. With respect to ESI, the inclusion of a data type as an example of a type of ESI in the Definitions herein should not be construed as an agreement by a Producing Party that these types of ESI may be potentially relevant and/or must be collected, searched, or produced. Similarly, the exclusion of a data type as an example of a type of ESI in the Definitions herein shall not be

construed as agreement by the Requesting Party that these types of ESI are not potentially relevant and/or need not be collected, searched, or produced. Further, the fact that a Document is captured by the application of a search protocol does not mean that such Document is responsive to any propounded discovery request or otherwise relevant to the MDL. Nothing in this stipulation is intended to alter any Producing Party, Receiving Party, or Requesting Party's rights, obligations, or responsibilities under Federal Rules of Civil Procedure 26(b)(2)(B), 34(a)(1), and 37. No provision of this ESI Protocol waives any objections as to the production, discoverability, admissibility, or confidentiality of Documents and ESI. The discovery requests, objections thereto, agreements between or among the Requesting Party, Receiving Party, and/or Producing Party, and any pertinent Court orders shall govern the scope of Documents and ESI to be produced.

- 2.2 Nothing in this Protocol is intended to be an exhaustive list of discovery obligations or rights of a Producing Party or a Requesting Party. To the extent additional obligations or rights not addressed in this Protocol arise under the Federal Rules of Civil Procedure, local rules, or applicable state and federal statutes, they shall be controlling. In particular, nothing in this ESI Protocol is meant to impose any obligations on any Producing Party to search, disclose or produce information protected under the Health Insurance Portability and Accountability Act of 1996 (Pub. L. 104–191, 110 Stat. 1936, enacted August 21, 1996) (“HIPAA”).
- 2.3 The Requesting Party, Receiving Party, and Producing Party, as appropriate, shall meet and confer in an effort to resolve any disputes that may arise under this ESI

Protocol, prior to seeking assistance from the Court or with an appointed discovery master.

3. **PRIOR PRODUCTIONS**

To the extent the Requesting Party has requested Productions of Documents or ESI that were previously collected and processed or produced by the Producing Party to the Plaintiff States, to the Department of Justice or in *In re Propranolol Antitrust Litig.*, Civil Action No.16-9901 (S.D.N.Y.), the Producing Party, subject to its objections to the request, may produce the previously-produced Documents in the same form in which they originally were produced or prepared for production, even if such form is different from the specifications in this ESI Protocol. To the extent Defendants choose to re-produce documents previously produced by Defendants to the Plaintiff States, the Defendants shall either (1) re-produce the documents using the same Bates numbers used when such documents were previously produced to the Plaintiff States or (2) provide an overlay to the Plaintiff States with the corresponding Bates numbers used when such documents were previously produced to the Plaintiff States. Unless the Court so orders, any such overlay shall not be shared with the Private Plaintiffs without the prior written consent of Defendants. To the extent a Producing Party chooses to re-produce documents previously produced by the Producing Party in *Propranolol*, the Producing Party shall either (1) re-produce the documents using the same Bates numbers used when such documents were previously produced in *Propranolol* or (2) the Producing Party shall provide an overlay with the corresponding Bates numbers used when such documents were previously produced in *Propranolol*. If the Court orders that any documents previously produced by Defendants to the Plaintiff States must be re-produced to the

Private Plaintiffs, the Producing Party shall re-produce such documents by either (1) re-producing the documents using the same Bates numbers used when such documents were previously produced to the Plaintiff States or (2) the Producing Party shall provide an overlay with the corresponding Bates numbers used when such documents were previously produced to the Plaintiff States.

4. **PRODUCTION FORMAT**

4.1 Format Guidelines: Other than as provided in Paragraphs 3 and 4, each Producing Party shall, to the extent reasonably and technically possible, produce Documents and ESI according to the specifications provided in Exhibit A. The Requesting Party, Receiving Party, and/or Producing Party, as appropriate, agree to meet and confer in good faith if any of the technological specifications set forth in Exhibit A result in technological issues.

4.2 De-Duplication: The Producing Party need only produce a single copy of a particular electronic Document.

- a) Vertical Deduplication. A Producing Party may de-duplicate ESI vertically by Agreed Custodian, provided however, that an email that includes content in the BCC or other blind copy field shall not be treated as a duplicate of an email that does not include content in the BCC or other blind copy field, even if all remaining content in the email is identical.
- b) Horizontal Deduplication. A Producing Party may de-duplicate ESI horizontally (globally) across the population of records, if the Producing Party discloses to the Receiving Party and the Requesting Party that it has deduplicated horizontally, and provided further that: (a) an email that

includes content in the BCC or other blind copy field shall not be treated as a duplicate of an email that does not include content in the BCC or other blind copy field, even if all remaining content in the email is identical; and (b) all Agreed Custodians who were in possession of a de-duplicated Document, and the directory structure where the Agreed Custodian stored the de-duplicated Document, must be identified in the AllCustodian and CustodianOtherDirectory Metadata fields specified in Exhibit A.

To ensure accuracy, the All Custodian and CustodianOtherDirectory Metadata fields must be captured by an automated process and cannot be populated using a manual process. The aforementioned Metadata must be produced to the extent it exists. In the event of a rolling production of Documents or ESI items, the Producing Party shall provide an overlay load file with updated AllCustodian and CustodianOtherDirectory Metadata fields along with each production. The Metadata overlay may contain a full refresh of data for the AllCustodian and CustodianOtherDirectory Metadata fields or be a supplement to the information previously provided for the fields. At the time of production, the Producing Party shall identify the overlay as a full refresh or a supplement. A Metadata overlay file shall be either a full refresh overlay or a supplemental overlay.

- c) A Producing Party using a centralized system (or “journaling”) as a preservation and backup system for email may not possess certain Metadata, such as “CustodianOtherDirectory” and “Importance.” Where Documents are produced from such a centralized system, in the production

cover letter the Producing Party shall, to the extent practicable, identify the centralized system in the “Source” Metadata field for the Documents produced from such system, or identify by Bates Number which Documents are being produced from a centralized system.

- d) **Methodology.** If a Producing Party elects to de-duplicate, the Producing Party shall identify ESI duplicates by using industry standard MD5 or SHA-1 algorithms (or a reasonably equivalent alternative) to create and compare hash values for exact duplicates only. Other methodologies that are substantially different for identification of duplicates must be discussed with the Requesting Party and approved in writing before implementation. The resulting hash value for each item shall be reflected in the HASH Value field specified in Exhibit A.
- e) The Requesting Party and Producing Party hereby agree that production of Documents and ESI globally de-duplicated in accordance with the provisions of this ESI Protocol shall constitute production of Documents as maintained in the ordinary course of business. No Producing Party shall be required to, but may, eliminate duplicates by manual review, including Hard Copy Documents that are exact duplicates of electronic versions. Such documents could include copies of marketing materials printed and stored in boxes but never used, or conference programs printed but not distributed. However, any document containing handwritten notes or markings would not be considered a duplicate of an electronic version and if responsive must be produced as an original document. Likewise, printed-out electronic

documents not bearing markings but whose removal would undermine the completeness of a hard-copy file must be produced if responsive.

4.3 Email Thread Suppression: Email threads are email communications that contain prior or lesser-included email communications. A most inclusive email thread is one that contains all of the prior or lesser-included emails and attachments, including each branch of the email thread. A Producing Party may use e-mail thread suppression to exclude email from production, provided however, that an email that includes an attachment or content in the BCC or other blind copy field shall not be treated as a lesser-included version of an email that does not include the attachment or content, even if all remaining content in the email is identical. To the extent that a Producing Party uses e-mail thread suppression to exclude email from production, the Producing Party shall produce the metadata for that suppressed email.

4.4 Documents to Be Produced Natively: Except for Documents to which paragraph 4.9 applies, a Producing Party shall produce Microsoft Excel and other spreadsheet files, including comma or tab delimited text files, Microsoft Access files, and video or audio files in Native Format, if available. Other document types which may be difficult or costly to be accurately imaged, such as large Microsoft Power Point files, may be selected to be produced natively at the Producing Party's discretion. The production Load Files shall contain a link to the produced Native Format files as specified in the "NativeLink" Metadata field described in Exhibit A. Each electronic file produced in Native Format shall be assigned a unique Bates Number as set forth in Paragraph 5.6, and the database

record for that file shall include a single page TIFF image branded with this unique Bates Number, any confidentiality designation, and a standardized phrase indicating that the document was produced in native format (i.e., PRODUCED IN NATIVE FORMAT).

- 4.5 Unitization: In scanning Hard Copy Documents, distinct Documents shall not be merged into a single record, and single Documents shall not be split into multiple records. The Producing Party shall take reasonable steps to physically and logically unitize Hard Copy Documents. For example, Documents stored in a binder, folder, or similar container (each, a “container”) shall be produced in the same order as they appear in the container. Similarly, pages that are stapled or clipped shall be produced as a single document and not multiple one-page documents. The Producing Party shall undertake reasonable efforts to, or have its vendors, logically unitize (i.e. use cues such as consecutive numbering, report titles, similar headers and footers, and other logical cues that indicate the pages belong together) Hard Copy Documents that are not otherwise bound. The Producing Party shall make reasonable best efforts to unitize Hard Copy Documents correctly. This provision does not obligate any Producing Party to reassemble Document Families for Hard Copy Documents that are not stored or maintained as Document Families in the location in which members of that family are found or as they are kept in the ordinary course of business. Nor shall this provision obligate any Producing Party to make whole any Document that is not stored or maintained in its complete form.

- 4.6 Bates Numbers and Confidentiality Designations for TIFF Images: Each page of a Document produced in the MDL in TIFF file format shall have a legible numeric identifier (“Bates Number”) electronically “burned” onto the image that must: (1) be unique across all Document productions in this MDL; (2) maintain a constant length and format of nine numeric digits (with a consistent prefix and including 0-padding to the same number of characters) across the entire production; (3) be sequential within a given document; and (4) include a letter prefix identifying the Producing Party followed by a single-dash. The Bates Numbers shall be in a consistent font type and size. If a Bates number or set of Bates numbers is skipped in a production, the Producing Party will so note in a cover letter or production log accompanying the production. If warranted, consistent with the terms of any applicable protective order, each page of a Document shall have either “CONFIDENTIAL” or “HIGHLY CONFIDENTIAL” electronically “burned” onto the image. The Producing Party will make reasonable efforts to avoid obscuring any information originally appearing on the document and will reproduce any such document on request.
- 4.7 Metadata Fields and Processing: A Producing Party is not obligated to populate manually any of the fields in Exhibit A, with the exception of the following, which must always be populated for ESI: (a) BegBates, (b) EndBates, and (c) Custodian. To the extent the fields can be automatically populated at the time of production, Record Type, Production Volume and SourceParty shall be populated. Additionally, the Producing Party must populate the following fields in Exhibit A if applicable and reasonably and technically possible: (a) Confidentiality, (b)

PageCount, (c) AllCustodian (which is required if performing horizontal deduplication as allowed under Paragraph 5.2(b) of this ESI Protocol), (d) Redacted and (e) family designation fields sufficient to identify all members of a Document Family (e.g. BegAttach and EndAttach, or ParentBates and AttachBates, or AttachRange). To the extent reasonably available, Metadata identified in Exhibit A shall be provided in a Concordance-format delimited file with a .DAT file extension using Concordance default delimiters, including ASCII 020 and 254 delimiters for column break and text qualifier, and new line as ASCII 174. The first line shall be the header with field names, and each subsequent line shall contain the fielded data for each Document.

- 4.8 Production Media: The Producing Party shall produce Document images, Native Format files, Text and/or OCR files, Load Files, and Metadata on hard drives, CDs, DVDs, secure FTP, or other secure file transfer utility or other mutually agreeable media (“Production Media”). Production volumes may be produced via FTP or other electronic transfer system, without a separate agreement. Productions made via FTP or other electronic transfer are not required to be supplemented with hard media containing the same Documents. Each piece of hard media shall include a unique identifying label providing the identity of the Producing Party, the MDL number, the date of the production of Documents on the hard media, the disk number (1 of X, 2 of X, etc.) if applicable, Production Volume, and the Bates Number ranges of the Documents in the production. For productions delivered via a secure file transfer utility, the Producing Party shall provide a letter containing the information that would otherwise be on the label.

Each volume shall limit directory contents to approximately 5,000 files per folder. All productions shall be checked and produced free of computer viruses. To the extent that the Production Media includes any confidential information protected under any applicable protective order filed with the Court, the label on such Production Media shall indicate that the Production Media includes information so designated. Further, any replacement Production Media shall cross-reference the original Production Media, clearly identify that it is a replacement, and cross-reference the Bates Number range that is being replaced. All Production Media that is capable of write protection should be write-protected before production. All Production Media must be encrypted, with the Producing Party to provide a decryption key at the time of production.

- 4.9 Redacted Documents: In the event that a Document is redacted, as allowed under Paragraph 13 of this ESI Protocol, the full text may be replaced with OCR text that excludes the redacted material, Metadata fields may be redacted if they contain redactable information, and the Native Format version need not be produced. When a Document is redacted, the TIFF image should show the word “redacted” where applicable and a production Load File field should be populated to indicate the Document contains a redaction. If a Document to be produced in Native Format requires redaction, that Document may be produced in redacted TIFF format, or in redacted Native Format, at the Producing Party’s discretion, and to the extent reasonably and technically possible.
- Should a Producing Party believe that redacting a file is overly burdensome, the Producing Party, may request a meet and confer to determine if an alternative

means of production would be appropriate, such as creating a new native document which contains the tab and heading structure of the original file with only the excerpted responsive data (“Extracted Document”), along with a brief explanation of what has been excluded. If the Parties are unable to agree after meeting and conferring in good faith, the Parties may notify the Court or an appointed discovery master of their unresolved dispute(s) and seek resolution by the Court or an appointed discovery master. If the Parties agree and the Producing Party creates such an Extracted Document, it shall so indicate in the metadata that the Extracted Document is an extract. The Receiving Party may request that any such Extracted Document be produced in its original form with redactions and the parties shall meet and confer concerning any such request. If redacting TIFF images, the Producing Party, or its ediscovery vendor, shall make reasonable efforts to: (1) reveal hidden rows, columns or sheets prior to converting the Document to TIFF; (2) clear any filters that may conceal information; (3) adjust column widths so that numbers do not appear as “#####”; (4) ensure that column and row headings print; (5) ensure that the tab name appears in the header or footer of the document; (6) process comments so that they are produced at the end of the spreadsheet; (7) process spreadsheets so that they print across then down; and (8) process presentation Documents (e.g., PowerPoints) so that all speaker notes and comments are visible. If a Requesting Party or Receiving Party receives a redacted TIFF image of a Document required herein to be produced in Native Format that the Requesting Party or Receiving Party does not believe is formatted so as to be legible (e.g., column cells display

“#####” instead of the value) or if a Requesting Party or Receiving Party wants additional information from an Excel-type spreadsheet (e.g., formulas), the Requesting Party or Receiving Party may request from the Producing Party a legible TIFF image or a redacted native item. At that time the Requesting Party or Receiving Party will explain a reasonable basis for its request and will provide a specific Bates Number range for the ESI at issue. Upon receiving such a request, the Producing Party shall either produce a legible TIFF image, or redacted native item or disclose to the Requesting Party or Receiving Party why it is unreasonable or unnecessary to do so. If the Producing Party encounters Microsoft Access files or audio or video files or other file types requiring native production that contains privileged content, the Requesting Party, Receiving Party, and Producing Party, as appropriate, shall meet and confer to determine a suitable manner of producing the non-privileged, responsive content contained in these files.

- 4.10 Attachments: Email attachments and embedded files must be mapped to their parent Document by the Bates Number by including a “BegAttach” field designating the beginning of each such attachment and “EndAttach” field designating the end of each such attachment. If attachments and embedded files cannot be separated from their parent Documents, then “BegAttach” and “EndAttach” fields listing the unique beginning and end number for each attachment or embedded Document must be included. Non-substantive automatically-generated embedded files, such as logos, embedded, non-substantive formatting files such as .ole or .dll formats, or confidentiality legends

need not be produced as separate attachments. To the extent they are maintained together, all Documents in a Document Family shall be consecutively Bates Number stamped with the child Documents produced immediately after the parent-document.

4.11 Text Files: Each Document produced under this ESI Protocol shall be accompanied by a single, multipage text file containing all of the text for that Document (as opposed to one text file per page of such Document). Each text file shall be named using the Bates Number of the first page of the corresponding production item.

- a) ESI: The text of each ESI item shall be extracted directly from the ESI native file. To the extent that is not technically possible (e.g., the underlying native file is an image file), the text for each ESI item shall be generated by applying OCR to the native file under the provision above. For contacts and calendars, user modifiable fields shall be extracted and produced as text.
- b) OCR: To the extent that Documents have been run through OCR software, the full text shall be provided on a document-level basis in an appropriately formatted text file (.txt) that is named to match the first Bates Number of the document. Text files shall be provided in a "Text" folder. To the extent that a Document is redacted as allowed under Paragraph 13, the text files shall not contain the text of the redacted portions, but shall indicate where the redactions were made, e.g. with the

notation “REDACTED.” There is no obligation to OCR any electronic Documents that do not natively exist in a text-searchable format.

- 4.12 Password Protected Files: The Producing Party shall make reasonable efforts to ensure that all encrypted or password-protected Documents are successfully processed for review and production under the requirements of this ESI Protocol, and the decrypted Document is produced. To the extent encrypted or password-protected Documents are successfully processed according to the requirements of this ESI Protocol, the Producing Party has no duty to identify the prior encrypted status of such Documents. To the extent such Documents are not successfully processed, the Producing Party agrees to: (a) produce a slipsheet for each encrypted or password protected Document that cannot be successfully processed indicating that the Document cannot be decrypted; and (b) provide the metadata for the Document required by Exhibit A to the extent it can be reasonably extracted from the file in its encrypted form. Notwithstanding the preceding sentence, a Producing Party need not produce a slipsheet or provide metadata for encrypted attachments in otherwise non-responsive Document Families that are encrypted, but do not appear reasonably likely to contain responsive material. The Requesting Party, Receiving Party, and/or Producing Party, as appropriate, shall meet and confer regarding any requests that a Producing Party undertake additional efforts to decrypt files after production. If the Parties are unable to agree after meeting and conferring in good faith, the Parties shall notify the Court or an appointed discovery master of their unresolved dispute(s) and seek resolution by the Court or an appointed discovery master.

- 4.13 Embedded Documents: Embedded ESI documents (e.g. a spread sheet embedded within a word processing document) will be extracted, produced as an independent Document, and related back to the respective top-level parent document (e.g., standalone file, email message, tec.) via the BegAttach and EndAttach fields referenced in Exhibit A. Related embedded documents will be produced within a continuous Bates Range.
- 4.14 Compressed and Container Files: Compression file types (e.g., .CAB, .GZ, .RAR, .ZIP), shall be decompressed to ensure that a compressed file within a compressed file are decompressed into the lowest possible compression resulting in individual folders and/or files. Original compression files and container files need not be produced, provided the responsive content files are produced in accordance with the specifications of this ESI Protocol.
- 4.15 Custodian or Originating Source: The custodian or originating source shall be identified in the Custodian field of the database load files, as provided in Exhibit A. Documents found in the possession of a natural person (or on a natural person's hardware or storage media) shall be produced in such fashion as to identify the natural person. Documents found in the possession of a department, group, entity, or other common facility (e.g., office, file room, archive, network storage, file share, back-up, hard drive, etc.) shall be produced in such a fashion as to identify the department, group, entity, or facility. A Producing Party shall use a uniform description of a particular Agreed Custodian across productions.
5. **ENTERPRISE LEVEL DATABASES:** Where a discovery request requires production of Structured Data, in lieu of producing the native database or TIFF images of database

content, the Producing Party shall identify such Structured Data sources within a reasonable period after receiving the discovery request, and the Requesting Party and Producing Party, as appropriate, shall meet and confer on the content and format of a data extraction from such Structured Data Source. The Requesting Party and Producing Party, as appropriate, shall, in good faith, make disclosures necessary to ensure the meet and confer discussions regarding content and format of the production are meaningful.

6. **PROCESSING SPECIFICATIONS:** The Producing Party shall collect and process Documents using reasonable methods that preserve available data. To the extent reasonably feasible upon collection, the Producing Party shall use the following specifications when converting ESI from its Native Format into TIFF image files prior to production:

- (a) All tracked changes shall be maintained as last saved, to the extent reasonably feasible upon collection, so that all changes to a Document are evident, unless redactions were necessary to remove privileged material.
- (b) All Word Documents shall include and show field codes for auto-date and auto-time fields.
- (c) Author comments shall remain or be made visible, unless redactions were necessary.
- (d) Presenter notes within a presentation shall be made visible, to the extent reasonably feasible upon collection and unless redactions were necessary.
- (e) ESI shall be processed with a single time zone and date and time setting that is consistent across each Producing Party's productions ("Chosen Time Zone"). If a time zone other than UTC/GMT time zone is used for the Chosen Time Zone, a

Producing Party shall notify the Requesting Party in the cover letter accompanying each production. The date and time reflected in the fields in Exhibit A, and on any TIFF image will include the Chosen Time Zone. TIFF images may optionally show the local date and time if they display the offset to the Chosen Time Zone.

- (f) To the extent technically feasible, ESI items shall be processed in a manner that maintains and displays all hidden columns or rows, hidden text or worksheets, speaker notes, tracked changes and comments (i.e., shall force on hidden columns or rows, hidden work sheets, track changes, can comments). If the file ordinarily to be produced as a TIFF under this ESI Protocol that cannot be expanded, the Receiving Party may request that the native be produced with the image file.
- (g) ESI items shall be processed so as to maintain the date/time shown in the Document as it was last saved by the custodian or end user, not the date of collection or processing (i.e., shall force off Auto Data).
- (h) If a Document otherwise subject to production in TIFF under this ESI Protocol cannot be converted to TIFF without error due to corruption or some other issue that renders the Document unreviewable, password protection, or some other issue, the Document shall be produced in Native format consistent with paragraph 4.4 of this ESI Protocol.
- (i) English Language: If no English version of a Document is available, the Producing Party has no obligation to produce an English translation of that Document and does not have an obligation to render that Document text searchable via OCR or other means. The Producing Party shall make reasonable

efforts to ensure that all technologies and processes used to collect, process and produce the text of any Document – including all TIFF conversion and OCR processes, and the extraction of text from native files – preserves all foreign language text, punctuation and other characteristics as they exist in the source native file. To the extent reasonably and technically possible, foreign language text files shall be delivered in UTF-8 and be Unicode compliant, with the correct encoding to enable the preservation of the Documents’ original language.

**7. DISCLOSURES REGARDING CUSTODIANS AND SOURCES OF ESI**

**7.1 Process for determination of Agreed Custodians**

- a) Prior to a meet and confer between the Parties to discuss appropriate custodians, the Producing Party shall disclose the Potential Custodians it proposes to be used as Agreed Custodians and for each such Potential Custodian his/her name, and title(s). In addition, to the extent reasonably available, the Parties shall provide specific years of service.
- b) The Requesting Party may dispute the designations in 7.1(a) or request reasonable additional information that may be needed to evaluate the sufficiency of the Producing Party’s list of proposed Agreed Custodians.
- c) If the parties are unable to resolve their disputes after good faith negotiations, the Requesting Party seeking to add to the list of proposed Agreed Custodians provided by the Producing Party shall promptly file a motion with the Court or an appointed discovery master to seek its appropriate ruling. Notwithstanding the foregoing, any party may petition the Court or an appointed discovery master, at any time and upon a

showing of good cause, to add names to the list of Custodians provided by the Producing Party.

7.2 Disclosure of Sources of Potentially Relevant Documents and ESI.

- a) Following the determination of Agreed Custodians, the parties shall meet and confer concerning the appropriate Custodial Data Sources for the Agreed Custodians.
- b) Prior to such a meet and confer between the Parties to discuss appropriate Custodial Data Sources for the Agreed Custodians the Producing Party will disclose and identify the Custodial Data Sources, including structured and unstructured data, along with general information about the data source (such as dates of service, nature, scope, character, organization, and formats employed in each system).
- c) Prior to a meet and confer between the Parties to discuss appropriate Non-Custodial Data Sources, the Producing Party will disclose and identify the Non-Custodial Data Sources, including structured and unstructured data, along with general information about the data source (such as dates of service, nature, scope, character, organization, and formats employed in each system).
- d) For any Custodial or Non-Custodial Sources identified in response to the disclosures identified in response to Section 7.2(b) and 7.2(c) that a Producing Party contends is not reasonably accessible, the Producing Party shall identify why the information is considered not reasonably accessible, and the general nature of such software, systems, or

information. If the Requesting Party intends to seek discovery that the Producing Party contends is not reasonably accessible, the Parties shall promptly meet and confer in good faith, and if necessary, seek resolution by the Court or an appointed discovery master.

**8. DESIGNATED LIAISON**

8.1 Each Requesting Party, Receiving Party, and Producing Party shall designate individual(s) to act as e-discovery liaison(s) for purposes of meeting, conferring, and attending court hearings on the subject (“Designated ESI Liaison”). The Designated ESI Liaison shall:

- a) be prepared to participate in e-discovery discussions and dispute resolution;
- b) be knowledgeable about his or her respective Requesting Party’s, Receiving Party’s, or Producing Party’s e-discovery efforts;
- c) be, or have reasonable access to those who are, familiar with his or her respective Requesting Party’s, Receiving Party’s, or Producing Party’s electronic systems and capabilities in order to explain those systems and answer relevant questions; and
- d) be, or have reasonable access to those who are, knowledgeable about the technical aspects of e-discovery, including electronic Document storage, organization, and format issues, and relevant information retrieval technology, including search methodology.

**9. SEARCH METHODOLOGIES FOR UNSTRUCTURED DATA**

9.1 In General:

- a) Prior to conducting a search for responsive ESI, regardless of the search methodologies to be employed, the Requesting Party and Producing Party shall meet and confer regarding the search methodologies the Producing Party proposes to employ to identify responsive Documents, and make such disclosures regarding their proposed search methodology that will permit the Receiving Party to evaluate the proposed methodology and enable meaningful meet and confers, such as the type of methodology to be used (e.g., Search Terms, TAR or other advanced analytics, e-mail thread suppression, manual review, etc.) and the Custodial Data Sources and Non-Custodial Data Sources to which they will be applied, along with information sufficient for the Requesting Party to evaluate the reasonableness of the Agreed Custodians whose Documents are to be searched, and the Custodial Data Sources and Non-Custodial Data Sources to be searched. In addition, the Producing Party shall disclose whether it intends to fulfill its obligation to produce responsive documents and ESI by either: (i) Producing all non-privileged documents and ESI that meet specified, disclosed search criteria, or (ii) Subjecting documents and ESI that meet specified disclosed search criteria to a responsiveness review in addition to the application of search methodologies.
- b) Any search methodology used by a Producing Party to search for responsive Documents will search any associated attachments and embedded files.

9.2 To the extent a Producing Party elects to use search terms and/or Boolean search strings (together, “Search Terms”) or other limiters, including, by way of example only, date ranges and email domains in Metadata fields, as a means of limiting the volume of information to be reviewed for responsiveness, prior to conducting any such searches or applying other limiters, that Producing Party shall disclose the following to the Requesting Party.

- a) The Agreed Custodians whose ESI will be searched using Search Terms, and a description of the Custodial Data Sources and Non-Custodial Data Sources against which the limiters and/or Search Terms shall be run; and
- b) An initial list of the limiters and/or Search Terms the Producing Party intends to use.

9.3 Upon receipt of the proposed Search Terms and disclosures set forth above, the Requesting Party and Producing Party shall meet and confer to attempt to reach agreement on the Search Terms and/or limiters to be used to identify responsive Documents. To facilitate such meet and confers, the Producing Party shall discuss, among other matters, and to the extent not protected by the attorney-client privilege or work-product doctrine, whether the terms include relevant terminology, or nicknames, code words, euphemisms, acronyms, slang, terms of art, email addresses, and other language likely to be contained in responsive documents; appropriate synonyms for proposed Search Terms and variations on search syntax, for example, using wildcard characters, truncation, stem words, fuzzy logic and proximity terms to address over and under inclusiveness; and whether any appropriate testing and quality control measures were conducted or

will be conducted to evaluate the sufficiency of the Search Terms. The Requesting Party and Producing Party hereby agree that negotiations regarding Search Terms and other limiters are intended to be a cooperative and iterative process, involving a good faith exchange of information and proposals to facilitate the negotiations.

- 9.4 Technology Assisted Review (“TAR”) and Similar Advanced Analytics: If a Producing Party elects to use TAR or similar advanced analytics as a means of including or excluding Documents to be reviewed for responsiveness or of culling or otherwise limiting the volume of information to be reviewed for responsiveness, prior to use of such tool the Requesting Party and Producing Party shall meet and confer as to (1) the Custodial Data Sources and Non-Custodial Data Sources against which TAR will be run; (2) the TAR or advanced analytics vendor and methodology being deployed; (3) the quality control measures used to validate the results of the TAR methodology or similar advanced analytics, (4) any Documents, Document types, file types or other categories that the Producing Party proposes to exclude from the TAR process and the method of identifying such Documents to be excluded, (5) other disclosures that are reasonably necessary for the Requesting Party to evaluate the proposed TAR process. To the extent a Producing Party proposes to use Search Terms to pre-cull ESI prior to application of TAR and/or advanced analytics, prior to doing so, they shall meet-and-confer with the Requesting Party regarding whether pre-culling is appropriate and if so, how it is to be applied. If the Requesting Party and Producing Party are unable to agree on the TAR and/or

advanced analytics technology and methods being proposed after meeting and conferring in good faith, the Requesting Party and Producing Party shall notify the Court or an appointed discovery master of their unresolved dispute(s) and seek resolution by the Court or an appointed discovery master.

10. **AMENDMENT OF ORDER**

- 10.1 Nothing herein shall preclude any Requesting Party, Receiving Party, or Producing Party from seeking to amend this ESI Protocol in writing, provided, however, that no Requesting Party, Receiving Party, and/or Producing Party may seek relief from the Court or an appointed discovery master concerning compliance with the ESI Protocol until that Requesting Party, Receiving Party, and/or Producing Party has met and conferred in good faith with the other Requesting Party, Receiving Party, and/or Producing Party involved in the dispute.
- 10.2 Any Requesting Party, Receiving Party, or Producing Party added or joined to this MDL after the date of this ESI Protocol that seeks to deviate from this ESI Protocol must obtain leave of Court or an appointed discovery master to do so unless every affected Requesting Party, Receiving Party, and Producing Party consent to the proposed deviation in writing. Before seeking Court or appointed discovery master intervention, every affected Requesting Party, Receiving Party, and Producing Party shall meet and confer in good faith regarding any modification.
- 10.3 In light of the disparate data systems and architectures employed by various entities, variations from this ESI Protocol may be required. In the event that any

Requesting Party, Receiving Party, or Producing Party identifies a circumstance where application of this ESI Protocol is not technologically possible, would be unduly burdensome or impractical, or when another process would satisfy the objective and reach the same result with less burden, the Requesting Party, Receiving Party, or Producing Party will notify the affected Requesting Party, Receiving Party, or Producing Party of the exception and before implementing an alternative, specify an alternative procedure that is not unduly burdensome or impractical that will be employed, if one exists. Upon request by any affected Requesting Party, Receiving Party, or Producing Party, those affected Requesting Parties, Receiving Parties, and/or Producing Parties will meet and confer regarding the circumstances and proposed alternative approaches.

- 10.4 Nothing in this ESI Protocol waives the right of any Producing Party to petition the Court or an appointed discovery master for an Order modifying the terms of this ESI Protocol upon sufficient demonstration that compliance with such terms is either (1) unexpectedly or unreasonably burdensome, or (2) impossible, provided, however, that counsel for such Producing Party must first meet and confer with counsel for the Requesting Party, and the Requesting Party and Producing Party shall use reasonable best efforts to negotiate an exception from or modification to this ESI Protocol prior to seeking relief from the Court or an appointed discovery master.

11. **ASSERTIONS OF PRIVILEGE.** Pursuant to Rule 26(b)(5) of the Federal Rules of Civil Procedure, the Requesting Party, Receiving Party, and Producing Party hereby agree that a Producing Party may withhold or redact a Document if the Document

withheld is protected by attorney-client privilege, the work-product doctrine, or any other applicable privilege or immunity from disclosure.

11.1 If a Producing Party identifies portions of a Document and redacts such portions of the Document pursuant to Paragraph 12 of this ESI Protocol, the Producing Party must log the fact of redaction except if such redactions are solely to protect “sensitive personally identifying information” or “SPII.”

11.2 Privilege Logs: Privilege logs shall be provided in Excel format and contain the following information for each responsive Document or ESI withheld or redacted:

- a) a sequential number associated with each privilege log record;
- b) the date of the Document or ESI;
- c) the Bates Numbers of Documents or ESI redacted or a numerical or other identifier for each Document or ESI withheld;
- d) the identity of persons who sent (and, if different, the identity of all persons who authored or signed) the Document or ESI and the addressees, recipients, copyees, and blind copyees (with senders, signers, authors, addressees/recipients, copyees, and blind copyees, each separately identified by those categories), and identification of which of them are attorneys, and the job title or general description of the job responsibilities of such persons, if known or reasonably knowable. The identification of job titles or responsibilities of such persons may be satisfied by providing a key accompanying the log that provides the job title or general job responsibilities for such persons and by identifying those persons whose title or responsibilities are unknown rather than by entering such titles or

descriptions in the log itself, or by providing organizational charts or similar documents sufficiently detailed for the Requesting Party to readily identify the job titles or responsibilities of such persons.<sup>1</sup> In the event a Producing Party reasonably believes compliance with the foregoing requirement to provide job titles or general job descriptions will be unduly burdensome, it shall request a meet and confer with the Requesting Party and the parties shall meet and confer and, if they cannot resolve the matter, bring it to the Court or an appointed discovery master for resolution.

- e) a description of the subject matter of the information contained in the Document or ESI that, without revealing information itself privileged or protected, is sufficient to understand the subject matter of the Document and the basis of the claim of privilege or immunity. The same description may be used for multiple Documents (i.e., a categorical description) so long as the Producing Party has, in good faith, evaluated the Document to ensure the categorical description accurately reflects the contents of the Document and is sufficient for the Receiving Party to evaluate the claim of privilege or immunity;
- f) the type or nature of the privilege asserted (i.e., attorney-client privilege or work product doctrine, and if such other privilege or immunity is asserted it shall be separately identified along with identification of whether the

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<sup>1</sup> Nothing in Paragraph 13.2(d) shall obligate a Producing Party to conduct unreasonable independent research regarding the identity of any such persons. If the Producing Party is unable to identify the job title or provide a general description of such persons, it shall disclose that inability in the log or any accompanying key providing job titles and/or general job descriptions.

Producing Party or some other entity holds the privilege or protection asserted); and

g) an indication of whether the Document or ESI has been redacted and produced or withheld in its entirety.

11.3 For email threads, the Producing Party shall log an entry for each lesser-included email in the thread, or the Producing Party shall log a single entry for the entire thread and produce a redacted version of the threaded email.

11.4 For ESI, as an alternative to manually entering the information required under Paragraph 12.2 (a)-(d) of this ESI Protocol, a portion of each Producing Party's privilege log may be generated by exporting objective Metadata from the review tool used to identify privileged or work-product protected Documents where the objective Metadata provides the information required under those subparagraphs, provided, however, that: the Metadata are reasonably understandable and legible; the requirement to provide a key or other documents sufficient to identify the job titles or job responsibilities of the persons identified in the metadata is satisfied or a meet and confer on that issue is requested, as provided under Paragraph 12.2(d); for email senders or recipients for which the Metadata reveals only an email address rather than an individual's name, the Producing Party shall provide a "key" that identifies the individuals associated with such email addresses and identify any email addresses for which the associated individual is unknown; and that for email, email and any attachments are sequentially logged.

a) Such Metadata shall include the following:

1. A unique privilege log identifier or, in the case of redacted documents, the Bates number assigned to such document;
2. Author
3. From
4. To
5. CC
6. BCC
7. Date Sent, Received or Created
8. Document Type, (for example MSG (message), ATT (attachment), DOC (loose file))
9. Page Count or File Size

11.5 The Producing Party shall produce a key showing the job title(s) for all attorneys identified on that Producing Party's privilege log.

11.6 Should a Receiving Party be unable to ascertain whether or not a Document contained on the log is privileged or have reason to believe a particular entry on the log is responsive and does not reflect privileged information, the Receiving Party may request a meet and confer, and the Requesting Party, Receiving Party, and/or Producing Party, as appropriate, shall, meet and confer about such deficiencies. The Producing Party shall provide additional information necessary for the Receiving Party to determine if the Document has been properly withheld or redacted. If the Requesting Party, Receiving Party, and/or Producing Party, as appropriate, cannot agree on the provision of such additional information, the

Receiving Party will promptly move the Court or an appointed discovery master for resolution.

11.7 Privilege logs shall be produced within a reasonable time following production of the first production volume and shall be supplemented within a reasonable time following each subsequent production where production occurs on a rolling basis, or by another date upon agreement of the Requesting Party and the Producing Party. The Requesting Party, Receiving Party, and/or Producing Party, as appropriate, shall meet and confer to reach agreement regarding what constitutes such reasonable time for that privilege log production.

11.8 Documents Presumptively Excluded from the Privilege Logs.

- a) Any documents or communications sent solely between and among counsel for the Plaintiff States or state governmental agencies (including the State Attorneys General<sup>2</sup>), or persons employed by or acting on behalf of such counsel.
- b) Communications, after July 15, 2014, exclusively between a Producing Party (either defendant or plaintiff) and its outside litigation counsel (or in the case of states, litigation counsel), primarily about this MDL, the Private Actions, or the State Actions (all as defined by PTO 45), or the state investigation of the generic pharmaceuticals industry, or the criminal investigation that the Antitrust Division of the U.S. Department of Justice is conducting into the generic pharmaceuticals industry.

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<sup>2</sup> Wyoming and Rhode Island are included as “Plaintiff States” for the purposes of this provision provided they join this MDL.

- c) Work product created for this MDL, the Private Actions, or the State Actions (all as defined by PTO 45), or the state investigation of the generic pharmaceuticals industry, or the criminal investigation that the Antitrust Division of the U.S. Department of Justice is conducting into the generic pharmaceuticals industry by outside litigation counsel (or in the case of states, litigation counsel), or by an agent of outside litigation counsel for a party, other than a party to the MDL, after March 2, 2016.
- d) Work product prepared after March 2, 2016, by a party or its inside counsel at the direction or request of the party's outside litigation counsel (or in the case of states, litigation counsel) for purposes of assisting such outside counsel's prosecution or defense of this MDL, the Private Actions, or the State Actions (all as defined by PTO 45), or the state investigation of the generic pharmaceuticals industry, or the criminal investigation that the Antitrust Division of the U.S. Department of Justice is conducting into the generic pharmaceuticals industry.
- e) Communications regarding this MDL, the Private Actions, or the State Actions (as defined by Pre Trial Order 45) (i) sent solely between litigation counsel for the Parties, and or (ii) sent solely between litigation counsel for the Parties and persons employed by or acting on behalf of such counsel.

11.9 In the interest of time, and to minimize litigation costs, the Requesting Party and Producing Party may in good faith negotiate the exclusion of categories, in addition to those identified in Paragraph 11.7 herein, of Documents that while

technically responsive are relatively irrelevant to the issues in the litigation and likely to be privileged or protected by the work-production doctrine.

12. **PROPER BASIS FOR REDACTIONS AND WITHHOLDING OF DOCUMENTS**

**Redaction or Withholding of Responsive Documents.** Pursuant to Rule 26(b)(5)(A), a party may redact or withhold responsive documents only on grounds of (1) attorney-client privilege; and (2) protection under the work-product doctrine. If any member of a Document Family is responsive, the Producing Party shall produce all family members and/or portions thereof that are not independently protected as privileged or work-product. Additionally, because of the risk of irreparable harm to individuals, such as identity theft: (1) an otherwise responsive document that contains personal medical or health records not relevant to this litigation or protected by HIPAA, personal credit card or personal bank account numbers, social security numbers, or tax identification numbers of individual Plaintiffs, individual employees or agents of the Parties, or individuals not a Party to this litigation (together, “sensitive personally identifying information” or “SPII”) may be redacted to exclude SPII; (2) a document that is a member of a family that includes one or more responsive documents may be withheld if it contains exclusively SPII.

To the extent documents are redacted or withheld on the above grounds, the redaction legends or placeholder document for a withheld family member should indicate the reason for the redaction as follows: 1) REDACTED – PRIVILEGED or WITHHELD - PRIVILEGED; 2) REDACTED – WORK PRODUCT or

WITHHELD –WORK PRODUCT; or (3) REDACTED – SPII or WITHHELD – SPII.

If a Producing Party, for any reason, subsequently produces a Document/ESI withheld and place-holdered or redacted pursuant to this ESI Protocol, the Producing Party shall produce that Document pursuant to the production format specifications of this Order that would have been applicable to the Document had it been produced initially (including provision of applicable load files necessary to link the replacement file to other previously produced document family members), except that the Producing Party shall apply an appropriate numerical suffix to the Bates number of the file to account for instances where the produced version of the file occupies more pages than the original placeholder image for the file. If the Producing Party's production software does not support the required numerical suffix, the Producing Party may, at the time of the production of the withheld Document/ESI, produce such Document/ESI with a new Bates number so long as a cross reference chart from the original Bates number to the new Bates numbers is provided in Excel format. As an example, if a Producing Party initially withholds a five-page Word document as non-responsive and provides a placeholder image branded with the number ABC-000000001, the subsequently produced version of that five-page Word document shall be branded ABC-000000001.001 through ABC-000000001.005.

It is so **ORDERED**.

**BY THE COURT:**

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**CYNTHIA M. RUFÉ, J.**

## EXHIBIT A

### 1. COVER LETTER

A cover letter shall be included with each production and shall include information sufficient to identify all accompanying media (hard drive, thumb drive, DVD, CD, secure FTP), shall identify each production on such media by assigning a Production Volume name or number, and shall include the Bates range for the Documents produced in each volume.

### 2. PRODUCTION LOAD FILES

There will be two Load/Unitization files accompanying all Productions of ESI.

The first will be a Metadata import file, in Concordance-format delimited file with a .DAT file extension, that contains the agreed upon Metadata fields in UTF-8 encoding.

- The second will be a cross-reference file that contains the corresponding image information identifying document breaks. The acceptable formats for the cross-reference files are .log and .opt.
- **Image Load Files**
  1. The name of the image load file shall mirror the name of the delivery volume, and shall have the appropriate extension (e.g., ABC001.OPT).
  2. The volume names shall be consecutive (e.g., ABC001, ABC002, *et seq.*).
  3. There shall be one row in the load file for every TIFF image in the Production.
  4. Every image in the delivery volume shall be cross-referenced in the image load file.
  5. The imageID key shall be named the same as the Bates Number of the page.
  6. Load files shall not span across media (e.g., CDs, DVDs, hard drives, etc.), *i.e.*, a separate volume shall be created for each piece of media delivered.
  7. Files that are the first page of a logical Document shall include a “Y” where appropriate. Subsequent pages of all Documents (regular Document, Email, or attachment) shall include a blank in the appropriate position.
- **Concordance Data Load Files:**
  1. Data load files shall be produced in Concordance .DAT format.
  2. The data load file shall use standard Concordance delimiters:

3. Comma - ¶ (ASCII 20);
4. Quote - ¢ (ASCII 254);
5. Newline - ® (ASCII 174).
6. The first line of the .DAT file shall contain the field names arranged in the same order as the data is arranged in subsequent lines.
7. All date fields shall be produced in mm/dd/yyyy format.
8. All attachments shall sequentially follow the parent document/email.
9. Use carriage-return to indicate the start of the next record.
10. Load files shall not span across media (e.g., CDs, DVDs, hard drives, etc.); a separate volume shall be created for each piece of media delivered.
11. The name of the data load file shall mirror the name of the delivery volume, and shall have a .DAT extension (e.g., ABC001.DAT).
12. The volume names shall be consecutive (e.g., ABC001, ABC002, *et seq.*).
13. If foreign language / Unicode text exists, the .DAT file shall be in UTF-8 or UTF-16 format where appropriate, consistent with this ESI Protocol.

**OCR/Extracted Text Files**

1. OCR or Extracted Text files shall be provided in a separate \TEXT\ directory containing Document level text files.
2. If Foreign Language/Unicode text exists, TEXT files shall be in appropriate UTF-8 or UTF-16 format.

**3. IMAGES**

Produce Documents in Single Page Group IV TIFF black and white files.

Image Resolution of 300 DPI.

Paper 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.

If a Receiving Party reasonably deems the quality of the Document produced in TIFF format to be insufficient, the Parties will meet and confer in good faith to determine whether the Producing Party must produce the Document in Native Format, or as a JPEG file, and whether such Document must be produced as a color image.

If a Receiving Party reasonably believes that a Document originally produced in black and white needs to be produced in color, it shall notify the Producing Party. The

Parties agree to meet and confer in good faith concerning the re-production of such Document(s) in color either as a JPEG file or in Native Format.  
File Naming Convention: Match Bates Number of the page.  
Original Document orientation or corrected orientation shall be retained.

**4. ESI (AND PAPER TO THE EXTENT APPLICABLE) PRODUCTION  
METADATA FIELDS**

<b>Field Name</b>	<b>Description</b>
BegBates	Beginning Bates Number.
EndBates	Ending Bates Number.
BegAttach	Beginning Bates Number of the first Document in a Document family range. Documents that are part of Document families, i.e., containing parents and attachments, should receive a value.

<b>Field Name</b>	<b>Description</b>
EndAttach	Ending Bates number of the last Document in attachment range in a Document Family range. Documents that are part of Document Families, i.e., containing parents or attachments, should receive a value.
AttachmentCount	Populated for Email parent records and indicates the number of attachments that constitute the whole family (BegAttach to EndAttach)
Custodian	Name of the Custodian of the Document Produced, to the extent reasonably and technically available.
AllCustodian	The AllCustodian field shall reference the Name(s) of all Custodian(s) who were in possession of a de-duplicated Document, to the extent reasonably and technically available.
CustodianOtherDirectory	The directory structure or path where the original file was stored on the computer for the custodians identified in the AllCustodian metadata field. The data contained in the field shall start with the identification of the other custodian followed by the source file path. This field is required only when a Producing Party de-duplicates ESI horizontally. (See Paragraph 4.2(b))
FileName	Filename of the original source ESI.
NativeLink	Path and filename to produced Native Format file (see Paragraph 5.4).
EmailSubject	Subject line extracted from an Email.
Importance	Email importance flag, to the extent reasonably and technically available
Title	Title field extracted from the Metadata of a non-Email.
Author	Author field extracted from the Metadata of a non-Email.
From	From or Sender field extracted from an Email.
To	To or Recipient field extracted from an Email.
CC	CC or Carbon Copy field extracted from an Email.

<b>Field Name</b>	<b>Description</b>
BCC	BCC or Blind Carbon Copy field extracted from an Email.
DateSent	Sent date of an Email (mm/dd/yyyy format).
TimeSent	Time of an Email (hh:mm:ss format).
DateReceived	Received date of an Email (mm/dd/yyyy format).
TimeReceived	Received time of an Email (hh:mm:ss format).
DateCreated	Creation date of a file (mm/dd/yyyy format).
TimeCreated	Creation time of a file (hh:mm:ss format).
DateLastModified	Last modification date (mm/dd/yyyy format).
TimeLastModified	Last modification time (hh:mm:ss format).
DateLastPrinted	The date the Document was last printed.
DateAccessed	The last accessed date of the Document.
File Extension	File extension of Document (.msg, .doc, .xls, etc.).
Full Text	File path to full text/OCR File.
Confidentiality	“Confidential” or “Highly Confidential,” if a Document has been so designated under any Stipulated Protective Order filed with the Court; otherwise, blank.
Message-ID	The Outlook Message ID assigned by the Outlook mail server, if applicable.
ConversationIndex	Unique alphanumeric identifier for an email conversation, which may be populated by the e-mail client for each outgoing message.
HASHValue	MD5 or SHA Hash value of the file.
FolderPath	The path to the original folder in which the Document was located.
FileSize (in bytes)	Size of the file in bytes.
PageCount	The number of pages in the file.

<b>Field Name</b>	<b>Description</b>
AttachRange	Bates Number of the first page of the parent item to the Bates Number of the last page of the last attachment “child” item.
RecordType	To indicate “Paper,” “Hard Copy,” or “HC” if a Hard Copy Document and “ESI” if it is an ESI item.
Application	Indicates software application that generated the ESI item (e.g., Outlook, Word).
Production Volume	Production volume name or number.
Redacted	User-generated field that will indicate redactions. “X,” “Y,” “Yes,” “True,” are all acceptable indicators that the Document is redacted. Otherwise, blank.
SourceParty	The Producing Party.
Chosen Time Zone	As defined in the ESI Protocol.

## 5. SYSTEM FILES

Common system files defined by the NIST library (<http://www.nsrl.nist.gov/>) need not be produced.