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2	UNITED STATES DISTRICT COURT
3	WESTERN DISTRICT OF NEW YORK
4	No. 1:10-cv-00569-RJA
5	x
	PAUL D. CEGLIA,
6	
	Plaintiff,
7	
	vs.
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	MARK ELLIOT ZUCKERBERG,
9	Individually, and
	FACEBOOK, INC.,
10	Defendants
11	Defendants.
12	<b>x</b>
13	
14	July 18, 2012
15	10:09 a.m.
16	
17	Videotaped deposition of BRYAN J.
18	ROSE, held at the offices of Gibson, Dunn
19	& Crutcher LLP, 200 Park Avenue, New York,
20	New York, pursuant to notice, before Cary
21	N. Bigelow, Court Reporter, a Notary Public
22	of the State of New York.
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3	
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15	BY: ALEXANDER H. SOUTHWELL, ESQ.
16	THOMAS H. DUPREE JR., ESQ.
17	MATTHEW BENJAMIN, ESQ.
18	AMANDA AYCOCK, ESQ.
19	
2 0	
21	ALSO PRESENT:
22	VILAN TRUB, Videographer
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MR. SOUTHWELL: This is Alexander
Southwell for the defendants along with
Matthew Benjamin and Tom Dupree and Amanda
Aycock.

MR. BOLAND: I'm Dean Boland for the plaintiff, Paul Ceglia.

MR. ROSE: And I am Bryan Rose from Stroz Friedberg.

THE VIDEOGRAPHER: This is tape 1.

(The witness was sworn in.)

MR. SOUTHWELL: Mr. Boland, before we begin, I just want to put on the record our objection to this videographer. We reserve the right to object to the admissibility of this videotaped deposition. videographer is not a certified legal videographer, he doesn't appear, as I asked him previously, to have any familiarity or training in the Federal Rules of Civil Procedure, the Federal Rules of Evidence, the New York C.P.L.R., he has not used the required statutory language to begin a video deposition and he clearly is not following any of the best practices set out by the

videographer associations, so obviously it's your choice in what you want to do, but we reserve the right to object to the admissibility of this video deposition.

I don't know if you have something else in mind with respect to the videoing of the deposition, like are you planning to post them on YouTube like you've done in other cases.

MR. BOLAND: I just have plans for him to videotape it, that's all; that's it so far.

MR. SOUTHWELL: So you are not planning to post that on YouTube?

MR. BOLAND: Not today.

MR. SOUTHWELL: Tomorrow?

MR. BOLAND: I have no plans for tomorrow to post anything on YouTube.

MR. SOUTHWELL: At any point in the future?

MR. BOLAND: I have no current plans to post anything on YouTube.

MR. SOUTHWELL: Or otherwise make them publicly available?

MR. BOLAND: Oh, yes, correct. No, I'm just using the filed version.

you.

that the judge in this case has for people

sitting for deposition?

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## B. Rose

- A. What rules are you referring to?
  - Q. Well, let me just go over them.

The judge in this case has indicated that anyone being deposed, if they are confused about a question, should direct a request for clarification to the person asking the question, not the lawyers for, you know, the side that you are on.

- A. Okay.
- Q. And that also, when we take breaks during the deposition that the witness being deposed can't have any conversations with the lawyers from their side of the case about the deposition.
  - A. I was made aware of that rule, yes.
  - Q. Those are the rules I'm talking about.
- 18 A. Yes.
  - Q. So I'm going to assume when I ask you questions today that if you answer that question you understood what I was asking, and if you don't understand it -- well, is that a fair approach?
  - A. That's a fair approach, and if I don't understand your question I will ask for

Is there any other training that you've

Q.

	<b></b>
1	B. Rose
2	received since that CV was produced as part of
3	Exhibit 1 there?
4	A. No.
5	Q. In your preparation for today's
6	deposition were you provided transcripts of any
7	other witnesses' depositions in this case?
8	A. No.
9	Q. Did you discuss the testimony of
10	Mr. Broom with the defense counsel?
11	A. No.
12	Q. Did you discuss the testimony of
13	Mr. Grant with defense counsel?
14	A. No.
15	Q. Can you tell the Court how you were
16	paid for your work in preparing Exhibit 1?
17	A. Stroz Friedberg is compensated on an
18	hourly basis.
19	Q. And do you know what that rate was that
20	was charged to defense counsel for the
21	preparation of that report?
22	A. The rate would vary depending on the
23	person working on the report, so my current
24	billable rate is 650 an hour; Eric Friedberg, who

contributed to the report, would be, I believe,

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## B. Rose

- 950 an hour, and then Mike McGowan and Jason Novak, who are two of our digital forensic examiners who contributed significantly to the report, would be -- I'm not sure of their exact current rates, but they'd be somewhere in the range of 400 to 500 dollars an hour.
- Q. And do you know the total that was paid to Stroz Friedberg by the defendants for the production, for all the work involved in the production of that report?
  - A. I do not.
- Q. Do you know who at Stroz Friedberg would have the answer to that question?
- A. I think the -- I'm not sure anyone would have the answer to that question immediately at hand, you could certainly reconstruct it from a look at the invoices.
- Q. And when was the last time you read Exhibit 1, the report that you produced in this case?
  - A. Last night.
- Q. Did you read the entire report last night?
- 25 A. I did.

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#### B. Rose

- Q. And do you agree with all the conclusions in the report as of that last reading?
  - A. I do.
  - Q. And can you describe for the Court -let me ask you this question: Were you involved
    in every page of that, the preparation of every
    page of that report or just portions?

You mentioned there were several people involved.

Did you have a division of labor in producing that report?

- A. It was a collaborative drafting

  exercise so, you know, at some point in the

  process I would have, yes, would have read,

  reviewed and contributed to every section of the

  report.
- Q. So are there any portions of the report that you would feel uncomfortable answering questions about based on that division of labor that you had?
  - A. No.
- 23 Q. Okay.
- Is there any section of the report that
  you would identify yourself as sort of the

1	B. Rose
2	primary investigator for?
3	A. No.
4	Q. Did anyone there were two people
5	whose CVs are included with the report; right?
6	A. I believe there are four CVs included
7	in the report.
8	Q. You're right.
9	There's two people who didn't sign the
10	report, but their CVs are attached to the report?
11	A. That's correct.
12	Q. And how would you describe the work
13	they did in preparing the report, the folks who
<b>14</b>	didn't sign it, the two of them?
15	A. Eric Friedberg is the co-president of
16	Stroz Friedberg, he was involved in overall
17	supervision and certainly read drafts of the
18	report and contributed editorial comments and
19	provided overall supervision.
20	Jason Novak, whose CV was also attached,
21	was one of the forensic examiners and he would
22	have assisted in the actual analysis of the
23	Ceglia media.
2.4	O So did Mr Friedberg actually do any

analysis, get behind a computer and operate

1	B. Rose
2	software to do analysis?
3	A. No, neither Mr. Friedberg nor myself
4	would have done any actual analysis.
5	Q. So what role did you do, then, if you
6	didn't do actual analysis?
7	A. So I am responsible for supervising the
8	work of Mike McGowan and Jason Novak, discussing
9	overall strategy with them, reviewing the results
10	of their work and drafting the report.
11	Q. And you and Mr. McGowan signed the
12	report?
13	A. Correct.
14	Q. And the other two, Mr. Friedberg and
15	Mr. Novak, did not?
16	A. Correct.
17	Q. What's the reason that Mr. Novak, who
18	did some analysis in this case, did not sign the
19	report?
20	A. The decision was made that two
21	signatories were sufficient, so it was determined
22	that I would sign the report along with
23	Mr. McGowan.
24	Q. Is that the practice of Stroz Friedberg

to have individuals who do analysis in cases not

1	B. Rose
2	sign reports?
3	A. I don't think that's the practice of
4	Stroz Friedberg. It's certainly possible that
5	when issuing a report not every person who
6	contributed to the report would be a signatory.
7	Q. Now, you are not a certified document
8	examiner, paper document, I'm talking about?
9	A. I am not.
10	Q. Did you review the paper contract in
11	this case, the two-page paper contract?
12	A. I've seen it.
13	Q. How do you mean seen it, an actual
14	A. I have seen copies, I don't think I've
15	seen the original.
16	Q. Did that factor in any part of your
17	analysis or your conclusions in the report,
18	Exhibit 1?
19	A. No.
20	Q. Now, would you agree with me that the
21	existence of that paper contract, which you've
22	seen copies of, proves that the StreetFax
23	contract that's talked about in your report is
24	not genuine?

MR. SOUTHWELL: I am just going to

1	B. Rose
2	object to the form.
3	Can you specify what you mean by the
4	paper contract, try to be a little more
5	specific about what you are referring to?
6	MR. BOLAND: Sure.
7	Q. Are you aware that a two-page document
8	is being offered by my client as an authentic
9	a two-page paper document is being offered as an
10	authentic contract between him and Mark
11	Zuckerberg?
12	A. I am.
13	Q. And are you aware that that two-page
14	paper document was evaluated by a bunch of paper
15	document experts in about July of 2011?
16	MR. SOUTHWELL: You mean the original
17	of it?
18	MR. BOLAND: Yes.
19	Q. The two-page document was evaluated
20	in July 2011.
21	A. I'm aware that there was paper analysis
22	done in the case.
23	Q. Okay.
24	So when I'm referring to what I am
25	calling the Facebook contract I'm talking about

1	B. Rose
2	that two-page paper document that Mr. Ceglia has
3	attached a copy of to an amended complaint and
4	his claim obviously rests on that being an
5	authentic contract between him and Mr. Zuckerberg,
6	okay, that's what I am talking about.
7	A. Okay.
8	MR. SOUTHWELL: Just to be clear, I
9	don't think this witness has seen the actual
10	original document that's been proffered, so
11	you may want to be clear in your questions.
12	MR. BOLAND: Fair enough.
13	Q. So you haven't seen the original
14	A. I have not.
15	Q but you've seen copies of that
16	document?
17	A. Yes.
18	Q. Fair enough.
19	But you're aware that the original
20	exists?
21	A. I have not seen it. I understand some
22	analysis has been done of it, so I have no reason
23	to think it doesn't exist, yes.
24	Q. Did you read any other expert reports

in this case that the plaintiffs have submitted?

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## B. Rose

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- I read some of the paper analysis but Α. not the entire report.
  - Q. Which report are you referring to?
  - Α. I don't recall.
- Would you agree with me the existence 0. of that two-page paper contract, the one we just referred to, which you read some analysis of, proves that the StreetFax contract that you identified in Exhibit 1 can't be genuine?
- I would not agree with that. I wouldn't begin to speculate on the paper analysis.
- Q. Well, assume for a second a hypothetical for me. Assume that somewhere down the line, tomorrow or the next day, the two-page paper contract that we're talking about is determined by the Court in this case or a jury to be an authentic contract between Mark Zuckerberg and Paul Ceglia, let's assume that.

Would you agree with me, then, if that's determined to be an authentic contract between those two parties, that the StreetFax contract as you identified in Exhibit 1 has to be not genuine?

> Object to the form. MR. SOUTHWELL:

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## B. Rose

- Q. Would you agree with that?
  - A. Mr. Boland, my expertise is in digital forensics. I think clearly based on the digital forensics we've conducted that the StreetFax contract is the genuine contract in this case and the Work For Hire contract offered by your client is a fraud. Beyond that, you know, I wouldn't speculate on what the paper analysis itself would show.
  - Q. All right. Well, let's try this hypothetical.

Let's say that Mark Zuckerberg is deposed in this case at some point and concedes that the two-page written contract that we're talking about, the Facebook contract, is authentic.

Would you then agree that the StreetFax contract that's in your report must not be genuine?

MR. SOUTHWELL: Object to the form.

A. I would think if Mr. Zuckerberg in a deposition testified that the Work For Hire contract was an authentic contract, I would think that would mean that the Work For Hire contract

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## B. Rose

2 was an authentic contract.

Beyond that I think that's what it means, exactly what you say it means, which is that if Mr. Zuckerberg says that that is an authentic contract then that is an authentic contract. I don't necessarily think that would affect my analysis of the StreetFax contract itself as found on the digital forensics side.

Q. Well, let's talk about that.

You know there's a conclusion in your report, Exhibit 1, that the StreetFax contract is the authentic contract between the parties; correct?

- A. Correct.
- Q. How did you arrive at -- let me back up.

You are not an expert in digital image analysis; correct? You are not certified or qualified as an expert to analyze digital images to determine if there are authentic or not?

- A. What is digital image analysis, what do you mean by that?
- Q. I mean any electronic file that is in a digital format like TIFF, JPEG, GIF, have you

1	B. Rose
2	ever been qualified in court to give an opinion
3	as to whether an image of that format is in fact
4	authentic or altered or a copy or an original,
5	things like this?
6	A. No.
7	Q. Do you have any training, classes
8	you've gone to, about how to evaluate digital
9	images to determine if they've been altered?
10	A. No.
11	Q. So it would be fair to say, then, that
12	the StreetFax contract as you identify it in
13	Exhibit 1 is comprised of two TIFF images?
14	A. Correct.
15	Q. It's not paper we're talking about;
16	right?
17	A. That's correct, it's an electronic file.
18	Q. And your analysis didn't find any paper
19	predecessor to that, those TIFF images; correct?
20	A. We were dealing with electronic media,
21	so, yes, that's correct.
22	Q. Okay.
23	And a TIFF image is a digital image,
24	you would agree with me?
25	A. Correct.

	Page 21
1	B. Rose
2	Q. As opposed to a Word document, which is
3	not really typically called by folks in your
4	industry as a digital image?
5	A. That's correct.
6	Q. Okay.
7	So let's talk about that digital image
8	that is the two TIFF images.
9	Who found those two TIFF images, by
10	the way?
11	MR. SOUTHWELL: Can you just clarify
12	what you mean by found?
13	MR. BOLAND: Well, I will ask him if he
14	doesn't understand.
15	MR. SOUTHWELL: Object to the form.
16	MR. BOLAND: Okay.
17	Q. Who was the person who first said to
18	anyone on your team there are two TIFF images
19	which appear to be a contract between the parties
20	that I've just located on some media? Someone
21	must have first said that.
22	A. I was informed of the discovery of the
23	TIFF images by Mike McGowan.

Q. Do you know if he is the one who

discovered them?

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1		B. Rose
2	Α.	I believe he was.
3	Q.	Okay.
4		Is he a digital image expert in the way
5	we defined	d it earlier in your testimony, do you
6	know?	
7	<b>A</b> .	I don't know.
8	Q.	How long has he worked for Stroz
9	Friedberg	?
10	<b>A</b> .	Mike McGowan has worked he's been
11	there befo	ore I got there, I would say he's worked
12	there app	coximately 10 years.
13	Q.	How long have you worked there?
14	<b>A</b> .	In November it will be seven years.
15	Q.	And you don't know if he is a digital
16	image expe	ert, as you sit here today?
17	<b>A</b> .	He's a digital forensic expert.
18		I mean, in terms of digital image
19	expert, Mi	ike has been qualified in many courts to
20	offer test	timony on the authenticity of electronic
21	documents	, including image files, so whether he's
22	a document	t image expert, I think that term you're
23	using a li	ittle loosely, I'm not sure exactly what

that means in that context.

Do you know if either one of these two Q.

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	Page 23
1	B. Rose
2	TIFF images that we're talking about that
3	comprise the StreetFax contract are original
4	images or copies?
5	A. I don't understand that question.
6	Q. Do you use a digital camera personally?
7	A. Yes, occasionally.
8	Q. Okay.
9	When you capture a picture with your
10	digital camera, I'm calling that an original, you
L1	just hit the shutter button and the picture is
12	captured, it's on the card in the camera, that's
13	an original, okay, that's the definition I'm
14	using.
15	A. Okay.
16	Q. Have you ever captured digital images
17	like that and put them on a computer?
18	A. Yes.
19	Q. Now, once they're on a computer, for
20	example, pictures can have problems like red eye.
21	Are you familiar with that?
22	A. Yes.
23	Q. And are you aware that there's photo-

editing tools which allow you to correct red eye

in images?

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# B. Rose

A. Yes.

Q. What I'm calling an original would be the picture as you captured it and would you agree with me that if you went in and fixed a red-eye defect in that image that's no longer an original, it's been altered?

A. You've changed it, yes.

Q. You've changed it, right, not significantly, but you've changed it.

So what I'm asking you about is these TIFF images that are the StreetFax contract, is it your opinion that those are originals or have they -- were they altered before they landed where they were found on the media where you found them?

A. I think what we know from the digital forensics is that they were created on the hard drive and then e-mailed out within minutes, so I think from the time they were created on the computer there would not have been time to alter them before sending them out.

Q. Fair enough.

How about before -- when you say created on a hard drive, it's true that files can

	Page 25
1	B. Rose
2	be created on a hard drive in many ways; right?
3	A. True.
4	Q. They can come from a floppy disk years
5	ago; correct?
6	A. Sure.
7	Q. They can be copied off of a CD?
8	They can be, yes.
9	Q. Copied off of a USB device?
10	A. Correct.
11	Q. Copied from another hard drive to that
12	hard drive?
13	A. Correct.
14	Q. They could be downloaded from the
15	<pre>Internet?</pre>
16	A. Correct.
17	Q. How did those TIFF files get created on
18	that hard drive? Your report doesn't say.
19	Which one of those methods was the
20	method that created them on that hard drive?
21	A. They appear to be scans that we believe
22	were then copied to the hard drive, but that's
23	the extent of what we can determine from the
24	digital forensic evidence that's available.
25	Q. So you don't know if they were copied

1	B. Rose
2	from any of those various methods I just went
3	through in the previous question?
4	A. There is no digital forensic evidence
5	as to where they were copied from.
6	Q. So I understand your answer that when
7	they landed on the hard drive, from that point to
8	when you say they were e-mailed there wasn't
9	enough time really to alter them, I understand
10	what you're saying there.
11	That's your testimony; correct?
12	A. Correct.
13	Q. I'm asking you, before they landed on
14	that hard drive were they altered prior to that
15	time?
16	A. I wouldn't be able to speculate on
17	that.
18	Q. Do you know?
19	A. I don't know one way or the other.
20	Q. Now, did you read Mr. Broom's report,
21	the forensic expert for the plaintiffs?
22	A. Some time ago, yes.
23	Q. Do you recall a section of his report
24	where he talked about the physical size of the

two TIFF images that you found?

for all of this, you're right.

page of Exhibit H.

Yes, page 90 of 102, it's the first

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not sure if that's a production issue in

	Page 29
1	B. Rose
2	terms of the copying.
3	MR. BOLAND: I can ask him.
4	Q. When you produced your report for
5	filing is the size that you are looking at on
6	page 90 of 102, was that the size that document
7	was produced in the report?
8	A. I did not produce this exhibit, so I
9	don't know.
10	Q. But you reviewed the report before it
11	was filed?
12	A. I did.
13	Q. Do you remember the size of that
14	exhibit?
15	A. I don't.
16	Q. Do you have any reason to doubt that
17	that's the size of the exhibit as you produced it
18	in the report that was filed?
19	A. I don't know one way or the other,
20	Mr. Boland.
21	Q. Very well.
22	Can you read and the size that that
23	is, which I understand Mr. Southwell is disputing

whether that's actually the size it was when it

was filed, I understand that, but the size that

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#### B. Rose

- that actually appears there, is that legible, is any part of that legible?
  - A. Parts of it.
- Q. So can you read the parts and describe where you're reading from for the Court?
- A. I can read the title, which says

  StreetFax; I can read section 1, which says

  general provisions; I can read certain headings

  such as payment terms; that's essentially what's

  legible based on this copy which you've handed me.
- Q. And is page 2 of the TIFF -- do you recall if page 2 of these two TIFF images was placed into the report that you filed as an exhibit itself?
  - A. I do not recall.
- Q. And there's no other electronic evidence that you reviewed, or is there electronic evidence you reviewed before issuing this report that is not listed in the report?
  - A. No.
- Q. Is there any electronic evidence that you reviewed -- you know, let me back up that previous question. I used the phrase that you reviewed.

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1	B. Rose
2	Let me ask you, if you know, is there
3	any other electronic evidence that any of the
4	four people involved in this report reviewed
5	before issuing the report but it's not listed in
6	the report?
7	MR. SOUTHWELL: Objection to form.
8	I'm not sure what the
9	Q. Let me break it down.
10	A. Sure.
11	Q. You supervised the people who
12	contributed to this report; correct?
13	A. Correct.
14	Q. Okay.
15	So that's Mr. Novak and Mr. McGowan,
16	you supervised them?
17	A. Correct.
18	Q. And I'm asking you if you know whether
19	those two individuals or you reviewed or analyzed
20	electronic evidence before you issued this report
21	but didn't list that evidence that you analyzed
22	in the report.
23	MR. SOUTHWELL: Are you talking about

Related to this case.

any electronic evidence in the world?

MR. BOLAND:

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1	B. Rose	
2	MR. SOUTHWELL: Related to the report?	
3	MR. BOLAND: Related to this case.	
4	Q. Did you analyze any electronic evidence	
5	related to this case before you issued the report	
6	but didn't list that evidence that you reviewed	
7	in the report?	
8	A. Yes.	
9	Q. Could you list what that is now,	
10	please?	
11	A. So we reviewed copies of Mark	
12	Zuckerberg's Harvard e-mail, which I don't	
13	believe is covered in the report; we also	
14	there was also a review conducted of certain	
<b>15</b>	assets belonging to Mark Zuckerberg.	
16	Q. Can you describe those, please.	
17	A. They were various computers and other	
18	hard drives that belonged to a computer or	
19	computers that Mr. Zuckerberg had used	
20	historically.	
21	Q. When did he use those various other	
22	do you have a better description of those various	
23	other? How many computers are we talking about	
24	in that last answer you gave?	

I don't know exactly. It was, I would

A.

1	B. Rose
2	say, somewhere in the neighborhood of $15$ to $20$ ,
3	roughly.
4	Q. Who would know the exact answer of how
5	many computers of Mark Zuckerberg's that he
6	historically used that your team analyzed before
7	issuing the report?
8	A. Well, I would think it's possible Mike
9	McGowan would know the exact number from his
10	recollection, but as to who could tell you based
11	on recall, we certainly have an inventory of
12	those assets.
13	Q. You do have an inventory?
<b>14</b>	A. Yes, I do.
15	MR. BOLAND: Mr. Southwell, I will ask
16	you to produce that inventory of those
17	assets that were reviewed.
18	MR. SOUTHWELL: And your basis for that
19	request is what?
20	MR. BOLAND: It's part of the work he
21	did and
22	MR. SOUTHWELL: It's not related to the
23	Court-ordered expedited discovery in the
24	report.

Let's talk about those computers you

Q.

	Page 34		
1	B. Rose		
2	evaluated.		
3	Why did you evaluate those 15 to 20		
4	computers?		
5	A. To look for evidence of the		
6	authenticity or inauthenticity of the Work For		
7	Hire contract.		
8	Q. And do you know who did the analysis of		
9	those 15 or 20 computers on your team?		
10	A. I do not.		
11	Q. And are there notes or any		
12	documentation of what was found during the		
13	analysis of those 15 or 20 computers?		
14	A. There was nothing found.		
15	Q. That's not my question.		
16	Are there notes or documents of what		
17	was found, what they		
18	A. Notes and documents of what was found?		
19	Your question is what was found. I'm		
20	telling you nothing was found.		
21	In terms of whether there are notes or		
22	documents about the analysis itself, I don't know		
23	one way or the other.		
24	Q. Would there typically be notes when a		
25	computer expert evaluates a piece of media as to		

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#### B. Rose

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how they approach that evaluation, for example, search terms they might have used?

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A. Typically.

5

Q. And software tools they might have used to carve out data, would an analyst in your

7

company typically list the steps they went through analyzing a piece of media?

8

A. Typically.

10

Q. And do you know if those records were kept related to these 15 or 20 computers?

11

A. I don't know one way or the other.

12

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Q. And why was the result -- were the results of the analysis, specifically those 15 or 20 computers, not discussed in this report?

1516

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A. This report is based on the expedited discovery ordered by the Court which covered the Ceglia media and various other information contained pursuant to subpoenas such as the e-mails from Sidley & Austin, that's the focus of

19 20

this report is expedited discovery, so we limited

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our report to that.

2324

The assets themselves were not part of that, were not part of

25

that expedited discovery, so they are not

	rage 30
1	B. Rose
2	included in the report.
3	Q. Why did you bother to evaluate them if
4	they are not part of expedited discovery?
5	A. We evaluated them well before expedited
6	discovery even started.
7	Q. Why?
8	A. Why?
9	Again, because we're looking for
10	evidence of the authenticity or inauthenticity
11	of the contract.
12	Q. And would you agree with me that the
13	Court-ordered expedited discovery is limited to
14	determining the authenticity or inauthenticity of
15	the contract?
16	A. I think the expedited discovery's very
17	clear that we are no evaluate the authenticity or
18	inauthenticity of the contract based on our
19	analysis of the Ceglia media.
20	Q. I'm just asking you do you agree that
21	the court order, multiple court orders have
22	focused on determining the authenticity or the
23	inauthenticity of the contract.
24	A. Yes.

Q.

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Okay.

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## B. Rose

And you just stated that's one of the
things, the reasons why you looked at these 15 or
computers; correct?

- A. I mean, that -- I think that underlies all of the work in this case, I mean, that is the central issue.
- Q. And approximately what time did that -- what date did that analysis of those 15 or 20 computers take place?
- A. I don't know. That was before my involvement in the case.
- Q. But you supervised the team members who do it?
  - A. I did not supervise that portion, no.
  - Q. Who supervised that portion?
- 17 A. I don't know.
  - Q. And that analysis that we're talking about, was that done on original media or forensic copies of original media?
    - A. It would have been done -- I don't know the answer to that question, I would speculate.
  - Q. Would it be practice of Stroz Friedberg typically to not do analysis on original media but to make a forensic image or forensic copy

1	D. Door	
_	B. Rose	
2	first and analyze that?	
3	A. In most circumstances you would pref	er
4	to work off a copy, yes, that's correct.	
5	Q. And do you know if that was the	
6	circumstance for these 15 or 20 computers?	
7	A. I've already said I don't.	
8	Q. Do you know if okay.	
9	Do you know where those 15 or 20	
10	computers, whether they are originals or foren	sic
11	images, where they are at today?	
12	A. I do not.	
13	Q. Could they be in your locked, secure	d
14	facility at your offices? Is that possible?	
15	A. I do not believe we've maintained	
16	copies of those, no.	
17	Q. Did you discuss the results of that	
18	evaluation or analysis with defense counsel?	
19	A. We did.	
20	Q. And when was that discussion?	
21	A. I don't know.	
22	Q. Do you know who was present for that	•
23	discussion?	
24	A. I don't know. There was one discuss	ion

and no, I don't know who was present.

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#### B. Rose

- A. That's fair to say, yes.
  - Q. Have you written articles that have been published in computer forensics publications?
    - A. No.
    - Q. Okay.

Would you agree with this general statement that it's important for a computer forensics expert to review all the available evidence before producing a report?

- A. I would agree that it's important for a digital forensic expert to have examined all of the relevant data and certainly, you know, you are sometimes dealing with accessibility issues here, so I think there are times when, you know, I don't know what available means, there are certainly things which might, you know, if you move mountains, be available, but are not certainly worth it in every case, but as a general matter all of the reasonably accessible data should be reviewed.
- Q. And early on in -- well, I don't know if it was early on, I shouldn't say that, but your team at least twice either obtained or received copies of Mr. Zuckerberg's Harvard

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## B. Rose

We have at various times either

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e-mail account; fair to say?

3

collected or received copies of Mr. Zuckerberg's

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Harvard e-mail account, yes.

6 7 Q. And the record reflects at least two times that occurred; true?

8

A. Yes.

Α.

9

O. Are there more than two?

10

A. I believe that we received three

11

separate deliveries, so -- and let me just go

12

through them so I can be clear.

13

e-mail on April 15th of 2011. We also received a

We collected Mr. Zuckerberg's Harvard

15

copy of Mr. Zuckerberg's e-mail from Harvard that was made in or that was from October of 2010, I

16 17

believe that was the second delivery received,

18

and then we received a third delivery from

19 20 Harvard which included a November 2003 copy of his data, a February 12, 2012 copy of his data,

21

and an additional copy of the October 2010 data,

and by additional copy I mean it's a duplicate.

22

23

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Q. And you're aware that the defendants had a duty under expedited discovery to produce

1	B. Rose
2	account; correct?
3	MR. SOUTHWELL: Objection.
4	A. I don't know what their obligations
5	were.
6	Q. Were you or your team involved in
7	helping the defendants produce a set of
8	Mr. Zuckerberg's e-mails as part of expedited
9	discovery?
10	A. Yes.
11	Q. And do you know from which one of these
12	three separate deliveries that production came?
13	A. I do not.
14	Q. Now, Stroz Friedberg, you or no one
15	from your team analyzed the backup copies of
16	Harvard's e-mail servers; is that true?
17	A. What do you mean by analyze their
18	backup copies?
19	Q. Let me ask you a question.
20	Do most large organizations like a
21	university maintain backup copies of e-mail,
22	their e-mail servers, is that
23	A. Most large institutions make backup
24	copies for disaster recovery purposes. Whether

they maintain them or not or how long they

B. Rose
maintain them varies greatly from organization to
organization.
Q. Do you know if Harvard in 2003-2004
made backup copies of their e-mail server?
A. I believe they did, yes.
Q. Did you obtain a forensic image of any
backup copies of Mr. Zuckerberg's e-mail account
from 2003 or 2004?
MR. SOUTHWELL: Object to the form,
just being clear about what backup copies of
Mr. Zuckerberg's e-mail account means.
Q. I just asked you and you confirmed that
Harvard made backup copies of their e-mail server
in 2003 and 2004; correct?
A. I said I believe they did.
Q. Do you have any reason to believe that
that excluded Mr. Zuckerberg's e-mail account?
A. No.
Q. I'm asking about those backup copies.
Do you know if those were on tape or on
disc or what form those backups were in?
A. I don't know whether they would retain

Did you ask Harvard about whether they

them from then.

Q.

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## B. Rose

had backup copies from 2003 and 2004 that were accessible?

- A. We asked Harvard to identify all historical copies of Mr. Zuckerberg's e-mail, whether that's on a backup or anywhere else.
- Q. Did they produce forensic copies from a backup source to you?
- A. Yes. I've just delineated, I think, the copies they produced for us, so we collected the April 15, 2011 e-mail, they produced data from October 2010, February 2012, and November 2003; they said that and they indicated that after a thorough search that was all the copies of this historical e-mail they could identify.
- Q. Let me just clarify that for my understanding.

The first collection -- I'll use your term -- of April 15, 2011, was that from their actual e-mail server or --

- A. Correct.
- Q. So it was not from a backup copy?
- 23 A. That's correct.
  - Q. The copy that they -- that you received from them which was you received in October 2010,

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## B. Rose

was that from their server or from a backup?

- A. I don't know the source of that.
- Q. Very well.

And then the third delivery from Harvard, was that from their actual server, their live server is the term I'm going to use, their live server, e-mail server, or from a backup copy?

- A. Well, from November 2003 it would necessarily not be from their live server, and this is a copy of the e-mail box as it existed in November 2003.
  - Q. So from a backup you would assume?
- A. I don't know whether it was a backup, whether they made a copy for some other reason.

  I know they had a historical copy of his e-mail,

  I don't know why it was made or from what the source of it was.

Obviously, once you get past the collection of a server on April 15th everything else they provide us historically is a historical copy, I don't know the source.

Q. Now, since we are on that topic, those, at least between two of those copies, you

	luge 17
1	B. Rose
2	offered well, you've offered many declarations
3	in this case about different topics?
4	A. Correct.
5	Q. And one of them, if you recall, that
6	you offered a declaration about was some
7	differences that arose between the October 2010
8	e-mail collection and the April 2011.
9	Do you recall that declaration?
10	A. I do.
11	Q. And correct me if I'm wrong, but there
12	were two main explanations you provided in that
13	declaration as to why what appeared to be missing
14	e-mails actually weren't missing e-mails at all.
15	Do you remember providing explanation
16	for that?
17	MR. SOUTHWELL: Object to the form.
18	Q. Do you remember providing an
19	explanation for that?
20	A. I do.
21	Q. And you indicated in that declaration
22	that the cause of that apparent deleted e-mails,
23	which wasn't deleted e-mails at all, were minor

formatting differences; do you remember saying

that?

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	l lage 40
1	B. Rose
2	A. Do you have a copy of the declaration?
3	Q. Hold on a second. I may have a copy
4	here.
5	You know what, I don't have it handy,
6	Mr. Rose, so if your memory doesn't serve you, we
7	will go from there.
8	A. I do remember there being minor
9	formatting differences which were part of the
10	discrepancy.
11	Q. And do you recall using the term, and
12	in addition to minor formatting differences
13	technical issues arose, if you remember using
14	that in your declaration?
15	A. I don't recall that specific language.
16	Q. And is it your opinion that some
<b>17</b>	that Stroz Friedberg somehow was engaged in some
18	fraud which caused the minor formatting
19	differences in those e-mails?
20	A. Absolutely not.
21	What caused the differences was for
22	some in the collection process, as I recall,
23	there were two issues, one, some minor formatting
24	inconsistencies, for instance, and not even

apparent on the surface of the document, if you

	rage 49
1	B. Rose
2	look at it, for instance, it's an extra white
3	space in the subject line, when we compare the
4	two e-mails they were identical except for that
5	minor formatting difference.
6	I believe the technical issue was one
7	e-mail that got split into two different e-mails,
8	so of course it doesn't dedupe out, but I can't
9	imagine how you could equate that to fraud.
10	Q. How did those minor formatting
11	differences occur?
12	A. I don't know.
13	Q. Was it done manually by anyone at Stroz
14	Friedberg?
15	A. No.
16	Q. Was it done even in an automated
17	fashion, intentionally by someone at Stroz
18	Friedberg inserting those formatting differences?
19	A. Why would anyone at Stroz Friedberg
20	insert formatting differences into an e-mail?
21	Q. Well, the rules here are that I get to
22	ask the questions.
23	Was it done automatically by someone at
24	Stroz Friedberg intentionally trying to create

formatting differences?

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# B. Rose

- A. Absolutely not.
- Q. So those formatting differences do not indicate fraud by Stroz Friedberg; fair to say?
- A. Mr. Boland, that's an outrageous accusation, that anyone at Stroz Friedberg would insert a white space in an e-mail so that it would not dedupe out against a prior collection of e-mail.
- Q. I'm just asking you if you agree with the statement it's not fair to accuse Stroz Friedberg of committing fraud because minor formatting differences appear in these e-mails.

Is that fair to say?

- A. I think Stroz Friedberg would have absolutely no motivation to insert an extra white space into a subject line.
- Q. Well, my question is not about motivation, my question is, is it fair to say that it is not proof of Stroz Friedberg committing fraud because minor formatting differences occurred in these e-mails.
- A. I think given the circumstances you're considering, which is that Stroz Friedberg is engaged in a process of collecting e-mail and

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## B. Rose

deduping out against a prior set, so having an aggregate set of data for review, if you're talking about those circumstances, the idea that an extra white space would be inserted so that those documents in fact don't dedupe out, the only effect of that being that there are additional documents which Gibson, Dunn or Stroz Friedberg then has to review, the idea that that, there's any motivation for fraud there, the idea, given those circumstances, that that would be fraudulent conduct, is outrageous.

Q. So is the answer to my question yes, that it is not evidence -- I'll ask it again.

It's not -- because the paragraph you just gave me did not answer the question, sir.

Would you agree with me that it is not evidence of fraud by Stroz Friedberg merely because in your possession somehow, we don't know how, minor formatting differences appeared in these e-mails?

MR. SOUTHWELL: Objection, asked and answered, he answered the question.

A. What I'm saying is given the

circumstances it's clearly not fraud.

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- Q. Did you or anyone on your team review
  any electronic evidence related to any prior
  cases that Mr. Zuckerberg has been involved in as
  a defendant or as a party?
  - A. Again, we reviewed the assets,
    Mr. Zuckerberg's assets, I believe those did
    include some forensic images that have been made
    in prior litigations.
  - Q. And what prior litigation were those images involved in?
    - A. I don't recall.
  - Q. Are you familiar with the case against Mr. Zuckerberg involving an organization called ConnectU?
    - A. I recognize the name, yes.
  - Q. Are you familiar with litigation involving two twins from Harvard named the Winklevoss twins?
    - A. I am familiar with it, yes.
- Q. Do you know if you or anyone on your team reviewed evidence from the ConnectU

  Winklevoss case?
  - A. It is my recollection that some of the assets were related to the ConnectU case.

	Page 53
1	B. Rose
2	Q. Do you know if you reviewed all of the
3	electronic assets related to the ConnectU case?
4	A. I don't.
5	Q. Did you ask to see all those assets?
6	A. We asked to see all of the historical
7	Mark Zuckerberg assets.
8	Q. And who did you ask that question to?
9	A. Well, I mean, we were in consultation
10	with Gibson, Dunn and attorneys from McManis
11	Faulkner, Mr. Zuckerberg's personal attorneys.
12	Q. Did you or anyone from your team review
13	any electronic evidence from a case involving
14	Eduardo Saverin?
15	A. I don't know.
16	Q. Does that name ring a bell?
17	A. It does.
18	Q. Are you aware that he and
19	Mr. Zuckerberg were involved in litigation years
20	ago regarding Facebook?
21	A. I've seen "The Social Network," but
22	beyond that
23	Q. Did you ask to see any evidence from

that case, any electronic evidence from that

case?

24

1	B. Rose
2	A. We didn't have discussions about
3	electronic assets for specific cases. What we
4	were provided was our understanding was the
5	existing historical assets for Mr. Zuckerberg.
6	Q. You know who Orin Snyder is; right?
7	A. I do.
8	Q. Have you met with him before?
9	A. I have.
10	Q. Pardon me?
11	A. I have, yes.
12	Q. Have you met with him about this, in
13	preparation for your deposition today?
14	A. No.
15	Q. Would you agree with the statement that
16	Mr. Snyder made about this issue of the minor
17	formatting differences we were talking about with
18	the Harvard e-mails, can you tell me if you agree
19	with this statement?
20	MR. SOUTHWELL: Can you just be clear
21	what you are referring to?
22	MR. BOLAND: A statement from
23	Mr. Snyder December 13, 2011, during the
24	oral argument we had that day.

Mr. Snyder said "It's possible the

Q.

1	B. Rose
2	differences in storage format or the conversion
3	process can create minor format discrepancies
4	between two copies of the same e-mail."
5	Do you agree with that statement?
6	A. Can I read that, do you mind?
7	Q. Sure. Page 163 of that, and I started
8	reading "It's possible."
9	Do you see where I am pointing there,
10	line 17?
11	MR. SOUTHWELL: Can we see the page
12	before? This relates to the issue you are
13	asking about?
14	MR. BOLAND: It does, I'll represent to
15	you that it does.
16	You can see the page before, that's
17	fine. It relates to an argument well, I
18	will let the witness read that.
19	Q. Just tell me if you agree with that
20	statement he makes about minor formatting
21	differences.
22	A. I mean, as a general matter, I would
23	agree with that.
24	Q. Very well.
25	So the accidental or unintentional

1	B. Rose
2	insertion of a formatting difference into a
3	document, you would agree with me, is not by
4	itself proof of fraud?
5	A. Accidental so accidental and
6	unintentional insertion?
7	Q. Correct.
8	A. I would say since fraud involves
9	intent, I would say by definition that would not
10	be fraud.
11	Q. And we just went over that such
12	formatting differences can be caused
13	unintentionally as Stroz Friedberg unintentionally
14	caused them somehow?
15	MR. SOUTHWELL: Objection to the form.
16	What are you referring to as such
17	formatting differences?
18	Q. Formatting differences between the sets
19	of Harvard e-mails that we talked about were
20	caused unintentionally; right?
21	A. If you are doing forensic collection
22	and you're collecting e-mail, it is possible in
23	the conversion process or based on storage
24	formats for there to be formatting differences
25	<pre>introduced.</pre>

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- Q. Now, is that the only way in the whole world of computers is just forensics where these formatting differences can occur?
  - A. I don't understand that question.
  - Q. People trading files on CDs or e-mailing files to each other, can formatting differences occur in that process?
  - A. Can you be specific? That seems very hypothetical.
  - Q. You have a Microsoft Word document and you send it to me and I open it in Microsoft Word, can formatting differences occur depending on how you have Microsoft Word set and how I have it set on my computer?
  - A. I think in general that should not occur.
  - Q. My question is not whether it should not occur.
- Does that occur for people, do they
  get --
  - A. I am not aware of that occurring.
  - Q. You have never received a document that somehow the formatting got altered from what the recipient created?

1	B. Rose
2	MR. SOUTHWELL: Objection to form.
3	Q. Has that ever happened?
4	A. I don't know, Mr. Boland.
5	Q. Fair enough.
6	Can you look at Exhibit 1, page 24, we
7	are in the upper I think we are in the upper
8	corner still of those page numbers.
9	A. Okay.
10	Q. So fair to say this page is generally
11	some discussion about the Sidley Austin server
12	and there's some header information in the middle
13	of the page; correct?
14	A. I would say it's a discussion of the
15	StreetFax e-mails found at Sidley & Austin and
16	particularly the Internet header information
17	appended to those e-mails.
18	Q. And your report notes in footnote 9
19	I mean, there's a whole paragraph there, but
20	there is a note there that the server
21	MR. BOLAND: Scratch that.
22	Q. Right at the bottom, the last sentence
23	of that footnote, the time zone setting was
24	incorrectly set to Eastern time

Do you see that sentence, the last half

	rage 59
1	B. Rose
2	of the last sentence of footnote 9?
3	A. I do see that sentence.
4	Q. And that's referring to the Sidley
5	Austin e-mail server; correct?
6	A. It is referring to one of the
7	intermediary Sidley & Austin e-mail servers,
8	specifically Mail 02.
9	Q. Did your computer forensic analysis
10	reveal any fraud regarding Sidley Austin and
11	e-mails?
12	A. No.
13	Q. And did your forensic analysis reveal
14	any fraud by Mr. Zuckerberg in relation to
15	e-mails from his Harvard e-mail account?
16	A. No.
17	Q. Now, on that same page, the time stamps
18	regarding the sent items from Mr. Ceglia's
19	parents' computer, this Kole e-mail, and the
20	received time of that e-mail on the Sidley Austin
21	server, this is my calculation, but they differ
22	by more than 144 seconds; is that a fair bit of
23	math?
24	MR. SOUTHWELL: What are you referring

to?

I'm sorry.

	Page 60
1	B. Rose
2	Q. The time stamps on the sent item from
3	Mr. Ceglia's parents' computer of the Kole e-mail
4	and the time it was received by Sidley Austin,
5	they differ by about a little over two minutes.
6	A. There are two e-mails, so can we
7	clarify which one we're talking about?
8	Q. Let's start with the first one.
9	A. Okay.
10	MR. SOUTHWELL: By the first one, are
11	you referring to page 24 of the report?
12	A. Or page 23.
13	Q. Let's look at where you have detailed
14	when those e-mails were sent.
15	Do you see on page yes, go back to
16	page 23 under the number 1.
17	There's an e-mail sent at 10:37 a.m.
18	Do you see that reference?
19	A. Yes.
20	Q. So there were two StreetFax e-mails
21	that you talk about being sent here on this page?
22	A. Yes.
23	O. The first one sent at 10:37 a.m.

Α.

Eastern Standard Time.

Yes.

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	Page 61
1	B. Rose
2	Q. And then you talk about it being
3	received on the top of page 24, it's received by
4	the Sidley Austin server at 9:38 Central time.
5	A. Correct.
6	Q. That's a difference of a minute,
7	roughly, or a little under a minute; is that fair
8	to say?
9	A. That is a difference of 51 seconds.
10	Q. And in the second e-mail is in the
11	middle of page 24, it's sent at 10:39; right?
12	A. Correct.
13	Q. And it's received, at the bottom of 24
14	it's received by the Sidley Austin server at 9:41.
15	A. Correct.
16	Q. So that's a little more than a minute,
17	a minute and a half, roughly; correct?
18	A. Let me just do the math.
19	Yeah, that's roughly correct.
20	Q. Now, on the computer where the Kole
21	e-mail was found your report identifies it as
22	part of the Ceglia media; fair to say?
23	A. Right.

owner and user of that computer? Was it Paul

And do you know who was the actual

24

	rage 02
1	B. Rose
2	Ceglia?
3	A. I don't know.
4	Q. Do you know if he ever used that
5	computer?
6	A. I don't know one way or the other.
7	Q. And these e-mails, these two TIFF
8	images that were sent by these two e-mails, you
9	would agree with the notion that from a computer
10	forensic standpoint you can't no one can say
11	whose butt was actually in the seat at that
12	computer?
13	A. So and let me maybe amend my last
14	answer a little bit.
15	From a forensic standpoint it is
16	difficult from the forensics to tell who's
17	actually sitting in the seat, so what you have to
18	look for is other contextual evidence.
19	So given the fact that what we have in
20	this case is two e-mails from a computer
21	belonging to used by someone at the Ceglias',
22	assuming that, you have one of the e-mails that's
23	signed by Paul that sets forth a phone number
24	that is sent to his attorney at Sidley & Austin,

Jim Kole.

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#### B. Rose

From those circumstances I would say

that, yes, at least for the purpose of sending

those StreetFax e-mails, Mr. Ceglia, Paul Ceglia

specifically, did use that computer.

- Q. Now, in sending that e-mail -- so it's your position that the forensic evidence -- and if I'm using the wrong word correct me -- proves that Paul Ceglia was sitting at the computer that sent those e-mails?
- A. I think the forensic evidence is yes, that Mr. -- that the evidence, the forensic evidence and I would say the other evidence, for instance, I don't know whether I would characterize the fact that Paul signed the e-mail as forensic evidence, but it's certainly evidence obtained in a forensic analysis, yes. I would say that it shows that Paul Ceglia sent those e-mails to Mr. Kole.
- Q. Now, when you say the word "signed the e-mail" you're talking about his name was typed at the bottom of the e-mail?
  - A. Correct.
    - Q. Not a handwritten signature?
- A. Correct.

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## B. Rose

- 2
- Q. And not even a scanned image of a handwritten signature?
- 4

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- A. That's correct.
- 5
- Q. And anyone can type those four letters

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that are his name; right?

7

A. Anyone could, yes.

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Q. Isn't it true that a person could be sitting at the computer, as you are positing here, and send that e-mail; true?

10 11

A. Could you repeat that?

12

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Q. As you said, a person, one of the ways this e-mail could have been sent is Paul Ceglia sitting at the computer typing?

15

A. Correct.

16

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Q. It could also have been sent by another person sitting at the computer typing everything that was in that e-mail; true?

18 19

A. Hypothetically true. I don't think in the case the evidence supports that, no.

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Q. And are there ways -- there are ways for people to get, for example, GoToMyPC is a program you are familiar with, a service you are familiar with?

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A. Yes.

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- Q. So a person could be in one state and use GoToMyPC and get remote access to their computer; right?
  - A. You can get remote access, yes.
  - Q. And using that remote access you can operate that computer as if you're sitting in front of it; true?
    - A. If you -- yes, that's true.
  - Q. Including you can send an e-mail from the e-mail program on that computer while you are in another state?
    - A. Correct.
  - Q. Did your forensic evidence indicate whether remote access to this computer by GoToMyPC happened with Mr. Ceglia?
  - A. I think remote access is unlikely given the fact that the scanned documents were copied to the actual physical hard drive, so I think what we are looking at is physical access to the machine, that would be our conclusion from the forensics.
  - Q. Well, let's talk about that.

    You testified just earlier that there's a variety of ways that those TIFF images could

	<b></b>
1	B. Rose
2	have been created on that hard drive.
3	Do you remember testifying about that?
4	MR. SOUTHWELL: Objection,
5	mischaracterizes the testimony.
6	Q. Do you remember testifying that there
7	are a variety of ways that those TIFF images
8	could have been created on to that hard drive?
9	A. I believe your question was a general
10	question about the way in which documents can in
11	fact be created on hard drive, if I'm recalling
12	that correctly.
13	Q. Well, let me clarify that, then.
14	You agree with me that there's multiple
15	ways that a file in a general sense can be
16	created on a hard drive; right?
17	A. Correct.
18	Q. And I asked you this before, they can
19	be copied from a CD?
20	You have to
21	A. Yes.
22	Q. Floppy disk in the old days?
23	A. Yes.
24	Q. USB drive?
25	A. Yes.

1		B. Rose
2	Q. Another ha	ard drive?
3	A. Yes.	
4	Q. And the In	ternet?
5	A. Yes.	
6	Q. Which one	of those ways I asked you
7	before, I'm pretty o	clear on this, but I will do
8	it again.	
9	Which one	of those ways was the way
10	these two TIFF image	es got on to that hard drive
11	where you found them	1?
12	A. I don't kr	low.
13	Q. You don't	know.
14	So that ne	ecessarily means, then, it's
15	correct that a perso	on, Paul Ceglia or whoever
16	using GoToMyPC, for	example, can remotely access
17	this computer where	you found these TIFF images
18	and put them there;	true?
19	A. I don't kr	ow specifically how
20	GoToMeeting operates	s. I mean, for instance,
21	there are remote acc	ess clients where I can go on

and get documents, for instance, on a desktop,

but I can't actually save things to my physical

hard drive, so I think it would depend on how

that actually operated.

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- Q. Do you know if -- and just to correct you, I think you just misspoke, I'm not talking about GoToMeeting, I'm talking about GoToMyPC.
  - A. Oh, I'm sorry, yes.
  - Q. Do you know if GoToMyPC does or does not have that function?
    - A. I don't.
  - Q. If the product like GoToMyPC allows remote access and has that function allowing you to save files to that remotely accessed computer, that's one way Mr. Ceglia or whoever could have put those TIFF images on that computer; would you agree with me?
  - A. It's possible that's a way Mr. Ceglia could have saved those to that computer, yes.
  - Q. Is GoToMyPC the only way to get remote access to a computer?
    - A. No.
- Q. What are the other ways, if you could list them, please?
  - A. I couldn't list all of them.
    - Q. List as many as you can, if you would.
- A. I mean, there are various clients like that that allow remote access, there is, you

- know, VPN access to a computer, there -- you know, there are certainly other ways, I mean, there are really innumerable ways to gain remote access.
  - Q. Now, the ways you just went through, VPN and other clients like that, those aren't hacking tools, are they?
  - A. They're not, they're generally software actually installed on the computer.
  - Q. In your experience as a computer forensics expert, you know that individuals around the world have the ability to remotely access other people's computers without their authorization?
- A. There are people who do that. I mean, obviously that would require -- you know, that would require the installation of some kind of software, you know, malware program, depending on how you want to characterize it, that would allow for both that remote access and also the kind of control over the computer itself that you would need to perform those functions, but assuming that that software, malware is installed on the computer, sure, that's a possibility.

malware?

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- Q. Do you know any of them that allow that?
- I mean, there are kinds, but again, Α. you'd be talking about specific pieces of malware, right, so there are literally tens of thousands of these things cataloged, so I think any analysis of malware would have to start with what is -- not a general analysis, but what is the specific malware found on the computer and what capabilities does that malware provide, so, for instance, you know, what is notably lacking from Mr. Broom's report is any analysis of how any of the malware he actually found would, A, existed in 2003 and, B, would have provided the kind of control over the computer that you would need for remote access to be an explanation for this.
- Q. Which ones -- did you or your team evaluate the malware in Mr. Broom's report to determine if it existed in 2004?
- A. We researched that malware to both determine whether any of those pieces of malware existed in 2003 and had the capabilities that would provide the kind of remote access necessary.
  - Q. And what was your evaluation?

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### B. Rose

- A. That none of those pieces of malware would have provided the ability to do that.
  - Q. Now, do people, hackers, in general, who gain remote access to a computer, sometimes they leave evidence behind of that intrusion; fair to say?
    - A. Yes.
  - Q. Are there occasions where they do not leave evidence behind that can be detected of that intrusion?
  - A. It's hypothetically possible. I mean, generally what you would see is either evidence of the access or evidence of the cleanup, but it's certainly possible to have as part of the malware essentially a cleanup of the malware on the machine.
  - Q. And you don't know, from your evaluation of Paul Ceglia's parents' computer where the Kole e-mail was found, what malware was on that computer in 2004?
    - MR. SOUTHWELL: Object to the form.
- 23 O. True?
- 24 A. No.
- Q. You don't know if there was any malware

1	B. Rose
2	on that computer in 2004?
3	A. I do not.
4	Q. And you don't know if it was littered
5	with hundreds of types of malware in 2004?
6	A. I don't know anything about the state
7	of the computer in 2004.
8	Q. And do you think it's a reasonable
9	conclusion that if a computer in 2011 has the
10	list of malware on it that you saw on Mr. Broom's
11	report that that makes it more likely that that
12	computer had malware on it sometime prior to 2011?
13	A. I would not agree with that, no.
<b>14</b>	Q. Do you know when all that malware
15	landed on that computer?
16	A. I do not.
17	Q. Do you know if any of that malware had
18	earlier versions that were in existence in 2004?
19	A. I'm not sure I understand the question.
20	Q. Well, you know Microsoft Word
21	A. Sure.
22	Q it's got some version number for the
23	current version of today, let's call it the 2012
2.4	version and eight wears ago it had a prior

version, maybe called Microsoft 2003.

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### B. Rose

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You are aware that Microsoft works that

3 way?

A. Sure.

5

Q. So I'm asking about the malware that's currently on the computer that Mr. Broom found, do you have any evidence of what prior versions of that malware existed before?

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A. I guess that I don't really understand the premise of the question in the sense that, you know, people who produce malware generally don't version like Microsoft Word does. They'll create, I guess, what I would consider new malware and maybe it's just a matter of semantics, but, you know, certainly it is possible for, you know, pieces of malware to, you know, once malware, for instance, is discovered and shut

Q. Now, in your report there's -- let me find the page -- you talk about a sent items DBX file in various places in the report; do you recall that?

down and picked up by the virus scans, they may

know, that's a variation off that.

adapt that and create a new piece of malware, you

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One of them is -- I just found the

1	B. Rose
2	first one just for purposes of the question, it's
3	referred to on page 15, you talk about the sent
4	items DBX file?
5	A. Yes.
6	Q. And it's other places in the report as
7	well, you would agree?
8	A. Yes.
9	Q. Can you look at page 16 of 102 of your
10	report.
11	A. Are you referring to the top line
12	numbers?
13	Q. Top line numbers, yeah.
14	A. Yes.
15	Q. Now, you have a graphic there of the
16	sent items folder of Vera Ceglia's e-mail
17	account; true?
18	MR. SOUTHWELL: Object to the form.
19	A. In terms of what do you mean by Vera
20	Ceglia's e-mail account?
21	Q. Well, the e-mail associated with
22	what was the e-mail associated with this account?
23	A. The user name that resolves when you
21	send an e-mail is Vera Ceglia

Any reason to believe that that is not

Q.

	Page //
1	B. Rose
2	Vera Ceglia's e-mail account?
3	A. Well, I believe the account is
4	registered to Carmine Ceglia.
5	Q. So whose account did your forensic
6	analysis determine that that was, Vera's or
7	Carmine's, or did they both use it?
8	A. I think our forensic analysis showed
9	and, again, forensics and the information we
10	obtained during the analysis showed the account
11	was registered to Carmine Ceglia, that the user
12	name that resolves is Vera Ceglia and that in the
13	case, at least in the case of the two StreetFax
14	e-mails, the account was used by Paul Ceglia.
15	Q. So you mention you list there five
16	sent items, three of them are blacked out.
17	Do you see that?
18	A. That's correct.
19	Q. Did it seem unusual to you that on
20	average only one e-mail was sent per year that
21	that account or that that DBX file existed from
22	Outlook?
23	MR. SOUTHWELL: Objection.
24	A. I don't think you can I mean, I

think that's a faulty premise. You certainly

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### B. Rose

can't conclude from the fact that only five e-mails are here that that's the extent of the sent e-mails.

- Q. Where would other sent e-mails be?
- A. They could have been deleted.
- Q. Did your forensic analysis find evidence that sent e-mail items were deleted?
  - A. No.
- Q. So where are they, the rest of the ones that -- other than those five that were sent in five years, what evidence do you have?
  - A. I don't know whether they exist.

I'm saying that based on an analysis of the current contents of a mailbox you can't conclude that that is a complete historical record of everything that was sent, nor to the extent e-mails were deleted over time are you necessarily going to be able to recover evidence of those deleted e-mails, so what I'm saying is what this is evidence of is what resided in this mailbox at a particular historical point in time.

Q. Now, would that statement, those series of statements you just gave also apply to Mark Zuckerberg's Harvard e-mail account?

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# B. Rose

- 2 3
- Α. Could you be specific about which statements you want me to apply to his e-mail account?
- 5
- 0. Let's break them down.
- 6
- Α. Sure.
- 7

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- It's true that it's your opinion based Q. on page 24 there that that's not necessarily all of the sent items, all of the items that were ever sent from that e-mail account?
- 11

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Again, it is a snapshot, a historical Α. record of a particular point in time.

So it would be true, then, that the

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- 14 items that you found in the equivalent sent items
- 15
- account, not necessarily all of the e-mails he 16

folder of Mark Zuckerberg's Harvard e-mail

- 17
- ever sent?

Q.

- 18 19
- I think that's true of everyone's Α. e-mail, yes.

he had sent but then got deleted?

- 20
- And there could be e-mails that were 0. deleted that you were not able to recover, that
- 22

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- 25
- There could have been e-mails deleted Α. either through user action or through system processes that we were not able to recover,

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1	B. Rose
2	that's correct.
3	Q. Did you ask Mr. Zuckerberg if he
4	deleted any e-mails from his Harvard e-mail
5	account?
6	A. I have not spoken to Mr. Zuckerberg.
7	Q. Why didn't you ask him that?
8	MR. SOUTHWELL: Objection. He just
9	said he didn't speak to him.
10	A. I have never spoken to Mr. Zuckerberg.
11	Q. I understand you've never spoken to him.
12	Why didn't you speak to him and ask him
13	whether he deleted e-mail from his account?
14	A. Again, I'm doing a forensic analysis.
15	You know, to the extent that others the
16	strategy about whether interview Mr. Zuckerberg
17	is beyond what we were charged to do in the
18	expedited discovery. I was asked to do a
19	forensic analysis of the Ceglia media.
20	Q. Is it of no value to your forensic
21	analysis to know how somebody who's a user of a
22	computer tells, that actually states how they
23	used it, that's not relevant to your analysis?
24	A. I don't think that would have been

relevant to our report, no.

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#### B. Rose

- 2 3
- Q. I'm saying is it relevant to your analysis to know how Mark Zuckerberg used his e-mail account.

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A. To our expedited discovery analysis or --

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Q. Is it relevant to you at all?

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A. Look, again, you know, the Harvard e-mail was not included here, it was not part of the expedited discovery, so to the extent we are talking about my report, and that's what I thought we were here talking about is Stroz Friedberg's report, talking to Mr. Zuckerberg about his practices with e-mail would not be

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relevant.

In understanding, you know, the Harvard e-mail, right, our analysis of that was limited to trying to collect it all and provide it in a format that could be reviewed and looking for the existence of the purported e-mails and various correspondence with StreetFax employees, that

2122

was our analysis and that was what we were limited to.

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What we were charged with, knowing Mr. Zuckerberg's historical practices, would not

1	B. Rose
2	have been relevant. Whether that's relevant to
3	the broader case and whether that's an analysis
4	that should be done, I mean, that's really a
5	strategic question that I would leave to the
6	attorneys.
7	THE VIDEOGRAPHER: I need a card
8	change.
9	MR. BOLAND: All right. We will go off
10	the record for a moment so he can change the
11	card.
12	Q. Do you want to take a 10-minute break
13	so you can run to the bathroom or whatever?
14	A. Sure.
15	(Recess taken.)
16	(Rose Exhibit 2, declaration of Neil
17	Broom, marked for identification, as of this
18	date.)
19	MR. BOLAND: Could we start the video
20	back up again?
21	THE VIDEOGRAPHER: Recording tape 2.
22	MR. BOLAND: We are back on the record.
23	BY MR. BOLAND:
24	Q. Mr. Rose, we just had about a 10 or so
25	minute break

1	B. Rose
2	Did you chat with defense counsel about
3	the deposition during the break?
4	A. I did not.
5	Q. I'm going to back up to a topic briefly
6	and then we will move ahead to ask you a couple
7	more questions.
8	The 15 or 20 computers that
9	Mr. Zuckerberg had used historically and you
10	indicated members of your firm had analyzed;
11	true?
12	A. Correct.
13	Q. And who at Stroz Friedberg actually
14	obtained that evidence?
15	A. I do not know.
16	Q. Where did they physically go
17	geographically to get that evidence?
18	MR. SOUTHWELL: Objection. He just
19	said he doesn't know.
20	MR. BOLAND: I asked him who obtained
21	it, he doesn't know.
22	Q. Where
23	MR. SOUTHWELL: He previously testified
24	he doesn't know about this, so
25	Q. Where was that evidence located?

1	B. Rose
2	A. I believe generically it was in
3	California.
4	Q. Who supervised that collection of that
5	evidence?
6	A. I don't know.
7	Q. And who did the actual work and
8	analyzing those 15 or 20 computers?
9	A. I don't know.
10	Q. If you could look at what's been marked
11	Rose Exhibit 2 and tell me if you've seen that
12	before.
13	A. I have.
14	Q. And that in fact for the record, for
15	the Court, is Mr. Neil Broom's report, the
16	plaintiff's computer forensics expert; true?
17	A. That's my understanding, yes.
18	Q. Could you go to page 21, again, in the
19	upper right-hand corner page numbers in the
20	report.
21	MR. SOUTHWELL: Can we pause for just a
22	second? Our computer is not connected to
23	the Livenote.
24	THE COURT REPORTER: Do you want to go

off the record?

	rage 00
1	B. Rose
2	MR. BOLAND: We can go off the record,
3	that's fine, sure.
4	(Discussion off the record.)
5	BY MR. BOLAND:
6	Q. So we are back on the record.
7	If you could just look at page 21 of
8	Mr. Broom's report.
9	Are you on that page?
10	A. Yes, referenced by the top-line number,
11	I believe they are the same.
12	Q. Do you see in the second full paragraph
13	Mr. Broom discusses the dimensions of the scanned
14	documents that would have been needed to create
15	the TIFF images attached to the Kole e-mail? Do
16	you see that description of the size?
17	A. I see a description of the dimensions
18	of the scanned documents, yes.
19	Q. Right.
20	The dimension dimensions he calculated
21	are 2.4 by 3.2 inches in size; correct?
22	A. That's what he states.
23	Q. Do you have any different opinion on
24	what size of a document would be needed to be

scanned to generate the size of the dimensions

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## B. Rose

for the TIFF images that you found? Do you
disagree with his calculation of that size?

- A. Would you repeat that question?
- Q. Do you disagree with his calculation of 2.4 by 3.2 inches in that paragraph?

MR. SOUTHWELL: Are you talking about -- object to the form. Are you talking about his calculation of the TIFF file?

MR. BOLAND: Yes.

- A. As I understand it, that's the dimensions he calculated for the TIFF images.
- Q. That's the dimensions he has -- well, I'm just asking you if you disagree with that calculation in that paragraph.

Take your time to read that paragraph and tell me if you disagree with the calculation that he has there.

A. I think that paragraph is ambiguous as to what scanned documents means. I don't know whether he is referring to the scanned images themselves as they appear on the computer or whether he is referring to the dimensions of the pieces of paper that were scanned at some point

1	B. Rose
2	to create the TIFF images.
3	Q. Well, in that paragraph well, let's
4	back up.
5	The TIFF images as they appear on your
6	report, or Exhibit 1 that I have shown you, let's
7	put it that way, Exhibit 1, are much smaller than
8	an 8-1/2-by-11 piece of paper; true?
9	We looked at them earlier.
10	MR. SOUTHWELL: Objection. You didn't
11	look at the one that was filed. You are
12	looking at your printout. The one that's
13	filed is not that small.
14	Q. I'm talking about Exhibit 1 that I
15	showed you.
16	MR. SOUTHWELL: That's your printout of
17	Exhibit 1, that's not what it looked like
18	when it was filed.
19	MR. BOLAND: Fair enough.
20	Q. I am saying, on Exhibit 1, the size of
21	that image
22	MR. SOUTHWELL: You're on Mr. Boland's
23	printout of Exhibit 1
24	MR. BOLAND: I am not deposing you,
25	Alex, I'm just asking him to look at the

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1	B. Rose
2	exhibit.
3	MR. SOUTHWELL: You seem to be implying
4	that the actual exhibit in the record was
5	small.
6	MR. BOLAND: Whatever I'm implying,
7	though, you can't coach the witness.
8	MR. SOUTHWELL: I'm just trying to get
9	a clear record about you're talking about.
10	MR. BOLAND: And I am making very
11	clear.
12	Q. Exhibit 1, which we looked at before,
13	has an image in it of page 1 of the TIFF?
14	A. Correct.
15	Q. And the image in that exhibit that's
16	all I'm talking about, is that Exhibit 1 makes
17	that image is much smaller than an $8-1/2-by-11$
18	piece of paper.
19	A. The image in the printed copy you've
20	handed me that we've looked at in Exhibit 1 is
21	smaller than 8-1/2 by 11, correct.
22	Q. And the physical did you do a
23	measurement or did anyone from Stroz Friedberg
24	measure the dimensions of the TIFF images that

you found?

	rage 09
1	B. Rose
2	A. Not that I know of.
3	Q. Do you have any reason to disagree with
4	Mr. Broom's calculation that the dimensions of
5	those TIFF images are what he puts in paragraph 2?
6	A. I don't have any information to
7	evaluate that calculation.
8	Q. And then in paragraph 4 of that same
9	page Mr. Broom again calculates that the
10	resulting dimensions of the TIFF file are about
11	30 percent the size of a regular piece of paper.
12	Do you see where he says that?
13	A. Are you referring to the fourth
14	paragraph?
15	Q. Yes, fourth full paragraph.
16	A. Let me read it.
17	Q. Sure.
18	A. Okay, I've read it.
19	What's your question, again?
20	Q. Do you have any reason to disagree with
21	his calculation there that the physical
22	dimensions of the TIFF images you found or your
23	team found are about 30 percent the size of a

Well, as I understand it, what he's

regular piece of paper?

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## B. Rose

saying is he took an 8-1/2-by-11-inch piece of paper, he then put it on a copier, copied it at 30 percent the size of the original and then scanned that with the scan area set to 2.4 by 3.2 inches and the resulting files were 945 kilobytes and 123 kilobytes.

- Q. Did you look at the metadata related to the TIFF images attached to the Kole e-mail?
  - A. Yes.
- Q. And isn't it true that that metadata includes the dimensions of the image?
- A. I don't specifically recall, but it could.
- Q. And do you have any reason to dispute Mr. Broom's reading of that metadata that he, from where he derived those dimensions?
- A. Again, I don't have any information in my possession right now that I could evaluate his conclusions one way or the other.
- Q. And you -- the version of this report that was actually -- I'm sorry, looking at Exhibit 1 again that I showed you --
  - A. So you are referring to our report?
  - Q. Correct. Well, Exhibit 1 there.

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Do you agree or not that the size of that TIFF image as it appears in Exhibit 1, is that different than the size of that TIFF image as it appeared in the report you filed with the Court?

- 7 A. I don't know.
  - Q. Did you or anyone from Stroz Friedberg magnify the TIFF image, magnify it and print it as an exhibit to your report before you filed it?
    - A. Not that I recall.
  - Q. The TIFF images attached to the Kole e-mail have -- it's true they have the file names Scan0001.tif for the second page of the contract; true?
  - A. I would have to refresh the report. My recollection is that Scan0001 is in fact the first page of the report.
  - Q. If you could grab your report there, do you see -- I'll get you there quickly.

Let's go to page 19 of 102 in the upper right-hand corner, do you see that table that's in the middle of page there, it has a blue top line?

25 A. Yes.

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### B. Rose

- Q. So does that refresh your recollection as to the page 1 of the StreetFax contract being file name Scan0002.tif?
  - A. Again, let's -- I don't want to confuse the issue here.

What you are referring to is a table that has the subject so that it was denominated by the sender, Paul Ceglia, as page 1 of 2 for StreetFax contract and what was attached to that was Scan0002.tif. In fact, if you look at the image, that is in fact a copy of page 1 of the contract, in other words, it is a misdescription in the subject line and they were sent out of order, but the names are in fact accurate in terms of 1 and 2 being -- 1 being the first page of the contract and 2 being the second page of the contract.

- Q. And that file-naming convention there appears to be a default file name that a scanner would use or scanner software, let's put it that way?
  - A. Yeah, it's consistent with that.
- Q. Did you find any evidence in your analysis different than that that indicated

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#### B. Rose

2 that's not a default file name from software?

A. I don't know what we would find in a forensic analysis of the Ceglia media that would show us what the default naming scheme for a particular scanner was; that is a typical default naming convention for scanned documents.

MR. SOUTHWELL: Mr. Boland, if I may interrupt, attached as Exhibit F and G to the report are the scans that go along with it. I just want to make -- I just want to make sure it's clear. Maybe you are under the misapprehension about the 002 whether it is the first page or second page.

MR. BOLAND: No, I'm fine. Thank you.

- Q. So let's continue on with this table here, Scan0002.tif, was that file scanned, was that the earliest of the two pages that was scanned, based on your report?
- A. Yes, so that -- well, I should say what we know is that that would have been the one that was first created on the Seagate hard drive.
- Q. And then the Scan001.tif was created later?
  - A. That's correct.

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#### B. Rose

- Q. Now, in your experience with default
  file names of scanner software, wouldn't you
  agree with me that if you scan four different
  jobs, the scanner software by default is going to
  continue to count forward and not backward?
  - A. Generally.
  - Q. And yet here we have the earlier scanned image having a higher number than the later scanned image, as you just testified; correct?
  - A. I don't believe I testified -- I'm sorry, what was your question?
  - Q. The file name Scan0002 was created on the hard drive before the file name Scan0001, you just testified to that; correct?
    - A. That's correct.
  - Q. So if they were scanned, how did that -- if they were scanned onto that hard drive, that's one way they could have gotten on to that hard drive; true?
  - A. That's one possible way they could have gotten on the hard drive.
  - Q. So how would that happen? If hypothetically they were scanned onto that hard

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#### B. Rose

drive, how would that scanner have been counting backwards?

- Α. The scanner would not have to have been counting backwards, so there are a couple of possibilities; one is that they were copied to the hard drive in a different order than they were scanned so that scan 2 was the second scan but it was copied to the hard drive first, in other words, not a direct scan. It's also certainly possible that when you put something into a scanner that the first item to be scanned would be the second page; right? Scanners scan things depending upon how you feed documents in, and it is certainly possible to feed documents in in a backwards order, so it is not the scanner counting backwards, but it's the way in which the user scanned it.
- Q. And what evidence did you find in analyzing the Ceglia media of either one of those two things happening?
- A. I don't think we found any evidence as to the order of scan, of direct scanning, right, or of how a user was feeding documents into the scanner. I mean, it seems clear -- the only

1	B. Rose
2	thing we can say from the evidence is I would
3	agree that it appears as if the second page of
4	the contract was scanned first.
5	Q. Well, and it's obvious from your
6	analysis that the file name Scan0002 was created
7	first as well?
8	A. What do you mean by created?
9	Scan0002 was created first on the
10	Seagate hard drive.
11	Q. Yes. And then the Scan0001 was created
12	second on the Seagate hard drive?
13	A. Yes. Which could be a function of them
14	just being copied in that order.
15	Again, I'm not offering an opinion as
16	to, you know, the origination of the document,
17	but rather, what I can tell you from the metadata
18	associated with the creation dates of the files
19	is what order they were copied to that computer in.
20	Q. Let's ask about those creation dates
21	for a second.
22	The creation dates associated with
23	those two TIFF image files, are those accurate?
24	A. I believe so, yes.

Based on what?

Q.

### B. Rose

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- I think that was the time recorded by Α. the computer and it appears to be an accurate time.
- 0. What are all the facts you have that those dates are accurate, the creation dates of those two TIFF images are accurate dates and times? Can you list for me the facts that support that conclusion?
  - Α. Sure.
- So we have the creation date of the files, right, so -- and let me refresh my recollection of the report to give you the exact creation dates.
- So you have an initial creation date of approximately 10:37 for the first e-mail, which again contains the second page of the contract, so that was 10:37 a.m.
- You then have that being sent out via e-mail and an initial time being appended in the Internet headers by the Adelphia servers which is immediately following which is consistent evidence that in fact that time setting on the computer is correct because then you're dealing with a consistent time set by an independent

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#### B. Rose

2 server.

You then also have times appended by two servers at Sidley & Austin, including the intermediary server and the final server receiving it.

All of those which are independent of each other all indicate consistent times, so in fact I think based on that evidence we can conclude that in fact the creation and the sent time of the e-mail on the computer is the same.

I will also say that you also have the e-mails then being forwarded on by Mr. Kole shortly after again with a consistent time, so all of those times appended by servers that are independent of this clock setting demonstrate this time is accurate.

- Q. So it's those, the Adelphia e-mail server is one factor that confirms this time in your mind?
- A. You have the fact that the system clock has recorded the time and then -- so look for evidence outside of the system clock, right, correct, the first piece of evidence I would look to is the Adelphia server, which is the first

	Page 99
1	B. Rose
2	server it hit after being transmitted.
3	Q. And then the server at Sidley & Austin?
4	A. Two servers at Sidley & Austin.
5	Q. So two e-mail servers?
6	A. Correct.
7	Q. So three e-mail servers now, Adelphia
8	and two at Sidley Austin, those help bolster your
9	confidence in the creation date of the two TIFF
10	images?
11	A. Correct.
12	Q. Anything else?
13	A. I think that's it.
14	Q. Without those e-mail servers,
15	hypothetically, say you had no evidence of e-mail
16	servers at all, would you still be confident in
17	that creation date, that time being accurate?
18	A. I mean, that's a complete hypothetical,
19	since I have those e-mail servers, so it's a
20	little hard to evaluate that outside the context
21	of having those e-mail servers, which I think
22	clearly demonstrate the times are correct.
23	If all we had was the system clock,
24	which is not the case here, I would say that, you

know, we would look for evidence of system clock

	Page 100
1	B. Rose
2	manipulation.
3	Absent that, I think, you know, we
4	would proceed as if it were the correct time,
5	but, you know, your confidence of not having all
6	of those external factors would be much less than
7	it is when you have external evidence that's all
8	consistent with the time.
9	Q. Well, what about okay.
10	And you've been an expert in other
11	cases; right, an expert witness?
12	A. I have not been an expert witness in
13	other cases.
14	Q. This is the first time you have ever
15	even sat for a deposition?
16	A. Well, I have sat for a deposition
17	before.
18	Q. Have you ever been asked hypotheticals
19	at those depositions?
20	A. Yes.
21	Q. Okay.
22	So you know that's a fair question for
23	experts, hypotheticals?

So the hypothetical I asked you was if

Α.

Q.

Yes.

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### B. Rose

- the three e-mail servers didn't exist, none of that data existed, it's fair to say you'd have less confidence in the creation date of those two TIFF images; true?
- A. I mean, again, your hypothetical asks
  me to discard the servers, it doesn't -- I mean,
  we would look for other, you know, other evidence
  outside of that.

Assuming the only thing I have -- maybe this is your hypothetical -- the only thing I have is the time appended by the computer itself --

- Q. Yes, assume that.
- A. -- would I be as confident as I am in a case where I also have consistent evidence from external servers?

No, I would not be as confident.

- Q. And if you found evidence of a system clock being manipulated along with only having the date appended to that file, would you be even less confident in the accuracy of that creation date?
- A. I think that would depend on the system clock manipulation and our evaluation of how it

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#### B. Rose

would have affected that particular e-mail.

These are all very context -- the problem with the hypotheticals is they are all very contextual, so it really depends on the other evidence, you know, in terms of if I have a system clock manipulation that appears to have impacted that time, I wouldn't be confident in it at all.

- Q. How would you know if a system clock manipulation affected a particular file's creation date?
- A. Well, if you -- I mean, if I can show that at the time the file was created on the computer the system clock was backdated, that would be one way.
- Q. Are you aware that Mark Zuckerberg -related to the TIFF images attached to the Kole
  e-mail, your expert opinion in that report was
  that that is the authentic contract between the
  parties; true?
- A. The TIFF images, the StreetFax contract, yes.
- Q. And you are aware that Mark Zuckerberg has never offered a declaration in this case

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### B. Rose

agreeing with that position, that that is the authentic contract between the parties?

- A. I am not aware one way or the other of what Mr. Zuckerberg has offered in the way of declarations.
- Q. Are you aware that none of the other experts in this entire case have offered an opinion that the StreetFax contract is the authentic contract between the parties?
  - A. I don't know that one way or the other.
- Q. Now, we talked a little bit earlier about rootkits and malware; you remember I was discussing that?
  - A. Yes.
- Q. And rootkits can be used by hackers, you would agree?
- A. Rootkits can be used by hackers, I would agree with that.
- Q. Can hackers take over the operation of a computer, is that one of the things hackers have the ability to do?
- A. It depends, again, on the specific circumstances. I mean, if they have the proper access and, you know, that the software which

1	B. Rose
2	would allow that kind of control is in place,
3	yes.
4	Q. Does that kind of software exist for
5	them to do that, for hackers to do that?
6	A. Does it exist in the world?
7	Q. Yes.
8	A. Yes.
9	Q. Can hackers take over e-mail programs?
10	A. What do you mean, take over e-mail
11	programs?
12	Q. Intrude on someone's computer and send
13	out e-mails on their behalf.
14	A. Yes.
15	Q. Can hackers intrude on someone's
16	computer and deposit files onto that person's
17	computer?
18	A. There's no questions about what hackers
19	are capable of doing in the world today, yes.
20	Yes.
21	Q. Well, let's talk about back in 2004,
22	then.
23	Would you amend any of my answers if I
24	asked you those questions and said in 2004 can a

rootkit be used by a hacker, is there a different

	Page 105
1	B. Rose
2	answer?
3	A. I think the same general answer would
4	apply to 2004.
5	Q. Very well.
6	Did your work on this case cause you to
7	learn that anyone involved in this case has some
8	ability for computer hacking?
9	MR. SOUTHWELL: Object to the form.
10	A. Could you rephrase that?
11	Q. You analyzed a bunch of computers in
12	this case; right?
13	A. Right.
14	Q. Some were provided or produced by Paul
15	Ceglia; correct?
16	A. Correct.
17	Q. Some were produced by Mark Zuckerberg?
18	A. Correct.
19	Q. In part of your analysis of those
20	computers did you learn that anyone involved in
21	this case has hacking ability?
22	A. Nothing in my analysis indicated that
23	anyone involved in the case had hacking ability,
24	no.

Are you aware from things outside of

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#### B. Rose

- your analysis that Mark Zuckerberg has some proficiency as a computer hacker?
- A. I am aware in a general sense that Mr. Zuckerberg has been accused of some actions which were called hacking in the past; I do not have any information regarding his proficiencies or his ability to do that.
- Q. Are you aware that his company Facebook has a hacking contest every year amongst employees?
  - A. No.
- Q. Are you aware that Mr. Zuckerberg has hired renowned hackers to be employees?
- A. I'm not aware of that one way or the other.
  - Q. Did you look for evidence of hacking on Paul Ceglia's parents' computer where these TIFF images supposedly originated from?
    - A. We did not.
  - Q. But even if you looked at it, is it possible that a hacker who accessed a computer could leave no trace of that intrusion? Isn't that possible?
    - A. It is theoretically possible for a

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### B. Rose

hacker to leave no trace.

- Q. Now, the StreetFax contract that we've been talking about you found on two different pieces of media; correct? I think you say that at the top of 15, page 15 of Exhibit 21?
  - A. Yes, that's correct.
- Q. And let's just be clear for the Court, because later on on that page -- correct me if I'm wrong -- you say, you clarify that the StreetFax contract was found on a hard drive that you analyzed and a forensic copy of that same hard drive that you analyzed.

Is that a fair statement?

A. I don't think we're clarifying anything. I think we're being very clear about the pieces of media we analyzed. The StreetFax contract was on two different hard drives. I think we're very clear on that very page; right? I think actually in the first paragraph in the second sentence that in fact one is a copy of a hard drive that we made and was produced to us in July and the other, again, was a copy we made of StreetFax in July that we determined upon analysis was a actually a forensic image of the hard drive, so

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we have the Seagate hard drive that's produced to us, we have a Western Digital, we determined the Western Digital hard drive was in fact a forensic copy that had been previously made of that, and I think we're very clear about that in the second sentence.

- Q. So the forensic copy was that physical hard drive that had that forensic copy on it, that was not produced by Paul Ceglia, that was a copy made of something he produced; true?
- A. Are you referring to the Western Digital hard drive?
- Q. I'm referring to the forensic copy that you mentioned on page 15.
  - A. Okay.

The forensic copy was on a Western

Digital hard drive that was produced to us in

Chicago by Mr. Lake as part of the Ceglia media.

To me, that's produced by Paul Ceglia, so I would say that both of them in fact were produced to us by Paul Ceglia.

Q. Now, the computer where these TIFF images were found, did you read Paul Ceglia's father's declaration that was filed in this case

	Page 109
1	B. Rose
2	that was document number 419?
3	A. I may have read it at one point in
4	time, I don't have a specific recollection of
5	that.
6	Q. Well, let's assume, since you don't
7	have a recollection of that, that Mr. Ceglia's
8	father declared that his son, Paul Ceglia, the
9	plaintiff, never had access to the computer on
10	which the Kole e-mail originated, let's assume he
11	says that.
12	A. Rather than assuming it, can we
13	actually look at a copy of the
14	Q. This is a hypothetical for now.
15	Let's just assume he said that, which
16	I'll represent to you he did say that in document
17	419, but I'll let you answer the question with an
18	assumption, you don't have to accept the fact as
19	true, we'll just do the hypothetical.
20	Would that change your opinion that
21	Paul Ceglia sent those e-mails if his father
22	declared under the penalty of perjury that Paul
23	Ceglia never had access to that computer?
24	MR. SOUTHWELL: Mr. Boland, are you

referring to document 419?

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MR. BOLAND: That's what my notes say, yeah.

MR. SOUTHWELL: Because that's not what it says. It doesn't say anything about he never had access. It asserts my son Paul Ceglia never used the computer, which is contrary to some earlier declarations he's provided, but --

MR. BOLAND: Let's clarify that.

Q. Let's just say hypothetically Mr. Ceglia does offer a declaration of the father, Carmine Ceglia, saying that Paul Ceglia never had access, never used, never got anywhere near that computer.

Would that declaration change your opinion regarding your conclusion that Paul Ceglia sent those e-mails?

- A. Based on the forensic evidence, I think it is clear that Paul Ceglia sent those e-mails. I would not regard a statement like that from Mr. Ceglia to be credible in light of the evidence that's been uncovered in this case, so no, it would not change my opinion.
  - Q. And how did, in your opinion, based on

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# B. Rose

your forensic analysis, how did Paul Ceglia send this e-mail, meaning was he physically at the computer and hit the keys on the keyboard to send it or did he somehow remotely access the computer and then send the e-mail that way?

- A. Again, given the fact that the files were copied physically to the hard drive, I would think the most likely explanation is in fact a physical access to the computer, but, you know, I can't eliminate remote access as a possibility.
- Q. So you're saying one's more likely? Is that your --
  - A. I believe so.
- Q. And define the term "likely." What does that mean? How did you rule out the likelihood of remote access?
  - A. Define likely?

I think if I had to from -- if you asked me do I think he had physical access or remote access, I think there's a greater probability, meaning more likely that he had physical access, that's likely.

Q. And what's the forensic evidence that supports that opinion?

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A. Again, I think the copying of the scanned image to the hard drive immediately beforehand to me is more consistent with physical access, but, again, you know, you're asking whether remote access is possible? Yes.

And I should say, you know, I mean, I'm talking remote access theoretically. You know, whether under the circumstances and the capabilities that, you know, Adelphia had at the time in terms of whether it offered Web access and all of that, that's a specific question as to whether in these circumstances remote access is possible, I don't know that.

As a general matter, I can't eliminate remote access as a possibility.

- Q. Did your investigation reveal where Paul Ceglia resided at the time that e-mail was sent?
- A. Our forensic analysis of the Ceglia media did not reveal where Mr. Ceglia resided at the time this was sent.
- Q. And did it reveal where Paul Ceglia's parents' computer was physically located at the time those e-mails were sent?

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#### B. Rose

- A. There is some evidence that in 2010 that IP address was registered to the Buffalo, New York, area, so I think there's some support for the fact that the computer resided somewhere in upstate New York, but in terms of drawing a definitive conclusion about where that resided, I can't do that from the forensics.
- Q. Well, you'd agree with me that your conclusion about -- again, another hypothetical -- your conclusion about Paul Ceglia having most probably physical access to the computer to send the e-mails, if he resided outside the state of New York and was physically outside the state of New York at the time those e-mails were sent, the likelihood of him being the one who sent the e-mails is very low, since he wasn't physically accessing the computer at that time; true?

MR. SOUTHWELL: Object to the form.

A. I completely disagree with that.

I mean, the question is not where did he reside, the question is where he is at a particular point in time.

I reside in New York, I visit my

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# B. Rose

parents frequently in Indiana, so I don't think -- and I use their computer when I'm there, so I don't think you can possibly conclude from where somebody purportedly resides that there's a low likelihood they were at their parents' house or at a location where their parents resided at any particular point in time.

Q. Well, let's not use reside. I'll be more precise.

What if hypothetically on the date and time these e-mails were sent he was not physically in Buffalo, New York, he was in another state, then what's the likelihood he sent the e-mails then, what's the probability he was the one who sent the e-mail?

A. I wouldn't want to put a number on it.

Again, you know, remote access is possible. I think it is more likely explained by physical access, but in terms of if Mr. Ceglia was in a particular location, what's the likelihood he sent the e-mails, I think it is absolutely clear from all of the evidence in this case, from the StreetFax e-mails themselves, from the attempt to manipulate the Work For Hire

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# B. Rose

document, attempt to create fraudulent Work For Hire documents, from all the manipulation of the computer we see in this case I think it is absolutely clear that the StreetFax e-mails, that those e-mails are genuine, were sent by Paul Ceglia and contain the authentic contract, so I think the probability that Mr. Ceglia sent those, regardless of where he was at any particular point in time, is exceedingly high.

- Q. So it's your testimony that if at the precise moment those e-mails were sent he was in Florida or New Mexico when these were sent from New York, same probability he sent them as if he was in Buffalo?
- A. His location would not change my assessment that Paul Ceglia sent those because I think the evidence is absolutely overwhelming.

The only thing that would do would change my conclusion about the form of access to the computer, it would not impact my determination as to who sent it at all because, again, the forensics in this case is absolutely overwhelming.

Q. Outlook Express, which was the e-mail

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# B. Rose

- account from which this was sent, has the capacity to synchronize with a Web-based account; true?
- A. As a general principle, yes, that's true.
  - Q. Do you find any evidence that this

    Outlook Express account was unable to synchronize
    with a Web-based account?
  - A. No. Again, you know, I don't know the specifics in terms of versioning and how and what particular data was syncing, you know, those can vary across time, so I don't know how this version of Outlook Express operated in conjunction with an Adelphia account, but I have no reason to believe that there wasn't some syncing capability because that's generally something that Outlook Express offers.
  - Q. And when Outlook Express synchronizes, when it's set up that way, with an external e-mail account, it can synchronize and pull down everything, the inbox, the deleted files, attachments, et cetera; true?
  - A. I think it depends, again, on how it's set up to sync. There is certainly a possibility

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### B. Rose

that -- and by deleted items I assume you are talking about deleted items that still physically reside in some kind of trash bin or something.

- Q. Yes, that is possible.
- A. There are certainly programs that sync everything, there are programs that sync only the inbox, there are programs that sync the inbox and the sent mail, there are programs which sync everything, it really depends, and a lot of programs can be configured in different ways, so, I mean, as a general matter, if you're asking me is it possible, do there exist programs in the world that allow you to sync the entire contents of a Web mail account to a program like Outlook Express, yes, that's true.
- Q. And I'm asking about Outlook Express specifically, does it have the capability to synchronize with a Web-based e-mail account?
- A. It does, again, but, you know, what items specifically are synced I think could vary from version to version and from configuration to configuration, so as to this version of Outlook Express, I don't know.

As a general principle, yes, Outlook

### B. Rose

Express does sync with Webmail accounts.

Q. So if I have an Outlook Express account and I have it synchronizing with my Web-based account and I'm nowhere near my office computer which has Outlook Express on it, but I'm here at the offices of Gibson, Dunn and I get online to my Web-based e-mail, the one that's synchronizing, and I send an e-mail out with a couple of attachments.

11 Are you with me so far?

- A. Yes.
  - Q. Okay.

And I go back to my office two days later and turn on my computer and Outlook Express is configured to synchronize my entire inbox and sent e-mails with my Web-based account.

You'd agree with me that that function would pull down from my Web-based account an e-mail that I sent here at Gibson, Dunn along with the attachments that I sent?

A. So your hypothetical is if you from Gibson, Dunn sent two e-mails using your Webmail account and then you returned to your offices and opened Outlook Express would it sync?

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### B. Rose

I mean, I think that would depend on how it was configured. My guess would be you would actually probably have to access the Webmail account being synced, and I don't know that there's --

- Q. But depending on how it was configured, that could happen?
- A. Again, I think if you went and you accessed your Webmail account and it was set up to sync, yeah, I would think that certainly would be possible.
- Q. Let's talk about the -- you are familiar with the getzuck e-mail account, it's in your report?
  - A. Yes.
- Q. And you claim there that Mr. Ceglia deleted e-mails from that account.
- A. Can I go to the part of the report where we discuss that?
- Q. Let me ask you, do you recall that conclusion, that he deleted e-mails from the account?
- A. I recall the conclusion that e-mails had been deleted from the account, it is in my

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# B. Rose

recollection that we had evidence that that account had been in use through 2011 and that there were no e-mails existing in the account prior to sometime in January, so the logical conclusion is that something has been deleted.

- Q. Now, by the phrase you just used, the account was in use, you mean the account was opened at a certain date, that's what you're calling in use?
- A. That's not what I'm calling in use.

  What I'm calling in use, I'm saying the account was actually used, not just opened.
  - Q. And used for -- in what way?
- A. I would have to refresh my recollection with the report for the specifics. I know it was used -- it was used in some way in connection with a receipt of something from Facebook or something like that, we found evidence of that, and so it was evidence of actual use and not just the fact that the account was opened.
- Q. Let's look at page 52 of your -- of the Exhibit 21 you have in front of you --
  - A. 52, the top page?
- 25 Q. Yes.

1	B. Rose
2	And I think section D is where you talk
3	about deletion of data from the getzuck Webmail
4	account.
5	Do you see that?
6	MR. SOUTHWELL: Are you referring to
7	Exhibit 1?
8	MR. BOLAND: What did I say?
9	MR. SOUTHWELL: You said Exhibit 21.
10	MR. BOLAND: I'm sorry, Exhibit 1.
11	Thank you for the correction.
12	MR. SOUTHWELL: And we're on page 52 in
13	the upper right?
14	MR. BOLAND: Page 52.
15	A. Yes.
16	Q. So the activity that you found
17	correct me if I'm wrong was that the Ceglia
18	media was used to read an e-mail on April 18,
19	2011.
20	Do you see that phrase there?
21	A. Mm-hm.
22	Q. And that was an e-mail received from
23	Facebook, actually, on the activation of a
24	Facebook account; right?
25	A. Yes.

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# B. Rose

- Q. And do you know how Facebook accounts get set up?
  - A. Not specifically.
  - Q. Do you know if Mr. Ceglia had to send an e-mail to someone at Facebook to set up that account, if you know?
    - A. I don't know.
  - Q. So what you do know is an e-mail was received from Facebook, so there's one; right?
    - A. Yes.
  - Q. And there's no evidence you found of any e-mails being sent from that account; true?
  - A. I believe the evidence we have, again, is the evidence that's outlined here, that that e-mail address was used to receive an e-mail related to the Facebook account, yes.
  - Q. And so my question is, no evidence that e-mails were ever sent from that account; true?
  - A. Well, I don't know whether that's the case because I don't know whether in fact the post-January 28, 2012 e-mail included sent e-mails or not.
  - Q. I'm just saying your report doesn't show any evidence that he ever sent an e-mail

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# B. Rose

from that account.

True?

A. Again, that's not relevant to our report; right?

We received that e-mail data, we looked at it for only two things; one, we reviewed it for presumptively relevant materials that would be produced to you and then subsequently to Gibson, Dunn to pass privilege review.

We identified no such data in the existing data. We did know from an Internet analysis from the Ceglia media that in fact that e-mail was in use for the purposes of receiving an e-mail from Facebook in April 2011 and despite that there was no content for any of 2011 up to January 28th of 2012. That indicates to me the e-mail's been deleted. I don't know who deleted it, I don't know what the activity was that led to the deletion, I don't know how much data was received or sent prior to January 28, 2012.

Your question to me was do I have any evidence that it was used to send e-mail.

What I'm saying is it's possible that we have sent e-mail from after January 28, 2012.

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# B. Rose

- I don't know, because my only analysis of that media, of that data was to see whether there were presumptively relevant materials.
- Q. But I'm talking about your conclusion that my client did have e-mails in that account and he deleted them.

It's fair to say your report indicates that he actually had e-mails which he deleted from that account; true?

- A. Yes, based on the conclusion, again, that we have evidence it was in use and there's no e-mail.
  - Q. All right.
- Let's ask about the Harvard e-mail account of Mr. Zuckerberg.

You are aware that there are no e-mails at all in that account from -- related to Mr. Ceglia and Zuckerberg from, the earliest one being June 2003, you are aware of that, that's the earliest e-mail?

- A. I have not done a date analysis of that e-mail, no.
- Q. Well, your team worked to produce the e-mail that was provided us from that account;

1	B. Rose
2	true?
3	A. Correct.
4	Q. And were you aware that the e-mail that
5	your team produced using a variety of search
6	terms which included my client's name and
7	Mr. Zuckerberg didn't produce a single e-mail
8	between those two individuals until June of 2003?
9	Are you aware of that?
10	A. I am not aware of the content of that
11	production.
12	Q. All right.
13	Well, let's say that that's what
14	happened, okay, let's use a hypothetical.
15	Are you aware that the contract in this
16	case, the paper contract that's being disputed
17	has a signing date of April 28, 2003? Are you
18	aware of that?
19	A. Again, I don't think I've seen the
20	paper contract.
21	Q. Copies that you've seen.
22	A. Yes, the copies I've seen have a signing
23	date of that date.
24	Q. Okay.
25	And April is before June in the

	rage 120
1	B. Rose
2	calendar; right?
3	A. Well, April 2003 is before June 2003.
4	Q. Correct.
5	And would you agree with me, then, if
6	there are no e-mails that you were able to
7	recover, your team, from Mr. Zuckerberg's Harvard
8	account from April to June of 2003, that
9	Mr. Zuckerberg must have deleted them?
10	MR. SOUTHWELL: Objection.
11	Q. I am asking if that's your conclusion
12	based on that hypothetical, if there's no e-mails
13	from April of '03 when the contract was signed
14	between the parties and June of '03, which was
15	the first e-mail that we were provided, they must
16	have been deleted?
17	A. That would not be my conclusion.
18	Q. Very well.
19	But it is your conclusion that my
20	client had the getzuck e-mail account in use and
21	because there's no e-mails in it, it's been
22	deleted?
23	A. Excuse me
2.4	O Just let me finish the question

Excuse me, you keep misrepresenting

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1	B. Rose
2	what I said.
3	What I said was
4	Q. Sir, I'm asking the questions. I
5	didn't finish my question.
6	A. And I'm answering the question.
7	What I said was that this e-mail
8	account was in use prior to January 28, 2012,
9	there was data in there.
10	MR. BOLAND: I am going to object to
11	this entire answer. There's no question
12	pending. I'm going to object to everything
13	he is saying and ask that it all be stricken
14	from the record.
15	A. I absolutely was clear with you that I
16	can't say who deleted
17	MR. BOLAND: You know, if we need to
18	dial up the judge, Mr. Southwell, and ask
19	him to instruct the witness to answer
20	questions, I'll be happy to take a break and
21	do that.
22	MR. SOUTHWELL: He answered your
23	question. I'm looking at the transcript
24	right here, he answered your question.
25	Why don't you let him finish.

	rage 125
1	B. Rose
2	MR. BOLAND: I didn't finish my
3	question before he started speaking.
4	MR. SOUTHWELL: There was a question, a
5	question mark and then he proceeded.
6	Q. It's your position that Mr. Ceglia
7	deleted e-mails from the getzuck account?
8	A. It is my position that e-mail was
9	deleted from the getzuck account.
10	Q. So your answer is yes?
11	A. My answer is not yes.
12	Your question was my position is
13	Mr. Ceglia deleted the e-mail. I am being very
14	clear with you that my position is there was
15	e-mail in that account prior to January 28, 2012
16	that is no longer there, meaning that it was
17	deleted.
18	I'm offering no opinion whatsoever
19	let's be clear about this as to how that
20	e-mail was deleted or as to who deleted it, so
21	the answer to your question is no.
22	Q. How many e-mails were deleted?
23	A. I do not know what was deleted, I do

Again, what I know is that that account

not know what content was in that account.

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# B. Rose

was in use prior to January 28, 2012, we know it received at least one e-mail. There is no data in that account, so something has been deleted; I can't tell you who deleted it, I can't tell you what has been deleted because that e-mail is gone.

- Q. When were the e-mails deleted from that account?
- A. I cannot tell you that except to say that it was prior to January 28th of 2012.
- Q. Can a person set up an e-mail account and not ever send an e-mail using that account?
  - A. Yes.
- Q. What evidence do you have that Mr. Ceglia set up this account and actually sent e-mails out to someone?
- A. Again, the only evidence we would have is if the post-January 28, 2012 e-mail includes sent e-mail.

I don't have that information in front of me, I don't know whether that's the case or not. I don't have evidence right now that I can rely on to tell you that Mr. Ceglia set up that account and sent e-mail from it.

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# B. Rose

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Q. In your report you talk about a Hex editor.

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Do you recall that?

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A. I do.

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Q. And it's true that your analysis did not find -- well, let me back up.

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A Hex editor is a computer program?

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A. Yes.

10 11 Q. You did not find any evidence of a computer program in the category of Hex editor installed on any of the media that you analyzed?

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A. No. We found evidence of the use of a Hex editor, but you're correct, we did not find the actual Hex editor installed on the computer, which, frankly, is not surprising given that

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Q. And the anomalies that you found that you attributed to a Hex editor, is a Hex editor the only program that can create those anomalies, if you know?

people who use Hex editors generally delete them.

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A. Can I go to the page where we discussed the --

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Q. Very well.

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A. So, I mean, so I think it depends on

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### B. Rose

what anomalies you're talking about. I mean, I think what we discuss is the fact that there are six documents which I think, you know, including ones named test document, including ones which have the content that says I'm going to essentially test how the Hex editor worked, and it's not a direct quote, and I would give you the direct language, but it's been redacted from this report, that leads to our conclusion that in fact, you know, this is consistent with someone using a Hex editor to try to forge a document.

As to the second anomaly, which is is in this sfwebworkforhiremz.doc which is an anomaly in the metadata, depending on whether it was viewed through, you know, Metadata Assistant, which is a common tool we use, or a forensic program like EnCase.

I think, based on the evidence, the only reasonable conclusion is that this was the result of a Hex editor; whether that is the only possible explanation for that I don't know.

- Q. And what other explanations are possible?
  - A. I don't know.

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# B. Rose

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- Q. The Hex editor in this case you claim was used to manipulate metadata on a file; correct?

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A. In one instance.

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Q. Well, what was it used for in the other instance?

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A. It was actually used to create a fraudulent document, it was used to test how the Hex editor worked, it was used to essentially, I think, merge documents together to try to create a fraudulent document that appeared as if it was one document.

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I would say, frankly, that based on all the evidence that it was your client's attempt to manipulate the Work For Hire document and create a fraudulent document.

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Q. So the Hex editor was used to alter metadata is one of your conclusions; right?

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A. Yes.

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Q. What other ways can metadata be altered other than a Hex editor, or is that the only way, if that's what your testimony is going to be?

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A. Again, I think the anomaly we see here, which is it being -- it's not just manipulated

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### B. Rose

metadata, it's what we see, which is that when you view it in metadata assistant you essentially get no metadata.

When you view it in a forensic tool, what you see is the metadata, although it is interspersed with machine code. I think that particular circumstance -- I don't know that there is any explanation for that other than the use of a Hex editor, but, again, if you are asking me whether anything else is possible, I don't know whether there are any other explanations, I don't think there are any likely explanations given those circumstance.

Q. That's not my question.

What other ways can metadata be altered is my question, generally.

- A. I mean, there are programs which allow you to manipulate metadata.
  - Q. For example, can you list some of those?
- A. I don't know the names of the programs. I mean, there are some open source tools that do it, I know there are some software versions you can buy that allow you to do it, I don't know the names.

### B. Rose

- Q. How about if I copy files from my computer on a CD and give them to you and you copy them out of your computer at your office, can metadata change during that process associated with those files?
  - A. Metadata can change, yes.
- Q. And that's not intentional change, it just happened in that process, the hypothetical that I gave you?
- A. Are you talking about like an update of a creation date or an access date?
  - Q. Yes.
- A. That can happen through ordinary usage.

  This particular circumstance cannot
  happen through ordinary usage.
- Q. How did you rule out ordinary usage as not a possible cause of that, how did you rule that out?
- A. The ordinary update of a file -- I mean, you're right, if I have last 10 authors metadata and I go on and I change the document, I am going to now be the first last 10 author and one of the names is going to drop off, that is a common alteration if I am going to write the

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### B. Rose

document.

To have this, last 10 authors metadata with all of these question marks that essentially metadata assistant is returning me the idea that there's no metadata here, that's an anomaly, that's not caused by ordinary usage of a file, and the fact that I can now view it in EnCase Forensic and see what some of the metadata is, including the file path, that indicates to me a Hex editor was been used. That is not -- this pattern where metadata assistant cannot give me any metadata does not happen merely because we exchanged a file and somebody modified it.

- Q. So the only cause for that is a Hex editor is your opinion?
- A. I think the only reasonable explanation for these facts is that a Hex editor was used.
  - Q. That's not my question.

Is that the only way that that happened?

A. Again, I think I've answered this before. I don't know whether anything else is theoretically possible. I'm drawing a conclusion based upon the evidence I see. In this case I don't think there's a reasonable explanation for

	luge 130
1	B. Rose
2	this other than the fact that a Hex editor was
3	used.
4	Theoretically possible?
5	I don't know one way or the other.
6	Q. Those 15 to 20 computers of
7	Mr. Zuckerberg's that someone on your team
8	evaluated, was there evidence of Mr. Zuckerberg
9	using those computers to electronically
10	communicate with anyone?
11	MR. SOUTHWELL: Objection, calls for
12	speculation. He already said he was not
13	involved with that.
14	Q. If you know.
15	A. I am not aware one way or the other.
16	MR. BOLAND: Can we take it about a
17	10-minute break?
18	MR. SOUTHWELL: Are you close to being
19	done?
20	MR. BOLAND: I don't know. I'm going
21	to take a break and sort of assess where I'm
22	at.
23	MR. SOUTHWELL: We can go off the
2 4	record.
25	(Recess taken.)

	Page 137
1	B. Rose
2	THE VIDEOGRAPHER: The tape is rolling.
3	BY MR. BOLAND:
4	Q. Mr. Rose, we are back on the record.
5	I want to go back over a couple of
6	things that, just a couple of questions on a
7	topic or two that we already discussed.
8	Did your team your team evaluated 15
9	or 20 computers that Mr. Zuckerberg used
10	historically; right?
11	A. I don't know that I would it call my
12	team; Stroz Friedberg personnel did, yes,
13	correct.
14	Q. I'll be clear, Stroz Friedberg
15	personnel, right.
16	I am not going to ask you again, but we
17	already determined you don't know who actually
18	did the analysis or who supervised; true?
19	A. Correct.
20	Q. Did Stroz Friedberg rely on the
21	analysis of those computers in coming to the
22	conclusions in your report that you filed in this
23	case?

anything relevant on those devices so no, the

Well, we -- I mean, we didn't find

case?

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# B. Rose

2 answer is no.

- Q. If you had found something relevant on those devices would you have inserted it into this report?
- A. I don't know. I mean, you know, we were -- we were asked to look at the authenticity or inauthenticity of the document and to examine Ceglia media, so we had to consider how that fit into what the Court had asked us to do, but in general, if we had found something in there that I think, you know, was, it was relevant, I think we would have considered including it, certainly.
- Q. The Kole e-mail that we had some discussion about, is it possible that someone other than Paul Ceglia, physically possible that someone else other than Paul Ceglia could have sent that e-mail?
  - A. Is it physically possible?I suppose anything's possible.
  - Q. So the answer is yes, it's possible?
- 22 A. Yes.
- Q. I know you've concluded otherwise;
- 24 true?
- A. I think it's implausible, but it's

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#### B. Rose

certainly theoretically possible.

- Q. Have you ever in either your personal or professional work used the copy-and-paste function on some content on the Internet and then pasted into a document?
  - A. Yes.
- Q. And are you familiar with one of the common programming file formats for the Internet is HTML?
- A. Yes.
- Q. And when you've copied and pasted stuff from the Internet to a document has that process ever resulted in that content's formatting being different in the document from what it looked like on the Internet?
  - A. Yes.
- Q. In the conversation we had about the Hex editor, I need to be a little more precise in my question about one of the areas there.

Can you detail for me, list for me the computer forensics evidence that supports your conclusion that the person who used the Hex editor was Paul Ceglia?

A. Can you repeat that question? I'm

2 sorry.

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- Q. Yes. Let me clarify.
- A. Sure.
  - Q. I am aware from your report that you believe, at the very least, a Hex editor was used to manipulate some metadata.

Is that a fair statement?

- A. Yes.
- Q. It was used?
- 11 A. Yes.
  - Q. And you detailed the forensic evidence that you believe supports that opinion.

Now what I'm asking you is not the forensic evidence that supports that it was used, but what, if any, computer forensics evidence supports the conclusion that Paul Ceglia used the Hex editor?

And I'm saying forensic evidence.

A. Sure.

So the six documents that were created, their names, for instance, document created to copy out of test doc, that I think is very clearly a pattern to try to create a merged forged document. Whether that was done by -- I

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# B. Rose

think that was clearly done by someone with motivation to create a fake document. In this case the person with the motivation to create a fake document, the person with the greatest motivation is obviously Mr. Ceglia, who is attempting to rely on it to support a claim worth a tremendous amount of money, and whether it was actually Mr. Ceglia did that or somebody working in concert with Mr. Ceglia, I don't know, but I think it's somebody clearly with motivations to create a false document and in this case I think the person with the greatest motivation is Mr. Ceglia.

- Q. And how do you know what his motivation is?
  - A. How do I know what his motivation is?
  - Q. How did you determine what his motivation is?

You just talked about his motivation.

How did you determine that?

- A. My understanding is he claims to, based on a contract, own half of Facebook. That seems like clear motivation to me, but --
  - Q. Clear motivation to do what?

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### B. Rose

A. He's made a claim for half of Facebook, and clearly your motivation there is money, right? Facebook's a tremendously valuable organization. I think the motivation is money.

The motivation, then how do you get a claim?

Well, he can't base it on the real document, the StreetFax contract, because that doesn't mention Facebook, so I think the motivation to create a false document is to try to create something which is not real and didn't exist in 2003 and is not a contract between Mark Zuckerberg, but which appears to be a contract on which you can support a claim.

I mean, your motivation, your ultimate motivation is money. The actions taken are, you know, all of this, it's not just the Hex editor, but all of this evidence of manipulation of documents and fraud in an attempt to support that claim.

Q. But you don't have any opinion -you're not challenging any of the plaintiff's
experts' opinions that the paper, two-page paper
document is real?

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1	B. Rose
2	A. I'm limiting to digital forensics, I
3	haven't considered the paper at all, I have no
4	opinion about that.
5	Q. You are not challenging any of their
6	claims?
7	A. I have no opinion about it whatsoever.
8	Q. Are you challenging any of their claims?
9	A. I have no opinion about it.
10	Q. The question is not whether you have an
11	opinion.
12	Do you have any evidence to challenge
13	their claims?
14	A. I'm not challenging or not challenging
15	their claims, I have no opinion about their
16	claims.
17	Q. Now, you talk about my client's
18	motivation sort of is outside the realm of
19	computer forensics, it seems to me, wouldn't you
20	agree?
21	His motivation doesn't come out of
22	metadata or applications or whatever, that
23	doesn't communicate someone's motivation?

And you are speculating about his

I think that's correct, yes.

Α.

Q.

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# B. Rose

2 motive?

A. Well, I'm not sure I understand that question.

I mean, I think -- I think it is a clear motive. Whether that's actually what's motivating him, I mean, I think it's a fairly clear motive, but I'm not inside his head, if that's your question.

Q. If his paper contract, which you have no opinion about -- let's have a hypothetical -- if the paper contract's authentic, then you'd agree with me he doesn't have a motive to fake electronic documents because he's got a real contract.

Again, it's a hypothetical. If the paper contract is authentic, he has no motive to create electronic documents?

A. So hypothetically, if his paper contract is authentic, I would say that's correct, given the forensic evidence that in fact all of this fraud was attempted, I would say, you know, that the corollary to that is it seems clear that the paper contract is not the genuine contract.

#### B. Rose

- Q. But my question is if you assume it is, so we're not going to talk about it not being authentic, we are assuming it is authentic, then he has no motivation to manipulate electronic files; right?
- A. I would say that no one has the motivation to manipulate the files and we wouldn't see it on here, but we do, so, I mean, that tells me the contract's not real.
  - Q. Let's talk about motivation.

If the paper contract is real you then would agree with me Mark Zuckerberg has a motivation to do something to call into question the authenticity of that paper document. Don't you think he -- he would lose a lot of money too if the paper contract is authentic, wouldn't he?

MR. SOUTHWELL: Object to the form.

- A. I certainly -- I mean, I guess I don't know personally what he would lose versus, you know, Facebook, who owns what in terms of their -- but I assume it would have a very detrimental financial impact on him where he would have to give up half of Facebook.
  - Q. So my point is about the motivation

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#### B. Rose

comment. If the paper contract's authentic then Mr. Zuckerberg, just like Mr. Ceglia in the opposite conclusion, has a motivation to try and fake evidence to prevent that contract from being enforced; correct?

A. True. And I do think if we had seen fraud going the other way, right, that the motivation might play in. If we'd seen, you know, that evidence that the StreetFax contract was in fact apparently a fraudulent document, I would agree with you that, you know, maybe we would factor in the motivation and that my conclusion would be that if the StreetFax contract that we found, if the forensics indicated it was a fake document, I think a logical conclusion would be Mr. Zuckerberg faked it.

That's not what the forensics shows.

The forensics clearly shows that the StreetFax contract is authentic, there is overwhelming evidence that there's been fraud perpetrated here both in the creation of purported e-mails and the Work For Hire contract relied on by your client.

The same holds true there. Our

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# B. Rose

conclusion is that the likely person who would engage in that kind of fraud is Mr. Ceglia.

Now, whether any specific action was actually taken by Mr. Ceglia or was done by someone, you know, sharing the same motivation or working in concert with him such as use of the Hex editor, again, I can't pinpoint an individual for you, but I can say that, you know, I think, again, Mr. Ceglia is a likely candidate just as if the forensics had cut the other way, Mr. Zuckerberg would be a logical candidate, but, you know, it didn't.

- Q. Are you aware that Mr. Zuckerberg was provided a signed copy of the agreement he entered into with Mr. Ceglia at the time it was signed?
  - A. I am not.
  - Q. Okay.

Are you aware that there are e-mails missing from Mr. Zuckerberg's Harvard e-mail account from periods of time where he was in communication with Mr. Ceglia?

- A. I am not.
- Q. And the two TIFF images that make up

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# B. Rose

the StreetFax contract are digital images.

We've already talked about that; right?

- A. Yes.
- Q. And you don't know where they -- what device they originated from for sure; correct?
- A. Again, not beyond saying they appear to be scanned documents which were then created on the hard drive, you know, on the morning of March 3rd, yes.
- Q. And so they could have been scanned at any point prior to March 3rd?
  - A. They could have been.
- Q. And what computer forensics evidence, specifically computer forensics evidence about those TIFF images tells you they are the authentic contract between the parties?

Not all the other stuff, because I know you've gone into that multiple times, just those two TIFF images, what is all the computer forensics data about those images which tells you that's the authentic contract?

A. So, I mean, as an initial matter, let me just say that I think in terms of analysis of the authenticity of the StreetFax contract it is

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#### B. Rose

impossible from our standpoint to divorce that from the other evidence that's on the computer, including evidence that the purported e-mails were fake, that there was manipulation of documents, there's backdating of the system clock on multiple occasions.

Having said that, if you just analyze that alone, and it's not what we do, right, we do everything in context, but if you just look at the TIFF images alone I think you have the fact that it was found on a computer belonging to Mr. Ceglia, it was e-mailed to his attorney, it was e-mailed on March 3rd of 2004, it was e-mailed through intermediary servers at Adelphia and Sidley & Austin before residing at Sidley & Austin.

The fact that Sidley & Austin
maintained a copy of the e-mail, so you have both
the sending side and the receiving side of a
contract, the fact that it was sent via e-mail
that says -- again, typed, but says Paul to his
attorney saying this is the contract with Mark,
the fact that you have the March 4th and 5th
e-mail chain where, again consistent with the

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# B. Rose

small images you've talked about, Mr. Kole says,
I can't read this, there's a handwritten note,
all of that evidence shows me that this is a
genuine contract.

I mean, frankly, to me, having the plaintiff produce a piece of media that contains a contract that does not support his claim and having the same e-mail that based on a forensic analysis was purportedly sent to Sidley & Austin, to have that be produced by Sidley & Austin, I mean, even if you put all the other evidence aside, that ends this case, I mean, that is clear smoking-gun evidence that the StreetFax contract is the authentic contract e-mailed from your client to his lawyer at Sidley & Austin and you've got both sides of the conversation producing the same identical e-mail chain.

Q. Let me try this way, because you are not answering my question.

MR. SOUTHWELL: Objection.

Q. Here's a hypothetical, trying to make this more precise.

If you found an e-mail between Paul Ceglia and Jim Kole that had a photograph

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#### B. Rose

attached to it that showed Paul Ceglia's mother walking on a wire between two buildings in downtown New York, okay, like a wire walker, would it be -- and you found all of the server information that you just detailed that went from here to here to here, all the servers, and Sidley Austin had a copy of that e-mail on their server, everything you've just said about that, would it be your position that that image of his mother walking on a wire 400 feet in the air is an authentic picture of an event that actually happened? Would that be your position?

A. Forgive me if I pause for a minute, this is an awfully strange hypothetical.

So let's assume -- I mean, if I have an e-mail and the e-mail says, Hey, Jim, this is my mom tightrope walking, Paul --

- Q. There you go.
- A. -- I mean, I guess the question in my mind would be is there any evidence she is actually a tightrope walker; right?

I mean, it's sort of an odd
hypothetical because you have posited a photograph
of a woman doing something that very few people

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#### B. Rose

in the world could actually do, so the fact that
the image itself is fairly unrealistic, again,
you know, these are all fairly contextual
analyses, then I think it would lead me to
question whether I mean, it wouldn't lead
it would clearly be an e-mail sent from, you
know, from, I think it wouldn't lead me to
question it was sent from Paul to Jim Kole, it
would lead me to question whether it was actually
a true image, but just because of the
strangeness, in this case, you know, it's a
hypothetical which is completely off point to the
actual case, which is you have a standard
contract being e-mailed from, you know, Paul to
his lawyer at Sidley & Austin and a subsequent
conversation about it.

- Q. Well, to be clear, the e-mail was actually e-mailed from an account owned by Vera and Carmine Ceglia; true?
  - A. Well, let's be careful.

It is an account that is registered to Carmine Ceglia. The user name resolves to Vera Ceglia and the e-mail is signed -- again, as you pointed out, not a signature, but typed, is Paul.

#### B. Rose

Q. So do you feel you're qualified to testify about the authenticity of images generally when you see them attached to e-mails, you can declare which images are authentic and which images are not?

MR. SOUTHWELL: Objection to form.

- Q. Just yes or no, are you qualified to testify about it?
- A. It is not a yes-or-no question, it would depend on the circumstances.

I mean, in a case like this where I think you have obvious evidence of authenticity and obvious evidence of fraud, it's a fairly straightforward case.

In other cases I could see, you know, you depending again on what the image was and what the question was, in some cases I would say yes and in some cases no, but it would depend on what analysis was needed.

Q. If I sent an e-mail to Mr. Southwell and typed the message, Hey, check out this contract, Alex, signed, and then typed in Bryan Rose, is it your position that you sent that e-mail?

# B. Rose

So you're -- if you sent an e-mail to

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I would assume not.

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4 Alex and typed Bryan Rose, is it my position that

5 I sent that?

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Α.

- I sent a message saying, Alex, Q. No. this is Bryan Rose sending you a contract, and I typed Bryan Rose, that's not from Bryan Rose is it?
  - Not if you sent it, no. Α.
  - Q. Correct.

Just because your name is typed at the bottom doesn't mean it's sent from you; true?

Α. That's true.

Again, if you isolate -- if you isolate any individual piece, it's possible to say there are other possibilities, but, again, that's not what we do. We analyze the forensic evidence in the entire context of the case, and so that is one piece of evidence, the fact that it went to Jim Kole is another piece of evidence, the fact that Jim Kole had a handwritten note where he responds is another piece of evidence, the evidence of backdating is another piece of

1		В.	Rose
2	evidence.		

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This is all part of building a picture of what happened, and so, I mean, if you pull out any piece of evidence and say what's possible, that's one thing.

That's not what we do. We consider it in the context of the entire case and we say what are the reasonable explanations for this, and given the forensic evidence in this case, the only reasonable explanation is that the StreetFax contract is authentic and that your client was engaged in a massive fraud to attempt to generate a fraudulent contract, that's the only reasonable explanation for the digital forensics taken as a whole.

- Q. You've made that clear.
- Can we go to page 21 of your report,

  which is Exhibit 11 --
  - A. You mean the top level?
  - O. Yes.
- You just mentioned a response from Jim

  Kole.
- This is the document you were referring to; right?

	Page 156
1	B. Rose
2	A. Correct.
3	Q. And can you I'm going to be real
4	specific.
5	Can you read the date and time of that
6	e-mail being sent allegedly from Jim Kole?
7	A. Friday, March 5th, 2004, 11:44 a.m.
8	Q. So that's a day later than the alleged
9	Kole e-mail was sent to him; true?
10	A. I believe it's two days later, correct.
11	The Kole e-mails were sent by Mr. Ceglia on March
12	3rd, 2004. This response appears to be on March
13	5th, 2004, so that's two days.
<b>14</b>	Q. Even better.
15	Whose handwriting is on the document?
16	What computer forensics evidence tells
17	you who wrote that handwritten note?
18	A. Based on the context the fact that it's
19	on an e-mail printed out by Jim Kole and the fact
20	that it is giving legal advice about a contract
21	that was put in front of him by Mr. Ceglia, the
22	context indicates to me that it's Mr. Kole's
23	handwriting, but we haven't we are not

forensic -- we are not handwriting experts and,

you know, I couldn't tell you ultimately who

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1	B. Rose
2	wrote that.
3	Q. And this is a reply to Paul's I'm
4	sorry, this is an e-mail from paulceglia@msn.com
5	at the top; right?
6	MR. SOUTHWELL: Objection.
7	Can you just be specific? You're
8	referring to the top from Ceglia to Kole on
9	March 5th or the ones below?
10	Q. The very top of the e-mail where it
11	says from paulceglia@msn; isn't that correct?
12	A. Which one, again, the top level e-mail?
13	Q. The most top level
14	A. Yes, that is from paulceglia@msn.com.
15	Q. Right.
16	Then let's go down into the body of the
17	e-mail, there's another e-mail referenced there
18	and there's the next word "from" and a colon and
19	"to" and a colon.
20	Do you see that?
21	A. Are we talking about the e-mail
22	immediately below towards the top level, the
23	reply to, yes.
24	0 Yes

And that's paulceglia@msn as well?

1	B. Rose
2	A. Correct.
3	Q. Let's go a little farther down
4	underneath a little portion that says "original
5	message" and under there it says "from," and you
6	see that says paulceglia@msn again?
7	MR. SOUTHWELL: The one on March 4th?
8	A. March 4th, 2004 at 9:49 a.m., yes,
9	that's correct.
10	Q. So this, you would agree with me,
11	appears to be an exchange between, if it's
12	authentic, Mr. Kole and Mr. Ceglia who is
13	communicating using his msn account?
14	A. Correct.
15	Q. Okay.
16	And as you pointed out, the
17	communication that is the Kole e-mail came from
18	an account registered to Carmine Ceglia with the
19	user name Vera Ceglia?
20	A. Correct.
21	Q. And it's your position that this
22	represents a reply by Mr. Kole two days later to
23	the e-mail that came from the Adelphia account?
24	MR. SOUTHWELL: Objection,

mischaracterizes.

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# B. Rose

A. That's not my position.

That is clearly a separate e-mail
chain, so the Kole e-mails -- the Kole e-mails
that were sent on March 3rd are not part of this
chain, so, you know, what it looks like,
Mr. Ceglia sends the March 3rd e-mails to
Mr. Kole, then opens up a new e-mail chain using
his msn account and they go back and forth based
on that, and so this is -- so it's not a direct
reply.

What I'm saying is based on the content, right, it appears to be discussing the contract that was provided on March 3rd, 2004, including a reference to the fact that it can't be read.

Q. Do you know if it was actually discussing that blurry TIFF image or another blurry TIFF image? Do you know?

Did your forensics analysis tell you what blurry image they're talking about?

A. We only have evidence of one blurry TIFF image, so we have one blurry TIFF image or two blurry TIFF images sent on March 3rd, 2004, and a response here indicating that he's received

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#### B. Rose

blurry TIFF images, which we know he received, right, because we know, A, Sidley & Austin still has them and we know he forwarded them on, so, yes, I'm basing that on the context here that when he's referring to blurry TIFF images he's referring to the blurry TIFF images we know he received two days before.

- Q. And he is referring to the blurry TIFF images he received from the Adelphia account is your position about when you read this e-mail here?
- A. That seems to me to be a reasonable inference based on what we know, yes.
- Q. And how did you rule out someone scanning --
  - A. Again, I'm talking about what --
  - Q. Let me finish the question, sir.
- 19 A. Yes.
  - Q. How did you rule out additional e-mails with blurry TIFF images sent from Paul Ceglia's msn account to Jim Kole and he's replying regarding that, how did you rule that out?
  - A. I haven't ruled that out. What I'm saying is what is the likely and reasonable

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# B. Rose

2 explanation.

- Q. How likely is it that an e-mail was sent by Paul Ceglia from his msn account with blurry attachments that he's responding to here, how likely is that?
- A. Well, I think given the fact that we know he sent blurry TIFF images two days before, it's unlikely.

I don't know how to --

- Q. Why is it unlikely? What do you know about Mr. Ceglia's personal habits that make it unlikely in that two-day period he did not send blurry TIFF images to his lawyer by his msn account?
- A. I think it's probably unlikely he's sending multiple copies of blurry TIFF images, but --
- Q. Why is it unlikely? How did you determine that?
- A. It seems to me people don't generally do that, but, you're right, he could have sent a thousand blurry TIFF images, it seems exceedingly unlikely to me, but I have not ruled it out.
  - Q. Why is it unlikely?

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- 2 Again, I think I've answered that Α. 3 It seems to me that if you have a question. 4 reference to an attorney having been sent blurry 5 TIFF images and we know that two days before he was sent blurry TIFF images that we know he 6 7 received, the likely explanation is that he's referring to those TIFF images. I have not ruled 8 9 out the fact that he's referring to other TIFF 10 images.
  - Q. And there's an intervening two-day period between the Kole e-mail and this one; right?
  - A. Correct.
  - Q. And the Kole e-mail and this one were sent with two different e-mail accounts?
  - I'm sorry, the Kole e-mail is sent with an Adelphia account; true?
  - A. The Kole e-mail was sent from -- yes.
    - Q. And these exchanges with Mr. Kole are sent by Mr. -- are with Mr. Ceglia at his msn account; correct?
- A. Correct.
- Q. Okay.
- So for two days some number of

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1	B. Rose
2	e-mails we will never know, right, went back and
3	forth between Mr. Kole and Paul Ceglia from his
4	msn account.
5	You don't know how many they sent back
6	and forth during those two days, do you?
7	A. Well, I know I mean, based on the
8	evidence we have, it would appear to be as if the
9	e-mail chain here is four e-mails.
10	Whether, you know, how many more than
11	that, that puts a lower limit on it. I can't
12	tell you how many e-mails would be in the entire
13	chain.
14	Q. And they could have simultaneous
15	different threads going back and forth that
16	aren't even included here; right?
17	A. They could.
18	Q. So you don't know?
19	A. I don't.
20	Q. Now, your report also challenges
21	generally the authenticity let me back up.
22	Are you aware that there have been two
23	documents two categories of documents

submitted to the Court thus far as attachments to

pleadings that Mr. Ceglia is claiming are

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1	B. Rose
2	authentic, one of which is the two-page paper
3	contract you're aware he's claiming that's
4	authentic; right?
5	A. Yes. You are referring to the Work For
6	Hire, what we call the Work For Hire document?
7	Q. Yes.
8	A. Yes.
9	Q. And he's also attached to an amended
10	complaint copies of e-mails that he exchanged
11	with Mr. Zuckerberg which he's claiming are
12	authentic e-mails exchanged with Mr. Zuckerberg.
13	MR. SOUTHWELL: Objection. That's not
<b>14</b>	in evidence, he didn't attach any e-mails.
15	Q. He attached documents to an amended
16	complaint purporting to be copied and pasted
17	e-mails between him and Mr. Zuckerberg.
18	MR. SOUTHWELL: Take a look at the
19	complaint, there's nothing attached.
20	Q. It's attached well, let's just
21	assume you've evaluated e-mails that he claims to
22	have exchanged with Mr. Zuckerberg; true? You
23	took a look at them?
24	A. We have evaluated Word documents

containing what appear to be cut and paste --

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#### B. Rose

- Q. Well, my client admits they are copied and pasted into the Word document, does he not?
  - A. Well, I should say that are claimed to be cut and pasted.

I mean, I am aware that Mr. Ceglia claims to have Word documents containing e-mails that purportedly support his claim. We identified in our forensic analysis three Word documents that we believe to be those e-mails.

- Q. And you analyzed them?
- A. Correct.
- Q. And there's at least two areas of that analysis which support -- and maybe there's more, you can correct me -- your claim and your report that those e-mails are fakes, so let's go over them.

One of the areas is the Coordinated
Universal Time as it appears in those e-mails is
incorrect based on the fact that it was Daylight
Savings Time at the time they were sent; right?

- A. So, yes --
- Q. Is that the e-mails --
- A. There is a group of e-mails, I believe it is sent between October 2003 and April 2004 at

# B. Rose

which point Eastern Standard Time would have been in effect and the offset that's in the e-mails appear to be Eastern Daylight Time which is an anomaly which shouldn't occur.

Q. Right, that's one area.

And the second area you indicate in your report is formatting and differences between these e-mails, for example -- and I think you might remember this one, in one of the e-mails the word "Tuesday" is spelled out and in the other one it's abbreviated, things like this is one of the other ares that you indicate supporting your belief that those are fraudulent; true?

A. Yes, and that's inconsistencies that they both between the way those should appear, for instance, the way, you know, Microsoft Hotmail would abbreviate Tuesday and the way it's actually abbreviated in the e-mails themselves, so Microsoft, you know, abbreviates it T-u-e, if you cut and paste it out it should not say T-u-e-s, and I know you asked questions earlier about whether formatting differences can be introduced during cut and paste; that's true, but, for instance, the addition of an "s" is not

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#### B. Rose

a formatting difference that would occur, so I think that's clear evidence of fraud.

There's also inconsistencies among the documents themselves, so after the "from," colon, sometimes there's one space, sometimes there's two, after the "to" there are an inconsistent number of spaces, there are various formatting inconsistencies like that and, again, going back to your point about copy and paste, to the extent I copy and paste out Hotmail documents and the formatting change, I would expect it to change in a consistent way, I wouldn't expect the copy-and-paste operation to, for instance, insert two spaces after "to" sometimes and three in another and one in another.

- Q. Why would you expect it to do it in a uniform way?
- A. Generally -- because, again, when you are cutting and pasting, if you are cutting from the same source to the same source, what you would expect to see is a consistent change.
- Q. Did Mr. Ceglia cut from the same source to the same source?
  - A. My understanding is he's cutting from

1	B. Rose
2	his Hotmail account, yes.
3	Q. On what computer was he copying that
4	from?
5	A. He is copying it from his account, it
6	wouldn't matter what computer he's copying it
7	from, you're copying from an Internet Webmail
8	account, the data is residing on Hotmail servers,
9	it wouldn't matter what computer he's using.
10	Q. Would it matter what browser he's
11	using?
12	All browsers format Web mail the same;
13	is that your position?
14	A. Well, so for the T-u-e-s, right, that
15	difference and
16	Q. No. I'm asking you do all browsers
17	A. You asked me a question, I'm trying to
18	answer the question.
19	MR. BOLAND: He is rephrasing the
20	question.
21	MR. SOUTHWELL: He is answering your
22	question.
23	Q. Do all browsers format Webmail accounts
24	the same?
25	A. No.

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1	B. Rose
2	Q. What browser was Mr. Ceglia using when
3	he copied and pasted each one of these e-mails?
4	I don't know.
5	Q. How did Hotmail function when it came
6	to abbreviations of things like Tuesday in 2004?
7	A. It abbreviated it T-u-e.
8	Q. How do you know that?
9	A. I think we've tested, we've seen the
10	way it format, Hotmail formulates Tuesday and it
11	is T-u-e.
12	Q. In 2004 you ran tests to confirm that?
13	A. My understanding is that we confirmed
14	that in fact that's the way Hotmail abbreviates
15	T-u-e.
16	Q. Where do you get that understanding?
17	A. So that understanding was passed
18	that information comes from, I believe, directly
19	from Mike McGowan.
20	Q. So it's your testimony that Mike
21	McGowan in 2004 tested the Hotmail server?
22	A. No, that's not my testimony.
23	Q. Okay.
24	How did he determine in 2004 that's how

Hotmail worked?

1	B. Rose
2	A. I don't know how he determined that.
3	Q. To the best of your recollection he's
4	the person who told you that that's how it worked
5	in 2004?
6	A. Yes.
7	Q. Okay.
8	Did anyone else from Stroz Friedberg
9	conduct any testing on how Hotmail might have
10	worked in 2004?
11	A. I don't know the answer to that, I
12	don't know if the information came directly from
13	him.
14	I would also just note that how that
15	works in 2004 is one question.
16	I would also note that you would expect
17	it to work the same way in 2004 each time; in
18	other words, you wouldn't expect Hotmail in 2004
19	to sometimes abbreviate T-u-e, sometimes
20	abbreviate T-u-e-s.
21	Q. Why would you not expect that?
22	Do you know how Hotmail operates?
23	A. Because they don't configure themselves

uniform configuration that they don't just run

back and forth like that, right, there's a

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	Page 171
1	B. Rose
2	and change willy-nilly.
3	Q. How do you know there's a uniform
4	configuration, what's your basis for that
5	statement?
6	A. The Webmail account displays dates in a
7	consistent format.
8	Q. What's your basis for that in 2004
9	Hotmail consistently displayed Webmail account
10	information?
11	A. I think it is unquestionable that that
12	would be the way it would operate, but if you
13	feel I mean, and the idea somehow that
14	Hotmail, the way they set themselves up, right
15	and these are all behind-the-scenes configurations
16	that they somehow had a configuration which
17	allowed T-u-e sometimes and T-u-e-s other times
18	as the display is completely implausible to me.
19	Q. What's your basis for it being
20	implausible?
21	A. I'm saying it's implausible.
22	These are behind-the-scenes
23	configurations that display uniformly over time.

Now, that's not -- I just -- it's implausible to

me that when you're talking about a series of

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1	B. Rose
2	documents from the same time frame, sometimes
3	very close together, that they're going to
4	display inconsistently is just implausible.
5	Q. Based on what?
6	A. It's my experience and my understanding
7	of the way they operate.
8	Q. And do you have any experience with
9	Hotmail back in 2004?
10	A. I mean, I don't know. I think I may
11	have been a Hotmail user back in 2004, but
12	Q. Were you or were you not?
13	A. I don't recall.
14	Q. And the version of Microsoft Word
15	used that contains these documents that this
16	data was pasted into, how was Microsoft Word
17	configured back at that time to handle the
18	pasting-in of data from a browser like a Webmail
19	account?
20	A. I'm not sure I understand that
21	question.
22	Q. What kind of changes could Microsoft
23	Word's program cause to data that's copied and
24	pasted from a Web mail account back in 2004?

I don't know.

**A**.

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- Q. Did anyone from Stroz Friedberg try and test the versions of Microsoft Word that these documents were created in to see what changes might occur, if you know?
  - A. Not that I'm aware of.
- Q. Did you ask Microsoft for any advice on how formatting changes might have occurred through that process?
- A. We did not have any conversation with Microsoft about that.
  - Q. Did you contact Hotmail?
- A. No.
- Q. Did you attempt to configure a Hotmail server the way it would have been configured back in 2004, e-mail server?
- 17 A. No.
  - Q. And did you test even in the current time, 2011, how data copied from different Web browsers in Webmail accounts and then pasted into Microsoft Word might result in different formatting? Did you run that test?
  - A. I did not. I don't know whether it was done.
    - Q. Now, the Coordinated Universal Time

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that appears in an e-mail if let's just say
2011 as a hypothetical, assume this is the case,
but I'll just ask you to assume it as a
hypothetical, that Daylight Savings Time, we went
from Standard Time to Daylight Savings Time
somewhere in March of 2011, the date's not
relevant to the question, is it the case that if
an e-mail is sent before that change of time, but
the person doesn't open it until after we've
changed into Daylight Savings Time, what
Coordinated Universal Time would appear in that
e-mail if it's opened at that time? Is
Coordinated Universal Time reflective of when the
person actually opens the e-mail or when the
e-mail was sent?

- A. So it would in general, I think, display based on the time zone of the computer clock being used to view it, but I don't know with Hotmail how that would operate in that hypothetical.
- Q. And if that computer clock is set correctly, hypothetically, then the Coordinated Universal Time in that e-mail should be correct, should be accurate?

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- A. Again, I don't know how Hotmail specifically operated there.
  - Q. Are there any -- you conclude about these e-mails that the Coordinated Universal Time is not consistent with the time of year in which they were allegedly received, I believe -- I'm summarizing and if I'm doing it incorrectly, please put the words in you think make it correct.
    - A. Okay.
  - Q. Is it only fraud which could be the cause of that Coordinated Universal Time being apparently in error in these e-mails? Just the e-mail itself, not considering everything else that you clearly think my client's committing a fraud, just looking at that e-mail and Coordinated Universal Time is off, is the only conclusion for that fraud got to be fraud?
  - A. So forgetting -- I guess I'm forgetting everything else I know, I just got an e-mail --
  - Q. If I just give you an e-mail and I say
    I just got this e-mail today or it was sent today
    and received today and you look at it and say,
    Well, Dean, the Coordinated Universal Time is

#### B. Rose

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off, would you then say, in my opinion that e-mail is a fraud because of that one fact?

**4** 5 A. I'd say that standing alone, no, not necessarily.

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Q. And the formatting differences we talked about before, standing alone, not indications of fraud necessarily either, they can just occur sometimes?

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A. I think the formatting differences we see here are clear indications that the document has been manipulated, so I would disagree with that. I don't think there's any plausible explanation that these could be the result of formatting differences introduced as a cut-and-paste operation, so I would disagree with that.

You're asking me the mere appending of the wrong time zone to an e-mail standing alone without any other fact surrounding it, there could be other explanations for that.

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Q. And are you aware of any e-mails or references to e-mails in this case from a source other than Mr. Ceglia which have the wrong Coordinated Universal Time attached to them?

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A. I am aware -- I'm trying to think in

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# B. Rose

terms of the time zones -- there is in, I think, one of the, again, the intermediary servers in the Sidley & Austin e-mails had the wrong time zone setting; those are the only examples I can think of.

Q. Let me try and jog your memory a little bit.

You and I have exchanged e-mails in the past couple of weeks about this Kasowitz letter issue; are you generally familiar with that?

- A. Yes.
- Q. You sent me a TrueCrypt container on a couple of occasions, and there's an item 379, does that ring a bell, as one of the items we've been corresponding with and --
  - A. It does.
- Q. And you had to evaluate that item to see if it was relevant to put it on a relevant items log in the past; do you recall that?
  - A. Yes.
- Q. I'm not asking you to memorize it, but you did read through it to see if it was relevant, obviously?
- A. Yes. I mean, it is an extremely long

	Page 178
1	B. Rose
2	document
3	Q. It is.
4	A so I may not have read it word for
5	word, but I've reviewed enough of it to know that
6	the contents are relevant.
7	Q. Right.
8	And let me just state, and this is the
9	record in this case, that that item 379 is a
10	single e-mail with some attachments and then in
11	the body of that e-mail are referenced many more
12	e-mails, it's quite a long document, as you
13	indicated.
<b>14</b>	A. It's a long chain.
15	Q. Right.
16	So that's generally what it is.
17	And many of those e-mails referenced in
18	the body of 379 are e-mails that appear to be
19	between lawyers that were working with Mr. Ceglia
20	at that time.
21	Do you recall that?
22	A. I know there are some, some of those
23	e-mail exchanges are between lawyers working for

And now here's the hypothetical, and

Q.

Mr. Ceglia at the time.

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# B. Rose

because I don't have 379 in front of me, I won't ask you to trust me on this, so I will convert it to a hypothetical.

Let's say some of those e-mails referenced in the body of 379, if some of them were sent at a time where the Coordinated Universal Time should have been, let's say, minus 500, but it says minus 400, it's wrong, you wouldn't conclude, based on that, that some of those prior lawyers for Paul Ceglia were committing fraud?

- A. So this is a hypothetical specifically about 379?
  - Q. Right.

If some of those e-mails have the wrong Coordinated Universal Time that's not an indication of fraud by those lawyers, in your opinion?

- A. So given the context, no, I would not conclude that.
- Q. And that Kasowitz e-mail you just recently sent it to me in a TrueCrypt container as a native format e-mail.

Do you recall sending that to me?

1	B. Rose
2	A. Yes.
3	Q. Okay.
4	That native format e-mail itself has
5	one attachment. I don't know if you recall that.
6	Do you recall it?
7	A. I thought it had more attachments than
8	that, but I don't recall.
9	Q. And that actual individual e-mail was
10	never included by you on a privilege log in this
11	case by itself, if you recall?
12	MR. SOUTHWELL: What specifically are
13	you referring to?
14	MR. BOLAND: The native format
15	individual e-mail dated August April 13,
16	2011, which you recently sent to me itself
17	was never included on a privilege log in
18	this case.
19	MR. SOUTHWELL: I'm just going to
20	object, this doesn't seem to have anything
21	to do with Coordinated Universal Time or the
22	report, so it's an objectionable line, but
23	if you're going to connect it, I'd like to
24	hear that.

MR. BOLAND: I would like to hear the

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### B. Rose

answer of the witness, but I hear your objection.

A. I mean, I sent you, as I recall, what I recently sent you included several -- it was one -- it was item 379 -- I mean, there were various items in that, right, there were various attachments, I don't think it was limited to one attachment, so I guess I'm not sure exactly which document you're talking about.

I mean, it's possible to me -- and, you know, we include, when we include an e-mail, we also include their attachment, so just merely saying dated April 13th I'm not sure I can with precision identify the document which you're talking about.

Q. Fair enough.

 Let's talk about use of computers generally.

Would you agree with me that -- and maybe you've seen this in your work -- that people can lie about how they actually use their computers?

A. Yes, I would agree that people can lie about the way they use their computers.

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### B. Rose

- Q. And as a forensics expert you wouldn't rely on a witness' statement about how they used their computer without confirming it through forensic analysis?
  - A. That's correct.
  - Q. And would you agree that people who commit fraud often make self-interested statements to try and avoid detection for that fraud?
  - A. As a hypothetical, yes, I think I would agree with that.
  - Q. And I think I asked you this before.

    You never spoke with Mark Zuckerberg
    about how he used his Harvard e-mail account?
  - A. I've never spoken with Mark Zuckerberg about anything.
  - Q. Did you ask his lawyers to get information from him telling you how he used his Harvard e-mail account?
  - A. So let me be clear: Our role in the Harvard e-mail account was to work with Harvard to make sure we'd gotten all of the historical copies, to perform whatever collections were necessary and then to perform electronic

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### B. Rose

discovery processing to create an aggregate data set, to then subject that to certain search terms and provide those to Gibson, Dunn for review as well as to conduct our own review of those, of certain specified documents to determine whether the purported e-mails were found there and to identify communications between Mr. Zuckerberg and various people involved with StreetFax.com, that was our charge with the Harvard e-mail, and so I did not ask Gibson, Dunn to do that, I don't think, given our role, that would have been a relevant consideration for us or appropriate for me to tell Gibson, Dunn to go ask a question that's irrelevant to the work I'm tasked to do.

- Q. And did you somehow confirm with anyone that this was all of Mark Zuckerberg's available e-mail that was relevant to expedited discovery?
- A. I find that to be a confusing question because my reading of the order in the protocol is that the expedited discovery phase is focused on an analysis of Mr. Ceglia's media and Mr. Ceglia's e-mail, so --
  - Q. I'm just asking the question, sir.
    Did you ask someone to have Mark

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# B. Rose

Zuckerberg confirm that you had access to all of his e-mail? Did you ask someone that question?

MR. SOUTHWELL: Objection. You are

asking -- well, you are asking a different question, but --

MR. BOLAND: That's my question.

- A. I did not ask anyone to make sure that we had access to all of Mark Zuckerberg's e-mail. There was, you know, we were involved in conversations with Harvard IT to make sure that we had gotten everything that was available. We were, as I said, involved early on in analysis of various other assets of Mr. Ceglia that I understood to be comprehensive, but as to that specific question, no, I don't recall asking that specific question.
- Q. It's possible, then, that there is additional sources of e-mail relevant to this case which you have not had access to?
  - A. Is it possible?
- I mean, again, anything's possible, so I would say yes.
- Q. Don't you think it's a prudent thing to do to ask the person who's the custodian of their

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### B. Rose

- 2 e-mail account if that's everything?
  - A. Is that a prudent thing to do in general?
  - Q. In this case don't you think it would have been a prudent thing to do to ask the defendants, Hey, ask Mr. Zuckerberg is this is everything or if he's got e-mails somewhere else?
  - A. To me, you're asking me a question that is appropriately a strategy question for attorneys that goes outside what I was charged to do in the case, which involves expedited discovery and to describe the work with Mr. Zuckerberg's e-mails, so as to whether that would be prudent in this case, you know, I haven't really considered that and I don't think I want to offer an opinion on it.
  - Q. What do you think the likelihood is that there's other e-mail or electronic communications relevant to this case that you have not had access to?
  - A. I would think, given the thoroughness
    I've seen of the investigations that I've been
    party to, I think it unlikely, but it's possible.
    - Q. You talked about one of the retrievals

1	B. Rose
2	from the Harvard server was from November 2003,
3	you got e-mail from that time period?
4	A. That's correct.
5	Q. Not in that time period, but from that
6	time period?
7	A. From that time period.
8	In other words, just to be clear, a
9	historical snapshot of what existed in the
10	mailbox at some point in November 2003.
11	Q. And did you find any e-mails in that
12	retrieval that were not included in the
13	subsequent productions that you got, either
14	collected or received from Harvard?
15	MR. SOUTHWELL: Are you asking about
16	Ceglia-Zuckerberg e-mails?
17	MR. BOLAND: Yes.
18	A. I believe so. You're talking about
19	between the November 2003 and the subsequent
20	productions, the first of which would have been
21	in October 2010?
22	Q. Right.
23	A. Yes, I believe there were e-mails that
24	were included in that production that were not

included, not unsurprisingly, in a production

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# B. Rose

that occurred seven years later.

- Q. And what happened to those e-mails that were not in that production seven years later?
  - A. I don't know.
- Q. Did you ask the defendants to ask

  Mr. Zuckerberg what happened to those e-mails?
  - A. I did not.
- Q. Did anyone else from Stroz Friedberg ask that question of the defendants, if you know?
- A. Again, given our task with the e-mail,

  I don't think that would be an appropriate

  question for us to direct to Gibson, Dunn.
- Q. Did you see Paul Ceglia's -- a recent declaration of Paul Ceglia stating that he sent e-mails to Mr. Zuckerberg between the time period of March 2003 and June of 2003?
  - A. I may have, I don't recall that.
- Q. And are you aware that your -- that Stroz Friedberg did not recover any e-mails between Mr. Ceglia and Mr. Zuckerberg during that time period?
  - A. I am not.
- Q. Did you see the production that Stroz Friedberg provided to the plaintiff pursuant to

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# B. Rose

2 the expedited discovery order of the Harvard
3 e-mails?

- A. Did I see the production itself?
- Q. Before it was produced to us did you look at it?
  - A. No.
    - Q. Do you think it's -- what's your opinion of the likelihood that this contract signed on April 28, 2003, that the terms of this contract were discussed between Mr. Ceglia and Mr. Zuckerberg using e-mails before the date it was signed?
    - A. I wouldn't even want to offer an opinion on that.
    - Q. Assuming, because it is the case, but we will just assume it for this, that there are no e-mails between the parties Ceglia and Zuckerberg from around March of '03 till June of '03, don't you think that's a little odd that they have no e-mail communication before the signing of this contract in April of 2003 and then for another six weeks, 5-1/2 weeks later, still no e-mail communication in Mr. Zuckerberg's Harvard e-mail account? Don't you find that odd?

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# B. Rose

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A. No.

Q. Now, you found -- the report details several different documents that are similar to the paper contract in this case with the Facebook language in it, true, in your report, you talk about those?

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A. So we talk about multiple unsigned versions of what we refer to as the Work For Hire contract, yes.

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Q. Yes.

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And did your forensic analysis provide you with which one, if any, of those unsigned versions was the one that was printed and became the paper contract that my client is now offering as the authentic contract between the parties?

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A. I think none of them were printed directly because they all vary somewhat in substance from the actual original contract; in other words, they are all similar documents, but there are seven different variations, so the printed copy is ultimately different.

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We did not identify any exact duplicate copies of the Work For Hire contract save for one that was included in an e-mail from Mr. Argentieri

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# B. Rose

2 that was post litigation.

- Q. And you are aware that Mr. Ceglia has not offered or attached to any pleadings any of those similar versions of the Work For Hire contract? You are aware of that?
  - A. I don't believe he has.
- Q. And he didn't attach the e-mail from Jim Kole or the TIFF images to any pleadings or anything that he's filed in this case, you are aware of that?
  - A. I am aware of that, yes.
- Q. Now, your forensic report and your analysis is not arguing that the paper contract itself is backdated somehow?
- A. I am not offering any opinions on the paper contract at all.
- Q. And there's no computer evidence that you found suggesting that Mr. Zuckerberg did not sign page 2 of the paper contract?

That's a double negative, I can ask it a little more clearly.

- A. Sure, that would help.
- Q. Did you find any computer forensics evidence suggesting that Mr. Zuckerberg was not

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### B. Rose

2 the person who signed the second page of the 3 paper contract?

MR. SOUTHWELL: You're talking about the original paper Work For Hire document that was presented for production?

MR. BOLAND: Correct.

- A. The forensic evidence that we found overwhelmingly indicates that the StreetFax contract is authentic; therefore -- and the evidence also indicates with all the manipulation that the Work For Hire contract is a fake, so I would say that that evidence would lead me to conclude, without even having to analyze the paper, which I have no opinion on and I am not an expert on, that any paper document presented that purports to be the Work For Hire document signed by Mark Zuckerberg is a fake.
- Q. What I'm asking you is, is the computer forensic evidence, is there any that tells you that the person who put a signature on page 2 of the paper contract was not Mark Zuckerberg? Do you have forensic evidence that points you to that not happening, for example, an e-mail that Mark Zuckerberg says, I never signed page 2 of

1	B. Rose
2	the contract, did you find anything like that?
3	A. We did not find anything like an e-mail
4	from Mr. Zuckerberg disclaiming that he'd signed
5	page 2 of that contract.
6	Q. Okay.
7	Did you find any Web history that
8	supports an argument that Mr. Zuckerberg didn't
9	sign page 2 of the paper contract?
10	A. I mean, again, beyond, you know, some
11	of the Internet history providing some evidence
12	that, you know, the StreetFax contract is
13	authentic, the other contract is fake, no.
14	Q. Did you visually compare a copy of page
15	2 of the paper contract with page 2 of the
16	StreetFax contract, looking at them side by side?
17	A. I probably have looked at them side by
18	side before. I don't recall.
19	Q. Do you recall what your reaction was to
20	that comparison? Did they look the same to you
21	or different?
22	A. I don't recall.
23	Q. Now
24	MR. SOUTHWELL: If you are going to a

different topic, we are approaching 3-1/2

1	B. Rose
2	hours.
3	Do you know how much more you think
4	you've got planned?
5	MR. BOLAND: I don't really know. I
6	will probably go over 3-1/2 a little bit.
7	MR. SOUTHWELL: When would you like to
8	take a lunch break? I would like to take a
9	little lunch break.
10	MR. BOLAND: We can do that now.
11	Do you want to?
12	MR. SOUTHWELL: How much more do you
13	think you have?
14	MR. BOLAND: Probably an hour, I'm
15	guessing.
16	MR. SOUTHWELL: Do you want to go off
17	the record, then, at this point?
18	MR. BOLAND: Let's go off the record,
19	we can do that.
20	(Lunch recess: 2:09 p.m.)
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1	B. Rose
2	AFTERNOON SESSION
3	(Time noted: 3:05 p.m.)
4	MR. BOLAND: We can start the tape.
5	THE VIDEOGRAPHER: And we are rolling.
6	MR. DUPREE: Timewise, I know you
7	requested, I think, three and a half hours,
8	which I think we are probably at about that
9	limit now. I am not going to shut things
10	down, but I wanted to call that to your
11	attention.
12	MR. BOLAND: Yes, we are a little bit
13	over. Probably another hour or so and that
14	will wrap it up, presumably.
15	MR. DUPREE: Hopefully we can do that
16	quickly.
17	MR. BOLAND: Yes, I will.
18	BRYAN J. ROSE, resumed and
19	testified as follows:
20	EXAMINATION BY (Cont'd)
21	MR. BOLAND:
22	Q. Mr. Rose, in addition to the two TIFF
23	images which were named Scan0001 and 0002, you
24	didn't find any other you found those on the
2 5	computer in one location and that was it

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### B. Rose

according to your report, if I'm recalling it correctly, you didn't find them anywhere else?

I'm saying the Ceglia media, not the

Sidley & Austin servers now.

- A. So we found -- so we found the TIFF images in the Outlook Express mailbox, we also found what appeared to be deleted versions that had been created on the hard drive immediately before being sent, which is why we determined they appeared to be copied from the hard drive and then sent from the hard drive, but we believed those copies represented those files because the file size and file name, but in terms of an actual copy with content, although one of the deleted files was partially recoverable in terms of content, that was the only location was the Outlook Express file.
- Q. And the comment you just made about believing that those files were the same, let's talk about that for a moment.

The deleted versions had the same file name as the versions you actually found and they had the same file size?

A. The same file size, in addition to one

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### B. Rose

of them was partially recoverable and the content was the same.

- Q. And what's the likelihood that those files that had the same file name and the same file size were in fact versions of the two files that you did find, what would be your opinion on that?
- A. I think it's very likely. Certainly for the one -- I would say for the one -- very likely, particularly given the fact we were able to recover some content, compare that.
- Q. Even without the content, is it fairly likely they are same?
  - A. Yeah.
- Q. Is that a common way that forensic experts will reach that conclusion in general is if they have two files with the same name and the same file size, but one of them the content is missing, they will conclude it's likely that that's a copy?
- A. I think it depends on the context, but in general, yes. I mean, you know, the file name, depending on what you're comparing, can be more or less persuasive, depending on the

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### B. Rose

- circumstances. Comparing the file size, you know, it's one way to reach a conclusion the two files are the same.
- Q. Can you, on this similar topic, on page 54 of Exhibit 1, which is the version of your report that we provided you today that has the file stamp across the top, do you see on page 54 you are talking about a missing USB device and links, link files on a Toshiba laptop that reference two files that your report indicates you believe were on that missing USB device?

  Do you see where I'm referring to

Do you see where I'm referring to there?

- A. So the -- at the top of the page it's a list of USB devices which were attached to various PC media but were not produced.
  - Q. Right.
- A. And then the discussion does include two files which were link files were found on a Toshiba laptop, two files on a USB device, yes.
  - Q. Right.
- And those are the files -- those are two files that I believe -- correct me if I'm wrong -- you're saying they were named -- well,

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# B. Rose

- yeah, what's a link file, if you can just describe that for the Court?
  - A. It's essentially like a shortcut, I mean, it's a file, your computer puts down a link file so that it can recall a document quicker, it is a shortcut file, it's a pointer, essentially.
  - Q. In about the third full paragraph you start talking about on the Toshiba satellite laptop.

Do you see that?

- A. Mm-hm.
  - Q. And then you name the two link files?
- A. Yes.
- Q. And the embedded metadata, these link files show that they point, what does that mean, the embedded metadata, what are you referring to there, these link files show that they point to a removable device? Can you explain that?
- A. So if you analyze the link file itself you can see essentially to what it's pointing, generally whether it's an Internet location, whether it is a removable device location, so that would just indicate that the metadata associated with the files, which is just, you

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# B. Rose

- know, information about the -- data about data, right, so it is data about the files, we were able to determine from that that it pointed to a USB removable device rather than to the Internet or some other location.
- Q. And the link is not an actual file, it's just a pointer?
- A. Well, it's an actual file, I mean, it's a link file, but it's not -- it is a pointer to another file, yes.
- Q. It isn't the file that it is pointing to, it's just a pointer to it?
- A. So a link file to the Zuckerberg contract page 1 TIFF is not the actual TIFF document, it's a pointer to that document.
- Q. And it's not a copy of the actual document, it's just a pointer?
- A. No, yes.
- Q. So that file, as you put in your report, is one of the evidence, pieces of evidence under a claim the defendants -- you know the defendants have made a claim of spoliation of evidence against Mr. Ceglia; right? Are you aware of that?

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1	B. Rose
2	A. I don't I mean, a formal claim, I
3	know that there have been allegations of
4	spoliation, yes.
5	Q. And this is in your report two TIFF
6	files which your report indicates existed at one
7	time on removable media; true?
8	A. Mm-hm.
9	Q. But yet weren't produced in discovery;
10	true?
11	A. Correct.
12	Q. And
13	A. I should point out existed on removable
14	media subsequent to the filing of the complaint.
15	Q. I'm going to show you I don't know
16	if I have two copies or not, so your lawyers may
17	have to look over your shoulder. I thought I
18	did.
19	MR. BOLAND: Could you mark this as
20	Exhibit I think we're on 3.
21	(Rose Exhibit 3, supplemental
22	declaration of Paul D. Ceglia, marked for
23	identification, as of this date.)
24	Q. And this is document number this is

Exhibit 3, document number 139-2 filed in this

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# B. Rose

case, it's entitled "Supplemental Declaration of Paul Ceglia."

Do you see that, Mr. Rose?

- A. I do.
- Q. Can you look at paragraph 6 of that document, and it should indicate there that he produced by way of Mr. Argentieri two files with the same file name that we were just talking about from your report.

Go ahead and confirm that that's what those files names say.

- A. It actually appears to be a different file name in that the file name cited in Mr. Ceglia's affidavit includes underscores and not spaces.
- Q. And does the file name that there's a link file to --
- A. And just to be clear, in a file-naming convention that's not a small difference; to me they're different file names.
- Q. And the file name in your report does not include an underscore?
- 24 A. It does not.
- Q. And is that the accurate file name for

1	B. Rose
2	that file?
3	A. I believe so.
4	Q. Can you check out paragraph 49, please.
5	A. Okay.
6	Q. Does that file name seem to be the same
7	two files names as we were just talking about in
8	your report?
9	A. So now we are in paragraph 49 and 50?
10	Q. Yes.
11	A. It does appear to be the same file
12	names.
13	Q. And this is a declaration by Mr. Ceglia
14	of items he has produced; true?
15	A. I'm just looking at the entire document.
16	So it's not clear to me what he's
17	stating here. I mean, it appears to be a list
18	of initially a list of documents that are in
19	the possession of various groups, as I understand
20	at some point who had been employed or retained
21	by Mr. Ceglia, so he lists documents which are in
22	their possession and then there's a certification
23	in 173 that indicates that all of the above are
24	being produced to defendants on August 29, 2011.

To the extent -- I mean, I guess this

	Page 203
1	B. Rose
2	is a little ambiguous, but to the extent 173
3	refers to everything listed in the proceeding,
4	172 paragraphs, that would be the case.
5	Q. And do you know the file size of
6	Zuckerberg, the two files we were just talking
7	about from your report that were on the USB
8	drive?
9	A. I do not.
10	Q. Do you know the file size for the two
11	files that were in paragraph 49 of the
12	declaration that you just read?
13	A. I do not.
14	Q. Would it surprise you to learn that
15	they are the identical file size?
16	A. I don't know that it would surprise me
17	or not surprise me.
18	Q. What's the likelihood that the file in
19	paragraph 49 of his declaration is an exact copy
20	of the files you reference in your report from
21	the USB drive if the file names are the same and
22	the file sizes are the same, what's the
23	likelihood those are the same files?
24	MR. DUPREE: Just for clarification,

you are talking about file size.

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# B. Rose

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Are you talking about the linked files or the actual files?

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MR. BOLAND: Actual files.

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name and the same file size, although -- I mean,

So if the actual files have the same

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you couldn't determine file size from the link

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files themselves, so you'd have to have the files

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as they existed on the removable media and the

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files that exist -- is it -- I'm sorry, which

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expert was this? Mr. Stewart?

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If you had the name in the files --

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well, if you had the files, you could compare the

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If you just the name and the file sizes content.

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and it had the same name and the same file size I

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quess I would conclude, depending on if there

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were any other circumstances surrounding that,

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that it's likely they're the same.

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So you're saying a link file cannot Q. tell you the file size of the file it is pointing

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to?

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Α. I think generally link files don't show

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Q. But can they?

you the size, but --

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Α. I don't know.

1	B. Rose
2	MR. BOLAND: Can you mark this as
3	Exhibit 4, please.
4	(Rose Exhibit 4, five-page document
5	headed "Shortcut file," marked for
6	identification, as of this date.)
7	MR. DUPREE: Is this a document that
8	was filed in the case?
9	MR. BOLAND: No.
10	Q. Mr. Rose, this is Exhibit 4, this is a
11	document prepared by our expert.
12	A. Yes.
13	Q. The first three pages are the first
14	two pages are the link file metadata for
15	Zuckerberg contract page 1 TIFF and Zuckerberg
16	contract page 2 TIFF from, as you see there, the
17	removable media, the same link files you refer to
18	in your report.
19	Do you see the file size that's listed
20	on that contract page1.tif that ends in 036?
21	A. I do.
22	Q. And on page 2 the file size ends in 172
23	for the second one?
24	A. Correct.
25	Q. Can you flip to the second to last page

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1	B. Rose
2	of Exhibit 4.
3	A. Second to last page, that's the
4	properties screenshot for Zuckerberg contract,
5	page 1, yes.
6	Q. Exactly, properties screenshot.
7	And do you see the file size for
8	Zuckerberg contract page 1 the actual TIFF file
9	that was produced is referenced in the
10	declaration and it ends in 036 as well, it's the
11	same file size; true?
12	A. Yes, it appears to be.
13	Q. And then the last page is a screenshot
14	of the properties of Zuckerberg contract page 2
15	that was produced to defendants and it also ends
16	in 172, but it's the identical file size to the
17	one from the link file; right?
18	MR. DUPREE: And I'm just going to
19	object to the use of the document because we
20	don't know what it is, it hasn't been
21	verified.
22	MR. BOLAND: Very well.
23	Q. You would agree that those file sizes
2.4	are the same?

Α.

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Yes, in comparing link files to the

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### B. Rose

screenshot you showed me.

- Q. So assuming -- we'll go with a hypothetical -- that those, that data on that exhibit you just reviewed is all accurate regarding the link files and the actual files that were produced to the defendants, what is the likelihood that the files that you identified in your report as missing from -- along with a USB device were in fact produced to the defendants?

  MR. DUPREE: Object to form, calls for speculation.
- Q. Just what's the likelihood, probability, whichever word you choose?

  MR. DUPREE: Same objection.
- A. I would say it's likely, but, you know, without having the two files to compare, I couldn't say conclusively.
- Q. You used the phrase fraud or evidence of fraud several times during your testimony today; is that correct?
  - A. I believe so, yes.
- Q. Are you aware that there is actually a certification for people to obtain if they want to be a fraud examiner or a fraud expert? Are

1	B. Rose
2	you aware of that?
3	A. I am.
4	Q. Do you have such a certification?
5	A. Well, I do not. To my knowledge, the
6	CFE you're talking about is not a digital
7	forensic certification.
8	Q. Fair enough.
9	I was just asking, you don't have that
10	certification?
11	A. No, I do not.
12	Q. Are you aware that plaintiff's expert
13	Mr. Broom does have that certification?
14	A. I am not aware of that.
15	Q. Did you review his report and his CV?
16	A. I don't know that I I did review his
17	report, I don't know that I reviewed his CV.
18	Q. I think I marked his report
19	A. I have it.
20	Q as Exhibit could you tell me what
21	exhibit number is on there?
22	A. Exhibit 2.
23	Q. Can you look at page 29 of Exhibit 2,
24	again using the numbers in the upper right-hand

corner.

	Page 209
1	B. Rose
2	A. 29, yes.
3	Q. And the third full paragraph, if you
4	could read there where it starts with the U.S.
5	Department of Justice.
6	A. $Mm-hm$ .
7	Q. Mr. Broom provides by the way, are
8	you familiar with that document that he refers to
9	in that paragraph?
10	A. I'm not.
11	Q. You've never read it?
12	A. Not to my knowledge.
13	Q. Is the Department of Justice a reliable
14	source for computer forensics guidelines and
15	information, generally speaking?
16	A. I don't know that I would offer an
17	opinion on that one way or the other.
18	Q. Are there experts of a different
19	standard than experts outside of the government?
20	Are they not quite as good? Are they relatively
21	the same?
22	A. I think it depends on the expert.
23	Q. Do you see the quote in the next

paragraph, if you could read that and tell me if

you agree with that quote from that document.

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### B. Rose

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I think I would generally agree with Α. that statement.

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And on the top of page 30 the quote Q. there which says "Caution. If the date and time associated with the e-mail are important to the investigation, consider that this received time recorded in the e-mail header comes from the e-mail server and may not be accurate."

Do you agree with that caution there?

- Α. I would hesitate to agree or disagree with that because it appears this received time appears to be referring to something that preceded this statement, and I don't know what I mean, you've got -- you've got a that is. selected quotation here referring to some prior paragraph that is not included.
- Let me ask you, when an e-mail is going Q. through an e-mail server, does the received time of that e-mail come from the server or from the person's computer who receives the e-mail?
- So if you're looking at the copy -- I mean, it depends on what copy you are looking at, right, so if you're looking at the copy as it flowed, for instance, through the Internet

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### B. Rose

headers as we discussed, it would be appended by the server. If you're looking at it on the actual machine itself, the received time would appear based on the system clock of the computer used to do it.

- Q. And in the e-mails that you evaluated the content of the Word documents which you evaluated where my client copied and pasted e-mails, which is his statement, do you know whether that data you just referred to came from an e-mail server or from my client's computer?
- A. Well, I mean, they appear to -- I mean, they purport to be Hotmail e-mails, so they would have been accessed through the Internet and generally would reside on Hotmail servers.

Does that -- if I understand your question --

Q. So is the date and time that that e-mail was received as it's reflected in that, those Word documents, is it your opinion that that information, that data came from the Hotmail server or came from my client's computer clock on which -- the computer he was using to copy and paste those e-mails?

	1 ago 111
1	B. Rose
2	MR. DUPREE: Object to form.
3	A. Specifically with the e-mails that are
4	part of the copy and paste?
5	Q. Yes.
6	A. I mean, I don't think those are
7	legitimate e-mails, so I think they've been
8	edited and manipulated and altered, so, I mean, I
9	think the forensic evidence shows that these are
10	Word documents that were generated and altered.
11	Q. Is it your opinion that no part of
12	those Word documents came from any e-mail between
13	Mr. Ceglia and Mr. Zuckerberg?
14	A. I think it likely that some e-mail,
15	some underlying Hotmail was used as a template,
16	which is why we see the time zone anomaly.
17	Q. I'm asking about the content of the
18	e-mail itself.
19	Are you saying that all that content
20	was manually typed into that document by my
21	client or just some of it?
22	A. I don't know the answer to that
23	question.
24	What I am saying is that the e-mails

themselves show clear signs of manipulation, so

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# B. Rose

- whether he's taking e-mails and editing them or generating them out of whole cloth from a template drawn from an msn e-mail he has, I don't know.
- Q. And the evidence of manipulation, just to be clear, is the time zone anomaly is one of the elements of the manipulation evidence; true?
- A. True.
  - Q. The formatting issues we discussed,
    Tuesday being one of the references, that's the
    other evidence?
- A. True.
- 14 O. What else?
  - A. I mean, you also have the issue that the documents themselves all have been backdated, which is further evidence that they are not genuine documents.
- 19 Q. We have backdating.
- 20 Anything else other than those three
- 21 items?
  - A. Not that I can think of right now.
- 23 Q. The next quote that's on page 30 --
- A. Oh, I -- let me amend myself.
- I actually think not only do you have

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### B. Rose

- backdated documents, but you have multiple
  versions of various documents, which is generally
  something you would not expect to see and in our
  experience it is consistent with people trying
  to -- in forgery cases trying to draft fraudulent
  documents as they sort of experiment and go
  through various drafts and versions.
  - Q. Does Stroz Friedberg have more than one client that you are being paid by currently, just as a general rule?
    - A. As a general rule, yes.
  - Q. Do you use fee agreements that are written with those clients?
    - A. Yes.
  - Q. Are you here to tell this court that Stroz Friedberg types from a blank page every time they rewrite a fee agreement, they just start out with a blank page and start writing or do you use a previous version and update it for each new client?
  - A. I wouldn't want to speak for what everybody does. I think generally you would work off either a template or off a pre-existing agreement and substitute a different client in.

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# B. Rose

- Q. So on your computer and the computer of other employees of Stroz Friedberg there are multiple versions of your fee agreement sitting there today; true?
- A. True, but there are -- I mean, let's look at the example.

There are multiple fee agreements, so, yes, there are multiple versions. My fee agreement with Gibson, Dunn in one case might be very different with a different law firm in another case, so I would have two copies of those.

What you generally would not expect to see is, if this was a true cut-and-paste operation and I was just saving documents, I would cut and paste and I would save the document, I wouldn't have three different versions of it.

The reason you have different versions of documents on our system in terms of a fee agreement is because to produce new fee agreements we have to edit it, and so to the extent that there are multiple versions of that contract, yeah, I think that this cut-and-paste operation, I think those multiple versions are

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# B. Rose

indications that he's edited this document over time, which frankly shouldn't happen if this was just a true cut-and-paste of those e-mails, he shouldn't be editing them.

- Q. Maybe we're talking about different things. I thought you were discussing the Work For Hire document different versions now.
- A. I'm talking about different versions of the three Word documents contained in the purported e-mails.
- Q. Did you have a written -- well, let's stay on this topic since I accidentally waded into it.

When you negotiate with someone who's hiring your firm do copies of your agreement go back and forth by e-mail until you arrive at a final one that both sides agree to?

- A. Occasionally.
- Q. And that would result in different versions potentially of that same document being on your computer?
- A. Yes.
- Q. And that's not an indication of fraud by you guys?

1	B. Rose
2	A. No.
3	Q. Or by the recipient?
4	A. No.
5	Q. It's just how you do business?
6	A. Contract negotiations, no, I would not
7	view them as evidence of fraud.
8	Q. But you did find different versions of
9	a contract in this case in electronic form on
10	Mr on media that you analyzed?
11	A. Of the Work For Hire contract?
12	Q. Yes.
13	A. Yes.
<b>14</b>	Q. And that in and of itself is not
15	evidence of fraud?
16	A. If you ignore the margin manipulations
17	and the backdating and the other problems
18	associated with those documents, yes, that
19	standing alone, if you put the other evidence
20	aside, is not, the mere existence of versions is
21	not evidence of fraud.
22	I do think, and just to be clear, I do
23	think when you have something like the Word
2 4	documents containing the purported e-mails, when
25	vou have multiple versions. I think in that case

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1	B. Rose
2	that is, given the circumstances, evidence of
3	fraud.
4	Q. What's your opinion about the
5	reliability of metadata in Microsoft's Windows
6	operating system?
7	A. I think that is too general a question
8	for me to answer.
9	Q. Does the Windows okay.
10	Metadata associated with files gets
11	placed into those files somehow in relation to
12	the operating system and the computer clock.
13	Am I right?
14	A. So, yes, I mean, certainly the time and
15	date stamps, for instance, would be dependent on
16	the system clock, yes.
17	Q. And are you aware that Microsoft
18	generally discredits the reliability of the last
19	accessed time stamp since it's easily altered by
20	system operations that are not sort of user
21	initiated?
22	MR. DUPREE: Objection, vague.
23	Q. If you are aware.

I am not aware as to Microsoft's

opinion on the last access date.

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# B. Rose

Q. Are you aware of other individuals in the field who have talked about Microsoft's opinion in this way?

- A. I am not aware of anyone who has talked about Microsoft's opinion regarding last access dates.
- Q. And do you know a computer security expert named Rebecca Mercuri?
  - A. I do not.
- Q. Now, you brought up the concept of backdating that you put into your report and your conclusion is that -- I want to be clear -- that a computer was backdated or that files were backdated or is it both?
- A. Well, I think, in the circumstances we're talking about it's taking an action with the system clock to backdate it and then taking an action with the document so that it picks up a date which is not the true date.

In other words, if I have a Word document and I want to backdate the creation date, before I saved it on the computer I would backdate the system clock of the computer, save the document onto the file system, it's going to pick up that,

www.veritext.com

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### B. Rose

the creation date, as, you know, as pursuant to the system clock.

- Q. And the way you determine backdating here is by comparing different dates in metadata associated with files; is that a fair statement?
- A. Well, I think that's one way in some circumstances you could do it. You know, there's other ways to do it, looking at system restore points, looking at information regarding the relationship between the system setting on the computer and Microsoft's network time, I mean, so there are other evidence of backdating, but one way is to look at the relationship between different dates.
- Q. Well, that's the way you used here, in your report here?
- A. We also discuss, of course, the examples of system restore points that are out of order, should be sequential, and we talk about one instance where the system clock was well off of the time recorded by Microsoft, the system generates an error log because it's so far off, so I would say we discussed all three methods of identifying backdating.

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### B. Rose

- Q. And all this backdating evidence that's in your report comes exclusively from the Seagate hard drive; true?
  - A. I think that is not true.
- Q. Where else did you find backdating evidence other than the Seagate hard drive, what other computer did you find that on?
- A. I know there's evidence of backdated documents on one of the -- I believe it was a floppy disk.
- Q. Do you know where in your report you talk about that floppy disk having evidence of backdating?
  - A. I will try to find it.

So on page -- there's a discussion of backdating related to one of the versions of the Work For Hire document that begins -- and I'm using the upper, the page number on page 37.

- Q. Where was that file found? On a CD?
- A. It was found on a floppy disk.
- Q. It's true that a floppy disk, for evidence of backdating, you have to find out what computer it was actually inserted into, because floppy disks don't have clocks; right?

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# B. Rose

A. Let's be clear.

So the time itself of the files would be appended by the computer that was used to essentially save the document onto the floppy disk; right? That doesn't mean the floppy disk itself is not going to contain evidence of backdating.

For instance, in this case you have two documents, you have documents which are last accessed February 18, 2011 that are deleted documents and you have another document that was created on May 2nd, 2003 that sits on top of those documents, or if that makes no sense, it's inherently inconsistent and could only resolve some system clock anomalies.

- Q. The deleted files had no content which you could recover; true?
  - A. That's correct.
- Q. And so there's no way to say whether they connect there the same as the file that sits over top of them? I mean, you can't say it's the same file as the one you have content from because you don't have the content to compare it?
  - A. Well, they are different names, so I

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# B. Rose

think that would be unusual, but it can't do a content-by-content comparison, that's correct.

Q. We were talking about the hourly rate you charged and the hourly rates for everyone else.

Do you know what your total billable hours were that went into the work that produced this report?

- A. I don't.
- Q. Is that something you could get from your office? How difficult would that be to get from whoever does accounting at your office?
- A. The total billable hours from myself preparing this report?
  - Q. And everyone else.
- A. I mean, you'd have to aggregate it from the invoices, so it's not -- it's not right at hand, but it would be a task that could be completed fairly easily.
- Q. I would ask you if you could have someone from your office compile that together.

The rules regarding experts, I think, entitle us to a statement of the compensation that you guys were paid for all of your study and

1	B. Rose
2	your testimony in the case, so
3	MR. DUPREE: We'll see what we can do
4	on that.
5	Q. What were your instructions when you
6	first started doing this gathering of evidence to
7	prepare this report?
8	You said several times in your
9	testimony we were charged with this, we were
10	charged with that, sort of instructed meaning
11	charged.
12	What were you instructed to do generally,
13	as far as your analysis?
14	MR. DUPREE: I just, for the record, I
15	want to make sure we don't get into
16	privileged areas.
17	I think it's acceptable for him to give
18	a high-level response, but I'm assuming
19	we're not going to get into the specific
20	contents of any communications he's had with
21	Gibson, Dunn lawyers?
22	MR. BOLAND: You're correct, yes, just
23	the high level.
24	Q. What was your general approach? After

you had your conversations with the defense

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### B. Rose

2 lawyers, what did you understand you were
3 supposed to do?

- Α. It has nothing to do with my conversations with the defense attorneys. mean, the work to produce this report was done pursuant to Electronic Asset Inspection Protocol, which I'm sure you've read, it was issued by the Court and sets forth what we are to do in terms of an analysis, and the charge based on that was to collect, preserve and analyze the Ceglia media for evidence of the authenticity or inauthenticity of the Work For Hire contract and the purported e-mails and then it sets forth, of course, various other procedural ways to identify presumptively relevant material, produce it to you first for privilege review and then produce it to Gibson, Dunn, so when I talk about what we were charged with doing, I'm talking about that document that was issued by the Court, and my understanding was agreed on between the parties.
- Q. In the Word documents that contain the e-mail exchanges between my client and Mr. Zuckerberg, how did you determine which one of the dates in the metadata were the authentic

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### B. Rose

2 ones and which ones weren't the authentic ones?

- A. I'm not sure what you mean.
- Q. Well, if a creation date and an access date somehow conflicted, how did you determine which one was the one to rely on and which was the one to say, well, that's obviously the wrong date?
- A. I'm not sure I can answer that question in the abstract, I'd have to -- I mean, these are all fact-specific inquiries and depend on circumstances.

Do you have a specific example?

I mean, for the purported e-mails, in other words, documents, I mean, I think the inaccuracy such as the time zone stamp is something which is fairly clear, right? I mean, things e-mailed in October should have a time zone consistent with Eastern Standard Time.

In terms of the rest of it, you know, these documents, based on our analysis of them, are clearly edited, manipulated documents, so I don't believe they are real e-mails and so making a choice as to which one is the accurate date, right, we don't have to do that and we are not

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### B. Rose

faced with that because frankly, you have a sent and received time on the face of the e-mail and it's a Word document. I don't have access dates, I don't have modified dates that are sort of the embedded data you would have if it were an e-mail file.

- Q. Did you review the report by Jerry Grant, plaintiff's expert?
  - A. Yes.
- Q. And he evaluated exclusively the data on the floppy disks in this case; true?
- A. That is what I recall him discussing; whether that's exclusively, I'd have to look back at the reports, but I do remember him focused on that issue.
- Q. After reading the report did you have any dispute with the accuracy of the forensic data that he found?
- A. I don't recall specific disputes. I do remember some questions about his analysis, but it's been some time since I looked at that.
- Q. Do you recall today any specific forensic data he recovered that you think is somehow not the correct forensic information, not

1	B. Rose
2	his interpretation of it, but that he pulled the
3	wrong dates or he pulled the wrong information
4	somehow?
5	A. Not that I recall as I sit here today.
6	(Rose Exhibit 5, article entitled "Real
7	Evidence, Virtual Crimes The Role of
8	Computer Forensic Experts" by Paul H. Luehr,
9	marked for identification, as of this date.)
10	Q. I'm giving you Exhibit 5, Mr. Rose, it
11	is an article by someone named Paul, I don't know
12	how to pronounce his last name, L-u-e-h-r.
13	A. Luehr.
14	Q. Do you know who that is?
15	A. I do.
16	Q. Who is that person?
17	A. He is the managing director of Stroz
18	Friedberg in our Minneapolis office.
19	Q. Can you look at the I guess it's the
20	third page from the end of all of this.
21	A. Third page from the end?
22	Q. Yes.
23	In the right-hand column near the
24	bottom, the last full paragraph, the second to

last full paragraph starts with the word "While."

1	B. Rose
2	Do you see that?
3	A. Mm-hm.
4	Q. It says here "While some computer dates
5	and time stamps will be conclusive, others may be
6	open to interpretation by competing experts.
7	Created, modified and accessed dates may be
8	viewed differently depending on whether a file
9	remained in one place or whether it was copied
10	and saved to several locations. In addition, log
11	files may vary by time zone, and metadata are
12	generally only as accurate as the underlying
13	computer clock time."
14	Would you agree with that statement
15	from his article?
16	MR. DUPREE: And just, for the record,
17	this appears to be about a 10-page
18	single-spaced article you have shown the
19	witness and he has not had an opportunity to
20	review the full article, obviously.
21	MR. BOLAND: True.
22	A. Let me just read it again, so I can
23	Q. Very well.
24	A. I think I would generally agree with
25	those statements.

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# B. Rose

- Q. Have you ever read that article before?
  - A. I don't recall if I read it before.
  - Q. But it's essentially a co-worker of yours in Stroz Friedberg who wrote it; true?
  - A. It's the managing director in our Minneapolis office.
    - Q. Do you know that person?
    - A. I do.
    - Q. Okay.

You mentioned you -- we had talked about a residence in different locations and that you'd go to Indiana occasionally and you'd use your parents computer there; do you remember talking about that?

- A. Yes.
- Q. Have you ever used your parents' computer to e-mail documents to lawyers in cases that you're working on using their account?
  - A. I don't recall one way or the other.
- Q. So it's possible you've used your parents' e-mail account to send documents to lawyers in cases on which you are working?
  - A. Is it possible?
- 25 It's possible.

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# B. Rose

- Q. How many times do you think that might have happened?
- A. I don't have any recollection of it one way or the other.
- Q. Did you find any forensic evidence in your analysis before or after producing this report to dispute Mr. Ceglia's declaration that he sent as an attachment a copy of the Facebook contract to Mark Zuckerberg before April of 2003?

MR. DUPREE: Object to form.

- A. Could you repeat it?
- Q. Did you find any evidence before or after you produced your report there to dispute my client's declaration under oath that he sent at least one e-mail to Mark Zuckerberg before April 2003, when they signed the contract, that included as an attachment the Facebook contract in electronic form?

MR. DUPREE: Same objection.

- A. And what's the Facebook contract?
- Q. The two-page document that my client has presented as an authentic contract between him and Mr. Zuckerberg which mentions Facebook.
  - A. So during our analysis we did not find

	Page 232
1	B. Rose
2	any evidence of that, I don't think we found any
3	evidence regarding that whatsoever.
4	Q. So no evidence to dispute his claim
5	that he sent that e-mail?
6	A. I mean, we didn't find any evidence
7	regarding that issue at all.
8	Q. And regarding the TIFF images and
9	physical size, et cetera, do you know how to use
10	the metadata associated with those TIFF images
11	and calculate the physical size of that file, the
12	mathematical formula that's used by digital
13	imaging experts to sort of tell you the physical
14	size of the file by using the pixels that are
15	listed in the metadata?
16	A. No.
17	Q. And you mentioned a November 2003
18	e-mail production from Harvard; do you recall
19	testifying about that?
20	A. Yes.
21	Q. And that there were some e-mails from
22	that production that were not in later productions;
23	true?
24	I think that's what you testified.

My recollection is that there were some

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### B. Rose

unique e-mails contained in the November 2003

collection that were not contained in the October

2010 collection and subsequent, obviously

subsequent collections.

- Q. And were any of those e-mails that weren't in the later collections relevant to this case based upon your evaluation of them?
  - A. I don't recall.

And let me just be clear about that.

In identifying unique e-mails, what we were doing is essentially deciding what to add to an aggregate review set, so what I'm working off is essentially an aggregate set, so I don't recall whether, you know, what particular source each e-mail came from.

Q. And the floppy disk which contained these Word documents that my client has said are the copy-and-pasted e-mails, plaintiff's expert Jerry Grant determined that the versions of Microsoft Word that those documents were created in were all contemporaneous with the dates that my client says he created them, 2003 and 2004.

Did you find anything to dispute that conclusion of Mr. Grant?

1	B. Rose
2	A. I don't have any information about the
3	versioning of those Word documents at this point,
4	so
5	Q. Who would have that amongst the people
6	who did work for you on this report?
7	A. I don't know. It's certainly possible
8	that either Mr. McGowan or Mr. Novak would have
9	that information.
10	Q. Would Mr. Friedberg have that
11	information?
12	A. I doubt it.
13	MR. BOLAND: I just want to take about
14	a five-minute break and then I think we will
15	wrap it up.
16	MR. DUPREE: Okay.
17	We're off the record.
18	(Recess taken.)
19	THE VIDEOGRAPHER: The camera is on.
20	MR. BOLAND: All right. Back on the
21	record.
22	BY MR. ROSE:
23	Q. Mr. Rose, just a few last questions.
24	Other than the four people associated
25	with the report there, can you give me the names

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### B. Rose

of anyone else who did any work on this case in some way contributing to the report?

A. I don't know that I can give you a full and accurate list from memory. There are -- the vast majority of the work, including the vast majority of the forensics was done by Mr. McGowan and Mr. Novak and together with them I primarily supervised the matter and the three of us were the primary drafters of the report, so most of the work, the vast majority of the work was done by us.

Now, to the extent small projects were done by various people, there were certainly other people who were involved at various stages in other projects and I'm not sure -- I could certainly reconstruct that for you, but I'm not sure I could give you an accurate and comprehensive list today.

Q. Very well.

If you could reconstruct that, that would be good.

Can give a ballpark on the number of hours you spent? I know you don't know exactly.

I'm assuming it's not a thousand, but

	rage 230
1	B. Rose
2	maybe it is.
3	A. I don't think it would be a thousand.
4	On the report, the case itself, I
5	mean
6	Q. On everything leading up to the
7	production of the report.
8	A. So not just I mean, I just want to
9	be clear, because there's sort of an expedited
10	discovery phase and there's a pre-expedited
11	discovery phase, so the work, you know, I would
12	say that we were involved in the case prior to
13	the expedited discovery, I think, order which
14	came down on July 1st, I believe, of 2010, and
15	then there's been a significant amount of work
16	since then, so we're talking about everything.
17	Q. Yes.
18	A. Okay.
19	I don't. It would be more than a
20	hundred, it's less than a thousand, but
21	Q. Somewhere in there?
22	A. Yeah, somewhere in there.
23	Q. Now, is the term "fraud" that's
24	throughout your report, is that defined anywhere

in the computer forensics field? Is there is an

1	B. Rose
2	agreed definition of that amongst computer
3	forensics experts?
4	A. I don't know if there's an agreed
5	definition of that among computer forensics
6	experts, I'm not aware of one.
7	Q. So would it be fair to say that the
8	determination of fraud which you repeat in the
9	report is really your personal opinion, not an
10	expert opinion, since you're not a fraud expert?
11	A. I would say it's an expert opinion, I
12	mean, it is an opinion based on our analysis of
13	the digital forensics evidence that we as digital
14	forensic experts uncovered, I would regard that
15	as an expert opinion.
16	Q. And you feel it's appropriate to opine
17	about fraud when you are not a certified fraud
18	expert or fraud examiner?
19	MR. DUPREE: Object to form.
20	Q. You feel that's appropriate?
21	A. Yes.
22	MR. BOLAND: Can you mark this one last
23	thing, please, I think we are on 6.
24	(Rose Exhibit 6, article entitled

"Criminal Defense Challenges in Computer

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# B. Rose

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Forensics" by Rebecca Mercuri, marked for identification, as of this date.)

**4** 5 Q. Exhibit 6, Mr. Rose, is an article by Dr. Rebecca Mercuri, it's actually an excerpt from a book.

6 7

A. Okay.

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Q. I would like to draw your attention to the paragraph on page 134 of that document, it is actually the third physical page of the document.

11

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A. Okay.

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Q. And in the section 2.3, "Confusing Time

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Stamps," do you see there's a third full paragraph that reads "Although Microsoft

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generally discredits the reliability of the last

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access time stamp, since it is easily altered by

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system operations that are not directly user

18

initiated, either or both prosecution and defense

19

may choose to use this metadata if it is helpful

20

to their construction. Best practice should

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always be to disallow it for any use."

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What's your opinion -- do you agree or disagree with Ms. Mercuri's statement about --

24

A. I disagree with that.

25

Q. Have you had any training from

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# B. Rose

2 Microsoft on that topic?

A. I have not, but let me give you a clear example where I think that paragraph is clearly incorrect.

There are examples, for instance, in the report where a last-access date predates a last-written-to date. That would be a circumstance where, in fact -- it should not be possible, right, you cannot open up a document and modify it without accessing it, and so the inconsistency itself is evidence of an anomaly. In that case I think you could clearly rely on the last-access date.

As I understand this, if you're talking about looking at a particular last-access date and saying I can conclusively determine when somebody last accessed that file, I do agree that it is a very fragile time stamp that can be updated by a variety of things including user action and system action, and so to the extent you're talking about using it for that particular purpose I think last-access dates are fragile and should be -- they should be interpreted accordingly.

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### B. Rose

I do think there are clear examples where inconsistencies between last-access dates and last-written dates, for example, there are times when it should be used, so I would disagree with that paragraph.

- Q. Has Microsoft ever issued, to your knowledge, as a computer forensics expert, any formal statements about relying on the access date that the operating system stamps on the files?
- A. I don't know about that one way or the other.
- Q. Did you call Microsoft or contact them in preparation of this report to find out if those dates are reliable?
  - A. No.
  - Q. You're just assuming that they are?
- A. Again, you're going to have to give me a specific example.

I don't think we in the report relied on it in the way I just said, that we said we can conclusively tell you that somebody accessed this document on this date because of the last-access date.

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### B. Rose

There are examples of times where we use a last-access date as -- to inform our opinion. I am giving you one example. If the last-access date predates the last written-to date, that's an anomaly which indicates to me some kind of system clock problem or manipulation, so, again, depending on the way we used it, I think you'd have to give me a specific example and I could address that.

I don't think we had just gone through and necessarily assumed in all cases that last-access dates are in fact reliable and in fact I think, if you've read the report, we do note on occasion that that is in fact a fragile time stamp and can be updated by system activity.

- Q. Is fraud the only way these anomalies that you've attributed to backdating could have occurred?
- A. Well, again, I have to deal with specific examples. I think there are examples, for instance, of flip flopping time stamps, so you're not just dealing with trying to determine when something happened, but you're looking at, you know, time stamps should not go -- should

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# B. Rose

not, you know, toggle back and forth, but when you see that what you're seeing is, I think, an example of some kind of system clock manipulation.

Again, you'd have to consider within the circumstances and I think the various motivations and what the documents are being used for and how the particular manipulation affected the interpretation of that document to determine whether I would conclude it was fraud.

I mean, fraud is a conclusion that's drawn from a complete analysis of the facts with everything considered, right, so -- and again, this is an overwhelming case of it, so if you look at this case and you look at all of the manipulations of data and you look at the existence of the StreetFax contract and you look at the manipulation of the Work For Hire document and the backdating and the margin manipulation and all of that example, that, I think, is a relatively clear conclusion of fraud.

Having said that, if you are looking at a particular metadata anomaly, whether I would conclude that in the context is fraud would depend on each individual example.

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# B. Rose

Q. My question is, let's put aside the constellation of things that you have brought up many times. I'm talking about just a document which has the anomaly you've identified, this difference of dates.

That alone is not enough to say fraud, just the single document with some anomaly in dates; isn't that true?

A. A single document with -- I mean, this is a very general question. I don't know what kind of anomaly in dates you're talking about.

I think there are examples of documents where you have date anomalies, but if you just had that standing alone you couldn't draw a conclusion of fraud.

- Q. And why couldn't you draw fraud from just that alone, a date anomaly?
- A. I think there are examples where you couldn't, I think there are probably examples where you could. It's all fact specific, so --
  - Q. Tell me about one where you couldn't.

You had just a date anomaly on a Word document, but you would not be comfortable saying it's the result of fraud.

	Page 244
1	B. Rose
2	Why not?
3	Isn't every date anomaly fraud?
4	A. No.
5	Q. Well, how else could a date anomaly
6	happen if it's not fraud?
7	A. Well, let me give you a clear example
8	because in this case.
9	You have the Sidley & Austin
10	intermediary server which had the time zone
11	setting that's incorrect. I would not conclude
12	from that that somebody at Sidley & Austin is
13	engaged in fraud because I see no it's a
14	misconfiguration which could easily occur, it
15	doesn't affect the actual dating of the document
16	itself because the time's correct, it's an
17	intermediary server, so you have the real time
18	appended by the server after it, it's something
19	which could easily escape notice at a place like
20	Sidley & Austin and I cannot think of any reason
21	that anybody would want to manipulate that time
22	zone stamp and the time zone stamp alone for any
23	purpose, for any fraudulent purpose.
24	So that's an example of one where, I

think, if you look at that and the circumstances

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### B. Rose

it would be very difficult to draw the conclusion of fraud from that, I think it's clearly not, but again, you're looking at all the circumstances.

- Q. But in reality there could have been someone who was a rogue employee from Sidley & Austin for some other purpose not related to this case who manipulated their clock and was committing a fraud internal to the company or internal to the law firm, that's hypothetically possible; right?
- A. I cannot think of a single fraud that you could perpetrate merely by misconfiguring the time zone setting and not the time itself and only doing it on the intermediary server, so I think that is a farfetched hypothetical.
- Q. So your opinion in this case that there's -- the reason you think there's backdating and fraud with the backdating isn't because of one specific document that you can conclude fraud from; true? It's a collection of everything together, it's in context, as you say?
- A. No, no. I think you have to take it case by case.

So there are examples, for instance,

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### B. Rose

you know, you look at some of these, you look at some of these documents and I think you look at them alone, they are clearly backdated, the documents themselves are backdated. Now -- and that happens multiple times throughout the thing.

If I see a system clock which generates an error because it's 94 days off of the Microsoft time, I know the system clock is off; right?

If I see restore points that go -which should be sequential and go from December
2010 to September 2010, I know that there's been
manipulation of the system clock.

So in all these examples we're not saying, Hey, there's been manipulation of the system clock because we're considering this piece of evidence in the context of the entire case.

What we're doing is saying, Okay, let's look at this document. This document is clearly backdated.

Let's look at this document. This document is clearly backdated and has been manipulated.

Let's look at this document. This

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# B. Rose

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document has clearly been backdated.

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Let's look an example of the error report, that is a clear example of where the

So you take each individual evaluation

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system clock is off.

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separately, so you look at a document -- I'm not

7 8

necessarily -- I'm looking at the metadata of

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that, I'm not evaluating in the context of the

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case, I'm evaluating that particular document.

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When I see that's backdated and when I

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see backdating in multiple versions and I see

13

manipulation of documents, you put all of that

14

together and you draw your ultimate conclusion

15

which in our case is, I think, clear evidence the

16

StreetFax contract is authentic and the Work For

17

Hire contract is not, so that ultimate conclusion

evaluated on its own and then you determine how

to interpret that in the broader context of the

18

is built upon what I think is overwhelming 19 evidence from a variety of different sources that

20 show fraud, but each individual instance is

21

22

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Whenever you use the word "backdating" Q.

25

is that synonymous with a fraudulent motive?

case.

	Page 248
1	B. Rose
2	A. I think it in my experience you
3	generally see backdating in a case of document
4	manipulation, document fraud, it's certainly not
5	synonymous with it.
6	Q. And the 94-day system clock difference
7	you just talked about, that's on the Seagate hard
8	drive, that's what you're referring to in the
9	report?
10	A. I believe so.
11	Can I refresh my recollection?
12	Q. Sure.
13	MR. DUPREE: Are we about to wrap
14	things up, I hope?
15	MR. BOLAND: Yes.
16	MR. DUPREE: Okay. Thank you.
17	A. Yes.
18	Q. And the copy of the StreetFax contract
19	that's in Exhibit 1 there, you would agree with
20	me in large part is not legible, either one of
21	those pages, the way it is in that document?
22	MR. DUPREE: This is the version you
23	handed him today?
24	MR. BOLAND: Yes.

So we're back to -- so we're back to

Α.

1	B. Rose
2	Exhibit F, second page
3	Q. Exhibit H was the first page.
4	A. So Exhibit F is the second page and
5	Exhibit H is the first page of the StreetFax
6	contract.
7	Q. And in the size that they are in that
8	report I'm sorry, in that exhibit I gave you,
9	in large part they are not legible?
10	A. I would say these exhibits, based on
11	size and, you know, the lightness of the ink and
12	other, you know, the way they appear in this
13	report, I mean, there are certain parts of that
14	that are legible, but most of it I would say
15	would be illegible.
16	Q. And Mr. Southwell had a version where
17	the document was significantly magnified.
18	Have you ever seen that version of the
19	StreetFax images?
20	A. I saw
21	MR. DUPREE: Object to form.
22	I'm not sure what we are talking about,
23	that's all.
24	Q. Have you ever seen a larger a
25	version of that image that you just talked about

1	B. Rose
2	in those two exhibits that was magnified to be
3	close to an 8-1/2-by-11 piece of paper? Have you
4	ever seen that?
5	MR. DUPREE: Object to form.
6	Go ahead.
7	A. I have seen larger versions of this.
8	Q. Are they legible in all respects? Can
9	you read all the words of those larger versions,
10	if you know?
11	A. I don't recall having any difficulty
12	reading it.
13	Q. Do you know which one was given to the
14	Court, the smaller version of that exhibit or the
15	larger magnified version that you might have
16	seen?
17	A. I do not.
18	Q. And finally, in Mr. Broom's report he
19	talked about the BIOS battery.
20	What is that on a computer, a BIOS
21	battery?
22	A. A BIOS battery? I am not sure I've
23	ever hear it called a BIOS battery. It tracks
24	certain information about the computer itself

such as the system clock settings and other

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# B. Rose

2 information.

- Q. Well, there's a battery on board the mother board of most desktop computers at least; right?
  - A. I don't know.
- Q. How does a computer know what time it is if you unplug it from the wall, for example? Doesn't it have a battery that helps keep track of the time for a while?
  - A. I don't know.
    - Q. Have you ever heard of a CMOS battery?
- A. No.
- Q. What happens to the time zone setting of a computer if you unplug it from the wall for a year, what will happen to it's ability to know what time it is when you plug it back in?
- A. I don't know whether it retains that the entire time or whether when you plug it back in it resyncs with the system clock, network clock, I should say.
- Q. This computer that the Seagate hard drive came from, do you know if that computer was ever unplugged for any period of time like a year?

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2	CERTIFICATE
3	STATE OF NEW YORK )
4	: ss.
5	COUNTY OF NEW YORK )
6	
7	I, CARY N. BIGELOW, Court Reporter,
8	a Notary Public within and for the State of
9	New York, do hereby certify:
10	That BRYAN J. ROSE, the witness whose
11	testimony is hereinbefore set forth, was
12	duly sworn by me and that such testimony
13	given by the witness was taken down
<b>14</b>	stenographically by me and then transcribed.
15	I further certify that I am not
16	related to any of the parties to this
17	action by blood or marriage, and that I am
18	in no way interested in the outcome of this
19	matter.
20	IN WITNESS WHEREOF, I have hereunto
21	set my hand this 23rd day of July, 2012.
22	
23	<del></del>
24	CARY N. BIGELOW
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