ESI Essentials

What You Absolutely Must Know in This Day and Age About Electronically Stored Information

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Daniel K. Bryson
Jeremy R. Williams
Patrick M. Wallace
Whitfield Bryson & Mason, LLP
900 West Morgan Street
Raleigh, NC 27603
(919) 600-5000
www.wbmllp.com

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I. Introduction

Metadata, OCR, TIFF, Native Format, De-NIST, Data Mapping? If you are confused by what all that mumbo-jumbo means, you are likely not alone. However, as attorneys, it has become important to have an understanding of not only what the terms mentioned above, and many more, mean, but also how they relate to your case.[1] As of 2005, over 93% of information was created electronically, and by that time, email was already regarded as the primary means of communication within the business world.[2] Surely, over a decade later, that percentage is even closer to 100%. Understanding how to navigate the world of Electronically Stored Information ("ESI") is now important in any area of law, but has become vital in the area of litigation. ESI is potentially responsive to nearly every discovery request served in cases today. Therefore, the question has become: is the discovery you currently serve adequately requesting all of the information that could assist you in obtaining a successful resolution for your client? This paper aims to provide you with the building blocks and skills necessary for managing ESI without getting mired in the mumbo-jumbo.

II. eDiscovery Overview

Prior to the digital age, the production of documents in litigation primarily consisted of paper documents, photographs, and other physical documents.[3] However, with the growth of digital technology, such as email and the Internet, both the format and methods of discovery has changed significantly to address ESI. It has become important

[1] *See* Appendix 1.
[2] Managing Discovery in the Digital Age: A Guide to Electronic Discovery in the District of Delaware, 8 Del. L. Rev. 75, 75 (2005).
[3] Burke T. Ward, Janice C. Sipior, Jamie P. Hopkins, Carolyn Purwin, Linda Volonino, Electronic Discovery: Rules for a Digital Age, 18 B.U. J. Sci. & Tech. L. 150 (2012).

for all litigators to understand what ESI is and what the best methods for obtaining ESI through discovery are.

As one might expect, ESI is information that is stored electronically. In other words, information is considered "electronic" if it is created, manipulated, communicated, stored, and best utilized in a digital form.[4] This broad definition includes word processing documents, spreadsheets, presentations, electronic communications (e.g., e-mail messages, chats and text messages), web-browser history, multimedia (e.g., pictures, audio and video), and configuration and activity logs.[5] ESI also consist of a file's metadata, which is electronically stored information about the characteristics of the data that includes information about the file's origin or validity.[6]

Although ESI is most often located on a computer system, such as a desktop, laptop, workstation, or server, ESI can also be found on mobile phones, digital cameras, flash drives, USB drives, and cloud storage.[7] Further, depending on the type of ESI that is being searched for, ESI could be found across multiple digital platforms.[8] An example of multiple platform ESI would include an email that is stored both on an individual's computer at her office and on her smartphone. Another example would be a digital photo taken by a digital camera that had also been saved to an individual's laptop computer. The portability of ESI allows for information to be stored in different locations and even in different formats on different devices. Thus, because ESI covers many kinds of

[4] *See* Burke, *supra* note 3, at 155.
[5] *See id*.
[6] *See* Philip J. Favro, A New Frontier in Electronic Discovery: Preserving and Obtaining Metadata, 13 B.U. J. Sci. & Tech. L. 1, 4 (2007); see also Craig Ball, Understanding Metadata; Knowing Metadata's Different Forms and Evidentiary Significance is Now an Essential Skill for Litigators, 13 L. Tech. News 78, 78 (2006).
[7] *See* Burke, *supra* note 3, at 155.
[8] *Id.*

documents over a multitude of areas of storage, the preservation, collection, and analysis of these documents can become complicated in litigation.

III. What do the rules provide?

In 2011, the North Carolina General Assembly amended the North Carolina Rules of Civil Procedure to address issues related to e-discovery in North Carolina state courts. The 2011 North Carolina amendments largely parallel the amendments made to the Federal Rules of Civil Procedure in 2006, but there are a couple of potentially significant differences. Recently, several changes were made to the Federal Rules of Civil Procedure, many of which address e-discovery issues.

a. Definition of ESI

N.C. R. Civ. Pro 26 explicitly lists "electronically stored information" as among the types of information that are subject to discovery in civil litigation. Rule 26 does not define ESI, except to state that:

> the phrase 'electronically stored information' includes reasonably accessible metadata that will enable the discovering party to have the ability to access such information as the date sent, date received, author, and recipients. The phrase does not include other metadata unless the parties agree otherwise or the court orders otherwise upon motion of a party and a showing of good cause for the production of certain metadata.[9]

The Federal Rules defined ESI slightly differently. Under the FRCP, ESI is defined to include "writings, drawings, graphs, charts, photographs, sound recordings, images, and other data or data compilations stored in any medium from which information can be obtained. . . ."[10]

[9] N.C. Civ. P. Rule 26(b)(1)
[10] *See* FRCP 26.

Thus, although the North Carolina General Assembly attempted to provide litigants in North Carolina courts some guidance on the issue of Metadata, questions remain as to the full scope of ESI.

b. Form of Production

North Carolina Civ. Pro. Rule 34 allows the party requesting discovery to specify a particular form or forms for the production of ESI.[11] If the producing party objects to the requested form or forms, it must state its objection in writing and indicate the form or forms it intends to use. Absent agreement among the parties or court order, a party must either (1) produce documents as they are kept in the usual course of business, or (2) produce them in a "reasonably usable form."[12] ESI, however, need not be produced in more than one form.[13]

While the Federal Rules are substantially similar to the North Carolina Rules, recent changes to the Federal Rules provide a few differences. As with the pre-2015 amendments, the Federal Rules require a party to "produce documents as they are kept in the usual course of business or must organize and label them to correspond to the categories in the request."[14] However, past commentary to the 2006 Amendments provides some helpful clarification:"[i]f the responding party ordinarily maintains the information it is producing in a way that makes it searchable by electronic means, the information should not be produced in a form that removes or significantly degrades this feature."[15] This commentary is reflected almost verbatim in the commentary to the 2011

[11] N.C. Civ. Pro. Rule 34
[12] N.C. R. Civ. P. 34(b).
[13] *Id.*
[14] FRCP 34(b)(2)(D)
[15] Committee Notes to FRCP 34- 2006 Amendment

Amendments to North Carolina's Rules: "If the responding party ordinarily maintains the information it is producing in a way that makes it searchable by electronic means, the information should not be produced in a form that removes or significantly degrades this feature."[16] Of note, the new Federal Rules explicitly allow parties to produce ESI in lieu of permitting inspection.[17]

c. Limitations on ESI Discovery

Rule 34 of the North Carolina Rules of Civil Procedure also provides some limitation to ESI discovery. The producing party may object to the production of ESI from sources that the party identifies as not reasonably accessible because of undue burden or cost.[18] This limitation is almost identical to that imposed under the FRCP.[19] The producing party may file for a protective order, but it bears the burden of showing that the ESI sought is not reasonably accessible. The court may still order production if the requesting party shows good cause.[20]

Further, if the producing party refuses to produce ESI in the requested form, or because it claims that it is not reasonably accessible, Rule 37 allows for the requesting party to file a motion to compel. If the objection was based on the documents not being reasonably accessible because of undue burden or cost, the objecting party carries the burden of establishing its objection.[21]

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[16] Committee Notes to N.C. Civ. P. Rule 34-2011 Amendments
[17] FRCP 34(b)(2)(B). The Federal Rules require that production in lieu of inspection be done within the time period specified in the request or in a reasonable time period stated in the response.
[18] N.C. Civ. Pro. Rule 34(b)
[19] Fed. R. Civ. Pro. Rule 34(b)
[20] N.C. Civ. Pro. Rule 34(b)
[21] N.C. Civ. Pro. Rule 37(a)(2): "If the motion is based upon an objection to production of electronically stored information from sources the objecting party identified as not reasonably accessible because of undue burden or cost, the objecting party has the burden of showing that the basis for the objection exists."

The 2015 Amendments to the Federal Rules emphasize proportionality for all discovery, including ESI. Federal Rule 26(b)(1) states that "Parties may obtain discovery regarding any nonprivileged matter that is relevant to any party's claim or defense and *proportional to the needs of the case, considering the importance of the issues at stake in the action, the amount in controversy, the parties' relative access to relevant information, the parties' resources, the importance of the discovery in resolving the issues, and whether the burden or expense of the proposed discovery outweighs its likely benefit*."[22] While recent cases interpreting this Rule emphasize that "proportionality" is not new,[23] "[w]hat will change—hopefully—is the mindset."[24] While it is too soon to tell, those who practice in North Carolina state courts should expect to see an emphasis on proportionality from defense attorneys.

d. Sanctions

North Carolina Civ. Pro. Rule 37(b1) limits a court's ability to impose sanctions on a party for failure to produce ESI. It provides that "[a]bsent exceptional circumstances, a court may not impose sanctions under these rules on a party for failing to provide electronically stored information lost as a result of routine, good-faith operation of an electronic information system."[25] This rule paralleled the 2006 Amendments to Federal Rule 37, but recent changes to the Federal Rules may impact how North Carolina courts understand North Carolina's Rule 37.

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[22] Fed. R. Civ. P. 26(b)(1) (emphasis added).
[23] *See, e.g , Carr v. State Farm Mut. Auto. Ins. Co.*, No. 3:15-cv-1026-M, 2015 WL 8010920, 2015 U.S. Dist. LEXIS 163444, at 22 (N.D. Tex. Dec. 7, 2015).
[24] *Gilead Sciences, Inc. v. Merk & Co., Inc.*, No. 5:13-cv-04057-BLF, 2016 WL 146574, 2016 U.S. Dist. LEXIS 5616, at *4 (N.D. Cal. Jan. 13, 2013).
[25] N.C. Civ. Pro. Rule 37(c)

The Federal Rules underwent a noteworthy change in 2015. Past decisions interpreting Rule 37 allowed for the giving an adverse-inference against a party who breached a discovery obligation upon the finding of negligence or gross negligence.[26] Now, Rule 37(e) encourages federal courts to tailor a remedy to the level of the harm: "If electronically stored information that should have been preserved in the anticipation or conduct of litigation is lost because a party failed to take reasonable steps to preserve it, and it cannot be restored or replaced through additional discovery, the court (1) upon finding prejudice to another party from loss of the information, may order measures no greater than necessary to cure the prejudice."[27] Rule 37 still allows the giving of an adverse-inference, but "only upon finding that the party acted with the intent to deprive another party of the information's use in the litigation…"[28]As evident from Federal Rule 37, there are several hurdles in route to obtaining sanctions: establishing that ESI should have been preserved, the availability of reasonable steps to prevent deletion, whether the deleted ESI could be replaced with additional discovery, the prejudicial effect to the party seeking discovery, and the exact remedy to match the prejudice.

The committee notes to 2015 Amendments to Federal Rule 37 explain that the prior 2006 Amendments placed too great a burden on preserving ESI because it has not "adequately addressed the serious problems resulting from the continued exponential growth in the volume of such information." The former version of Rule 37 provided that

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[26] *See, e.g., Residential Funding Corporation v. DeGeorge Financial Corporation*, 306 F.3d 99 (2d Cir. 2002). The Fourth Circuit's prior decisions seem to fall in line with the current Rule 37(e). *See Vodusek v. Bayliner Marine Corp.*, 71 F.3d 148, 157 (4th Cir. 1995) ("An adverse inference about a party's consciousness of the weakness of his case, however, cannot be drawn merely from his negligent loss or destruction of evidence; the inference requires a showing that the party knew the evidence was relevant to some issue at trial and that his willful conduct resulted in its loss or destruction.")

[27] Fed. R. Civ. P. 37(e)(1)

[28] Fed. R. Civ. P. 37(e)(2)

"a court may not impose sanctions under these rules on a party for failing to provide electronically stored information lost as a result of the routine, good-faith operation of an electronic information system," which seemed to obligate a party to act affirmatively to prevent its information system from destroying or altering information. The new Federal Rule 37 appears more lenient and forgiving, helping courts to tailor the remedy to the harm caused by the failure to preserve ESI. It is unclear whether parties will perceive a loosening in the Federal Rules to create a less restrictive internal preservation system, or if the threat of court-tailored sanctions will encourage them to stay their course.

e. Discovery Plan

North Carolina Civil Procedure Rule 26(f) allows a party attorney to request a discovery meeting.[29] With respect to ESI, the discovery plan must address issues relating to the preservation of the information and the media, form, format, and procedures by which it will be produced.[30] It also must address, if appropriate, the allocation of discovery costs for preservation, restoration, and production of the ESI and the method for asserting or preserving claims of privilege. Finally, it should detail any limitations proposed to be placed on the discovery of ESI, including, again if appropriate, that discovery be conducted in phases or be focused on particular issues.[31]

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[29] N.C. Civ. Pro. Rule 26(f)

[30] This requirement is also in the Federal Rules. The 2015 Amendments to the Federal Rules imposed a requirement that parties must address ESI preservation during the Rule 26(f) conference.

[31] See O'Bar v. Lowe's Home Ctrs., Inc., 2007 U.S. Dist. LEXIS 32497, *10-11, 2007 WL 1299180 (W.D.N.C. May 2, 2007). The Western District of North Carolina provided guidelines for the parties to assist the parties in conducting discovery of ESI and facilitate the "just, speedy, and inexpensive conduct of discovery involving ESI in this case, and to promote, whenever possible, the resolution of disputes regarding the discovery of ESI without Court intervention." These guidelines suggested the parties discuss and consider: (1) The anticipated scope and requested form of production of ESI; (2) Whether Meta-Data is requested for some or all ESI and, if so, the volume and costs of producing and reviewing said ESI; (3) The preservation of ESI during the pendency of the lawsuit; (4) Post-production assertion, and preservation or waiver of, the attorney-client privilege, work product doctrine, and/or other privileges; (5) the Identification

f. Privileged ESI

Mirroring the Federal Rules, North Carolina Civil Procedure Rule 26(b)(7) authorizes a party that inadvertently produces privileged information to assert the privilege claim after the information is produced. Parties also may adopt their own process for dealing with disclosures of privileged information in their discovery plan.[32]

g. Subpoenas

Both the North Carolina and federal rules allow for the discovery of ESI by subpoena. Rule 45(a)(2) of the North Carolina Rules of Civil Procedure states that a subpoena may specify the form or forms in which ESI is to be produced.[33] Similar to Responses to Request for Production of Documents, ESI responses to subpoenas must be produced either in the form that it is "kept in the usual course of business" or organized and labeled to correspond with the categories in the request.[34] If the form is not specified, the party responding must produce it in a form or forms in which it ordinarily is maintained or in a reasonably useable form or forms.[35]

However, Rule 45 limits the subpoena and states that "the person responding need not provide discovery of electronically stored information from sources that the person

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of ESI that is or is not reasonably accessible without undue burden or cost, specifically, and without limitation, the identity of such sources and the reasons for a contention that the ESI is or is not reasonably accessible without undue burden or cost, the methods of storing and retrieving that ESI, and the anticipated costs and efforts involved in retrieving that ESI. The party asserting that ESI is not reasonably accessible without undue burden or cost should be prepared to discuss in reasonable detail the basis for such assertion; (6) Redaction considerations; (7) The system to be used for ESI discovery; (8) Specific facts related to the costs and burdens of preservation, retrieval, and use of ESI; (9) Cost sharing; (10) Search methodology; (11) Preliminary depositions of information systems personnel, and limits on the scope of such depositions; (12) The need for a two-tier or staged discovery of ESI; (13) Protective orders; (14) Requests for sampling ESI; (15) The retention of experts to discuss ESI.

[32] See North Carolina Civ. Pro. R. 26(f); *Morris v. Scenera Research, LLC*, 2011 WL 3808544 (N.C. Super. Aug. 26, 2011) (finding no waiver of privilege when party followed process that parties jointly agreed to with respect to the recovery of inadvertently disclosed privileged information).

[33] N.C. R. Civ. P. 45(a)(2)

[34] N.C. R. Civ. P. 45(d)(1).

[35] N.C. R. Civ. P. 45(d)(2).

identifies as not reasonably accessible because of undue burden or cost."[36] If the party issuing a subpoena files a motion to compel discovery or the subpoenaed party files for a protective order, the subpoenaed party must show that the information requested is not reasonably accessible because of undue burden or cost.[37] Even if that showing is made, the court may nonetheless order discovery if the party issuing the subpoena shows good cause, after considering the limitations of Rule 26(b)(1a).[38] The court may still specify conditions for discovery, including requiring the party that seeks discovery from a non-party to bear the costs of locating, preserving, collecting, and producing the ESI involved.[39]

IV. 30(b)(6) of ESI Architecture and Custodians

30(b)(6) depositions have become increasingly useful as ESI discovery continues to grow in importance. Prior to the introduction of ESI, a parties method of storing and accessing documents (*i.e.*, a desk drawer, a file cabinet in the hall, or a box in a warehouse) was relatively simple to discover.[40] However, as discussed above, ESI can be stored in a variety of places in and in a variety of forms. Thus, an effective 30(b)(6) deposition of the correct individual with the correct knowledge can reveal critical information about the parties' information technology infrastructure and lead to ESI related to the substance of the case that may otherwise be undiscoverable.[41]

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[36] N.C. R. Civ. P. 45(d)(4).
[37] *Id.*
[38] *Id.*
[39] *Id.*
[40] James K. Lehman, John D. Martin, Daniel R. D'Alberto, *Electronic Discovery and 30(b)(6) Deposition*, Understanding the New E-Discovery Rules. 105.
[41] A sample 30(b)(6) deposition request is attached hereto as Appendix 2.

The most common purpose of the electronic discovery 30(b)(6) deposition is to determine what discoverable ESI a party has, on what type of platform it is stored and what it will take to retrieve it.[42] North Carolina Rule 30(b)(6) provides the a corporation must testify as to matters known or reasonably available to the organization.[43] However, the rules provide little insight into the definition of "reasonably available," thus, it is important to be detailed in the notice and, possibly, to request several individuals be deposed to gain all of the necessary information.

For instance, in *Marker v. Union Fid. Life Ins. Co.*,[44] the United States District Court for the Middle District of North Carolina dealt with an insurance company's 30(b)(6) designee who was prepared to discuss certain substantive claims information, but was unprepared to discuss the retrieval of such information from the company's "computer operation."[45] The court held that the company "had a duty to substitute another person once the deficiency of its Rule 30(b)(6) designation became apparent during the court of the deposition."[46] It further held that

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[42] *Id.* For example, in *In re CV Therapeutics, Inc. Sec. Litig.*, No. 03-03709, 2006 U.S. Dist. LEXIS 38909, at *29 n. 5 (N.D. Cal. Apr. 4, 2006), a senior corporate counsel, testifying as a 30(b)(6) witness on the location of electronic data and back-up media, was asked whether "all the different drives" on his company's computer network are being searched for responsive documents. The 30(b)(6) deponent responded, "It's ongoing, so I believe – at this point – we started in November, and we're still slugging through it. There's a lot of data. I believe, at this point, the S drive and the H drive, perhaps the email drive or the exchange server, have all been copied to allow for searching for potentially responsive communications to the documents requests. We do intend to move through whatever servers we haven't gotten to, and it's possible there's a couple we haven't, because we're focused on areas where we would expect to find the most relevant documents." Later the company sought a protective order to prevent access to the same drives claiming that the burden for searching several of the drives would outweigh the benefit to the plaintiffs. However, as a result of the 30(b)(6) testimony, the court rejected this argument and required a complete search of each drive.
[43] N.C. R. Civ. Pro. 30(b)(6).
[44] *Marker v. Union Fidelity Life Ins. Co.*, 125 F.R.D. 121, 122, 1989 U.S. Dist. LEXIS 9274, *1 (M.D.N.C. 1989)
[45] *Id.* at 126.
[46] *Id.*

> An inadequate Rule 30(b)(6) designation amounts to a refusal or failure to answer a deposition question. Among the other remedies, the Court can require the company to re-designate its witnesses and mandate their preparation for re-deposition at the company's expense. Because defendant unreasonably refused to satisfy plaintiff's rule 30(b)(6) deposition request, defendant will be required to produce such knowledge persons so that plaintiff may complete the deposition.[47]

Thus, it is imperative to specify that the request is for someone who is knowledgeable about substantive fact questions *and* about the location and retrieval of ESI. This may require the designation of two witnesses and two 30(b)(6) depositions.

V. Helpful Tips on ESI

As is evidenced from the discussion thus far, the introduction of this new form of evidence has changed the methods of discovery in litigation. As such, the discovery process for ESI differs in many ways from the conventional paper discovery. Although the Rules of Civil Procedure provide some guidance on how to navigate ESI discovery, collecting, assessing, investigating, and analyzing digital evidence requires specialized knowledge, skills, and abilities. Computers, mobile phones, and other data storage devices can hold a wealth of ESI, and it is imperative that attorneys learn how to navigate the ESI discovery process rules ethically, efficiently, and effectively. Here are some helpful tips on the preservation, collection, processing, and analyzing ESI in litigation.

a. Preservation

The preservation of ESI is critical during discovery. As technology continues to evolve rapidly, the preservation of data becomes even more complex.[48] As previous systems become outdated, potentially discoverable data may be destroyed.[49] Thus, it is

[47] *Id.* (internal citations omitted).
[48] Burke, *supra* note 3, at 158.
[49] *Id.*

imperative that attorneys move quickly to receive and preserve all available ESI once a lawsuit is filed.[50]

As soon as the possibility of litigation becomes anticipated or apparent, litigants and their counsel have a duty to preserve any electronic data that may be relevant or anticipated to be necessary for future litigation.[51] While many corporations and businesses have routine purging of ESI, the Federal Rules of Civil Procedure require a parties' suspension of "routine or intentional purging, overwriting, re-using, deleting, or any other destruction of electronic information relevant to a lawsuit, including electronic information wherever it is stored – at a University work station, on a laptop or at an employee's home."[52] North Carolina has also taken a similar approach. Thus, preservation obligations apply when a party reasonably anticipates litigation.

However, despite these obligations under the rules, it is recommended that counsel should issue a Lit-Hold Letter as soon as the lawsuit or claims are filed to ensure that these rules are being followed and the necessary ESI is preserved.[53] A Lit-Hold letter informs the party of the ensuing litigation and requests them to stop all routine purging or deleting of documents in light of this litigation. It can be an important first step in ensuring the parties are cooperating in discovery.

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[50] *Id*. However, while on one hand it is recommended that relevant ESI be preserved, we do note that, under North Carolina Civil Procedure Rule 37(b1), a court, absent exceptional circumstances, may not impose sanctions under these rules on a party for failing to provide electronically stored information lost as a result of routine, good-faith operation of an electronic information system. N.C. Civ. P. 37(b1).
[51] *Id.*
[52] Burke, *supra* note 3, at 158.
[53] A sample Lit Hold letter is attached hereto as Appendix 3.

b. Collection

The collection of ESI also differs from paper discovery, as the discovery of ESI can be far more voluminous than that of non-electronic documents.[54] The amount of data collected in ESI discovery can often be measured in gigabytes or even terabytes.[55] During an average work-day, employees send and receive an average of 50 e-mails per day, which can add up to more than 1.2 million messages a year for an organization of 100 employees.[56] Further, ESI is not limited to one medium or location, but can be stored in multiple locations, in greater volume, and with greater ease than hard-copy data.[57]

Given these difficulties with discovery of ESI, it is important that opposing counsels confer and come to an agreement on the terms of eDiscovery early in the process. As noted above, under Rule 34 of the North Carolina Rules of Civil Procedure, the requesting party may specify the form or forms in which electronically stored information is to be produced.[58] Further, if no specification is made, Rule 34 requires that the documents should be produced "as they are kept in the usual course of business" and in "reasonably usable form or forms," which may give the producing party an advantage by limiting the level of analysis of a particular document.[59] By the nature of these rules, parties often quibble during discovery over the particular type of electronic production, whether it is produced as a "paper printout, as a word-processing file, exported to various

[54] Burke, *supra* note 3, at 158.
[55] A gigabyte can hold up to 677,693 pages of plain text documentation or 64,783 pages of Microsoft Word Files. A terabyte can hold up to 75 million pages. *Id*.
[56] *Id*. at 157.
[57] *Id*.
[58] N.C. R. Civ. P. 34(b).
[59] Burke, *supra* note 3, at 164.

other computer-readable file formats, or imaged in TIFF or PDF formats."[60] As such, a helpful method of preventing these arguments is to agree upon an eDiscovery Scheduling Order.[61]

Thus, to overcome efforts to obstruct discovery, counsel should clearly state at the outset his or her preferred eDiscovery format and metadata needs, as well as document any actions by a party that circumvent prior agreements. While hard copies of a document may not reveal whether a document was modified or whether it was created on the date purported, electronic files contain metadata that identify when the document was created, the author's identity, and when and by whom it was edited.[62] All of this information is discoverable and important for authenticating documents in court.[63] Thus, a request must be tailored to include metadata for specific documents.[64]

As discussed *infra*, even when following the guidelines provided, ESI discovery can become very costly, and as such, courts are often willing to implement cost sharing to help with high production costs.

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[60] *See* Vlad J. Kroll, *Default Production of Electronically Store Information Under the Federal Rules of Civil Procedure: the Requirements of Rule 34(b)*, 59 Hastings L.J. 221, 221(2007).
[61] A sample eDiscovery Scheduling Order is attached hereto as Appendix 4.
[62] Burke, *supra* note 3, at 164-65.
[63] In *Williams v. Sprint/United Management Co.*, the court considered whether sanctions were necessary since the requested spreadsheets were "scrubbed" of metadata and certain data was locked in cells prior to the spreadsheet's production. Williams v. Sprint/United Mgmt. Co., 230 F.R.D. 640, 641 (D. Kan. 2005). The court explained that electronically store information must be produced with its metadata unless "(i) the producing party timely objects to the production of metadata, (ii) the parties agree that metadata should not be produced; or (iii) the producing party requests a protective order." *Id.* at 652. The court found that locking a spreadsheet's cells and data was not complying with the spirit of the court's directive that the spreadsheets be produced as they are kept in the ordinary court of business. *Id.* at 655. However, the court held that sanctions were not appropriate here because of the "lack of clear law on production of metadata…" *Id.* at 656. However, in *Kentucky Speedway, LLC v. National Association of Stock Car Auto Racing, Inc.*, the court found that "the emerging standards of electronic discovery appear to articulate a general presumption against the production of metadata." *Ky Speedway, LLC v. Nat'l Ass'n of Stock Car Racing, Inc.*, CIV. A. 05-138-WOB 2006 WL 5097354, at *8 (E.D. Ky. Dec. 18, 2006). Instead of metadata being considered "in the course of business," the court held that metadata was discoverable "where date and authorship information is unknown but relevant." *Id.*at *9.
[64] Burke, *supra* note 3, at 164-65. Sample discovery requests are attached as Appendix 5.

c. Processing

Once ESI has been collected, the next step involves the general processing and assessment of the ESI. Processing allows for the ESI to be read and displayed by the processing or investigation software.[65] It also allows for previously existing files to be recovered, as well as the identification of those files that require further, specific processing, such as encrypted, incomplete, compound, container, or database files. Parties should consider using a mutually approved third-party vendor for performing ESI collection and data reduction.[66] These services can make eDiscovery more efficient and thorough by creating complex algorithms for identifying the most relevant documents.[67] Another option is the use of computer mirror imaging orders to make copies of hard drives and the electronic data contained therein.[68]

However, these software-based techniques are not solutions in and of themselves. Parties must still work together to identify and narrow the ESI most relevant to the case. Although many attorneys consider cooperation to be submissive during litigation, coming to an agreement on the terms of eDiscovery with the opposing party is the most effective way to reduce the cost of discovery and prevent sanctions.[69]

VI. Cost Shifting

The costs associated with the review of electronic documents has become an intense area of review. Manual review of 30 gigabytes of data can cost up to $3.3

[65] *See* Woelker, *supra* note 4.
[66] *See id.* Examples of these services in Documatrix and Google Vault.
[67] *See id.*
[68] *Id.*
[69] *Id.*

million.[70] With the possibility of astronomical expenses, attorneys often feel that eDiscovery is too costly and only drives up litigation fees.[71] Generally, under the discovery rules, the responding party must bear the expense of complying with discovery requests.[72] Many courts have addressed how this burden applies to ESI as the costs continue to rise. Perhaps the most seminal case is *Zubulake v. UBS Warburg, LLC.*[73]

a. *Zubulake*

Although on its face *Zubulake v. UBS Warburg, LLC*[74] was a fairly straight-forward employment discrimination case, it created legal precedence on various e-discovery issues, including how to balance the competing needs of obtaining discovery broadly and maintaining manageable costs.[75] Technology has changed substantially since U.S. District Judge Shira Scheindin issued her pivotal pretrial ruling in *Zubulake* more than 10 years ago, however, it continues to resonate in courts around the country, including North Carolina.[76]

Plaintiff Laura Zubulake was hired by UBS in 1999 as a director and senior salesperson on its U.S. Asian Equities Sales Desk (the "Desk"), where she reported to

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[70] Chris Paskach & Vince Walden, *Document Analytics Allow Attorneys to be Attorneys, Digital Discovery & e-Evidence, Aug. 2005*, at 10 (analyzing manual versus electronic document review).
[71] *See* Marisa Peacock, *eDiscovery Drives Legal Costs Up*, CMS Wire (Sept. 11, 2008), http://www.cmswire.com/cms/enterprise-cms/ediscovery-drives-legal-costs-up-003135.php.
[72] *Oppenheimer Fund, Inc. v. Sanders*, 437 U.S. 340, 358, 57 L. Ed. 2d 253, 98 S. Ct. 2380 (1978) ("[U]nder [the discovery] rules, the presumption is that the responding party must bear the expense of complying with discovery requests, but [it] may invoke the district court's discretion under Rule 26(c) to grant orders protecting [it] from 'undue burden or expense' in doing so, including orders conditioning discovery on the requesting party's payment of the costs of discovery.")
[73] *See Zubulake v. UBS Warburg, LLC*, 217 F.R.D. 309 (2003) (also known as *Zubulake I*).
[74] *See id.*
[75] Victor Li, Looking Back on Zubulake, 10 years later, www.abajounral.com/magazine/looking_back_on_zubulake_10_years_later/
[76] Three North Carolina courts have cited to *Zubulake*: *Analog Devices, Inc.*, *Bank of Am. Corp.*, and *SCR-Tech LLC* (discussed infra). Despite the fact that these cases do not incorporate the same factors as in *Zubulake*, the series of cases nonetheless merit discussion.

Dominic Vail, the Desk's manager.[77] At the time she was hired, Ms. Zubulake was told that she would be considered for Mr. Vail's position, if it became vacant.[78] In December of 2000, Mr. Vail left his position with UBS, but Ms. Zubulake was not considered for the position.[79] UBS filled the vacancy by hiring Matthew Chapin to manage the Desk.[80] According to Ms. Zubulake, from the time of his hire, Mr. Chapin treated her differently than all of her male co-workers and undermined her ability to perform her job in various ways.[81] Ultimately, Ms. Zubulake filed a Charge of Discrimination with the Equal Employment Opportunity Commission ("EEOC") on August 16, 2001.[82]

On October 9, 2001, Ms. Zubulake was fired by UBS with two weeks' notice.[83] In February, 2002, Ms. Zubulake filed a lawsuit against UBS, alleging sex discrimination and retaliation under Title VII, the New York State Human Rights Law, and the Administrative Code of the City of New York.[84] UBS timely answered Ms. Zubulake's claim and denied her allegations, claiming that Mr. Chapin's conduct was not unlawfully discriminatory because he treated everyone equally poorly.[85]

In June of 2002, Ms. Zubulake served her first discovery requests to UBS.[86] In a turn of events that should come as no surprise to any trial attorney, it was soon after this request that the first discovery dispute began, and *Zubulake I* was born.

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[77] *Zubulake I*, 217 F.R.D. at 310.
[78] *Id.* at 312.
[79] *Id.*
[80] *Id.*
[81] *Id.*
[82] *Id.*
[83] *Id.*
[84] *Id.*
[85] *Id.*
[86] *Id.*

b. *Zubalake I*

Zubulake I was a result of Ms. Zubulake's Request for Production Number Twenty-Eight, which asked for "[a]ll documents concerning any communication by or between UBS employees concerning Plaintiff."[87] In her definitions section, she had defined "document" as "includ[ing], without limitation, electronic or computerized data compilations."[88] UBS also objected to a substantial portion of Ms. Zubulake's requests, but did respond to this request by producing approximately 350 pages of documents, including approximately 100 pages of e-mails.[89]

While UBS ultimately agreed to produce responsive e-mails from the accounts of five individuals, it ultimately did not produce any additional e-mails and insisted that its initial production (the 100 pages of e-mails) was complete. UBS failed to search any of its backup tapes for additional responsive emails, informing Ms. Zubulake that the cost to produce emails on the backup tapes would be approximately $300,000.00.[90] Ms. Zubulake objected, asserting that the parties' agreement required UBS to produce emails located on the backup tapes.[91] In fact, Ms. Zubulake *knew* that more responsive emails existed, because *she* had produced 450 pages of such emails.[92]

As a result, Ms. Zubulake filed a motion to compel the production of additional emails. In determining whether production was appropriate, the Court started its analysis with a brief look at the proportionality test contained in Rule 26(b)(2) of the Federal

[87] *Id.*
[88] *Id.*
[89] *Id.* at 312-13.
[90] *Id.*
[91] *Id.*
[92] *Id.*

Rules of Civil Procedure as well as the eight factor test utilized to determine whether discovery costs should be shifted in *Rowe Entertainment*.[93]

The first question the court answered in its analysis was whether cost-shifting must be considered in every case involving the discovery of electronic data. Wisely, the court found the answer to this question is no.[94] The court ruled that cost-shifting should be considered *only* when electronic discovery imposes an "undue burden or expense" on the responding party.[95] The burden or expense of discovery is "undue" when it "outweighs its likely benefit, taking into account the needs of the case, the amount in controversy, the parties' resources, the importance of the issues at stake in the litigation, and the importance of the proposed discovery in resolving the issues."[96] In turn, whether it is unduly burdensome or expensive likely depends primarily on whether it is kept in an *accessible* or *inaccessible* format.[97]

After drawing this conclusion, the *Zubulake* court engaged in a more thorough comparison of the *Rowe* factors and the Federal Rules of Civil Procedure before reaching its ultimate conclusion; a three step analysis is required when deciding disputes regarding the scope and cost of discovery of electronic data.[98]

First, it is necessary to thoroughly understand the responding party's computer system, both with respect to active and stored data. For data that is kept in an accessible format, the usual rules of discovery apply, and the responding party should pay the costs

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[93] *See Rowe Entm't, Inc. v. William Morris Agency, Inc.*, 205 F.R.D. 421 (S.D.N.Y. 2002), *aff'd*, 2002 U.S. Dist. LEXIS 8308, 2002 WL 975713 (S.D.N.Y. May 9, 2002).
[94] *Zubulake I*, 217 F.R.D. at 316.
[95] *Id.* at 317-18.
[96] *Id.* at 318.
[97] *Id.* at 319-20.
[98] *Id.* at 324.

of producing responsive data. A court should *only* consider cost-shifting when electronic data is relatively inaccessible, such as is backup tapes.[99]

Second, because the cost-shifting analysis is so fact-intensive, it is necessary to determine what data may be found on the inaccessible media. Requiring the responding party to restore and produce responsive documents from a small sample of the requested backup tapes is a sensible approach in most cases.[100]

Third, in conducting the cost-shifting analysis, the following factors should be considered, weighted more-or-less in the following order:

1) The extent to which the request is specifically tailored to discover relevant information;
2) The availability of such information from other sources;
3) The total cost of production, compared to the amount in controversy;
4) The total cost of production, compared to the resources available to each party;
5) The relative ability of each party to control costs and its incentive to do so;
6) The importance of the issues at stake in the litigation; and
7) The relative benefits to the parties of obtaining the information.[101]

Applying this test, the court in *Zubulake I* ultimately ordered UBS to produce "all responsive e-mails that exist on its optical disks or on its active servers (i.e., in HP OpenMail files) **at its own expense**."[102] The court also ordered to UBS produce, "**at its expense**, responsive e-mails from any five backups tapes selected by Zubulake" and "to

[99] *Id.*
[100] *Id.*
[101] For a thorough analysis of the Court's application of these factors, see *Zubulake III*. (*Zubulake v. UBS Warburg, LLC*, 216 F.R.D. 280 (2003).
[102] *Zubulake I*, at 324 (emphasis added).

prepare an affidavit detailing the results of its search, as well as the time and money spent."[103] After reviewing the contents of the backup tapes and UBS's certification, the Court agreed that it conduct the appropriate cost-shifting analysis.[104]

c. *Zubulake* II-V

Zubulake I, and its progeny *Zubulake II*[105] and *III*[106], dealt primarily with similar issues of the costs of ESI discovery and whether UBS could force Zubulake to pay for extracting data from the backup tapes.[107] However, *Zubulake IV* dealt with a different issue. By the time of *Zubulake IV*, it had become obvious that some of the requested data was unrecoverable. Ms. Zubulake's counsel moved for "adverse inference" sanction against UBS, requesting a jury instruction stating that any evidence UBS failed to provide would be beneficial to Zubulake.[108] The Court in *Zubulake IV* denied this motion and held that "an adverse inference instruction often ends litigation – it is too difficult a hurdle for the spoliator to overcome."[109]

However, litigation continued over ESI discovery in this matter, and by the time of *Zubulake V*[110], further discovery had revealed additional emails and documents that UBS had either deleted and/or failed to preserve. The court in *Zubulake V* now granted the motion for adverse inference and found that "UBS failed to preserve relevant emails,

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[103] *Id.*
[104] *Id.*
[105] *Zubulake v. UBS Warburg LLC*, 230 F.R.D. 290, 290, 2003 U.S. Dist. LEXIS 7940, *1, 91 Fair Empl. Prac. Cas. (BNA) 1590 (S.D.N.Y. 2003) (*Zubulake II).*
[106] *Zubulake v. UBS Warburg* LLC, 216 F.R.D. 280, 2003 U.S. Dist. LEXIS 12643 (S.D.N.Y., 2003) (*Zubulake III).*
[107] *Zubulake v. UBS Warburg LLC*, 220 F.R.D. 212, 214, 2003 U.S. Dist. LEXIS 18771, *1, 92 Fair Empl. Prac. Cas. (BNA) 1539 (S.D.N.Y. 2003) (*Zubulake IV).*
[108] *Id.*
[109] *Id.*
[110] *Zubulake v. UBS Warburg LLC*, 229 F.R.D. 422, 424, 2004 U.S. Dist. LEXIS 13574, *2, 94 Fair Empl. Prac. Cas. (BNA) 1, 85 Empl. Prac. Dec. (CCH) P41,728 (S.D.N.Y. 2004) (*Zubulake V).*

even after receiving adequate warnings from counsel, resulting in the production of some relevant emails almost two years after they were initially requested, and resulting in the complete destruction of others."[111] After all issues regarding discovery were settled, the trial began, and Ms. Zubulake won a $29.2 million verdict from the jury. UBS subsequently appealed, but Ms. Zubulake chose to settle with UBS before the case could be heard by an appellate court.

The *Zubulake* cases have had a large impact on eDiscovery and have created a far-reaching duty to preserve on every corporation in the country. *Zubulake* has been cited in more than 180 cases, including three in North Carolina.[112] Thus, it is important to understand these cases and when the courts will apply cost sharing to eDiscovery.

VII. Relevant NC Case Law

The following North Carolina State and federal cases discuss the issues associated with ESI discovery:

Analog Devices, Inc. v. Michalski, 2006 NCBC 14, 1, 2006 NCBC LEXIS 16, *1 (N.C. Super. Ct. 2006)

In *Analog Devices, Inc. v. Michalski*, two employees left their former employer, the plaintiff, to work for its competitor. During their employment, the former employees had access to trade secrets. When the former employees left their employment with plaintiff and went to work with the competitor, they allegedly provided the competitor with plaintiff's trade secrets. The former employees and competitor requested from plaintiff the production of e-mails of the originators of the trade secrets at issue relating

[111] *Id.*
[112] Li, *supra* note 60.

to the development of those trade secrets and products initially implementing them. Plaintiff argued that it would be unduly burdened by the enormous expense involved in restoring and searching the contents of some 400 backup tapes.

After analyzing various tests, the Court adopted a multi-factored test based on Rule 26. The court weighed (1) the potential burden and expense of production; (2) the needs of the case; (3) the amount in controversy; (4) whether there are any limitations on the parties' resources that might lead to the ruling on the issue to be outcome determinative; and (5) the importance of the issues at stake.

The court found that the cost of production had the potential to be high, but the cost was relatively small compared to the overall cost of discovery and the competitive issues at stake. The e-mails may have been the best or only source of information contemporaneously generated when the alleged trade secrets were developed. The uncertainty of the cost combined with the potential probative value of the discovery was too great to deny the motion.

SCR-Tech LLC v. Evonik Energy Servs. LLC, 2014 NCBC 70, P1, 2014 NCBC LEXIS 72, *1 (N.C. Super. Ct. 2014)

In *SCR-Tech LLC v. Evonik Energy Servs. LLC*, the court held that the defendants were entitled to the inference that the evidence regarding a forensic examination of plaintiff's computer files was lost or discarded during a period when plaintiff had a duty to preserve the evidence, but negligently failed to carry out that duty, where the facts defendants presented were adequate to trigger plaintiff's responsibility to rebut and explain the evidence adduced against it, and plaintiff failed to adequately rebut that the evidence was spoliated.

However, the court held that defendants had not demonstrated adequate prejudice to warrant striking claims for misappropriation of confidential information or restricting proof where the production of a report avoided some potential prejudice. Thus, because not all prejudice was eliminated, the appropriate sanction was a permissive, but not mandatory, adverse inference.

O'Bar v. Lowe's Home Ctrs., Inc., 2007 U.S. Dist. LEXIS 32497, *10-11, 2007 WL 1299180 (W.D.N.C. May 2, 2007)

As discussed *infra*, in *O'Bar v. Lowe's Home Ctrs., Inc*., the Western District of North Carolina provided guidelines for the parties to assist the parties in conducting discovery of ESI and facilitate the "just, speedy, and inexpensive conduct of discovery involving ESI in this case, and to promote, whenever possible, the resolution of disputes regarding the discovery of ESI without Court intervention." The court suggested the parties discuss and consider: (1) The anticipated scope and requested form of production of ESI; (2) Whether Meta-Data is requested for some or all ESI and, if so, the volume and costs of producing and reviewing said ESI; (3) The preservation of ESI during the pendency of the lawsuit; (4) Post-production assertion, and preservation or waiver of, the attorney-client privilege, work product doctrine, and/or other privileges; (5) The identification of ESI that is or is not reasonably accessible without undue burden or cost; (6) Redaction considerations; (7) The system to be used for ESI discovery; (8) Specific facts related to the costs and burdens of preservation, retrieval, and use of ESI; (9) Cost sharing; (10) Search methodology; (11) Preliminary depositions of information systems personnel, and limits on the scope of such depositions; (12) The need for a two-tier or

staged discovery of ESI; (13) Protective orders; (14) Requests for sampling ESI; (15) The retention of experts to discuss ESI.

Westdale Recap Props., Ltd. v. NP/I&G Wakefield Commons, L.L.C., 2013 U.S. Dist. LEXIS 138537, *15, 2013 WL 5424844 (E.D.N.C. Sept. 26, 2013)

In *Westdale Recap Props., Ltd. v. NP/I&G Wakefield Commons, L.L.C,* The plaintiffs contended that the defendant had not produced all ESI responsive to its production requests. The defendant indicated its willingness to conduct a search for additional responsive ESI based on search terms plaintiffs provided it. The court also found that the plaintiffs had not demonstrated an adequate need to have all the ESI produced in native format. Instead, production in the form of searchable PDF's is sufficient.

Country Vintner of N.C., LLC v. E. & J. Gallo Winery, Inc., 2013 U.S. Dist. LEXIS 138537, *15, 2013 WL 5424844 (E.D.N.C. Sept. 26, 2013)

In *Country Vintner of N.C., LLC v. E. & J. Gallo Winery, Inc.*, the district court found that the only tasks that involved copying were the conversion of native files to "Tagged Image File Format" (TIFF) and "Portable Document Format" (PDF) formats and the transfer of files onto CDs. It held that section 1920(4)'s history, its plain language, and the U.S. Supreme Court's narrow contemporary interpretation of the costs taxable under § 1920 supported a conclusion that § 1920(4) limited taxable costs to those identified by the district court: converting electronic files to non-editable formats, and burning the files onto CDs. When district court denied the I/D's motion for a protective order under Fed. R. Civ. P. 26, the I/D could have appealed that decision, but it could not obtain the same relief from § 1920, which imposed rigid controls on cost-shifting in

federal courts. The I/D did not appeal the denial of a protective order. Only the conversion of native files to TIFF and PDF formats, and the transfer of files onto CDs, constituted "making copies" under § 1920(4). Nor were the I/D's ESI processing charges taxable as "fees for exemplification" because the charges included neither authentication of public records nor exhibits or demonstrative aids.

Martinez-Hernandez v. Butterball, LLC, 2012 U.S. Dist. LEXIS 142376, *9, 2012 WL 4577718 (E.D.N.C. Oct. 2, 2012)

In *Martinez-Hernandez v. Butterball, LLC*, the court required the parties jointly compile a list of twenty-five individual search terms, and for the defendant to search reasonably accessible electronic data of relevant custodians for those mutually-agreed to terms.

Jemsek v. Jemsek Clinic, P.A. (In re Jemsek Clinic, P.A.), 2013 Bankr. LEXIS 3120, *1, 2013 WL 3994663 (Bankr. W.D.N.C. Aug. 2, 2013)

In *Jemsek v. Jemsek Clinic, P.A.* (In re Jemsek Clinic, P.A.), the court held that the defendants were not entitled to request reproduction of native versions of documents that had previously been produced because they never requested the documents in such format during the allowed time period for written discovery. Even if timely, request was not proportional under Fed. R. Civ. P. 26(b)(2)(C)(iii) because it was unduly burdensome.

Freeman v. Dal-Tile Corp. 2012 U.S. Dist. LEXIS 142376, *9, 2012 WL 4577718 (E.D.N.C. Oct. 2, 2012)

In *Freeman v. Dal-Tile Corp*., the Court reviewed the revised list of search terms requested by the plaintiff and found them appropriately limited in number and scope and,

thus, reasonably calculated to lead to the discovery of admissible evidence. Further, the court held that the defendant did not asserted that it would be unduly burdensome to search the emails and hard drives of the custodians.

Morris v. Scenera Research, LLC, 2011 NCBC LEXIS 34, *1, 2011 NCBC 33 (N.C. Super. Ct. 2011)

In *Morris v. Scenera Research, LLC,* the Court denied the motion to compel discovery because documents submitted for in camera review were privileged attorney-client communications between a limited liability company and its general counsel and the inadvertent disclosure of documents which were given to outside counsel did not result in a waiver of the attorney-client privilege.

Blue Cross & Blue Shield v. Jemsek Clinic, P.A. (In re Jemsek Clinic, P.A.), 2013 Bankr. LEXIS 3121, *24-25, 2013 WL 3994666 (Bankr. W.D.N.C. Aug. 2, 2013)

In *Blue Cross & Blue Shield v. Jemsek Clinic, P.A.* (In re Jemsek Clinic, P.A.),the court denied the motion to compel and held that ESI was not even requested in discovery and the defendants' theory that BCBSNC misled them about its existence was found to be unsubstantiated.

SCR-Tech LLC v. Evonik Energy Servs. LLC, 2014 NCBC 70, P1, 2014 NCBC LEXIS 72, *1 (N.C. Super. Ct. 2014)

In *SCR-Tech LLC v. Evonik Energy Servs. LLC,* the court held that the defendants were entitled to the inference that a forensic examination of the plaintiff’s computer files was lost or discarded during a period when plaintiff had a duty to preserve the evidence where defendants’ facts were adequate to trigger plaintiff’s responsibility to rebut, but it failed to adequately rebut that the evidence was spoliated.

Stewart v. EQ Indus. Servs., 2012 U.S. Dist. LEXIS 3283, *1-2 (E.D.N.C. Jan. 11, 2012)

In *Stewart v. EQ Indus. Servs.*, the court held that, in accordance with the parties' agreement, the defendants should produce electronic copies of the collection of about 27,600 emails discussed at the conference. Further, the court held that if requested by the plaintiffs, the defendants should produce the emails in a searchable format, and the plaintiffs should reimburse the defendants for the reasonable cost of making them searchable in an amount not to exceed $4,000.00.

Wood v. Town of Warsaw, 2011 U.S. Dist. LEXIS 147392, *7, 2011 WL 6748797 (E.D.N.C. Dec. 22, 2011)

In *Wood v. Town of Warsaw*, the court held that in this age of smart phones and telecommuting, it is increasingly common for work to be conducted outside of the office and through the use of personal electronic devices. Therefore, the court found that it was not unreasonable that some relevant information may be found on a personal computer's hard drive. The court held that counsel for the parties should confer in good faith to arrive at a mutually agreeable list of search terms.

VIII. Conclusion

Despite all the advances, ESI discovery is still continuing to evolve. Although courts and legislative branches have attempted to clarify the rules and procedure of ESI discovery, it will still take time for the rules of e-discovery to elucidate the best techniques, practices, and methodology. It is clear, however, that judges are already penalizing the use of traditional discovery tactics and are rewarding cooperative parties who make bona fide attempts to reduce the time and cost of discovery.