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ARBITRATOR CROW: Let's go on the record.  
Are we on cross-examination now?

MS. MARSHALL: In the interest of moving  
this train along, I think I'm finished with  
cross.

ARBITRATOR CROW: You think you're finished  
with cross-examination.

Any redirect, Mr. Rote?

MR. ROTE: A few questions.

ARBITRATOR CROW: All right.

- Q. BY MR. ROTE: There's been a suggestion that  
it's possible to have copied files from hard  
drive or from another flash drive or something  
of that nature over to the 120-gigabyte hard  
drive after that was reacquired by NorthWest.  
If that had been done how would that have  
created affected the created date or  
modification date of each of these files?
- A. My understanding just knowing how we're talking  
about the file sharing issues that we saw on the  
120-gig drive and the e-mail and some of the  
other things to show that it had been in use for

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a period of time, at least up until, to  
regular use up until May of 2003 When The drive

McCann

3 was removed from the Sony Vai o. After that  
4 point, if someone wanted to do, put a  
5 substantial amount of material on that hard  
6 drive and make it look like it came from a time  
7 period, since we're talking about movie  
8 downloads and TV downloads, someone would have  
9 to take that drive, put it into another computer  
10 as the secondary drive, or, you know, copy tons  
11 of material off onto their own computer and then  
12 copy it off onto this drive or save it directly  
13 to that drive however you want to get it to that  
14 120 drive and you have to constantly redate your  
15 computer to get different dates on that file to  
16 make it look like it came from 2003 when you're  
17 actually doing it in say 2004, 2005 if you want  
18 to make that jump. They are wreck Lee it's  
19 possible. It would be, in my opinion, as a  
20 practical matter, it would not be feasible just  
21 because of the sheer amount of data that you  
22 would have to put on there, you'd probably have  
23 to have someone working full time to do that  
24 kind of a job in order to make it look like  
25 something else. And as I looked at the contents

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4

1 of that drive and I believe Mr. Cox said the  
2 same thing, is that it looked to me, all things  
3 being equal, is if that drive up until May of  
4 2003 was used for what it was intended for, is  
5 for the NorthWest Direct work, it had the

McCann

6 e-mail, it had the files, and then at some point  
7 and Mr. Cox can clarify that, if we need to,  
8 there was a lot of file sharing going on, a lot  
9 of files were downloaded. It appeared that that  
10 happened most likely during the time frame that  
11 the drive was, would have been before Mr. Rote  
12 picked it up.

13 Q. Okay. But let me make this point clear though.  
14 If you had, from a hard drive or another flash  
15 drive or something of that nature and you wanted  
16 to copy a thousand files over and you copied  
17 them all at the same time, they wouldn't have  
18 all the different created dates, modification  
19 dates. They would be copied with the copy date?

20 A. They would, one of the dates for each of those  
21 files, they would all share the same date. At  
22 least one. Whether it was the file created  
23 date, the file modified date the last written  
24 date, one of those dates and times they would  
25 share in common.

♀

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1 ARBITRATOR CROW: I'm not sure I understand  
2 that.

3 THE WITNESS: If, I can clarify. If you  
4 copied a file, say you have a file on a thumb  
5 drive and it has a date of just pick January 1st  
6 of 2010 at 10:00 in the morning. If you copy  
7 that, put it into a computer and copy that over  
8 to your hard drive, it's going to still have

9 that January 1st of 2010 date and time on it as  
10 one of the date and time stamps. Files all have  
11 multiple date and time stamps involved in it.  
12 It's going to have that as one of its dates and  
13 time stamps. Then it's going to have a new date  
14 and time for when you save it to the new  
15 computer. So if I take a block of a thousand  
16 files off of this other media and I save it in  
17 mass to my computer, it's going to have the same  
18 date and time when I copied it over.

19 ARBITRATOR CROW: The original date or the  
20 new date?

21 THE WITNESS: It's going to have a new date  
22 on there.

23 ARBITRATOR CROW: Going to have two dates.

24 THE WITNESS: Well, most files have at least  
25 three or four dates attached to them, a created

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6

1 date, a last access date which is when someone  
2 maybe opened it and closed it. It's going to  
3 have a last written date, which means, a last  
4 written and last modified. And there are some,  
5 they're not always the same depending on the  
6 files and how they're used. Sometimes, I can  
7 look at a file and say, okay, the last written  
8 date appears to be when it was saved to this  
9 computer. The created date matches when it was  
10 originally saved to its original media. That's  
11 not always the same with every file in every

12 operating system. It's one of the oddities  
13 about Microsoft Windows.

14 ARBITRATOR CROW: And how does that relate  
15 to the 120 hard drive as it was when it was  
16 turned over to NorthWest Direct?

17 THE WITNESS: When it was turned over to  
18 NorthWest Direct, the drive, which has two drive  
19 letters on it, C and D, so there's two  
20 partitions so it would look like two separate  
21 drives in a computer, both of those have been  
22 reformatted. So they're essentially new open  
23 blocks to have data saved to it. It had, if you  
24 plugged it in and looked at it, it would say no  
25 data. And it had the new partitions, the time

♀

7

1 it was formatted appeared to be just prior to  
2 when Mr. Rote said he went and picked up  
3 computer and the hard drive from Mr. Zweizig.  
4 So at some point, that was in a computer. A  
5 computer was set to that date and that time.  
6 And I'd have to look back up and see the  
7 specific time. I believe it was something like,  
8 sorry, I have to look back here real quick,  
9 November 12, 2003, the first partition C had a  
10 date of 11:26 a.m. and the D partition had  
11 12:31 p.m. so it happened, it happened in about  
12 an hour's time period, those two drives were  
13 reformatted. Whatever was on there before then  
14 becomes an allocated space. It's just data

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15 that's still out there that can be written over  
16 but it can still be recovered. And all of that  
17 data showed a substantial amount of activity.  
18 And the way when I looked at it, that activity  
19 for the NorthWest Direct material and the  
20 e-mails had all come to pre, before May 2003  
21 When The drive was removed from the computer and  
22 set aside.

23 Now my understanding since then through  
24 Mr. Cox and Mr. Rote was that the, a lot of the  
25 file sharing activity was dated to that mid 2003

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8

1 time period, indicating the drive was still  
2 being used arch it had been removed from the  
3 Sony Vairo. I can't corroborate that myself  
4 because I didn't see that, I didn't look for  
5 that myself but I did see a substantial amount  
6 of file sharing activity that appeared that  
7 files were being downloaded through a file  
8 sharing program onto that computer and that  
9 these dates of those files was over an extended  
10 period of time, rather than a single time frame  
11 that would indicate all those files being copied  
12 at once onto the drive.

13 ARBITRATOR CROW: All right. Mr. Rote.

14 Q. BY MR. ROTE: Exhibit 146.

15 ARBITRATOR CROW: Do you have one,  
16 Ms. Marshall? Did you get one?

17 Q. BY MR. ROTE: This is an e-mail, you see

18 Exhibit 146, page one. There's been some  
19 discussion about not having access to a  
20 substantial number of drives or timely access to  
21 a substantial number of drives. Have you had an  
22 opportunity to review any hard drives from  
23 Mr. Zweizig?  
24 A. No. I didn't, other than the computer and the  
25 hard drive that belonged to the company, I

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9

1 didn't have a chance to see any of his personal  
2 computers.  
3 Q. Down below on this e-mail you see an e-mail from  
4 Max Zweizig identifying the machines on which he  
5 needed the registration code for a particular --  
6 ARBITRATOR CROW: What page are you looking  
7 at, Mr. Rote?  
8 MR. ROTE: Page one.  
9 MS. MARSHALL: You may need to speak a  
10 little bit louder so that it can be heard on the  
11 phone here.  
12 Q. BY MR. ROTE: Okay. Down under the original  
13 message from Max Zweizig you see that there are  
14 serial codes needed, the registration codes  
15 needed for particular machines that he was  
16 having access to. Do you see, do you see  
17 that --  
18 A. Yes, I do.  
19 Q. -- on page one? And do you see that he's  
20 identified his laptop?



McCann

- 21 A. I do below the NWT machine.  
22 Q. And would that lead to you conclude that he was  
23 using his laptop for company business?  
24 A. It appears that he has, there's at least one  
25 other machine that is, that is one that I did

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10

- 1 not have access to.  
2 Q. All right. Let's go to page two. This is  
3 discovery provided by Mr. Zweizig. Up at the  
4 top of this page there is an identification  
5 called Maxz@erols.com.  
6 A. Yes.  
7 Q. Can you tell us what that represents.  
8 A. When you're seeing an Outlook program or Outlook  
9 express, the Microsoft e-mail program, when you  
10 print out your e-mails, if you're to view an  
11 e-mail printed out it puts the e-mail address  
12 you've put into the program at the top of that  
13 e-mail. So this would appear to have been  
14 printed from an e-mail program where the  
15 Maxz@erols.com was the address used.  
16 Q. The text of the e-mail however has the e-mail  
17 from Max as Max@NWtelmarketing.com. So you  
18 presume what from this?  
19 A. Well, this is hard to say. It's, without doing  
20 some further research on my parts, typically if  
21 you've got your Outlook set to receive, send and  
22 receive e-mail with the one address, the  
23 Max@NWtelmarketing.com, I would expect to see

24 Max@NWtelmarketing.com at the top. But I don't  
25 see that. So it indicates that maybe something

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1 else has happened with this e-mail. Maybe it  
2 has been forwarded to the erols.com address or  
3 in some way opened up within that program with  
4 that profile.

5 Q. Nonetheless, this e-mail was provided and copied  
6 from a source that was an account called  
7 Maxz@erols.com?

8 A. It does appear that way, yes.

9 Q. Would you go to page three. Same conclusion for  
10 page three?

11 A. It looks the same, yes, the same headers.

12 Q. And that, of course that date for that e-mail is  
13 October 1st, 2003.

14 A. Yes.

15 Q. Okay. Go back, we have just similar examples on  
16 page four. This is dated on page 4,  
17 October 2nd, 2003.

18 A. It does look like that way, yes.

19 Q. And that is referring to a do not call  
20 complaint, do you see that?

21 A. Yes, I do.

22 Q. And then on page five also at the top of the  
23 page, the same account named Maxz@erols.com?

24 A. Yes.

25 Q. And the date on that e-mail is November 13,

12

- 1           2003?
- 2       A.    That's correct.
- 3       Q.    Okay.  And the same for page six?
- 4       A.    Yes.
- 5       Q.    Same for page seven?
- 6       A.    In that case it's a message from your e-mail  
7           address to Maxz@erols.com and there's no  
8           NorthWest, no company e-mail address on that one  
9           at all.
- 10      Q.    So this page seven is different from the other  
11           ones because it was actually sent to  
12           Maxz@erols.com?
- 13      A.    It appears that way, yes.
- 14      Q.    So but the other, in relationship to the other  
15           e-mails, then all of these other e-mails were  
16           also kept in the Maxz@erols.com folder?
- 17      A.    It looks like it, yes.
- 18                MR. ROTE:  That's all the redirect I have.
- 19                ARBITRATOR CROW:  I think you opened some  
20           new areas if you wish to cross-examine,  
21           Ms. Marshall, on these issues, you may do so.
- 22      Q.    BY MS. MARSHALL:  Just a couple questions.  
23           Mr. Williams, were you aware that the company  
24           widely used a program called PC anywhere?
- 25      A.    I wasn't aware of that, no.

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- 1       Q.    Okay.  Well, you're familiar with that program,

- 2 weren't you?
- 3 A. Somewhat, yes. I've never used it myself or  
4 done any research on it.
- 5 Q. So, if, for example, Mr. Zweizig were out of the  
6 office, were in some other office or traveling  
7 and needed to pick up his e-mails, wouldn't it  
8 make sense to you that he would take his laptop  
9 with him, not his desk top?
- 10 A. That would make certain PC Anywhere allows for  
11 remote access of another computer through a  
12 different computer.
- 13 Q. Okay. And were you familiar with the ISP  
14 service used by, at NDT?
- 15 A. No, I was not.
- 16 Q. Okay. Well, you're familiar with ISP services  
17 where you can actually call, or dial up over the  
18 internet and get your e-mails remotely?
- 19 A. Through a web page, yes.
- 20 Q. Through a web page. Okay. And were you aware  
21 that NDT had such a service?
- 22 A. No. It's a common practice. My department for  
23 the City of Eugene has the same service where I  
24 can access my e-mail remotely from any computer  
25 through a web page.

♀

- 1 Q. So in either case, if Mr. Zweizig was either  
2 accessing e-mails remote Lee or accessing them  
3 over the internet using his laptop computer, for  
4 example, if he's out of the office, if he's

5 traveling, something like that, and he prints  
6 it, it would be printed off of the  
7 Maxz@erols.com; right?

8 A. It could be. I don't know the format. I know  
9 that looking at this format it looks like  
10 Outlook the way Outlook prints when I print my  
11 e-mails directly from my work computer rather  
12 than the format when I print them remotely, but  
13 I don't know for sure as how that would look.

14 Q. You don't know how Mr. Zweizig's computer was  
15 set up?

16 A. No, because I've never seen his computer.

17 Q. Okay. But you do know that all of these  
18 documents that you've seen here, Mr. Zweizig  
19 produced in this litigation. Those have his  
20 Zweizig number at the bottom of them; right?

21 A. Yes. That's my understanding.

22 MS. MARSHALL: Okay. That's all the  
23 questions I have.

24 ARBITRATOR CROW: Are you finished with this  
25 witness?

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15

1 MR. ROTE: Yes, we are.

2 ARBITRATOR CROW: All right. You may be  
3 excused and don't go back to Eugene and arrest  
4 any Oregon football players, please.

5 THE WITNESS: I can't guarantee that because  
6 that's where I'll be all day tomorrow.

7 ARBITRATOR CROW: Thank you for coming.

McCann

8 THE WITNESS: Thank you, sir.

9 ARBITRATOR CROW: Next witness, Mr. Rote.

10 Are you putting on another expert or one by  
11 telephone?

12 MR. ROTE: No other experts. The person by  
13 phone will be available at 1:00.

14 ARBITRATOR CROW: All right. That's fine.

15 MS. MARSHALL: All right. That's fine.

16 Then we would like to call Mr. McAnn.

17 ARBITRATOR CROW: All right.

18 MS. MARSHALL: And what I would suggest is  
19 that he come up here so that he's close to the  
20 phone and close to you. And he also has some  
21 equipment with him that would allow him to  
22 actually show you some of the things that he's  
23 going to describe.

24 ARBITRATOR CROW: All right. And do you  
25 want to sit next to him then or do you want to

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16

1 sit across the way or what do you want to do?

2 MS. MARSHALL: I'll move right next to him.

3 He can turn and talk to you.

4 ARBITRATOR CROW: All right. Mr. McAnn, can  
5 you come and take the hot seat, please.

6 THE WITNESS: Yes, sir.

7 ARBITRATOR CROW: Thank you.

8 THE WITNESS: If you don't mind, it will  
9 take me a minute to set up.

10 ARBITRATOR CROW: Take your time. Let's go

McCann

11 off the record while he's setting up and you can  
12 relax.

13 (Break taken from 9:17 to 9:25.)

14 \*\* \*\* sworn sworn \*\* \*\*.

15 Q. BY MS. MARSHALL: You're going to have to speak  
16 up into the, speak into the mic and for the  
17 benefit of Mr. Crow.

18 Okay. Mr. McCann, we've invited you here  
19 today to give expert testimony. So I'd like to  
20 have you focus your qualifications, your  
21 background on your qualifications to assist in  
22 making a decision in the issues in this case. I  
23 guess let's start with you just describing how  
24 would you describe generally your professional  
25 work?

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17

1 A. Okay. My professional work, I have been in the  
2 field or fields of IT security, information  
3 technology and forensics examinations or  
4 forensics for over 13 years. This has gone  
5 through both corporate type of cases as well as  
6 attorneys, normal litigation and consulting or E  
7 discovery. So I've sort of covered the field  
8 when it comes to all the different areas where  
9 you can apply the forensic backgrounds or the  
10 forensic services.

11 Q. Do you, do you have a full time job?

12 A. I do.

13 Q. What is that?

McCann

14 A. I have a full time job at a company called \*PACR  
15 where perform forensic investigations. And this  
16 is a corporate environment. Luckily it's  
17 flexible so I freelance as well on my own in  
18 order to do forensic examinations such as this.

19 Q. Okay. And the type of examinations that you've  
20 done, freelancing, can you give us a general  
21 idea of what they are?

22 A. Freelancing has been from wrongful terminations  
23 to sexual harassment, to the stolen IP. So like  
24 going through and finding data that a company  
25 has, you know, classified or is their own, that

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18

1 might be going to another data, another company.  
2 Excuse me, to fraud, anti trust situations,  
3 et cetera.

4 Q. Okay. You have an idea of how many examinations  
5 you've done over the years?

6 A. Not exactly. Because I do corporate and I do  
7 litigation, corporate we've had up to 500 cases  
8 a year, which means it can be one computer, it  
9 can be three computers that I examine. So I've  
10 examined thousands of computers. But I've  
11 performed over probably over 500 cases myself.  
12 And again that's a cross from corporations type  
13 of investigations to litigation type of  
14 investigations.

15 Q. Okay. And you've brought a curriculum vitae  
16 with you, which I have a copy for you and for



17 Mr. Crow. And did's a petty detailed CV so I  
18 won't have you go through it in detail. But I  
19 notice in your CV that you also, in addition to  
20 working full time for \*PACR and doing consulting  
21 that you've just described, that you also are,  
22 that you teach the subject.

23 A. That's correct.

24 Q. Can you just give Mr. Crow an idea of what your  
25 teaching experience is?

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19

1 A. So currently, this is the third year I will be  
2 teaching advanced forensics, an advanced  
3 forensics course at University of Washington.  
4 It's a continuing education course and it allows  
5 students to go from the beginning, starting with  
6 the legal aspect of forensics, through beginner,  
7 more immediate to advanced. And so again, I  
8 teach the third class, which is the advanced  
9 forensics class.

10 Q. And in connection with your work at the  
11 University of Washington, and I see that you've  
12 worked at other universities as well, I notice  
13 that you have done some writing.

14 A. I have. Well, I've done writing that I have  
15 developed into videos, video tutorials, how to  
16 forensics for certain things such as incident  
17 sponsor hacking, like compromises on servers to  
18 general forensics, et cetera. So I've created  
19 at least ten different videos that are posted

20 out on the internet sort of like the U-Tube era  
21 for experts such as ourselves to go study and  
22 watch and learn from.

23 Q. Okay. And have you also been a coauthor of  
24 publication?

25 A. I'm currently working on an advanced forensics

20

1 book along with a person named Bill Nelson, who  
2 created one of the original or coauthored one of  
3 the original forensics books. So it was more  
4 beginner to intermediate and he's asked me to  
5 help him coauthor an advanced book to be  
6 published hopefully sometime next year.

7 Q. Okay. And I do want you to relate your  
8 experience specifically to this case. Can you  
9 tell us what types of software and what  
10 forensics environments you've worked in?

11 A. Okay. Well, it's sort of across the board  
12 another gambit. I specialize Encase, which has  
13 been utilized with some of the other experts  
14 here. I specialize in FTK. I also have a lot  
15 of knowledge about open systems. So open source  
16 software, other software such as X-Ways  
17 Forensics, Smart, a lot of different forensic  
18 software that's out there. And the reason I do,  
19 the reason I'm involved in those is because I  
20 have more, I have a lot of experience in not  
21 just Windows but UNIX as well as well as  
22 networking and applications. So my, I try to

23 say that I'm the jack of all trades but not  
24 quite the master of all or none, I say. Sorry.

25 Q. Have you, has your testimony been accepted as

‡

21

1 expert testimony in federal court, for example?

2 A. Yes, it has.

3 Q. Here in Oregon?

4 A. Here in Oregon.

5 Q. And when you hold yourself out as an expert,  
6 does that include the Windows operating system?

7 A. Yes, it does.

8 Q. And are you also familiar with Microsoft Office  
9 products?

10 A. I am.

11 Q. Including Microsoft Outlook?

12 A. Very much so, yes.

13 Q. Okay. So that would include the software that  
14 was in use in this case. How about the internet  
15 environment?

16 A. Not only am I an expert, but I've also had  
17 training on internet forensics specifically.

18 Q. Okay. And have you performed in other cases  
19 involving issues that involved the deletion of  
20 matter or wiping matter or somehow hiding items  
21 in computer environment?

22 A. As I mentioned, I specialize in what's called  
23 incident response. So the compromise of servers  
24 by hackers, et cetera, that they love to have a  
25 tool set which includes tools that wipe out data,

1 that hide data. An example would be they may  
2 install what's called a root kit that can tell  
3 you that you have all of your space available on  
4 your hard drive yet you really only have a few  
5 gigs free let's say because they're using it to  
6 share files out to the entire internet. So I  
7 have a lot of experience in that field  
8 determining what's been used to hide or wipe  
9 data on any source device.

10 Q. Okay. Now, you were sitting back in the back so  
11 you heard me ask questions of the other experts  
12 in terms of the concept of technical expert  
13 versus a scientific expert. Technical expert  
14 being one that can read, can perform the actual  
15 forensics, read the machine and tell you what it  
16 says, whereas the scientist, the scientific  
17 expert being able to take it, a measure beyond  
18 that.

19 Which do you see yourself as?

20 A. I see myself as the more of the scientist. And  
21 the reason that is is because not only do I pay  
22 attention to my tools, but I'm eager to reverse  
23 engineer what is happening in figuring out why  
24 it's happening, et cetera. So that's,  
25 therefore, it's more scientific than just

1 allowing the tool to tell me what it thinks is  
2 right.

3 Q. I would, well, let me ask you one final general  
4 background question. I have, I've asked the  
5 other experts whether they're willing to testify  
6 to the facts in order to help this arbitrator  
7 make a decision and I've asked you to do that,  
8 the same. Are you comfortable with that as  
9 opposed to being an advocate for anyone?

10 A. Absolutely.

11 Q. Have you served as a special master before?

12 A. Yes, I have.

13 Q. All right. What I'd like you to start with then  
14 is to help us understand what the different  
15 levels are of metadata. We've talked about  
16 metadata so far, but I don't know that anybody  
17 has educated us as to what it is.

18 A. Okay. Well, I'm going to keep it limited to the  
19 involvement of this case. But basically and I  
20 think I have heard someone here, someone of the  
21 experts say this metadata is usually data about  
22 data. It's kind of confusing. However there's  
23 two levels in this case there's file system  
24 metadata. File system metadata means the name  
25 of the file, the times, the times that

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24

1 Mr. Williams was talking about earlier that may  
2 or may not change. That's file system metadata.

McCann

3 And then there's application metadata. And that  
4 is like if you have your Microsoft Office, you  
5 open up a Word document, you know, your Word  
6 document stores things like the author, the  
7 company, how many words or characters are in the  
8 document itself when it was last printed,  
9 et cetera. There's a lot of data that's stored  
10 within the document itself, which becomes --

11 ARBITRATOR CROW: Is he going too fast for  
12 you? Are you okay?

13 THE WITNESS: Am I going too fast for you,  
14 sir?

15 ARBITRATOR CROW: No. No. I'm more  
16 concerned with those fingers over here. Go  
17 ahead.

18 THE WITNESS: So the document contains  
19 metadata itself, which again corroborate with  
20 the file system metadata as we will probably be  
21 explaining later.

22 Q. BY MS. MARSHALL: Okay.

23 ARBITRATOR CROW: I understand.

24 Q. BY MS. MARSHALL: Whereas here, one of the  
25 pivotal issues is the date, date and time. How

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1 can the metadata help us to figure out the  
2 actual date and time, not just read it off a  
3 machine, but to figure out the actual date that  
4 a document was created or a file was created?

5 A. Well, the metadata both file system and

McCann

6 application metadata can have and will have a  
7 created date and several other dates involved.  
8 You can try to --

9 ARBITRATOR CROW: On the document itself?

10 THE WITNESS: On the document itself if we  
11 are referring to a document, which we are during  
12 this case, and on the file system. So usually  
13 you would refer to those two different metadatas  
14 for the dates and times in order to depend on  
15 them.

16 ARBITRATOR CROW: Well, let's take a look at  
17 Exhibit 146, which I think is the last one. I  
18 need to make sure I understand what you're  
19 talking about. You say there's a creation date.  
20 I only see a creation date on this document.  
21 Would there be another date that you would find  
22 and where would you find it if you did.

23 THE WITNESS: Which page?

24 ARBITRATOR CROW: Page two, for instance.  
25 This e-mail is apparently sent October 1, 2003,

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1 at 9:35 a.m.

2 THE WITNESS: So in this case this is an  
3 application metadata date. Right. And this is  
4 actually called, if in some of the reports from  
5 Steve Williams this is technically the submit  
6 metadata that the date in which they actually  
7 punched that send button. Do you mind if I show  
8 you on the screen?

9 ARBITRATOR CROW: No. That would be fine.  
10 And if you would like to come down.

11 THE WITNESS: You will all recognize this.  
12 I'm not going to actually send it. But I am  
13 going to create a new e-mail and this is  
14 Outlook. This is also, I should mention that  
15 this computer is tuned so it's Outlook XP,  
16 office XP just like what existed when this data  
17 happened when all the data was being utilized.

18 So, the submit time or the sent date is the  
19 actual time when they go up here and they click  
20 on this send button.

21 ARBITRATOR CROW: That's the date that would  
22 be on this document that I just referred to.

23 THE WITNESS: That is correct.

24 ARBITRATOR CROW: All right.

25 THE WITNESS: Now there's other application

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1 metadata for this office Outlook application.  
2 So there's created which you don't see here as  
3 well as received and last modified. So there's  
4 four dates that off Microsoft Office Outlook  
5 has.

6 ARBITRATOR CROW: And are you able to  
7 extract those dates?

8 THE WITNESS: Yes.

9 ARBITRATOR CROW: From the computer?

10 THE WITNESS: Yes, I am.

11 ARBITRATOR CROW: The hard drive; is that



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correct?

THE WITNESS: Yes, sir.

ARBITRATOR CROW: Okay. I think I understand where you're going.

Go ahead.

Q. BY MS. MARSHALL: Okay. Now, are there ways, once you have these four pieces of metadata, are there ways that you can test them to verify that, in fact, they are true, are the truth?

A. Well, the best way, forensically, to test to make sure that these dates are the truth is by comparing them with computer log files, you know, to make sure that at no time the computer date was changed. I can demonstrate this as

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well if you'd all like to come back up.

Q. Let's wait until we get a little bit later and then he can do it all at once.

ARBITRATOR CROW: Are you saying there is a way to look at the hard drive to see when and if a date was changed manually?

THE WITNESS: Yes, sir.

ARBITRATOR CROW: All right.

Q. BY MS. MARSHALL: Okay. And what would you look at on the hard drive to determine if a date had been changed?

A. Again I would look at different log files that existed on the hard drive.

Q. And do you have to have the hard drive in order

- 15 to do that?
- 16 A. No. When it comes to e-mail anyway, e-mail you  
17 could also refer to the internet service  
18 provider that the e-mail went through if the  
19 e-mail went through an internet service  
20 provider.
- 21 Q. Okay. With respect to a paper document, for  
22 example, the letter that's at issue in this  
23 case, would you have to refer to the hard drive  
24 in order to examine the logs?
- 25 A. Yes.

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- 1 Q. Okay.
- 2 ARBITRATOR CROW: Give me that one again,  
3 Linda, that question again.
- 4 Q. BY MS. MARSHALL: I asked whether with respect  
5 to the written document, the letter in this  
6 case, would he have to examine the hard drive in  
7 order to, examine the logs on the hard drive in  
8 order to verify the date and time?
- 9 ARBITRATOR CROW: And the answer is no?
- 10 THE WITNESS: To, since she, since she  
11 clarified the question, the answer is that log  
12 files, I utilize log files to validate dates and  
13 times. But to validate an actual date and time  
14 from a piece of paper that was printed or used  
15 on a computer, then I have to go into the file  
16 system and the applications and configuration on  
17 the hard system. So the hard drive is the

McCann

18 answer is yes, I absolutely need the hard drive  
19 to validate that document.

20 ARBITRATOR CROW: All right. Thank you.

21 Q. BY MS. MARSHALL: Okay. Now, you've been in  
22 this field for 13 or so years. I want you to  
23 focus on the period 2003, 2004. I've asked you  
24 to do this in this exercise at least. Do you  
25 have an understanding of the concept of a

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1 litigation hold?

2 A. Absolutely. So a litigation hold is where one  
3 or both parties understands that litigation is  
4 going to be occurring and whatever the  
5 allegations are, any evidence involved in that  
6 litigation must be held, meaning it must be set  
7 aside and untouched during the time of that  
8 litigation.

9 Q. Okay. And are you talking about taking  
10 computers out of service?

11 A. Not necessarily. You could take the data  
12 storage devices out of the computers and replace  
13 them and still have them in a running, in the  
14 business or the company or whatever it may be  
15 and have those data storage devices out as the  
16 evidence that you need or the, yeah, the  
17 evidence that you need, that you are holding for  
18 the litigation.

19 ARBITRATOR CROW: Can you take a mirror  
20 image at that time and preserve it?

21 THE WITNESS: Yes, you could.

22 ARBITRATOR CROW: All right.

23 Q. BY MS. MARSHALL: Okay. And that would be by  
24 the parties getting together and agreeing that  
25 they would hire somebody together to take an

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1 image; is that correct?

2 A. That is correct.

3 Q. Okay. Now, what about a litigation hold with  
4 respect to storage devices like floppy disks and  
5 things of that nature?

6 A. The same applies to any sort of data storage  
7 device, whether it's a floppy disk or a CD rom,  
8 the idea is that it is stored and it is not  
9 touched in a technically it's not touched as in  
10 no one wrote to it or no one has modified it or  
11 corrupted it.

12 Q. Okay. And in 2003, was it your understanding  
13 that this was the practice in the industry that  
14 when litigation was imminent, that a litigation  
15 hold as you've described it would go into  
16 effect?

17 A. While E discovery was new in 2003, I was  
18 performing this exact role in my life. And so  
19 yes, it was still common practice for that to be  
20 in place.

21 Q. All right. And as a forensic examiner, are you  
22 familiar with concept of spoliation?

23 A. Yes. So spoliation is the intentional or even

24 unintentional change or manipulation of data  
25 that may be in that litigation hold. It could

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1 be the accidental deletion of a file, it could  
2 be the accidental overwritten file or it could  
3 be the loss of data or the loss of a data  
4 storage device itself.

5 Q. Okay. And have those sorts of things happened  
6 in this case?

7 A. Yes, they have.

8 Q. In your course in advanced forensics, do you  
9 teach your students about litigation holds?

10 A. Absolutely.

11 Q. Do you teach them about spoliation?

12 A. Yes.

13 Q. Have you found examples of spoliation in this  
14 case?

15 A. Yes, I have.

16 Q. And have they put Mr. Zweizig at a disadvantage?

17 A. Yes, they have.

18 Q. Okay. You spoke a moment ago about your, the  
19 computer that you're using here today, that it  
20 is loaded with the same software that was in use  
21 in 2003 by Mr. Zweizig's computer; is that  
22 correct?

23 A. And Mr. Rote's.

24 Q. And Mr. Rote's computer.

25 A. Yes.

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- 1 Q. Do you have available to you the forensic tools  
2 that were available? For example, the ones that  
3 Mr. Williams was using?
- 4 A. Yes, I do. Although they are, they have newer  
5 versions out and newer capabilities than  
6 Mr. Williams had back in 2004 and 2005 when he  
7 took his images and did his analysis.
- 8 Q. Okay. And so have you attempted to use the  
9 newer versions of the forensic tools?
- 10 A. Yes, I have.
- 11 Q. Okay. But I would like, whenever possible, when  
12 you're talking about, when you're trying to  
13 compare your data with that, that either of the  
14 other two gentlemen has used, that if you could  
15 refer to the same forensic tool, whether it  
16 be --
- 17 A. Newer or not.
- 18 Q. No. Whether it be Encase or FTK. Is it FTK?
- 19 A. You got it. Correct.
- 20 Q. Maybe you could explain for Mr. Crow the  
21 difference between those two.
- 22 A. So let's start with FTK.
- 23 ARBITRATOR CROW: D or --
- 24 THE WITNESS: T. It stands for forensic  
25 tool kit. It was really developed to sort of

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2 examiner, which means that it takes all of the  
3 data in and processes it first and then spits it  
4 out in buckets. This is how many documents you  
5 have this is how many e-mails you have this is  
6 how many spreadsheets you have type of scenario.  
7 So it's very commonly used or most commonly used  
8 I should say with law enforcement. The other  
9 product that has been used in this case is  
10 called Encase. That's E N C A S E. That  
11 product is, in my opinion, more advanced than  
12 the FTK product, means that you open up your  
13 case, you are looking directly at your data  
14 storage device and you have to work through it  
15 similar to sometimes to a hex editor. So it can  
16 get very complicated.

17 Q. Okay. The demonstrations that you've brought  
18 here today, are you going to be permitting  
19 Mr. Crow to actually look into the FTK and the  
20 Encase and what was the other thing, the hex  
21 editor?

22 A. It's called X-Ways forensics and that one is not  
23 loaded on here because I did not use it during  
24 this case. However, if absolutely at any time  
25 it pops up in my examples I will be showing you

‡

1 both of those products.

2 Q. Okay. I'd like to have, I'd like to move right  
3 into one of the, one of the important issues in  
4 the case, and that's the e-mail that's at issue.

- 5           And I believe it's Exhibit 14. I'll let you  
6           take a look at it. And I'll just ask you  
7           whether I have asked you to do forensic  
8           examination with respect to the, to this e-mail.  
9        A.    Only in respect to the latest protective order.  
10       Q.    Yes.  
11       A.    Have I taken a look at this e-mail and examined  
12           it forensically.  
13       Q.    Okay.  
14       A.    I'm sorry. Let me add onto that. The prior,  
15           the prior stipulation, protective order, I found  
16           this e-mail but it wasn't in the stipulation for  
17           me to really bring it out and examine it fully  
18           like I have since the new protective order came  
19           out.  
20       Q.    Okay. Well, let's go back to the first time  
21           that you approached the subject of the e-mail.  
22           And first of all, what computer did you  
23           understand the e-mail was created on?  
24       A.    My understanding is it was created on Mr. Rote's  
25           laptop.

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- 1       Q.    Okay. And were you provided Mr. Rote's laptop  
2           for examination?  
3       A.    Yes, I was.  
4       Q.    Okay. When were you provided his laptop?  
5       A.    I believe it was December 12th, 2008. And if  
6           you don't mind, I'm going to grab my folder down  
7           there.



- 8 ARBITRATOR CROW: December 8th?  
9 THE WITNESS: Yes.  
10 MS. MARSHALL: December 12, 2008.  
11 THE WITNESS: I am going to refer to, for  
12 this I am going to refer to my report that I  
13 submitted. I don't know which exhibit it is.  
14 MS. MARSHALL: It is an exhibit, I believe.  
15 While you get it out I'll get the report number.  
16 THE WITNESS: So to continue with that, I  
17 was, I was, did you handed over?  
18 Q. BY MS. MARSHALL: You were provided. Were you  
19 provided the actual laptop?  
20 A. I was provided the actual laptop on December  
21 12th, 2008.  
22 Q. Okay. And the date of the e-mail is what?  
23 A. October 2nd, 2003.  
24 Q. Okay. So you were looking at the forensic data  
25 roughly five years after the, ostensibly after

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- 1 the e-mail?  
2 A. Can you repeat the question, please.  
3 Q. I guess I was just summarizing that you were  
4 looking at the computer roughly five years after  
5 October of 2003.  
6 A. That is correct.  
7 Q. And where were you, where were you, where did  
8 you go to get the computer?  
9 A. I was actually in this building. I can't tell  
10 you which floor, but, or which law firm it was,

- 11 but the name of the attorney was Jeff Edelson.
- 12 Q. Okay. So you, your office is in Seattle?
- 13 A. Yes.
- 14 Q. Is that correct? So you came down here
- 15 specifically to examine or to take images of the
- 16 relevant computers?
- 17 A. That is correct.
- 18 Q. Okay. Can you tell us the general condition of
- 19 the laptop at that point?
- 20 A. The laptop physically did not look damaged.
- 21 Q. And what did you find when you went to take an
- 22 image of it?
- 23 A. What I found is that the hard drive itself,
- 24 however, did appear physically damaged, not from
- 25 the outside but by the sounds and its

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- 1 performance that it had when I was attempting to
- 2 take a forensic image, such as whining and
- 3 almost a grinding sound inside a hard drive,
- 4 smug would hopefully never want to hear unless
- 5 you backed up all of your files.
- 6 Q. Okay. We should have probably done this
- 7 earlier, but when you say you take an image,
- 8 what are you really talking about?
- 9 A. So what that means, and actually I'm going to
- 10 grab my bag for this. What that means is that
- 11 there's a procedure, procedure that I utilize in
- 12 order to preserve the evidence. And this
- 13 procedure first off starts off with me

McCann

14 documenting what the evidence is and the  
15 documentation comes in three forms. It comes in  
16 writing it down, as an example. I have these  
17 forms that I fill out when I go on site and I  
18 actually look at the equipment and take the  
19 equipment. So I'm writing down serial numbers  
20 and model numbers, et cetera. The second is the  
21 chain of custody. And the third is actual  
22 pictures. So I take a camera along with me and  
23 take pictures. Equipment so I can tell what  
24 state it was in, I can tell how it was  
25 configured and I take up close macro shots of

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1 the serial numbers. This is how I keep from  
2 accidentally not being able to read my own  
3 handwriting.  
4 Q. All right. So when you say an image, now the  
5 other two gentlemen have talked about images,  
6 too. What is, what is an image?  
7 A. So after I have documented everything that I  
8 need to, that I feel that I need to, I do what's  
9 called a forensic image, taking a forensic  
10 image. It's a bit by bit or byte by byte,  
11 depends on how you want to say it, copy of a  
12 data storage device. And that data storage  
13 device can be a hard drive or a floppy disk or a  
14 CD rom or anything. It can be an i-Pod or  
15 what's inside an i-Pod I should say. So what  
16 happens is that most of the scenarios,

17 especially computers and with their hard drives,  
18 we hook them up to what's called a write-blocker  
19 device. It's a piece of hardware. And the  
20 reason why we use a piece of hardware is as to  
21 things like viruses don't affect us. If my  
22 computer here gets affected and I'm suing a  
23 software device in order to keep from writing to  
24 a hard drive, it's possible that that virus has  
25 taken over and changed it to where I can

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1 accidentally contaminate my evidence. So that's  
2 why us in the field use hardware write-blocker  
3 devices. Once we attach the hardware  
4 write-blocker device to the data storage device,  
5 then we have a target data storage device  
6 usually an external hard drive which we have  
7 wiped, meaning we've wiped it completely clean.  
8 So even us forensic guys can't go and recover  
9 anything off of it. It looks like just a bunch  
10 of zeros. And then we begin to take our  
11 forensic image copy from the source off to our  
12 target drive and that's how, where we make our  
13 images.

14 Q. So the net result is that the objective is that  
15 everything, every one and zero, if you will, on  
16 the, whatever you're taking an image of, ends up  
17 on your external drive, is that --

18 A. That's correct.

19 Q. Is that it?

20                   Okay. And then you give the original back  
21                   to its owner?

22       A.    That is also correct.

23       Q.    Okay. Does that relief the, is your  
24                   understanding that that relieves the owner from  
25                   litigation hold?

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1       A.    No.

2       Q.    Or from taking it out of service, et cetera?

3       A.    No. And I say that only because you never know  
4                   what the next request may be. As an example,  
5                   this may not apply to this scenario, but when it  
6                   comes especially to either discovery, I may be  
7                   asked to search this entire data storage device  
8                   for certain keywords. Right. And then three  
9                   months down the road they may come back and tell  
10                  me that I need to go back to the hard drive and  
11                  pull more data off it in order to additional  
12                  keywords to that.

13       Q.    Okay. When you went to take your image of  
14                  Mr. Rote's laptop, were you able to get a  
15                  complete bit stream image of that laptop?

16       A.    I was able to complete the image after multiple  
17                  tries, since it was physically damaged, and,  
18                  however, the software that we utilize goes  
19                  through and if it has trouble reading any part  
20                  of the drive, it records it but it marks it all  
21                  as zeros. So I can't actually get access to the  
22                  data, wherever those bad areas were. And again,

23 I actually tried imaging this drive five times  
24 during the course of the period that I was at  
25 this, at Jeff Edelson's office.

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1 ARBITRATOR CROW: The laptop.

2 THE WITNESS: Of the laptop, yes. Whereas  
3 each one almost took an hour to complete. The  
4 size of this drive was ten gigabytes. It really  
5 should have took maybe 20 minutes. So there  
6 were issues and the image that I received, even  
7 though it was a, even though the software  
8 completed, I did not have access to all of the  
9 data on that 10 gigabyte hard drive.

10 Q. BY MS. MARSHALL: Okay. Now, if, we've talked  
11 about the litigation hold. But let's say the  
12 computer is not taken out of service. So the  
13 hard drive is not taken out of service. What  
14 effect does that have on the forensic evidence?

15 A. The longer and longer that hard drive or data  
16 storage device is kept in service, the more data  
17 that is deleted is overwritten. You know, the  
18 more it fills up, the less of a chance you have  
19 of recovering deleted files.

20 ARBITRATOR CROW: And if it's overwritten,  
21 you can't recover it?

22 THE WITNESS: That is correct.

23 ARBITRATOR CROW: All right.

24 Q. BY MS. MARSHALL: With any of your tools; is  
25 that correct?

1 A. That is also correct. Without it being sent off  
2 to a science lab.

3 Q. Okay. Now, the corruption on the laptop, did it  
4 affect your ability to read the registry?

5 A. Yes. Yes. I was unable to read the registry or  
6 even the backup registries that the computer  
7 automatically takes.

8 Q. Okay. Could you tell whether the laptop had  
9 been in use during the five years since October  
10 of 2003?

11 A. Referring back to my report.

12 Q. The report is Exhibit 103, Mr. Crow. We've  
13 located it down here. It is in evidence, I  
14 believe.

15 ARBITRATOR CROW: I think it is.

16 THE WITNESS: What's the third page on that?  
17 Is it 103, page 3?

18 Q. BY MS. MARSHALL: 103, Exhibit 103, page three.  
19 Okay.

20 A. Yeah. I believe if it's going based on this. I  
21 wrote in the, on the sort of second paragraph on  
22 that page, the very, the second to the last  
23 sentence talks about how this 10 gigabyte hard  
24 drive has been in use since the termination of  
25 Max through 11-12-08. So exactly a month before

- 1 I took the image and I had this in my hands.
- 2 Q. BY MS. MARSHALL: Okay. In your judgment when  
3 should the litigation hold have gone into effect  
4 for the hard drive that this exit time e-mail  
5 was created on?
- 6 A. In my opinion, the moment whomever initiated the  
7 litigation, you know, began to think about the  
8 litigation and/or discuss the litigation with an  
9 attorney.
- 10 Q. Okay. And is this an example of what you were  
11 talking earlier about, spoliation, what can  
12 happen if the litigation hold is not put into  
13 effect?
- 14 A. Absolutely. The fact that these were in use for  
15 years arch the litigation was put into effect is  
16 unintentionally overwriting data, which is  
17 spoliation.
- 18 Q. Did it prevent you from doing what you needed to  
19 do in order to properly examine the hard drive  
20 for this e-mail?
- 21 A. In several instances. A lot of, especially if  
22 we're talking about just the e-mail, this e-mail  
23 that was, to exist, you know, it's possible that  
24 copies or original drafts, et cetera, existed on  
25 this laptop at one time but I was unable to

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- 1 discover because of the overwritten data.
- 2 ARBITRATOR CROW: Well, let me ask you this,



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3 as I understand your earlier testimony, you can  
4 determine from the hard drive whether the date  
5 on the computer has been manually changed.

6 THE WITNESS: That is true.

7 ARBITRATOR CROW: Can that information be  
8 overwritten?

9 THE WITNESS: Absolutely.

10 ARBITRATOR CROW: All right.

11 THE WITNESS: Log files generally will do  
12 what they call rollover. So they can only go,  
13 get up to a certain size and then after that  
14 size is met, then they start overwriting the  
15 date that's in the beginning of it. It's also  
16 very similar to how the hard drive works when it  
17 deletes data.

18 ARBITRATOR CROW: All right.

19 Q. BY MS. MARSHALL: And in your view did that put  
20 Mr. Zweizig at a disadvantage?

21 A. Yes, it did.

22 Q. Fortunately you have had access to, now, to an  
23 earlier image of the laptop; is that correct?

24 A. Yes, I have.

25 Q. You were, after Mr. Williams testified and you

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1 obtained his file, you were given an image that  
2 he created in May of 2005?

3 A. June of 2005.

4 Q. June of 2005. And have you had -- When was that  
5 that you were given access to that?

6 A. That was actually <sup>McCann</sup> last week, last Tuesday. And  
7 the date skips my mind. So you'll have to fill  
8 that in for me. Actually I can fill it in.  
9 Tuesday, October 26th.  
10 ARBITRATOR CROW: Okay. You examined it --  
11 THE WITNESS: No. I received it.  
12 ARBITRATOR CROW: All right. And this is an  
13 image taken in June 2005.  
14 THE WITNESS: By Steve Williams.  
15 ARBITRATOR CROW: All right.  
16 Q. BY MS. MARSHALL: So this is 2010 and we're in  
17 the middle of the arbitration. And is this the  
18 first time that you have been able to examine  
19 the computer as it was in 2005?  
20 A. Yes.  
21 Q. And even then it was a year and a half after the  
22 fact; is that correct?  
23 A. That is correct.  
24 Q. Okay. And first of all, did receiving this  
25 image, even though you now have it, did that, in

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1 your view did that put Mr. Zweizig at a  
2 disadvantage?  
3 A. Yes, because that year and a half is still, and  
4 the fact that the drive is so small, being a 10  
5 gigabyte drive, that far back, the data that's  
6 being overwritten happens even faster than a  
7 drive that is bigger.  
8 Q. Okay. So when you examined Mr. Williams' image

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- 9 of the laptop, did you find missing or data that  
10 was, or did you find that data was missing that  
11 you would have hoped to have seen there?
- 12 A. Are you asking did I find data that I didn't  
13 find when I took my own image?
- 14 Q. Let me rephrase the question. Did you, in  
15 looking at the image of the laptop that  
16 Mr. Williams took, was there data missing that  
17 you would have hoped to have seen that you  
18 attribute to overwriting, et cetera?
- 19 A. One example, and there are many more, would be  
20 the log files. The idea is that, when I  
21 originally had access to this computer, not only  
22 was there an e-mail, you know, or e-mails about  
23 the termination, but there was a letter about  
24 the termination. And I was unable to find that  
25 information on the computer. That was before

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1 Mr. Rote's testimony. And I was unable to  
2 determine if any of the dates were modified or  
3 manipulated because well even a year and a half  
4 later that data is, has most likely been  
5 overwritten.

6 ARBITRATOR CROW: Well, to overwrite at the  
7 change of a date, manually, would you have to  
8 manually change the date? I mean, is that, do  
9 you overwrite the change of a date by change  
10 being the date again.

11 THE WITNESS: Yes, you can.

- 12 ARBITRATOR CROW: Is that the only thing  
13 that would overwrite the change of a date?  
14 THE WITNESS: No.  
15 ARBITRATOR CROW: What else would.  
16 THE WITNESS: There are programs that can.  
17 ARBITRATOR CROW: All right. Go ahead.  
18 Q. BY MS. MARSHALL: Okay. In addition to  
19 examining Mr. Williams' forensic image, which I  
20 take it you're primarily relying upon now; is  
21 that correct?  
22 A. As of a few days ago, yes.  
23 Q. Okay. Did you review his report?  
24 A. Yes, I did.  
25 Q. Okay. And that would be Exhibit 68. And we

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- 1 will be referring to that quite a bit?  
2 ARBITRATOR CROW: 68?  
3 MS. MARSHALL: Exhibit 68, is a report that  
4 Mr. Williams prepared in 2005 relating to his  
5 examination of the laptop.  
6 Q. BY MS. MARSHALL: Let's see. You need to have  
7 Exhibit 68 in front of you. And we have the  
8 books down here, I guess.  
9 A. Is it okay if I pull it up on my computer  
10 instead?  
11 Q. Sure. If you have that on your computer, that's  
12 fine?  
13 A. I believe that was Exhibit 5, NWD 0005 before;  
14 right?

McCann

15 Q. Yes. Okay. Let's start with the general first  
16 and then move toward the specific. And here, I  
17 think you'll be able to make some demonstrations  
18 for us. But basically what I want to know is  
19 how difficult it is to manipulate the date and  
20 time on a computer?

21 A. It is not difficult at all. It's easy enough  
22 that even a general user just first buys their  
23 computer can do it. Would you like a  
24 demonstration?

25 ARBITRATOR CROW: Would I do it the same as

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1 I would change the time, use that same?

2 THE WITNESS: Simply by double clicking on  
3 the clock in the corner, that's exactly how you  
4 change the date.

5 ARBITRATOR CROW: Okay. I've had to change  
6 the time so I understand how it's done.

7 Q. BY MS. MARSHALL: Okay. Now, when you do that,  
8 how does that affect the metadata in the  
9 computer?

10 A. That actually will change, not necessarily  
11 change, but that will impact the file system  
12 metadata as well as the document metadata. As  
13 an example, the dates and times that we're  
14 looking at in this exhibit, that's application  
15 metadata. That's metadata that Outlook,  
16 Microsoft Outlook has put into this e-mail. So  
17 by changing a date you could, well I mean

McCann

18 demonstrate this. And I already have, in a way,  
19 if I change my date from right now I actually  
20 have it dated until tomorrow. Let's say I  
21 change it to November 1st of this year, this  
22 month, okay, I set my date back just by double  
23 clicking as you are aware of changing your time,  
24 correct. Now whenever I, if I create a new  
25 e-mail and I can make this to anybody, I'll send

♀

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1 it to Max, what was it Erols, E R O L S. I  
2 think I spelled it wrong but it doesn't matter.  
3 Test e-mail. All right.  
4 Q. Now, before you go any further, can I ask you,  
5 do you have to be hooked up to an internet in  
6 order for this to, this demonstration to work?  
7 A. No.  
8 Q. Okay. So you're not depending on any outside.  
9 So this is all within the computer; is that  
10 right?  
11 A. That's correct.  
12 Q. Okay. So why don't you show us what happens to  
13 the date and time that you just made the change  
14 to.  
15 A. Okay. Once I send this, it's going to write a  
16 couple different dates, three different dates  
17 actually. It's going to write creation date, a  
18 receive date and what's called a sent date or a  
19 submit date. The submit date actually will not  
20 happen because as you can see here it is sitting

21 in my out box. McCann But it will have a fourth date  
22 called a modification date. And that you will  
23 see back on the exhibit, so what I just did is  
24 going to create this creation date, a delivery  
25 date and pay a modification date.

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1 ARBITRATOR CROW: But not a submit date.  
2 THE WITNESS: Not a submit date. Not yet.  
3 ARBITRATOR CROW: All right.  
4 Q. BY MS. MARSHALL: Well, let's just back up to  
5 the creation date.  
6 A. Okay.  
7 Q. What starts the creation date? What button do  
8 you hit that starts the creation date?  
9 A. New e-mail. So the new button in your Microsoft  
10 Outlook.  
11 Q. Okay. So that's the creation date and time; is  
12 that correct?  
13 A. Yes.  
14 Q. For the metadata. And what creates or what  
15 starts the delivery date and time?  
16 A. It's actually part of the send, once you send  
17 it, there's a send where it sort of saves it.  
18 You could call it save it in memory or a queue.  
19 Let's call it a queue. It's a place in line.  
20 All right. Once that gets, even though you hit  
21 the send button it's not officially sent, it's  
22 not officially submitted. It still has a  
23 receive time of when it sits in that queue and

24 waits for it to be officially submitted.

25 Q. Okay. And would that also include, if it was

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1 saved?

2 A. Yes.

3 Q. Okay. So if you save it rather than, if you  
4 don't, let's say you don't send it at all, you  
5 close and it asks you do you want to save it and  
6 you say yes, that would, that would create a  
7 delivery date also?

8 A. Yes.

9 Q. Okay. Now, there's some discussion about this  
10 submit date. Okay. And as to whether that is  
11 when somehow the e-mail bounces off of an ISP or  
12 something like that. And you recall  
13 Mr. Williams' testimony about that?

14 A. Mr. Williams' testimony was he thought that the  
15 submit date was received back from the server,  
16 like a response once you send it out. In truth,  
17 the submit date is put into place the same as  
18 automatic the other dates by the application,  
19 not by the outside ISP or a server of some sort,  
20 for the sender. I want to be specific. That's  
21 for the sender. It does not receive that send  
22 date or that submit date by an ISP. A  
23 recipient, however, a recipient of that e-mail  
24 will receive a date, one of these dates will be  
25 changed and applied by an ISP. But in this case

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1 all we're dealing with, all of our exhibit is  
2 dealing with is the sender, sending out the  
3 information or the e-mail.

4 Q. Okay. And how did you figure that out?

5 A. Well, besides being an expert and I have a lot  
6 of experience with these applications, I put the  
7 scenario into play. You know, I have created a  
8 computer, a lot top, very similar to Mr. Rote  
9 with the same software, the same name built  
10 into, and same company, et cetera. So when I  
11 send it out, whoever I send it to, it delivers  
12 the date back that I just set the clock to.  
13 I've tested it multiple times.

14 ARBITRATOR CROW: Well, I understand that.  
15 So you can change the date on your own computer.

16 THE WITNESS: Uh-huh.

17 ARBITRATOR CROW: But as far as the received  
18 time is concerned, it's going to show the actual  
19 date of receipt.

20 THE WITNESS: Only on the recipient side.

21 ARBITRATOR CROW: On the recipient side. I  
22 understand that. So have you examined  
23 Mr. Zweizig's computer to see when he received  
24 that e-mail?

25 THE WITNESS: Yes. And both, I should say.

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1 ARBITRATOR CROW: All right. Am I getting

2 ahead of things? I'm sorry.

3 MS. MARSHALL: Yes.

4 ARBITRATOR CROW: I apologize.

5 Q. BY MS. MARSHALL: Okay. So in terms of the  
6 metadata that's shown on Mr. Williams' report,  
7 the creation, the delivery, the submit dates,  
8 all October 2nd, 2003, is there anyway to decide  
9 whether those are the true dates given the fact  
10 that you've now created an e-mail that, or can  
11 you create an e-mail that, today that has an  
12 October 2nd, 2003, metadata in it?

13 A. Yes, I can.

14 ARBITRATOR CROW: I assume you can.

15 Q. BY MS. MARSHALL: So now that you've shown us  
16 that you can do that as a forensic examiner, is  
17 there a way you can get around it and figure out  
18 whether that has been done?

19 A. And the only true way of doing that forensically  
20 is by being able to analyze logs to seem if the  
21 changes were ever made. And if you don't mind  
22 I'm going to demonstrate this as well. I've  
23 changed my date on this computer several times.  
24 And I happen to be logging my firewall, the  
25 network. So the network connectivity that's

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1 been going on with this laptop since I've been  
2 at home, since I've been here on the wireless  
3 network here, it's been logging to a log file on  
4 my desk top here. And this log file is the

5 firewall log file. What you are going to see  
6 here say log file writes sequentially. It  
7 doesn't care what the date is. It doesn't care  
8 anything. It's going to keep writing it one  
9 line by line. And it doesn't sort by anything.  
10 So as you change your date you'll notice, I'm  
11 going to light it up here, you'll notice that I  
12 went from 10-26-2010 to 10-26-2003 back to  
13 10-26-2010. Right. That's, so I can tell when,  
14 by analyzing log files when somebody changed  
15 their date and time. And I mean, and you see  
16 this log file is very big, but you can see that  
17 the changes are still there and it, again,  
18 you'll see I went from here 10-05, October 5th,  
19 2010, to October 5th, 2003. It doesn't have to  
20 be just a year. It can be any date any time  
21 that I change and I will see the difference in a  
22 log file.

23 Q. Okay. And with a 10 gigabyte hard drive, which  
24 is what the laptop had in it, would you be able  
25 to look at the logs and determine whether

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1 anybody had, during that period of October of  
2 2003, say, through October, or through May of  
3 2005, whether anybody had tampered with the  
4 internal clock?

5 A. Only if I get to the log files in time. Before  
6 they get overwritten. This one happens to be  
7 set for 32 megabytes. So after it's written

8 32 megabytes, it's going to start to overwrite  
9 everything in the beginning. Most of them by  
10 default, this is only set to four megabytes. So  
11 after a long time, especially with a 10 gigabyte  
12 drive, this information will get overwritten  
13 before I got a chance to examine it.

14 Q. Okay. Are there any other ways that you can try  
15 to test the, whether something has happened to  
16 the date to make it less reliable, other than  
17 the logs? And I guess I'm thinking of files,  
18 file paths, I guess what I call them. Maybe  
19 I'm, maybe I've got the wrong name.

20 A. Yes. An example would be usage. If you were  
21 going to do an investigation about the activity  
22 on a computer, I don't know if we can find it,  
23 but in one of the exhibits that Steve Williams  
24 has wrote in his report, he shows a timetable  
25 that Encase is able to produce. So it shows

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1 that on yesterday so many files were written to,  
2 so many files were accessed, so many files were  
3 modified, et cetera. All right. So many files  
4 were created. It's a timetable in one of his  
5 exhibits and I don't know which one or if we  
6 have the ability to find it quickly. However,  
7 that timetable can say, let's say if you have, I  
8 wish we could draw here. If you have a square  
9 for a day of every week, let's look at the  
10 squares on this wall. Okay. So we have and

11 we'll count that one as seven over there. All  
12 right. So if you have a square and this is a  
13 big timetable of each one in the seven days in  
14 it, you know, if something is empty, if one of  
15 these squares is empty, then in a timetable the  
16 assumption is if the square is empty that the  
17 computer was not accessed or turned on during  
18 that day. And that's another way you can go  
19 through and identify --

20 Q. If something happened?

21 A. If anything happened.

22 Q. Okay. Let's go back to Mr. Williams' report,  
23 Exhibit 68. The last, the fourth bit of, I hate  
24 to say bit, I shouldn't say bit, should I. I  
25 should say the fourth piece of metadata, the

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1 modification date is April 29th, 2005, at 6:00  
2 p.m. did that catch your attention?

3 A. Yes, it did.

4 Q. And did you --

5 ARBITRATOR CROW: The image was taken on  
6 June.

7 THE WITNESS: Fifth.

8 ARBITRATOR CROW: 2005. Okay. Go ahead.

9 Q. BY MS. MARSHALL: That's roughly a month before  
10 the computer was given to Mr. Williams to  
11 examine.

12 A. He examined it on, well he took the image on  
13 June 5th, 2005.

- 14 Q. Okay. And this modification shows that it was  
15 modified on April 29th, 2005. Now, you were  
16 here when Mr. Williams explained that he had  
17 called Mr. Rote and asked for an explanation.  
18 A. Yes, I was.  
19 Q. And the explanation was that he had moved the  
20 e-mail from one folder to another.  
21 A. That's correct.  
22 Q. Is that an acceptable explanation for you?  
23 A. No.  
24 Q. Why not?  
25 A. Because even moving a, an e-mail from one area

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1 on what's called a PST file, let's say you can  
2 see your e-mail when you open up Outlook.  
3 Right. But let's say you want to save it to a  
4 back up file, a back up place where you just  
5 store everything because you just, you're so  
6 busy and you have all these different cases that  
7 you have another area such as, such as an  
8 archive, right, where maybe in this archive I  
9 want to create a new folder, which is NDT versus  
10 Zwei zig. And then in this folder I am going to  
11 go to my normal in box or wherever I want,  
12 wherever they come in and I am going to move  
13 these files, not these files, but these e-mails  
14 to a back up. Okay. Well, just by moving it to  
15 this back up from here, it does not change the  
16 modification date of this e-mail. And even if I

17 moved it from this location to old cases. All  
18 right. So now even if I moved it from this  
19 location in this archive to the next one, it  
20 actually does not change the modification date  
21 which was the assumption of Mr. Williams when he  
22 gave his testimony.

23 So again, by being more of the scientist and  
24 by not only know this program, but going and  
25 doing multiple tests in cases to verify this

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1 data, I can verify that it moves from one to the  
2 other, even from one archive to another archive,  
3 basically two different files and the  
4 modification date will not change. The only way  
5 or --

6 Q. Let me ask you, what will change the last  
7 modified date, the modification date?

8 A. The only way that you can change the last  
9 modification date or the only way that the  
10 normal users of a computer will change the  
11 modification date is by opening up the file and  
12 I believe Williams in his testimony said that I  
13 can't really modify an e-mail. Well the truth  
14 is that within Outlook itself, if you go to  
15 edit, you'll see right here, once you've sent  
16 it, whether it's sent, whether it's here whether  
17 it's in your send mail or drafts, wherever you  
18 have this e-mail sitting, if you open it up and  
19 go to edit and edit message, then you can

20 change, you can change the body of the e-mail  
21 and you can change the subject of the e-mail,  
22 et cetera. And once you change it, so if I  
23 change it --

24 Q. Let me ask you again, can you change the to and  
25 the from?

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1 A. No.

2 Q. And you can't change the date this way?

3 A. No, you cannot.

4 ARBITRATOR CROW: Can you change the  
5 creation date.

6 THE WITNESS: No. So the only thing that  
7 changes even by simply erasing this period on  
8 the end of this sentence, right, and then I quit  
9 and it asked me do I want to save it, now I just  
10 changed the modification date to whatever the  
11 date is set on my computer.

12 Q. BY MS. MARSHALL: Okay. So if that's not the  
13 answer to why that modification date is  
14 April 29th, 2005, did you look into it further  
15 to see what the answer is?

16 A. I think you might have to reclarify that  
17 question.

18 Q. Did you examine the image of the laptop further  
19 to try and figure out what happened on  
20 April 29th, 2005, 1 month before it went to  
21 Mr. Williams?

22 A. I did. And, again, as I was explaining with the



23 squares on the wall, there was no activity on  
24 the computer from a file metadata perspective.  
25 There was no activity on the computer at all on

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1 April, April --  
2 ARBITRATOR CROW: 29th.  
3 THE WITNESS: April 29th, 2005.  
4 Q. BY MS. MARSHALL: What does that tell you?  
5 A. That tells me that either it wasn't used on that  
6 date at all or the information that would tell  
7 me has been overwritten because of the time  
8 that's passed between when it was actually used  
9 and the time I got to examine it.  
10 Q. Okay. So if we're looking at the blocks on the  
11 wall here, April 29th was a Thursday, as I  
12 recall; right?  
13 A. Yes.  
14 Q. So that block would be blank on the, in what you  
15 call the file system?  
16 A. Yes.  
17 Q. Nothing there at all as if the computer hadn't  
18 even been opened?  
19 A. That's correct.  
20 Q. Okay. Did you go looking for the e-mail, the  
21 exit time e-mail?  
22 A. Yes, I did.  
23 Q. Did you find it?  
24 A. On --  
25 Q. April 29th.

- 1 A. On which data storage device?
- 2 Q. On the laptop, on Mr. Rote's laptop?
- 3 A. I did find it on the, on Mr. Rote's laptop.
- 4 Q. Okay.
- 5 A. I found the same e-mail that Steve Williams
- 6 found in his report.
- 7 Q. Okay. And I should be referring to when I'm
- 8 talking now, you're using Mr. Williams' forensic
- 9 image and you're using the same forensic tool
- 10 that he was using; is that correct?
- 11 A. Two things. When I originally examined the hard
- 12 drive or the laptop from Rote's, when he gave
- 13 it to me on December 12th of 2008, I was able to
- 14 find the exit time e-mail on his hard drive. I
- 15 was not able to find it at all on any of the two
- 16 drives supplied by or supposedly owned by Max
- 17 Zweizig.
- 18 Q. Okay.
- 19 A. And I was not able to see any activity on the
- 20 four 29 on either my image that was taken in
- 21 2008, December 2008, or on the one provided by
- 22 Zweizig, I mean, sorry, Steve Williams and Mark
- 23 Cox.
- 24 Q. Okay. And have you now found information
- 25 related to the exit time e-mail on April 29th,

- 1           2005?
- 2       A.    Repeat that.
- 3       Q.    Okay. Well, tell us what you have found with
- 4           respect to, what happened on April 29th, 2005,
- 5           with respect to the exit time e-mail?
- 6       A.    Nothing that I can find.
- 7       Q.    Okay. Did you find more than one version of the
- 8           exit time e-mail?
- 9       A.    No, I haven't.
- 10      Q.    All right. Did you find an exit time e-mail in
- 11           deleted space?
- 12      A.    Yes.
- 13      Q.    Okay.
- 14      A.    Yes.
- 15      Q.    Tell us what you found.
- 16      A.    So in the image that was provided to me by Mark
- 17           Cox, which happens to be the image taken by
- 18           Steve Williams, I found another exit time
- 19           e-mail, actually we're looking at it right now,
- 20           another exit time e-mail that was forwarded to,
- 21           I will put my hand right below it. I found an
- 22           exit time e-mail the same one that was forwarded
- 23           to a Ryan Burglhaus, House, not sure how to
- 24           pronounce it, but that was actually done on
- 25           which date? On the 29th, 2005. The almost

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- 1           exact same time as this e-mail was supposedly
- 2           sent to Max Zweizig or at least not, I'm sorry,

McCann

3 that was incorrect. Almost the same exact time  
4 as it was stated that this was sent. You know,  
5 however, this --

6 Q. Modified?

7 A. Modified.

8 Q. So in the image, and I may have been confusing  
9 you because I didn't realize that you were  
10 looking at Mr., at the image Mr. Cox had  
11 provided you.

12 A. I have not been provided the evidence or images  
13 that Steve Williams has really had his hands on  
14 or been working on. I only have been provided  
15 the, I can't remember what you call it, but the  
16 code or the evidence that Mark Cox has been  
17 provided.

18 Q. All right. Then I'll refer to that. So in that  
19 forensic image you found two copies of the exit  
20 time e-mail, one with the metadata that's shown  
21 in Mr. Williams' report, the other that had been  
22 deleted on April 29th, 2005. Did the one that  
23 had been deleted, did it have the same metadata  
24 as the one that's shown in the report, create  
25 date, delivery date, et cetera?

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1 A. It only had the same modification date and time.

2 Q. Okay. And did you look at that e-mail to see if  
3 it was the same e-mail? Was it an exit time  
4 e-mail?

5 A. It was an exit time e-mail. But the created and

McCann

6 sent date, everything except for the last  
7 modified, modification time was the same. The  
8 modification time was different though, I'm  
9 sorry, received and sent dates were different.  
10 They did not match.

11 Q. Is that the one you have up there?

12 A. Yeah. This is the one that was different, yes.

13 Q. Okay.

14 ARBITRATOR CROW: This is the modification  
15 that has the different date?

16 THE WITNESS: Yes.

17 ARBITRATOR CROW: From sent and received?  
18 All right. It was sent on April 29th, 2005?

19 THE WITNESS: Correct.

20 ARBITRATOR CROW: Okay.

21 Q. BY MS. MARSHALL: So can you take us any further  
22 into what really happened on April 29th, 2005?  
23 To this e-mail?

24 A. No.

25 Q. Okay. Normally if you had, if you had the image

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1 and time, you would be able to go to the file  
2 system and see what happened there. But that's  
3 blank.

4 A. Yes.

5 Q. As if nothing it happened?

6 A. Correct.

7 Q. When, in fact, we know something did happen.

8 A. Correct.

9 Q. Now --

10 ARBITRATOR CROW: So you can't tell us what  
11 the modification was, if there was a  
12 modification, whether it was a change in date or  
13 anything of the sort, is that what I'm hearing?

14 THE WITNESS: Yes.

15 ARBITRATOR CROW: So there was a  
16 modification but you can't tell us what that  
17 modification was.

18 THE WITNESS: That's correct.

19 ARBITRATOR CROW: And there may have been no  
20 modification at all, but simply a transfer of  
21 the e-mail from one place to another; is that  
22 correct?

23 THE WITNESS: That's correct.

24 Q. BY MS. MARSHALL: Well, now wait a minute. That  
25 last part, is that really correct, if it was

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1 just, if the e-mail was just transferred from  
2 one folder to another, would that change the  
3 modification date? I thought you had testified  
4 about that earlier.

5 A. Can you repeat that question?

6 Q. Okay. If, as Mr. Rote testified, he simply  
7 moved the e-mail from one folder to another,  
8 does that change the modification date?

9 ARBITRATOR CROW: Does it create a  
10 modification date, I think is the question.

11 Q. BY MS. MARSHALL: Well that might be the

McCann

- 12 question, too.
- 13 A. Yes. I mean, if, if you simply have changed it
- 14 or moved it, you know, that date will have
- 15 changed.
- 16 ARBITRATOR CROW: Well, as I understand it,
- 17 on April 29th, 2005, this e-mail was sent from
- 18 someone whose name I don't recall or to someone
- 19 whose name I don't recall. Would that create a
- 20 modification date if everything else was the
- 21 same on the e-mail?
- 22 THE WITNESS: Yes.
- 23 Q. BY MS. MARSHALL: Okay. So I don't want to
- 24 confuse it any further.
- 25 A. Okay.

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- 1 Q. When Mr. Rote said that his explanation being
- 2 that he simply moved the e-mail from one folder
- 3 to another folder, and I thought you testified
- 4 that that did not explain the change, the
- 5 modification date. Have you tested that?
- 6 A. Yes, I have.
- 7 Q. Okay. So now what you're saying is that if it
- 8 were forwarded on that date, that would change
- 9 the modification date?
- 10 A. That's correct.
- 11 Q. Okay. Did you find that it was also deleted on
- 12 that date?
- 13 A. Yes.
- 14 Q. Would that change the modification date?

McCann

- 15 A. I don't know.
- 16 Q. Fair enough. Because there were two e-mails; is
- 17 that correct?
- 18 A. That's correct.
- 19 Q. Okay. In any case, would it be accurate to say
- 20 that based on the forensic evidence, something
- 21 happened to that e-mail on April 29th of 2005,
- 22 that was different than the explanation that
- 23 Mr. Rote gave?
- 24 A. Yes.
- 25 MS. MARSHALL: Okay. Is it time for a

♀

71

- 1 break?
- 2 ARBITRATOR CROW: No. I'm just trying to
- 3 make sure I understand. If people want a break,
- 4 we can break.
- 5 THE WITNESS: I wouldn't mind one.
- 6 MR. ROTE: I wouldn't mind one.
- 7 ARBITRATOR CROW: Why don't we take
- 8 15 minutes then.
- 9 (Break taken from \* to \*.)
- 10 ARBITRATOR CROW: Let's go back on the
- 11 record.
- 12 MS. MARSHALL: Are you able to hear okay?
- 13 MR. ZWEIZIG: Yeah. I did want to is
- 14 everybody here?
- 15 MS. MARSHALL: Everybody is here.
- 16 MR. ZWEIZIG: Whoever got this phone system
- 17 picked out for me it is great this is a thousand



McCann

18 times better than it was before.

19 MS. MARSHALL: Great.

20 ARBITRATOR CROW: Ms. Marshall, you're up.

21 Q. BY MS. MARSHALL: All right. Okay. I want to  
22 have move on to the other document that is  
23 actually discussed in Exhibit 68. So if you  
24 could keep that with you. But it is, it's the  
25 termination letter. And the termination letter

♀

72

1 is Exhibit 13. Do you have that right there?  
2 13 is the termination letter. Were you shown a  
3 copy of this letter and asked to perform some  
4 forensic examination?

5 A. Yes.

6 Q. Okay. And what were you asked to do relative to  
7 this letter? Here.

8 A. Let me start by saying originally with the  
9 stipulation order that I originally received, I  
10 wasn't asked anything specifically about this  
11 letter. I was only asked to go through the data  
12 that I was presented with, basically the hard  
13 drive, two hard drives and floppy disk, that  
14 they didn't really ask me anything specific.  
15 They just said look for anything related to  
16 Max's termination, you know. And so therefore,  
17 I didn't really have this letter necessarily  
18 compared to any other letter.

19 Q. Okay. But I've asked you to do some forensic  
20 examination with respect to this letter. And we

21 refer to Exhibit 68, which you say is not in  
22 that book?

23 A. No.

24 Q. Okay. It will be in this book here. Exhibit 68  
25 is the, as Mr. Williams' report that we were

♀

73

1 just looking at. You might have even had it on  
2 your screen.

3 A. Okay.

4 Q. This is, Exhibit 68, page two, I guess, starts  
5 the discussion of what he refers to as  
6 Maxterm.doc?

7 A. Correct.

8 Q. Now, in 2008 when you came down to examine  
9 storage devices and whatnot, you were provided  
10 with a two and a half inch floppy disk; is that  
11 right?

12 A. Yes.

13 Q. Okay. And what were you told about that floppy  
14 disk?

15 A. I was told that it contained the copy of the Max  
16 termination letter.

17 Q. Okay. And who gave it to you?

18 A. Well, the floppy disk was originally given to me  
19 by Jeff Edelson, I think is what his name was.  
20 It was actually in the room. It was in Jeff  
21 Edelson's office along with the computers, two  
22 computers that were there, the laptop, Steve  
23 Rote's, I'm sorry, not Steve, Tim Rote's laptop

24 and the...

25 Q. Box?

74

1 A. Yeah.

2 Q. Okay. Let's just stick with the floppy disk.

3 Did you have an impression as to what the floppy  
4 disk was, what it represented?

5 A. The impression that I had, I'm sorry. The  
6 impression that I received was that it was  
7 simply a copy of, or it was a copy of the Max  
8 termination letter. Actually the impression  
9 that I was given is it was supposed to be the  
10 original Max termination letter, that it was  
11 created on that floppy disk when Tim Rote first  
12 created it.

13 Q. And was it marked in any way?

14 A. No, it was not.

15 Q. Did it have anything on it or in it to identify  
16 it as the original?

17 A. No.

18 Q. So how did you, well, first of all, how do you  
19 write protect a floppy disk?

20 A. Let's see here. Give me a moment. On a floppy  
21 disk, this is similar to the floppy disk that I  
22 reviewed except for it was green. It was not  
23 marked at all. And on a floppy disk there is a  
24 tiny switch on the back, this one right here  
25 that goes up and down. And that is what sets it

75

- 1 to be either writable or read only where you  
2 can't write any data to it.
- 3 Q. When you received it, was the write protect  
4 switch on or off?
- 5 A. The write protect switch was off.
- 6 Q. Which means that it could be --
- 7 A. Written to.
- 8 Q. Written to?
- 9 A. Correct.
- 10 Q. And what did you do with the write protect  
11 switch?
- 12 A. I turned it to where it was read only so I could  
13 not write to it.
- 14 Q. Okay. And then did you create a bit by bit, a  
15 bit stream image of the floppy disk?
- 16 A. Yes, I did.
- 17 Q. Was there anyway that you could determine  
18 whether this floppy disk was the same floppy  
19 disk or the same image that, was it Mr. Williams  
20 originally imaged in June of 2005?
- 21 A. Yes. No. No. There was no way to tell.
- 22 Q. Why is that?
- 23 A. Mainly because there's nothing that marks it as  
24 original. It's similar to just taking a hard  
25 drive out without any sort of identification.

♀

1 There's just no way to tell.

- 2 Q. Okay. Did, can you explain the concept of hash  
3 values.
- 4 A. Sure. So a hash value is basically an  
5 algorithm. They take every bit of byte that's  
6 on this data storage device. It could be huge.  
7 It could be like a hard drive. And they perform  
8 basically a mathematical equation against every  
9 bit or every set of bits on a data storage  
10 device. And the hash value at the end is, it  
11 becomes the, you know, the original or basically  
12 a finger print for whatever the hard drive,  
13 whatever that hard drive is. So the hash value  
14 in the cases when it comes to forensics is the  
15 way to tell if anything is changed on this disk  
16 or this drive or this original, you know, data  
17 storage device versus, you know, the next one  
18 you get or in order to tell that Steve's, when  
19 he took the image, the hard drive matches the  
20 same image that I took when you performed my  
21 data, my forensic imaging.
- 22 Q. Did you have the hash values that were taken  
23 when he took his image of the floppy?
- 24 A. No, I did not.
- 25 Q. Okay. But you created, your imaging device

‡

77

- 1 created hash values; is that correct?
- 2 A. Yes. That's correct.
- 3 Q. And did that tell you whether you got a complete  
4 copy of the floppy disk?

- 5 A. Yes.
- 6 Q. Okay. Was there anything on the disk other than  
7 the termination letter?
- 8 A. Yes.
- 9 Q. Or Max dot --
- 10 A. Maxterm.doc?
- 11 Q. Uh-huh. What else was on that?
- 12 A. There was images, deleted images.
- 13 Q. Images as in pictures?
- 14 A. As in pictures.
- 15 Q. Okay. So it was basically a used floppy disk?
- 16 A. Yes, it was.
- 17 Q. Okay. Do you have your report there so that you  
18 can refer to it if you need to?
- 19 A. Mine, yes, I do.
- 20 Q. All right. So after you took a bit by bit image  
21 of the floppy disk, did you analyze the image to  
22 determine what metadata might help you in  
23 determining whether that document was written in  
24 October of 2003?
- 25 A. Repeat the question, please.

‡

- 1 Q. Okay. Did you analyze or examine the image that  
2 you took to determine whether there was metadata  
3 that would help you figure out whether the  
4 document was, in truth, created October 2nd or  
5 October 1st, I guess it is, of 2003?
- 6 A. I mean, I took an image and had my own hash  
7 value. But I could not, just having your own

- 8 hash value doesn't tell you that this is  
9 necessarily the original or not. It just tells  
10 you that whatever your hash value is, you can  
11 have that compared to the next person who takes  
12 an image of this exact floppy.
- 13 Q. Okay. Let's, I think I'm confusing the issue by  
14 referring to hash values. In Mr. Williams'  
15 report, which is Exhibit 68, he reports that he  
16 found that the dates and times for the creation,  
17 create date, modification date and last access  
18 date, were October 1st, 2003, at 9:29 a.m.
- 19 A. Okay.
- 20 Q. For two of those. Okay. Did you also look for  
21 that kind of metadata in the floppy, on the  
22 floppy disk?
- 23 A. No.
- 24 Q. Okay. What did you look for?
- 25 A. I looked to see what data existed on the floppy

♀

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- 1 disk and verified that there was no corruption  
2 on the floppy disk, meaning that the same thing,  
3 when you take an image, as I explained to you  
4 previously, on the laptop drive, how it reports  
5 bad areas, right, the floppy disk does a similar  
6 thing. Anything you take does a similar thing.  
7 So I can tell whether or not this was, the  
8 floppy disk was corrupt in any way.
- 9 Q. Okay. Was the floppy disk corrupt in any way?
- 10 A. No, it wasn't.

McCann

- 11 Q. Okay. Did you review Mr. Williams' report with  
12 respect to the metadata on the termination  
13 document?  
14 A. Yes.  
15 Q. And do you have that in front of you?  
16 A. I don't have his report in front of me, no.  
17 Q. Okay. Well, we can get it for you. It's number  
18 68. It's right here. It's right here. All  
19 right. There it is. Exhibit 68, page three.  
20 A. Got it.  
21 Q. All right. And at the top he says, the dates  
22 and times associated with the document file  
23 entry are as follows, create date, October 1st,  
24 2003, at 9:29 a.m., modification date,  
25 October 1st, 2003, at 9:29 a.m.

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- 1 Does that in and of itself, is that  
2 sufficient to you to verify that that document  
3 was, in truth, created on October 1st, 2003?  
4 A. No.  
5 Q. Why not?  
6 A. The reason being is the same reason as before is  
7 to prove how easy it is to change your date and  
8 time on the computer, well in this case, simply  
9 plugging this in having the read only switch off  
10 is where I can write to the disk, we'll create  
11 the same dates, modified create date modified  
12 and last access as I set my date and time to on  
13 my computer. So therefore just because it says



14 so on the disk that those are the dates and  
15 times, without seeing the original computer that  
16 it was actually created on, I'm unable to prove,  
17 you know, to the fact that that is exactly when  
18 it was really created.

19 Q. Okay. Well, let's -- Did you look at the  
20 document within the forensic tool that you had?

21 A. Yes, I did.

22 Q. Okay. And did you find discrepancies between  
23 the document is in or was on the floppy and the  
24 document that was actually printed out?

25 A. Yes, I did.

♀

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1 Q. Okay. Can you explain to us or show us what  
2 those discrepancies are?

3 A. Do we have the printed out one anywhere?

4 Q. We do. It would be right below here,  
5 Exhibit 13.

6 A. Got it. Okay. I noticed, I'm just going to  
7 open it up. I noticed that there was  
8 differences in the address, for starters. And  
9 unfortunately I don't think I have... . It's  
10 tough to tell off of this exhibit without really  
11 showing the demonstration on the computer. But  
12 there was a difference for the date for  
13 starters, this date, the printed out date was  
14 ten two instead of 10-1. And it has a full date  
15 of 2003 instead of just a two digit date which  
16 is '03. The next thing down, this is all off my

17 memory, the NJ for New Jersey, you know, in the  
18 original one it was spelled out as New Jersey  
19 instead of the two letter abbreviation. And  
20 there were some various other names or words in  
21 here that were, you know, misspelled or not  
22 capitalized or correctly, et cetera, that were  
23 also different between the one that was on the  
24 floppy disk and the one that was printed out and  
25 told that this was what Max Zweizig had

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82

- 1 received.
- 2 Q. Okay. So would it be fair to describe  
3 Maxterm.doc on the floppy as appearing to be a  
4 draft?
- 5 A. Yes.
- 6 Q. Okay. Which, if it were finalized, turned into  
7 Exhibit 13; is that right?
- 8 A. That's correct.
- 9 Q. Okay. Based on, just based on the evidence that  
10 we've talked about so far, the evidence that you  
11 see in Mr. Williams' report, the metadata that  
12 shows create date on October 1st and a  
13 modification date of October 1st and a last  
14 access date of October 1st, and your review of  
15 the letter in the forensic file, okay, is there  
16 any way that one can conclude that that document  
17 was actually finalized on October 2nd, 2003?
- 18 A. The only way to conclude it is if you had the  
19 original computer in which the document was

20 created on.  
21 Q. Okay. Well, then let's talk about the original  
22 computer. How do you know there was an original  
23 computer?  
24 A. I know that because of the metadata that was  
25 found on the floppy disk that was taken, the

♀

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1 floppy disk image versus the, versus the image  
2 that the laptop had. So as an example, I think  
3 it's in my report, I have exhibits on here;  
4 right? Do we have the exhibits from my report?  
5 Q. They should be attached to the report.  
6 A. They're not on mine. There's an exhibit that  
7 shows a user name, a author, I should say, an  
8 author, an author's initials and the company. I  
9 don't know where we're going to find it.  
10 Q. Does it look like that?  
11 ARBITRATOR CROW: We do have --  
12 THE WITNESS: Close.  
13 Q. BY MS. MARSHALL: Can you work with that?  
14 A. This is more of it, yes.  
15 Q. Let's use this.  
16 ARBITRATOR CROW: What are you looking at?  
17 THE WITNESS: This is 185 --  
18 MS. MARSHALL: Mark this as Exhibit 185.  
19 But I believe it was originally part of his  
20 report.  
21 ARBITRATOR CROW: Well, show me on the  
22 report where it is. What page of the report?

23 I've got arbitration Exhibit 103 and I've got  
24 pages eight, nine, ten, 11 --

25 THE WITNESS: This is actually part of my

‡

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1 report as page two, at least one of them is on  
2 page two. I should say two of them.

3 MS. MARSHALL: We need to make sure that  
4 he's got all of Exhibit 103.

5 THE WITNESS: This actually isn't mine.  
6 Okay.

7 ARBITRATOR CROW: Well, let's take a look at  
8 Exhibit 185. What is it?

9 THE WITNESS: I tell you what I brought my  
10 file with me and this file contains the image on  
11 there. So if you don't mind -- I can't. I  
12 don't have the right thing for it.

13 Q. BY MS. MARSHALL: Is this what you are looking  
14 for?

15 A. We are getting there now. Yes. Okay. So  
16 Exhibit 103.

17 Q. What page?

18 A. 12 and 13.

19 ARBITRATOR CROW: Pages 12 and 13?

20 THE WITNESS: Yeah. 12 and 13 of  
21 Exhibit 103.

22 ARBITRATOR CROW: All right.

23 Q. BY MS. MARSHALL: Okay. Now, is this data off  
24 of the floppy data, the floppy disk?

25 A. This data actually is off of the laptop. And

1 then before that, let's see if I have it on  
2 here. Yeah.

3 ARBITRATOR CROW: I am looking at  
4 Exhibit 103, pages 12 and 13. It doesn't mean  
5 anything to me without your testimony. What am I  
6 looking at?

7 THE WITNESS: Okay. So 12 and 13, you're  
8 going to see in the bold, these are the settings  
9 on the computer. Let's say, let me go open this  
10 up for you on the screen. You'll see that I go  
11 into, oops. This isn't, not the right computer.  
12 Let me get to a different computer here.

13 Okay. If I go open up Microsoft Word. All  
14 right. And let's make sure I have this right.  
15 User information. Okay. So here you see that  
16 under my name I've got NorthWest Direct employee  
17 and under my initials I have NDE. Okay. Well  
18 that's a setting on the computer. In the  
19 operating system there's a, an area called the  
20 registry and that registry is a big database.  
21 And that database holds all the configuration,  
22 most the configuration for your computer,  
23 including your configuration of Microsoft  
24 Office. All right. So whenever you write a  
25 document such as that Maxterm.doc that was on

1 that floppy disk, this data gets written with  
2 it. This data is actually part of the metadata  
3 that's on that document on the floppy disk.

4 So what this is showing on 12 and 13, it's  
5 simply showing in a very technical, nonlayman's  
6 term way of what those equal. So the one that  
7 says name user initials and then you'll see, if  
8 I can find it, one second, okay. So on 12 and  
9 13 in the actual box, the boxes that are right  
10 here, these are the actual values that you'll  
11 see. So under user initials where it says  
12 registry key property value and you'll see R,  
13 that's all that was here in this area was here  
14 was an R. And then down below you'll see the  
15 user name. That's this one where it says name.  
16 In this case it says Rote T for I'm assuming Tim  
17 Rote. This is coming off of the laptop. And  
18 then the next one down below is a company, which  
19 is, I don't remember where that is, company is  
20 actually here, properties. Company, it simply  
21 says NWD. Well that's what the laptop has  
22 programmed into it.

23 Q. BY MS. MARSHALL: Was the floppy disk, was the  
24 Maxterm.doc created on Mr. Rote's laptop?

25 A. Not based on this information. And the reason

♀

1 being is because while Mr. Rote's laptop said R,  
2 Rote T and NWD for the information, the metadata

McCann

3 on that, on any document he creates, it's going  
4 to have that embedded into it. The one that's  
5 on the floppy did not have that information  
6 there. Therefore saying that it was not created  
7 on that laptop.

8 Q. Can you tell whether -- Now, you understand  
9 Mr. Rote testified that the, that the document,  
10 the termination document was created on the  
11 floppy and only saved to the floppy. Now, the  
12 floppy doesn't run by itself.

13 A. Right.

14 Q. So can you tell whether that is accurate?

15 A. Yes.

16 Q. Okay. By, based solely on the metadata in the  
17 floppy?

18 A. Yes.

19 Q. Okay. And here I guess I'm referring to  
20 Exhibit 185.

21 A. Yes. So she handed this over to you?

22 ARBITRATOR CROW: Yeah. I've got 185.

23 Q. BY MS. MARSHALL: And did this come off of the  
24 floppy itself?

25 A. This did.

♀

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1 Q. And what does it tell you? Starting at the top  
2 line.

3 A. Okay. So what happens is when you create a Word  
4 document and you first save it, like as an  
5 example you'll see on the screen here, I have

McCann

6 nothing written on this Word document. If I go  
7 to save this document, it's going to ask me to  
8 save it into my documents under the name of  
9 doc1.doc. That's what this first line means on  
10 Exhibit 185 page one. It was actually saved  
11 into and on a hard drive a C drive. The C drive  
12 colon typically means a hard drive somewhere.  
13 So it was saved originally as doc1.doc meaning  
14 it had nothing in it. Because watch on the  
15 screen again if I type anything into this  
16 document like Maxterm, okay, let's say I type  
17 that and then I go hit the save button, then  
18 it's going to try to name my document after the  
19 first thing that I have written into it. So  
20 based on this information that's in Exhibit 185,  
21 it was first saved with nothing in it. Then  
22 what happens --

- 23 Q. BY MS. MARSHALL: Now, where was it saved?  
24 A. It was saved on a C drive, or a hard drive  
25 underneath the user name of owner.

♀

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- 1 Q. Okay. Now, let's stop there. How do you know  
2 that it was saved --  
3 A. Sorry.  
4 Q. You're kind of fast for me anyway.  
5 A. I am.  
6 Q. How do you know it was initially saved to a hard  
7 drive of a computer?  
8 A. Well, it's an assumption, but based on the



- 9 typical operation of computers and of the  
10 Windows operating system, the C drive, C colon  
11 backslash is almost always the 1 hard drive on a  
12 computer. Right. Take a look at this computer  
13 here, okay, the C drive is my hard drive.
- 14 Q. Okay. And what is typically the floppy drive?  
15 A. Typically the floppy drive would be an A drive.  
16 Q. Okay. So let's go back to the C drive now. Do  
17 we know what hard drive it was that this  
18 document was created and saved to?  
19 A. No. All we know is that this hard drive, that  
20 in that specific location on the hard drive,  
21 does not match the laptop.  
22 Q. So it wasn't the laptop, but it was a computer.  
23 A. Yes.  
24 Q. Now, have you read Mr. Rote's testimony about,  
25 that he created this document on a computer at

♀

90

- 1 the NDT call center in Eugene?  
2 A. Yes, I have.  
3 Q. But did not save it to the computer. He saved  
4 it to the laptop. So are you saying that that's  
5 not exactly accurate? It was saved to a  
6 computer?  
7 A. That is exactly what I'm saying.  
8 Q. Okay. Now, when it was saved to that computer,  
9 would the computer, would the hard drive, the  
10 operating system on that hard drive create  
11 additional metadata that's not on the floppy?

McCann

- 12 A. Rephrase, please.
- 13 Q. Okay. Well, let's start with the save, the
- 14 initial saving, the doc1.doc.
- 15 A. Yes.
- 16 Q. Did doc1.doc have metadata associated with it on
- 17 the hard drive of that computer?
- 18 A. Absolutely.
- 19 Q. And would that metadata tell you the date and
- 20 time that the document was created?
- 21 A. Yes, it would have.
- 22 Q. If you had the computer?
- 23 A. If I had the original computer.
- 24 Q. Now, when you work on a document on, even --
- 25 ARBITRATOR CROW: Unless it was overwritten.

♀

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- 1 THE WITNESS: Unless it was overwritten.
- 2 ARBITRATOR CROW: All right.
- 3 Q. BY MS. MARSHALL: When you work on a computer
- 4 using a floppy, does the operating system, the
- 5 Windows system, capture or save that document in
- 6 any other way for you?
- 7 A. Yes, it does.
- 8 Q. How is that?
- 9 A. It has what's called an auto recovery. Again,
- 10 if you don't mind me demonstrating.
- 11 ARBITRATOR CROW: No. No.
- 12 THE WITNESS: If you go again into the
- 13 options -- they changed it on this one. If you
- 14 go into the options, you'll notice that it has

15 an auto recover in here. And by default it's  
16 set to three minutes, I think if I go, let me  
17 exactly show you.

18 Q. BY MS. MARSHALL: So you're saying every three  
19 minutes the computer automatically saves the  
20 Document 4?

21 A. That's correct.

22 Q. And if you do a forensic examination of that  
23 computer, are you able to find, assuming it  
24 hasn't been overwritten, are you able to find  
25 metadata associated with that auto recovery

♀

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1 file?

2 A. Yes.

3 Q. Okay. Are there, and that would be date and  
4 time as well?

5 A. Yes.

6 Q. Now, are there other files --

7 A. If you don't mind me interrupting you.

8 Q. Go ahead.

9 A. Basically this doc1 and this auto recovery save  
10 of doc1 will basically be the same exact file  
11 with the same metadata except if Tim, as an  
12 example, were writing in this document and three  
13 minutes later it saves, then that information,  
14 whatever he wrote, will be in there along with  
15 all the metadata.

16 Q. Okay. Are there other files that the  
17 original -- Can we call it the originating

McCann

- 18 computer now, that the originating computer, are  
19 there other files that it will save your  
20 document to?  
21 A. Yes.  
22 Q. And what are those called?  
23 A. Those are called temporary files.  
24 Q. So this is a third file that the document is  
25 created and saved to automatically; is that

♀

93

- 1 right?  
2 A. That is correct.  
3 Q. All right. On the originating computer. Do the  
4 temporary files have metadata associated with  
5 them that include date and time?  
6 A. Yes, they do.  
7 Q. And if you had the original computer, the  
8 originating computer and it was not overwritten,  
9 would you be able to identify the date and time  
10 that that document was created?  
11 A. I'd be able to identify the date and time that  
12 document was created as well as look at log  
13 files to make sure the date and time wasn't  
14 manipulated on the original computer.  
15 Q. Okay. Were you ever provided the original, the  
16 originating computer to examine?  
17 A. No, I wasn't.  
18 Q. Did you make people aware of the fact that there  
19 was a computer out there that had metadata on it  
20 you wanted to look at?

21 A. I did through my report.  
22 Q. Okay. Well, you have the report. You also  
23 prepared and submitted a couple of declarations  
24 in which you describe that.  
25 A. That's correct.

‡

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1 Q. Is that correct?  
2 A. Yes.  
3 Q. Were you ever permitted to examine the  
4 originating computer?  
5 A. No, I was not.  
6 Q. Do you know whether Mr. Williams or Mr. Cox ever  
7 examined the originating computer?  
8 A. I do not.  
9 Q. Without examining the originating computer, can  
10 you say with any degree of scientific certainty  
11 whether the metadata on the floppy is accurate?  
12 A. No, I can't.  
13 Q. All right. Let's talk a little bit more about  
14 Exhibit 185 because there's three lines there  
15 that I need to understand. And I think probably  
16 Mr. Crow would appreciate an explanation.  
17 You've talked about the document was  
18 manually saved by Mr. Rote or whoever the  
19 operator was once.  
20 A. Correct.  
21 Q. And you've talked about the temporary files and  
22 you have talked about auto recovery. Is there  
23 metadata here that tells you about the document

24 being saved to a floppy?

25 A. Yes, it does.

95

1 Q. Tell us what that is.

2 A. So with 185, the way that the metadata works  
3 within a document, even without originally  
4 necessarily being saved, but in this case it was  
5 saved as doc1.doc. After that within three  
6 minutes it was saved, it was auto recovery saved  
7 that same document as the auto recovery save of  
8 doc1.ASD. Even though it has a different  
9 extension, the ASD, it is still a document. So  
10 it still has the same metadata embedded within  
11 it. And then finally it was saved to an A  
12 drive, typically a floppy disk, as Maxterm.doc.  
13 So that tells me that there's three locations  
14 that this document existed in.

15 Now, if you have a look at my screen, I did  
16 the same exact order. I saved it as doc1.doc.  
17 I will waited until it did an auto save, auto  
18 recovery and then I saved it to a floppy disk.  
19 And if you look at the disk now you'll see this  
20 exclamation mark WRD3744.temp. That is the temp  
21 file that I was referring to that is always  
22 created wherever you save this document. You'll  
23 notice it's the same exact size at the  
24 Maxterm.doc. So from a forensics perspective,  
25 if the floppy disk that we were given, the green

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1 floppy disk was the original, the original one  
2 where he said, where Tim Rote stated he only  
3 saved it to that floppy disk we would be able to  
4 see the temp file from that creation of that  
5 document. But we were unable to.

6 Q. So are you telling us that you were not given  
7 even the original floppy disk on which the  
8 document was created?

9 A. That's correct.

10 Q. And you can tell that because it does not have  
11 the metadata in it that you would expect?

12 A. Because it does not have metadata that matches  
13 the laptop and does not have a temporary file.  
14 We cannot see the deleted temporary file even  
15 though we can see all the deleted pictures that  
16 were on that floppy disk. So it tells me that  
17 that was not the original floppy Maxterm.doc was  
18 create on.

19 Q. Okay. Now, let's just, before we leave the  
20 originating computer, in your judgment would the  
21 concept of litigation hold have applied to the  
22 originating computer?

23 A. Yes.

24 Q. And so it should have been preserved or at least  
25 the hard drive of that computer preserved or

♀

1 imaged early on, and if it had been, what would

2 you be able to do with it?

3 A. A few things. I'd be able to match the metadata  
4 between the document that was written, that goes  
5 with the owner, the user initials and the  
6 company. I'd be able to match the metadata and  
7 actually find the metadata and the document  
8 piece, at least pieces of the document that  
9 still existed according to where this says it  
10 was saved. I'd be able to term determine if or  
11 when that document was originally created, how  
12 many times or when it was last accessed, as well  
13 as looking at the log files and such in order to  
14 determine if the date was ever manipulated. So  
15 quite a few things if I had that original  
16 computer in front of me.

17 Q. Okay. And by, by not providing that computer to  
18 either you or either of the other two experts  
19 for examination so that you could even, even if  
20 you could review their images, you don't have  
21 any images, did that put Mr. Zweizig at a  
22 disadvantage?

23 A. Absolutely. I mean, it means that he could not  
24 get any of the original information to, again,  
25 disprove or prove his case.

‡

1 Q. Okay. Let's go back to the floppy now. In the  
2 Exhibit 68, which is I think still over here,  
3 Mr. Williams' report where he has the metadata  
4 create date and that's October 2nd, 2003, at



McCann

5 9:29 a.m. excuse me. October 1st at 9:29 p.m.,  
6 or a.m. modification date October 1st, 2003, at  
7 9:29 a.m. just as I call the eyeball test, does  
8 that suggest to you that this file was simply  
9 copied from somewhere else?  
10 A. Yes, it does. As Mr. Williams explained earlier  
11 during his redirect, just copying files over to  
12 a location will, will affect the last, sometimes  
13 the, usually what was getting at is it will  
14 affect the file created date on any file system  
15 that is there. When it comes to a floppy disk,  
16 it has a different type of file system than what  
17 he was referring to earlier, and, therefore, if  
18 you copy a file over to it, the last, the file  
19 created data along with the file modified date,  
20 the modification date will be exactly the same.  
21 So therefore, based on the image that was, that  
22 we took that Steve Williams took as well as  
23 myself of that, supposedly original green  
24 floppy, it wasn't the original, it was a copy of  
25 the document onto that floppy disk.

‡

99

1 Q. Okay. Now, you've read Mr. Rote's testimony  
2 where he said that he created this document on  
3 the floppy, saved it only to the floppy and  
4 carried the floppy home with him, and that is  
5 the floppy that he produced, can you say with  
6 any degree, with any degree of scientific  
7 certainty that that was not how that document

- 8 was created?
- 9 A. Yes, exactly how I just explained. It does not  
10 contain temporary files. The dates are  
11 completely the same on the created and the  
12 modified which shows that it was copied over to  
13 the disk and not created on it.
- 14 Q. So if the, if the document was not created --  
15 Well maybe I should ask you. Was the document,  
16 do you have any idea whether the document was  
17 created on Mr. Rote's laptop?
- 18 A. No. I mean --
- 19 Q. I asked a bad question. Yeah?
- 20 A. Yeah. Rephrase that, please.
- 21 Q. Was it created on Mr. Rote's laptop?
- 22 A. No.
- 23 Q. And how do you know that?
- 24 A. Because the metadata does not match the laptop,  
25 both the metadata does not match the laptop for

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100

- 1 the user name, the user initials and the company  
2 and the metadata does not match from Exhibit 185  
3 of the location. This documents, the settings  
4 backslash owner -- I'm slowing down a little bit  
5 for you -- the documents and settings, backslash  
6 owner is the sign of the windows operating  
7 system Microsoft Windows XP home, not  
8 professional. So that tells me that whatever  
9 computer was utilizing this software had the XP  
10 home on it instead of XP professional. The

- 11           laptop that Mr. Rote provided was XP  
12           professional. So that's another indication that  
13           this was not created on his laptop.  
14        Q.    Okay. Now, there's another really simple one.  
15           The laptop didn't have a slot for a two and a  
16           half inch floppy, did it?  
17        A.    From my pictures and my memory, that's correct.  
18        Q.    Okay. So if the floppy disk that you were  
19           provided was simply, had simply been copied from  
20           somewhere else, okay, how was that copy created?  
21           Can you explain how the copy was created?  
22        A.    If it was from somewhere else, meaning not on  
23           his laptop, it means that the drive, the  
24           computer that he utilized had a floppy disk or  
25           he was able to connect one up to it in order to

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- 1           copy it from the hard drive where it was located  
2           over to the floppy disk.  
3        Q.    Okay. So based on the information we have here,  
4           you didn't see the originating computer. You've  
5           never seen the original floppy and do we know  
6           what computer was used to create the copy of  
7           the, that went onto this floppy?  
8        A.    No, we don't.  
9        Q.    And that computer obviously would have metadata  
10           in it as well?  
11        A.    Yes, it would.  
12        Q.    Okay. All right. So Mr. Rote testified, you  
13           recall reading Mr. Rote testified that he took

McCann

14 the floppy home with him with Maxterm.doc on it  
15 and either that evening or the next day opened  
16 it, changed date and printed it. Okay. Can you  
17 tell from the information, the metadata that you  
18 were provided, that you got from the floppy,  
19 whether that's accurate?

20 A. No. No, you can't.

21 Q. And why is that?

22 A. Because if even printing it as I mentioned  
23 earlier, the metadata in the document also saves  
24 when it was last printed.

25 Q. Okay. So if we had the original floppy that he

♀

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1 says he carried home, we would be able to see  
2 metadata that would show when it was opened and  
3 printed?

4 A. No.

5 Q. Okay. Where do we have to look for the open and  
6 printed?

7 A. We have to look on his home PC.

8 Q. So that is now a third computer that may have  
9 metadata on it that would show the date and time  
10 that this document was created?

11 A. Yes.

12 Q. Did you, were you ever able to examine that  
13 computer?

14 A. No.

15 Q. So if we can call that the modifying computer or  
16 the second computer, what can metadata would

17 have, would that date, computer have on its hard  
18 drive?

19 A. Similar to the originating computer, it would  
20 have information about when it was accessed, the  
21 date and times of when it was accessed, how many  
22 times it was accessed, when it was printed and  
23 it would also, it would also contain an auto  
24 recovery, depending on how long the document was  
25 open for on that computer.

♀

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1 Q. Okay. Particularly the computer that was used  
2 to open the floppy and revise it and print it  
3 out, okay, the failure to provide that computer  
4 for examination, was that a particularly  
5 prejudicial thing as far as Mr. Zweizig is  
6 concerned?

7 A. My opinion, my opinion is that that was almost  
8 as valuable as the original computer that it was  
9 created on. Not as valuable only because the  
10 original computer should show the original date  
11 or have, give someone like me the ability to  
12 check the original date when it was actually  
13 created versus what we've been told and what was  
14 on the floppy disk. That may or may not exist  
15 on the secondary computer.

16 Q. Okay. But the secondary computer would tell you  
17 when it was printed; correct?

18 A. Yes. Yes, that's correct.

19 Q. Now, I have to ask you not to speculate but I am

20 going to speculate and give you a hypothetical .  
21 Okay. Let's say that Mr. Rote, and fed a peek  
22 or whatever on October 1st thought about firing  
23 Mr. Zweizig, sat down and drafted the letter and  
24 then thought better of it and didn't, didn't  
25 send it. Okay. The metadata that we see in

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1 Mr. William's report that you have described  
2 would all be there, it was created on  
3 October 1st?  
4 A. That's correct.  
5 Q. Okay. But you can't tell whether it was printed  
6 on October 2nd without the second computer, can  
7 you?  
8 A. That's correct as well.  
9 Q. Is it possible that even though it was created  
10 on October 1st, it could have been printed on  
11 October 30th after maybe other incidents have  
12 happened?  
13 A. Without having the computers around that it was  
14 printed on, there's no way to tell. So it's  
15 possible, absolutely possible.  
16 Q. So am I accurate in concluding that the metadata  
17 in Mr. Williams' report describes a draft and  
18 nothing more?  
19 A. Possibly.  
20 Q. Okay. Well, I asked Mr. Williams whether it was  
21 possible, whether three scenarios are possible,  
22 one is that one could reset the clock and type

23 the letter up any time you want and it would  
24 show that metadata. If you told the computer it  
25 was October 1st, that's what the computer would

‡

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1 think. The second is that you could draft the  
2 letter on October 1st, think better of it,  
3 change your mind, whatever, and then after  
4 incidents later in the month, decide, by golly,  
5 I am going to fire him. So then you finalize  
6 the document and print it. That's possible  
7 given the metadata that we have, isn't it?

8 A. Yes.

9 Q. And then of course the third possibility is that  
10 it could have been printed the next day but we  
11 can't test that because we don't have the  
12 computers; right?

13 A. That's correct.

14 Q. Okay. You mentioned earlier, and I'm just going  
15 to go into this for just a few minutes and then  
16 we can take a break for lunch. But you  
17 mentioned earlier that, where you asked to look  
18 for evidence of the exit time e-mail on the  
19 computer that Mr. Zweizig used, the Sony Vairo  
20 computer.

21 A. That's correct.

22 Q. Okay. Well, let's go back to when you received  
23 that computer. When was it that you examined  
24 that computer?

25 A. December 12, 2008.

- 1 Q. Okay. Same time that you got the floppy and  
2 examined Mr. Rote's laptop?  
3 A. That's correct.  
4 Q. And was the 60-gigabyte installed in the  
5 computer?  
6 A. Yes, it was.  
7 Q. So you were able to match it up and tell that  
8 that actually ran on that computer; right?  
9 A. Yes. Yes.  
10 Q. And did you make a forensic image of the  
11 60-gigabyte hard drive?  
12 A. Yes, I did.  
13 Q. And the same way that Mr. Williams described  
14 that he had made a forensic image?  
15 A. Correct.  
16 Q. And did you examine that, well let me ask you,  
17 what were the issues that you were asked to  
18 examine that 60-gigabyte hard drive for?  
19 A. I was asked to actually examine the 60-gigabyte  
20 hard drive, the laptop drive as well as 120  
21 gigabyte hard drive for any, any relevant  
22 documents dealing with Max's termination in the  
23 year 2003. That's the first thing I was asked  
24 by the stipulation order.  
25 The second thing I was asked was to review



1 the same data storage devices for any sign of  
2 basically nonbusiness related activity such as  
3 pornography or games or, you know, internet  
4 activity, that type of --

5 ARBITRATOR CROW: On which computers.

6 THE WITNESS: This is all of them, this was  
7 from the stipulation order. It was not specific  
8 about which computers. It was more or less  
9 saying that all of the data storage devices that  
10 I was provided by Edelson at the time and Tim  
11 Rote, I was supposed to go through and review  
12 all of the data storage devices for this  
13 information. And finally I was supposed to  
14 check to see if any, any deletion or programs on  
15 there were deleted, especially using any sort of  
16 deletion tools.

17 Q. BY MS. MARSHALL: Okay. So let's just focus on  
18 the e-mails. Did you examine the 60-gigabyte  
19 hard drive in December or January of 2000 -- I  
20 guess it was December of 2008, did you examine  
21 it for evidence of e-mails, specifically the  
22 exit time e-mail?

23 A. No. I, like I said, I was, I specifically, well  
24 not specifically. I generally was looking for  
25 anything having to do with Max's termination in

♀

1 the year of 2003. I was not specifically  
2 looking for e-mails and I was not specifically

McCann

3 Looking for the exit time e-mail.

4 Q. Okay. So you're looking generally for anything  
5 having to do with the termination. Did you find  
6 anything?

7 A. Yes, I did.

8 Q. What did you find?

9 A. I found the exit time e-mail as an example. I'm  
10 sorry. Not on the 60-gig. I found nothing.

11 ARBITRATOR CROW: Nothing on the 60.

12 THE WITNESS: I found absolutely nothing on  
13 the 60-gig Drive. Excuse me.

14 Q. BY MS. MARSHALL: Okay. You know that Mr. Cox  
15 did an examination of the 60 either in 2009 or  
16 2010. And also found no e-mail traffic on the  
17 60.

18 A. I am aware.

19 Q. Did you, did you review Mr. Williams' report to  
20 see whether he found any evidence of e-mails on  
21 the 60?

22 A. Yes, I did.

23 Q. This is back in 2005. And he found a series of  
24 e-mails, did he not?

25 A. That is correct.

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1 Q. Okay. And I want to draw your attention to one  
2 of them, in particular. This is Exhibit 71.  
3 You will find it over here. 71. Okay. Page  
4 eight.

5 ARBITRATOR CROW: Page eight.

- 6 Q. BY MS. MARSHALL: Yes. I'm sorry. I should  
7 have let you --
- 8 A. No problem. Okay.
- 9 Q. Now page eight number five. Now there's been  
10 some testimony about, that these e-mails were  
11 just parts of e-mails that were sent to somebody  
12 else. Number five here, in Mr. Williams'  
13 report, is printed off of the Sony Vaio in 2005.  
14 Well, tell us what that file, that line of file  
15 information tells us?
- 16 A. That path?
- 17 Q. Yes. File path?
- 18 A. That file path indicates that it's an Outlook  
19 storage file for all e-mail coming into Outlook  
20 and that it belongs to the account Jay Ci offi ,  
21 which I believe was owned by Joe Ci offi from  
22 NorthWest Di rect.
- 23 Q. Okay. And it's an Outlook PST file?
- 24 A. That's correct and it is not deleted.
- 25 Q. And it's not in deleted space?

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- 1 A. No.
- 2 Q. Okay. And it says original message from Irene a  
3 somebody, \*Ranoff, to Brent \*Cowi ak and  
4 Max@NWtel emarketin g. com.
- 5 A. Correct.
- 6 Q. Do you see that? Now, would that indicate to  
7 you that at some point in time prior to at least  
8 2005, that computer had been used to receive



McCann

- 12 A. Okay. So in forensics we use keywords to do our  
13 searches across the entire data storage device.  
14 Right. And in Mr. Cox's case my assumption is  
15 that he searched for Max@NWtelmarketing or he  
16 just searched for Max, just as an example.  
17 Well, if, if part of this file got wiped out  
18 like that original message and down four lines,  
19 that got wiped out but the rest this have still  
20 existed, he would not have found it because  
21 nothing else in this message matches Max or  
22 Max@NWtelmarketing.com. So it's possible that  
23 this still exists on the hard drive, just not  
24 the portion that is on the very top.  
25 Q. Okay. So in your judgment would you say that

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- 1 the conclusion that the 60-gigabyte hard drive  
2 was never, most certainly never used to receive  
3 e-mails or reach?  
4 A. I don't agree with that. So it was used,  
5 definitely used for e-mail at one point in time.  
6 MS. MARSHALL: All right. If it would be  
7 okay, it's straight up 12:00. And.  
8 ARBITRATOR CROW: That's fine for a break.  
9 MS. MARSHALL: It would be.  
10 ARBITRATOR CROW: If you would like to do  
11 that.  
12 MS. MARSHALL: I would.  
13 ARBITRATOR CROW: All right. We'll go off  
14 the record.



- 18 A. No, I did not.
- 19 Q. Did you find an image or any images on the
- 20 60-gigabyte hard drive that could be considered
- 21 to be porn?
- 22 A. No, I did not find any images at all. The only
- 23 thing that I found similar to Mr. Cox, is, and
- 24 maybe even Steve Williams, if I remember right,
- 25 is file names that represent or could be

♀

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- 1 pornography. However, all of the file names
- 2 and --
- 3 Q. Okay. Before you go any further, I'm still
- 4 talking about the 60-gigabyte not the
- 5 120-gigabyte?
- 6 A. My fault. Sorry.
- 7 Q. It might have been mine. Just sticking with the
- 8 60-gigabyte hard drive for the moment, did you
- 9 search it for anything that might be porn?
- 10 A. Yes.
- 11 Q. Okay. And what did you find?
- 12 A. I didn't find anything that related to porn at
- 13 all in the 60-gigabyte hard drive.
- 14 Q. Okay. Now, do you have experience that would
- 15 permit you to examine with some authority
- 16 looking for porn?
- 17 A. Yes. During my time working for different
- 18 corporations, that goes for AT&T wireless for
- 19 nine years as well as \*PACR for two years, a lot
- 20 of their cases are considered policy violations.

McCann

21 So most of the cases that I do on a corporate  
22 level are pornography cases. That's hundred,  
23 I've done at least 100 pornography cases.

24 Q. Okay. And how do you go about examining an  
25 image to look for porn?

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1 A. Typically what you do is you start off doing  
2 what they call a gallery mode or a gallery view  
3 to where you are viewing every picture that  
4 exists on that data storage device. And you go  
5 through it page at a time, no matter how many  
6 images there are in looking for specific, you  
7 know, flesh tones or specific images.

8 Q. Okay. And in this case did you do that with the  
9 60-gigabyte?

10 A. Yes, I did.

11 Q. And what did you find?

12 A. I did not find any pornography.

13 Q. Okay. Did you find any images that could be  
14 considered pornographic?

15 A. No, I did not. Not on the 60-gigabyte hard  
16 drive.

17 Q. Okay. I just want to make --

18 A. I'm sorry.

19 Q. Make sure we are you can talking about the same  
20 hard drive I am thinking about and the same  
21 images I am thinking about.

22 A. I'm sorry. Must be the lunch I did, I found  
23 three, three images that could be considered



24 pornographi c.

25 ARBITRATOR CROW: On the 60-gi gabyte.

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1 THE WITNESS: On the 60-gi gabyte hard drive.

2 Q. BY MS. MARSHALL: Okay. And without getting  
3 into too much detail can you tell us what those  
4 three are?

5 A. There were two images of male genitalia and one  
6 image of a woman's breast.

7 Q. And in terms of --

8 ARBITRATOR CROW: That's on the image, not  
9 on a hard drive? Am I correct?

10 THE WITNESS: No. Those are images that are  
11 on the 60-gi gabyte hard drive.

12 ARBITRATOR CROW: Oh. I understood you to  
13 say earlier that you found no pornographi c  
14 reference on the 60-gi gabyte hard drive.

15 THE WITNESS: That's my fault because I  
16 wasn't paying attention.

17 ARBITRATOR CROW: All right. So I didn't  
18 hear you wrong. You did say that.

19 THE WITNESS: That's correct. I spoke  
20 wrong.

21 ARBITRATOR CROW: All right.

22 Q. BY MS. MARSHALL: I want him to stay for a  
23 moment with the 60. And I want him to talk  
24 about the images he found on the 60-gi gabyte  
25 hard drive. And with respect to those three

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1 images, two of male genitalia, one of female  
2 breasts, what can you tell us that's relevant to  
3 this case?

4 A. I can tell you that one of the pictures  
5 occurred, well, had a date and time stamp of  
6 September, I believe, 2003. Yep.  
7 September 30th, 2003. The other two images did  
8 not, and unfortunately without my exhibits I  
9 can't tell you when they were, but they, the  
10 other two, one of the male genitalia and one of  
11 the woman's breast actually belonged to the  
12 account named Jay Ci offi. So Joe Ci offi's  
13 account.

14 Q. Okay. And speaking just of the image that had  
15 at least a date of September of 2003, what did  
16 you do to investigate that image?

17 A. I tried to review all activity around that  
18 image, whether, so that means who accessed it,  
19 where did it come from.

20 ARBITRATOR CROW: On the 9-30?

21 THE WITNESS: On the 9-30 image, correct.  
22 The 9-30 image was underneath the profile NWT  
23 employee. So it's somewhat generic. And what I  
24 found is that that specific picture was accessed  
25 twice by the Jay Ci offi account. Again, and

♀

1 that's actually on page, that's on Exhibit 103,

2 page 11, where the Jay Ci offi account accessed  
3 that image once in December of '04 and again in  
4 July of '08.

5 ARBITRATOR CROW: But as I understand it,  
6 the 60-gigabyte hard drive was in the possession  
7 of Mr. Zwei zig until sometime in October 2003.  
8 Is that not correct.

9 THE WITNESS: November, I believe of 2003.

10 ARBITRATOR CROW: November of 2003. So the  
11 access to the one picture on 9-30-03 would have  
12 been at a time when it was in Mr. Zwei zig's  
13 possession?

14 THE WITNESS: It wasn't actually accessed on  
15 9-30-03. That's simply the date and time like  
16 the creation date and time stamp as well as the  
17 last written date and time stamp. There's a,  
18 there's a difference between looking for  
19 activity and activity showing that somebody  
20 actually went to that picture and touched it  
21 versus a date that says it was touched by  
22 something. An example, if you look again on  
23 page 11 of example, of Exhibit 103, you'll see  
24 last access date. And those could be caused by  
25 anything. They could be your anti virus

♀

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1 programming touching them to make sure they're  
2 not viral.

3 ARBITRATOR CROW: Okay. I'm not sure but  
4 what we're off on a side bit of testimony here,

5 I don't recall having seen or heard any  
6 testimony that would suggest NorthWest Direct  
7 tell services had a policy which would prevent  
8 an employee from accessing whatever he or she  
9 wanted to during particularly during nonworking  
10 hours. Has there been any such testimony?

11 MS. MARSHALL: Not only has there not been  
12 any such testimony, but there are policies in  
13 the, that are in evidence that specifically  
14 allow employees to do personal things, they  
15 don't specifically allow viewing images, but --

16 ARBITRATOR CROW: But they don't prohibit  
17 it. That was my recollection as well.

18 MS. MARSHALL: That's right.

19 ARBITRATOR CROW: All right.

20 Q. BY MS. MARSHALL: So you were asked to find  
21 those and you did; is that correct?

22 A. That's correct.

23 Q. Okay. I think the third issue that you were  
24 asked to explore is whether there was any  
25 evidence that any data was intentionally deleted

‡

1 or destroyed, in other words, any use of mal  
2 ware or anything of that nature.

3 A. Correct.

4 Q. Do you have experience that would allow you to  
5 look for that?

6 A. Again, I specialize in incident response, which  
7 comes to computer compromises. So I have a lot

8 of experience when it comes to utilizing  
9 applications to delete data, hide data,  
10 et cetera.

11 Q. Okay. And did you find any evidence that  
12 Mr. Zweizig had deleted or hid data?

13 A. I did not find any evidence that he deleted or  
14 hid any data. I did find an application that  
15 was installed on the computer that was part of  
16 their standard business practice called PGP,  
17 which stand for pretty good privacy, which has  
18 the ability to write or wipe, I'm sorry, wipe  
19 data. However, it, it just as I said in my  
20 report, it leaves a very specific signature and  
21 that signature did not exist at least in the  
22 image that I was able to examine.

23 ARBITRATOR CROW: The software was there but  
24 it doesn't show that it had been used, is that  
25 what you're saying.

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1 THE WITNESS: By looking at the deleted data  
2 it doesn't look like anything was wiped using  
3 that software.

4 Q. BY MS. MARSHALL: Okay. Now do you know what  
5 the software was there for?

6 A. The software would be there to encrypted data  
7 such as private data for either their company or  
8 other companies in order to protect it from  
9 being compromised.

10 Q. When it was sent from client to --

- 11 A. Exactly.
- 12 Q. -- et cetera, back and forth. Okay. What would
- 13 be the signature that you would see if it were
- 14 used to actually wipe something off of the
- 15 60-gigabyte?
- 16 A. It would do a, it would do 255 characters
- 17 because that's the maximum length you can have
- 18 for a file name of like all A's or all B's or
- 19 all something like that. And it would do that
- 20 whether it's a file or a folder.
- 21 Q. And you didn't find any of those?
- 22 A. I did not find that.
- 23 Q. All right. Did you find any evidence that any
- 24 Fox Pro files had been deleted?
- 25 A. I did find Fox Pro files on there that were

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- 1 deleted but they were deleted after the date,
- 2 after the 2003 date that Max Zweizig was,
- 3 supposedly had that computer in his possession.
- 4 ARBITRATOR CROW: Wait just a moment.
- 5 Q. BY MS. MARSHALL: Okay. Let's move on to --
- 6 ARBITRATOR CROW: Wait a minute.
- 7 (Record read. \*
- 8 ARBITRATOR CROW: Could you do you mean
- 9 after it was no longer in his possession?
- 10 THE WITNESS: After 11-13-2003.
- 11 ARBITRATOR CROW: Okay. That was my
- 12 confusion. Go ahead.
- 13 Q. BY MS. MARSHALL: Let's go on to the

14 120-gigabyte hard drive. I want to talk about  
15 your examination of the hard drive. When you  
16 went to Mr. Rote's attorney's office in December  
17 of 2008, were you provided the hard drive at  
18 that time?

19 A. No. Well --

20 Q. What were you given?

21 A. I was provided a box that was meant for a CD rom  
22 and was told that the 120-gigabyte hard drive  
23 was in that CD rom box.

24 Q. What was in the CD rom?

25 A. A CD rom.

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1 Q. Is it hard to tell the difference between a CD  
2 rom drive and a hard drive?

3 A. No, it's not.

4 Q. So what did you do?

5 A. I told, actually Mr. Edelson was not there. So  
6 I told Mr. Edelson's assistant that it did not  
7 contain the 120-gigabyte hard drive --

8 ARBITRATOR CROW: I can hear you.

9 THE WITNESS: I'm sorry.

10 ARBITRATOR CROW: Don't worry. I'm not a  
11 jury.

12 THE WITNESS: So I explained that they, that  
13 it did not contain 120-gigabyte hard drive.  
14 So they contacted Edelson, who contacted  
15 somebody else and I believe they may have  
16 contacted Mr. Rote at that time and said that

17 they must have replaced or misplaced it and that  
18 I would have to come back at a later time.

19 Q. Okay. So then did you make another trip back  
20 here from Seattle to, at another, at a later  
21 date?

22 A. I did. So that was in December of '08 that I  
23 came back and sorry I was moving around. I am  
24 just going to go pull up my invoice so I can  
25 remember the date in February but it's probably

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1 not as important. I came back in February  
2 because they said they had found the hard drive  
3 and that I was going to be able to come back and  
4 take an image of the 120-gigabyte hard drive.

5 ARBITRATOR CROW: February 2008.

6 THE WITNESS: February 2009. So when I got  
7 there they said there was some confusion, that  
8 they didn't have anything scheduled for me to be  
9 there. They sent me back home to Seattle  
10 without taking the image or even seeing that it  
11 was there or not.

12 Q. BY MS. MARSHALL: Okay. So did you go back a  
13 third time?

14 A. I did. I came back on March 20th, 2009.

15 Q. And at that time did they give you access to the  
16 hard drive?

17 A. Well, again I was under the assumption that they  
18 had found the hard drive. And in this case Tim  
19 Rote was there and the, they presented me or



20 provided me a external drive that contained an  
21 image of the supposed hard drive on there. So I  
22 contacted at the time James Dow, who was the  
23 attorney for Max Zweizig, and they just said,  
24 well they couldn't find the hard drive, the  
25 original hard drive, but Steve Williams was able

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1 to find an image of the hard drive and provide a  
2 copy of it. So that is what was contained  
3 supposedly on that external drive that they  
4 provided me.

5 Q. Okay. So what did you do with the external  
6 drive that they provided to you?

7 A. I basically took an image of an image, if that  
8 makes any sense.

9 ARBITRATOR CROW: I understand.

10 Q. BY MS. MARSHALL: Okay. Now, was there anything  
11 else on that hard drive?

12 A. There was other pictures, other documents,  
13 et cetera, all deleted. So in other words, it  
14 wasn't a clean target drive like we, in our  
15 field our practice to do. It could have been  
16 old case documents, it could have been his own  
17 documents. I'm not sure. I didn't go into that  
18 much detail.

19 ARBITRATOR CROW: Did you ever examine the  
20 120 gigabyte hard drive.

21 THE WITNESS: Yes, I did.

22 Q. BY MS. MARSHALL: Well, the question is did you

23 ever examine the hard drive?

24 A. No.

25 ARBITRATOR CROW: Okay. You just had an

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1 image of an image.

2 THE WITNESS: (No audible response.)

3 ARBITRATOR CROW: All right. Thank you.

4 THE WITNESS: Sorry. Yes.

5 Q. BY MS. MARSHALL: So what does this, as a  
6 forensic examiner, what does this tell you about  
7 the litigation hold with respect to the  
8 120-gigabyte hard drive?

9 A. It tells me it wasn't handled properly, that the  
10 chain of custody was corrupt. Therefore, they  
11 had, they seemed to have lost the drive.

12 Q. I just want to ask you one question with respect  
13 to your search of that drive, of that image, of  
14 the image of the image. Did you find in your  
15 search any evidence that Max Zweizig was  
16 participating in any kind of a pedophilia  
17 website?

18 A. No.

19 Q. Did you find any evidence that he was, that he  
20 had downloaded a video of pedophilia activity?

21 A. No.

22 Q. Okay?

23 MS. MARSHALL: I think that's all the  
24 questions I have at this time.

25 ARBITRATOR CROW: Tim, before you ask any

1 questions, let me understand --

2 MR. ROTE: Sure.

3 ARBITRATOR CROW: -- some things here. You  
4 did discuss briefly a question of deletion of  
5 files on the 60-gigabyte hard drive and you  
6 found no deletions that took place until after  
7 November 13, 2003. Is that correct?

8 THE WITNESS: That's correct.

9 ARBITRATOR CROW: Did you look for deletions  
10 with respect to the 120 gigabyte hard drive  
11 image that you had?

12 THE WITNESS: Yes, I did.

13 ARBITRATOR CROW: And did you find evidence  
14 of deletions on that image?

15 THE WITNESS: I found over 1900 different  
16 Fox Pro files that had been deleted.

17 ARBITRATOR CROW: And could you tell when  
18 they were deleted? 120 of them deleted, did you  
19 say?

20 THE WITNESS: No. 1900. Let me refer to  
21 my, my report.

22 MS. MARSHALL: I want to make sure that  
23 we're talking about the same drive, too.

24 ARBITRATOR CROW: We're talking about the  
25 120-gigabyte image of an image; is that correct?

1 That's what you had to examine?

2 THE WITNESS: Yes.

3 ARBITRATOR CROW: And you found 1900  
4 deletions. Can you give me an idea of what  
5 those deletions were and when they were made?

6 THE WITNESS: I can tell you only based on  
7 my report that they were Fox Pro type files.  
8 However, I did not, I did not document the dates  
9 or date ranges of those files that were deleted  
10 on the 120-gigabyte hard drive.

11 ARBITRATOR CROW: Let me see if I understand  
12 a little bit of your testimony.

13 THE WITNESS: Oh.

14 ARBITRATOR CROW: Go ahead.

15 THE WITNESS: Actually now that I think  
16 about it, I did document the files that were on  
17 the 120-gigabyte hard drive. That was one of my  
18 exhibits that I turned over to Edelson. And I  
19 don't know if it's turned into an exhibit here  
20 or not. It was exhibit, for me, I turned it  
21 over and it was Exhibit 10.

22 ARBITRATOR CROW: To your report?

23 THE WITNESS: To my report. To my original  
24 report. Exhibit 10 was the complete file  
25 listing of the 120-gigabyte hard drive.

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1 MS. MARSHALL: We need make sure that you  
2 have a complete copy of that exhibit.

McCann

3 ARBITRATOR CROW: I think I do. That  
4 exhibit is number.

5 THE WITNESS: 103.

6 ARBITRATOR CROW: -- 103. Yeah.

7 THE WITNESS: But they didn't include them,  
8 I don't believe.

9 ARBITRATOR CROW: I think I've got, hold on.  
10 Let me make sure that I have it. Would it be  
11 page ten of your report, which has, that has a  
12 picture of the male genitalia, page ten.

13 THE WITNESS: Right. I do not see --

14 ARBITRATOR CROW: So I don't have anything  
15 from you which shows what deletions, if any,  
16 were made on the 120 gigabyte hard drive; is  
17 that correct?

18 THE WITNESS: It appears so, yes.

19 ARBITRATOR CROW: All right.

20 MS. MARSHALL: If it's okay, we can, we can  
21 make sure that that exhibit is complete. It  
22 doesn't appear that it is at the moment.

23 ARBITRATOR CROW: Well, that would require  
24 some testimony as well as some cross-examination  
25 and the cross-examination would be impossible.

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1 MS. MARSHALL: Okay.

2 ARBITRATOR CROW: Let me understand a bit.  
3 As I understand it you're unable to determine  
4 the date and time of the creation or the sending  
5 of the e-mail notifying Mr. Zweizig that he was

McCann

6 terminated?

7 THE WITNESS: No. I was able to determine  
8 date and time that was on the e-mail. I was  
9 unable to determine if that date and time was  
10 the true and accurate time.

11 ARBITRATOR CROW: That's right. And I  
12 understand that the spoliation argument  
13 testimony and the lack of the litigation hold  
14 that might interfere with your ability to  
15 recreate that information. As I understand it,  
16 your testimony is the same with respect to the  
17 termination letter.

18 THE WITNESS: Yes, sir.

19 ARBITRATOR CROW: All right. Let me say  
20 while I'm focused on this then for both of you,  
21 I would like to have from each of you some law  
22 about presumptions, whether I should presume  
23 that there was spoliation because of the lack of  
24 litigation hold, whether I should presume that  
25 e-mails and letters were sent on the date

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1 identified on those documents. As I recall  
2 before we had e-mail, there was a presumption  
3 that a letter was sent and received on or about  
4 the date it was dated. I don't know that that  
5 presumption holds true with respect to e-mail or  
6 not. But I need some help from both of you on  
7 that issue.

8 I also would like to have from you,

McCann

9 Mr. Rote, a reference to anything that is in the  
10 record about advice to you of the need for a  
11 litigation hold. You now understand what a  
12 litigation hold is, I assume.

13 MR. ROTE: Yes, I do.

14 ARBITRATOR CROW: If there's anything in the  
15 record that relates to any advice to you about  
16 that issue, I would like to have you point that  
17 out to me.

18 MR. ROTE: Okay.

19 ARBITRATOR CROW: Okay. Cross-examination.

20 Q. BY MR. ROTE: Okay. I have, with respect to  
21 your arbitration Exhibit 103, only attached  
22 exhibits one through eight. I don't have nine  
23 and ten. But let's go and talk about some of  
24 the issues. Your conclusions with respect to  
25 the 120-gig hard drive was that it was

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1 reformatted on November 12th, 2003.

2 A. That is correct. Which Exhibit No. Are you  
3 looking at?

4 Q. I was unable to find exhibits beyond eight in my  
5 records.

6 ARBITRATOR CROW: On Exhibit 103 you are  
7 talking about.

8 MR. ROTE: On Exhibit 103. I had separate  
9 records but I had only exhibits one through  
10 eight. Only a few exhibits are attached as part  
11 of this report. So we're still kind of back to

McCann

12 some of the exhibits in your original report  
13 never made it into the record.

14 THE WITNESS: Okay.

15 Q. BY MR. ROTE: But let's go on with respect to  
16 the question which was that you concluded that  
17 the 120-gigabyte hard drive had been reformatted  
18 on November 12, 2003?

19 A. That's correct.

20 Q. And that was during the time that Max Zweizig  
21 had that computer?

22 A. The date and time was supposedly during the time  
23 that Max Zweizig had that computer, yes.

24 Q. Now, many of the files that you also identified  
25 that were deleted I presume were zip files, had

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1 NWD identifications, do you recall?

2 A. No. The files that I found, the 1900, is that  
3 what you're referring to?

4 Q. Yes, I am.

5 A. Those 1900 were simply based on extensions for  
6 Fox Pro files.

7 Q. So they were all Fox Pro files?

8 A. Yeah. FXT's, anything like that.

9 Q. So in addition to those 1900, there were lots of  
10 other files that were deleted, Excel files,  
11 porn, other things?

12 A. I am not going to say porn was part of it. But  
13 the fact is I wrote or I, yeah, I wrote in my  
14 report I believe that like you say, this drive



McCann

15 was formatted. Formatting a drive is the same  
16 thing as deleting every file on the hard drive.  
17 So I found, so everything is deleted. There is  
18 no such as deleted and not deleted when you  
19 format a hard drive.

20 Q. Did you find a reformat date before December 12,  
21 2000, -- I mean, November 12, 2003?

22 A. No.

23 Q. You did not. Would you have expected to find  
24 them?

25 A. No.

♀

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1 Q. You would not. The, you mention that you didn't  
2 find any evidence of porn on the 120-gigabyte  
3 hard drive? I'm confused about your testimony.

4 A. Did I put that in my report?

5 Q. No. Your testimony just a short time ago. Did  
6 you testify that you didn't find any evidence --

7 A. That's right. And what I mean by I didn't find  
8 any porn, is I didn't find any pictures.

9 Q. You didn't find any pictures?

10 A. Right.

11 Q. You didn't find any recoverable video files?

12 A. No. All the video files that were named in a  
13 fashion that would line up with pornography I  
14 was unable to recover.

15 Q. Were you able to determine that there was a lot  
16 of, that there was a shared hard drive and the  
17 existence of software programs for file sharing?

McCann

- 18 A. I was able to determine that.
- 19 Q. Okay. Did, were you able to determine that
- 20 there was a substantial amount of activity with
- 21 respect to that?
- 22 A. Yes, I was.
- 23 Q. Okay. And the dates and times for many of those
- 24 files were during the course of the period of
- 25 time from May 2003 until it was reformatted in

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- 1 November 2003?
- 2 A. Yes.
- 3 Q. That's correct? That's a period of time in
- 4 which Mr. Zweizig testified that it was in his
- 5 fireproof safe. You found dates and times for
- 6 files during that period of time?
- 7 A. Yes.
- 8 Q. Okay. With respect to the 60-gigabyte hard
- 9 drive, you had mentioned that, I want to focus
- 10 on e-mail activity right now. I think your
- 11 testimony was there was evidence that the
- 12 60-gigabyte hard drive had been used for e-mail?
- 13 A. Yes.
- 14 Q. But the question is was it used by Mr. Zweizig
- 15 for e-mail. Has it been used by Mr. Zweizig for
- 16 e-mail?
- 17 A. Not that I found.
- 18 Q. Not that you found. So the question itself kind
- 19 of missed the mark on that. The real question
- 20 is was it used by Mr. Zweizig for his e-mail?

McCann

- 21 The answer is no?
- 22 A. No. Not that I found.
- 23 Q. Not that you found. Okay. When you're
- 24 examining log files for change dates, et cetera,
- 25 you must have found some change dates in the log

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- 1 files that you did find. What, for the, for the
- 2 laptop that you examined, for the exit time
- 3 e-mail, did you find any changed dates at all?
- 4 A. Actually I didn't find any changed dates at all
- 5 on any of the files on any of the --
- 6 Q. For any of the computers?
- 7 A. For any of the computers.
- 8 Q. Let me ask you about the credibility of forensic
- 9 scans. You had mentioned that you didn't get
- 10 the 120-gigabyte hard drive. You only received
- 11 a forensic scan.
- 12 A. A forensics image.
- 13 Q. Forensic image. I'm sorry. Do you find that
- 14 having a forensic image is not the same as
- 15 having a hard drive?
- 16 A. Absolutely.
- 17 Q. You do believe that?
- 18 A. Yes.
- 19 Q. And the forensic, I think Mr. Cox testified that
- 20 he typically travels around the country and does
- 21 forensic work and it's less common for him to
- 22 actually pick up hard drives. He takes forensic
- 23 scans, forensic images and uses those as his

24 tool?

25 A. I must have missed that in his testimony because

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1 the way that I understood Mr. Cox is that he  
2 works in more of a E discovery business and that  
3 the data comes to him at that business and it is  
4 not always necessarily hard drives, but it could  
5 be images or it could just be data in general.

6 Q. Okay. But the question then with respect to a  
7 copy of a forensic image, would you say that a  
8 copy deteriorates that forensic image, is that  
9 your position?

10 A. Yes. It comes down to best evidence. In some  
11 cases you will be limited to a copy, an image,  
12 not the original. Right. But the original is  
13 what every practiced forensic examiner should be  
14 going for.

15 Q. And with respect to the 120-gigabyte hard drive,  
16 that's all you have was the forensic image?

17 A. That's correct.

18 Q. But you found no activity of use after  
19 November 12th of 2003; is that correct?

20 A. That's correct.

21 Q. After it was reformatted, there was no evidence  
22 of activity?

23 A. Correct.

24 Q. Okay. Now, on the 60-gigabyte hard drive, that  
25 continued to be in use. So that was scanned,

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- 1 forensic image was made I believe May 2005. And  
2 continued to be in use thereafter. You did a  
3 forensic, your own forensic image?  
4 A. It was June 2005. And yes.  
5 Q. You did your own forensic image subsequent to  
6 that date but you also had Mr. Williams'  
7 forensic image on that date for the June 2005?  
8 A. You say subsequent.  
9 Q. Well you received a copy of his forensic image  
10 or received a forensic image?  
11 A. Last weeks.  
12 Q. That he provided?  
13 A. Steve Williams?  
14 Q. Steve Williams, well, the chain was Steve  
15 Williams provided it had to Mr. Cox and Mr. Cox  
16 provided it to you.  
17 A. Okay. In that case I have received a copy of  
18 the 60-gigabyte hard drive from Steve Williams.  
19 My understanding is it was from Mr. Cox.  
20 Q. Okay. So Steve Williams provided that forensic  
21 image which he took in June 2005 to Mr. Cox.  
22 Mr. Cox provided a copy of that to you. Okay.  
23 And that, and you evaluated that 60-gigabyte  
24 hard drive image as of June 2005?  
25 A. Correct.

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- 1 Q. And so your basis then was that in thinking back

- 2 now to the volume of e-mail activity, you again  
3 to reiterate found no evidence that Mr. Zweizig  
4 used --
- 5 A. I did -- I'm sorry to interrupt.
- 6 Q. That's okay.
- 7 A. I did not do any searches for e-mail other than  
8 the exit time e-mail on the 60-gigabyte hard  
9 drive.
- 10 Q. You did not do any additional work to evaluate  
11 whether or not that, there was a volume of  
12 activity with respect to the 60-gigabyte hard  
13 drive?
- 14 A. No. Not on the one provided to me that was  
15 provided to me by Mark Cox from Steve Williams.
- 16 Q. I see. But you did on your first, on your  
17 forensic image?
- 18 A. Yes.
- 19 Q. And you found no evidence of use by Max Zweizig?
- 20 A. No.
- 21 Q. Okay. What was the, you found no use by  
22 Mr. Zweizig?
- 23 A. On the 60-gigabyte hard drive.
- 24 Q. On the 60-gigabyte hard drive. Now, on the  
25 120-gigabyte hard drive, did you examine that

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- 1 for e-mail activity for Mr. Zweizig?
- 2 A. Yes, I did.
- 3 Q. And did you find a lot of e-mail? Did you find  
4 evidence of use?

- 5 A. I did find e-mail and evidence of use.
- 6 Q. And it was substantial?
- 7 A. I found two what they would call PST files. So
- 8 storage for e-mail and they were quite large.
- 9 However, they were also corrupt so I couldn't
- 10 get every e-mail out of them.
- 11 Q. But you did find substantial --
- 12 A. I did.
- 13 Q. -- e-mail. And you would have expected to find
- 14 substantial volumes of e-mail?
- 15 A. Yes.
- 16 Q. Okay. With respect to the floppy drive, you had
- 17 indicated that on Steve Williams' report,
- 18 Exhibit 71, page five, I believe, that, if you
- 19 can turn to that, please.
- 20 A. I got it. No.
- 21 Q. Let's see. Exhibit 71. Maybe it's exhibit 60.
- 22 Let me go there. Exhibit 68, arbitration
- 23 Exhibit 68, page three, if you could go there,
- 24 please. You had indicated that the date and
- 25 time stamps for create date and modification

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- 1 date, you reached a certain conclusion about
- 2 that. Would you restate that conclusion?
- 3 A. The conclusion is that they are the exact same,
- 4 so therefore it was copied, that Maxterm.doc was
- 5 copied to the floppy drive not created on it
- 6 originally.
- 7 Q. So it could have been, could have been drafted

- 8 on this other computer and saved only one time  
9 and it would create the same statement, is that  
10 the same conclusion?
- 11 A. The conclusion is it was drafted on some other  
12 computer or a computer, saved somewhere. Now  
13 according to the, according to the document that  
14 was saved on that floppy disk, I haven't say  
15 saved, that was examined on that floppy disk, it  
16 was saved not only to a hard drive but to a  
17 floppy disk at some point in time. Just not  
18 that floppy disk that I received.
- 19 Q. You're maintaining that because these two dates  
20 are the same, you reached a conclusion and the  
21 times are the same -- Are the times on there?  
22 They are. That that represents a copy?
- 23 A. That and because it didn't contain the temp  
24 files that go along with creating or saving a  
25 file to a document to a floppy disk.

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- 1 Q. So, but isn't your position that if that  
2 document was created on a computer that had a  
3 floppy drive and a hard drive, C drive, that if  
4 Microsoft Office was just brought up and that  
5 document was created, wouldn't the temp file  
6 have been on the C drive?
- 7 A. Both.
- 8 Q. It would be in both places.
- 9 A. Yes.
- 10 Q. So the temp file then, the metadata with respect



- 11 to the temp file, wouldn't have been copied over  
12 to that other floppy? Is that the point?
- 13 A. No. Not the point. The temp file would not  
14 have been copied over to the other floppy disk.
- 15 Q. I see. Okay. With respect to the 60-gigabyte  
16 hard drive and the identification of the Fox Pro  
17 files you were asked to search for deleted files  
18 and you found a substantial number of deleted  
19 files after Mr. Zweizig turned over the  
20 computer. Do you recall the dates?
- 21 A. Yes. Well, I recall that it was December, I  
22 believe 29th of '03 and above.
- 23 Q. And after?
- 24 A. And after.
- 25 Q. Were you asked to look for the existence of Fox

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- 1 Pro files that had date stamps prior to  
2 November 13, 2003?
- 3 A. I was asked -- No, not specifically.
- 4 Q. So you were only asked to look for deleted  
5 files, not Fox Pro files that were created prior  
6 to November 13, 2003?
- 7 A. That is correct. But I am verifying with the  
8 stipulation order. That is correct. The only,  
9 the only restriction or limit that I had for the  
10 year 2003 was the examination of media for the  
11 limited purposes of identifying records from  
12 2003 relating to the creation, modifying,  
13 editing, storing, chain of custody, receipt and

14 transmission of the termination letter or  
15 derivations thereof. So the actual look for  
16 destroy and tampered with files was not limited  
17 to 2003.

18 Q. Were you asked to examine any of Max Zweizig's  
19 computers?

20 A. Personal computers?

21 Q. Personal computers.

22 A. No.

23 Q. Laptop. He had a laptop?

24 A. No.

25 Q. And that wasn't made available to you?

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1 A. No.

2 Q. And your conclusion with respect to the exit  
3 time on the e-mail was that, was that the dates  
4 and times associated with that e-mail are  
5 accurate?

6 A. Accurate in the sense that they were definitely  
7 sent at that date and time would be no. If you  
8 mean that the computer was accurate when it put  
9 on those date and times based on whatever the  
10 computer time was? I would say yes.

11 Q. Your testimony is that you have not been able to  
12 refute that evidence; is that correct?

13 A. That's correct.

14 Q. And not that it didn't happen, just that you  
15 weren't able to refute it?

16 A. I don't have any collaborating evidence that

17 tells me one way or another if it's accurate or  
18 not.

19 MR. ROTE: Okay. That's all. Thank you.

20 ARBITRATOR CROW: Redirect.

21 Q. BY MS. MARSHALL: Yes. I just want to make sure  
22 that I understand correctly. When Mr. Rote drew  
23 the distinction between the e-mail that you  
24 testified about that, if you recall that was an  
25 original message that was from someone else to

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1 Mr. Zweizig, that was found by Mr. Williams on  
2 the 60-gigabyte hard drive in 2005 and his  
3 question of you was did you find any evidence  
4 that prosecute Zweizig used the 60 for his  
5 e-mail, were you drawing the distinction between  
6 receiving and sending?

7 A. Yes.

8 Q. Is that it?

9 Okay. So you didn't find any e-mails in  
10 which Mr. Zweizig sent an e-mail from the 60 but  
11 apparently Mr. Williams found one where he  
12 received it on the 60? Is that correct?  
13 According to his report?

14 A. Well, according to his report neither of those  
15 are correct.

16 Q. Okay. Tell me what's correct.

17 A. And the reason being you cannot distinctly say  
18 that number five on his report was to Max on  
19 that computer or Brent or Bret or any of the

20 other people that were on that computer, in that  
21 original e-mail. So therefore, you can't say  
22 that he was receiving on that computer. And the  
23 same thing goes for sent. Now, I am going based  
24 on, I would be going based on sent from him.  
25 However, even at that point there has to be a

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1 direct file at that really tells you that it  
2 was, that it belonged to him. You cannot make  
3 the assumption that either or is delivery or  
4 activity by Mr. Zweizig.  
5 Q. Okay. But in any case by 2008 you couldn't find  
6 that e-mail?  
7 A. No.  
8 Q. You were asked in cross whether you found that  
9 the 120-gigabyte had been reformatted prior to  
10 November of 2003 or prior to the November 12th  
11 date. And I believe you testified that you  
12 would not expect to find that. Why not?  
13 A. Only because it's, it's, I don't know. It's not  
14 a usual thing to reformat the drive over and  
15 over again. Now, there are ways to check and  
16 see previous formats, but I did not run through  
17 that type of examination.  
18 Q. Okay. But you didn't see any evidence that  
19 it --  
20 A. No.  
21 Q. -- had or had not been -- Okay.  
22 A. You skipped a page.

- 23 Q. Pardon?  
24 A. You skipped a page.  
25 Q. I'm sorry. You're anticipating my questions?

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1 MS. MARSHALL: I have no other questions.

2 ARBITRATOR CROW: All right. And you rest;  
3 is that correct? I know you have a rebuttal  
4 witness.

5 MS. MARSHALL: Yes, we do.

6 ARBITRATOR CROW: And Mr. Rote, I believe  
7 you have a witness.

8 MR. ROTE: One witness.

9 ARBITRATOR CROW: Can you get that witness  
10 on the phone now or what did you tell that  
11 witness?

12 MR. ROTE: I had replanned for her to be  
13 available at 2:30. I'm sorry. I thought we  
14 would take a little longer.

15 ARBITRATOR CROW: Do you want to see if you  
16 can get that witness now?

17 MR. ROTE: Let me see if I can step out.

18 ARBITRATOR CROW: Why don't you go give it a  
19 try. See if that witness is available. If not  
20 we'll wait until 2:30 and I have some things I  
21 need to suggest to you.

22 (Break taken from \* to \*.)

23 ARBITRATOR CROW: Let's go back on the  
24 record then. And Mr. Rote, as I understand it,  
25 wants to provide some additional testimony in

1 his case in chief.

2 MS. MARSHALL: Mr. Zweizig, what's happening  
3 is that the next witness is not available until  
4 2:30 and Mr. Rote has some testimony that he  
5 wants to put on the record and I have a question  
6 or two that I want to ask him. So that we're  
7 going to do that right now. That's why we  
8 called you back.

9 MR. ZWEIZIG: Okay. Thank you. I'll just  
10 be here.

11 ARBITRATOR CROW: As I understand it,  
12 Mr. Rote, do you want to reopen your case in  
13 chief and provide some additional evidence; is  
14 that correct.

15 MR. ROTE: I do.

16 ARBITRATOR CROW: All right. Proceed.  
17 You're already under oath.

18 MR. ROTE: Yes. Exhibit 149, I wasn't sure