UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

ELOUISE PEPION COBELL, : Civil Action 96-1285 et al.

Plaintiffs
V.

DIRK KEMPTHORNE, Secretary of the Interior, et al.

Defendants : MORNING SESSION
TRANSCRIPT OF EVIDENTIARY HEARING DAY 3
BEFORE THE HONORABLE JAMES ROBERTSON UNITED STATES DISTRICT JUDGE

APPEARANCES:
For the Plaintiffs: DENNIS GINGOLD, ESQUIRE
LAW OFFICES OF DENNIS GINGOLD
607 14th Street, NW
Ninth Floor
Washington, DC 20005
(202) 824-1448

ELLIOTT H. LEVITAS, ESQUIRE
WILLIAM E. DORRIS, ESQUIRE
KILPATRICK STOCKTON, L.L.P.
1100 Peachtree Street Suite 2800
Atlanta, Georgia 30309-4530
(404) 815-6450

KEITH HARPER, ESQUIRE
JUSTIN GUILDER, ESQUIRE
KILPATRICK STOCKTON, L.L.P.
607 14th Street, N.W.
Suite 900
Washington, D.C. 20005
(202) 585-0053

DAVID C. SMITH, ESQUIRE
KILPATRICK STOCKTON, L.L.P.
1001 West Fourth Street
Winston-Salem, North Carolina 27101
(336) 607-7392

For the Defendants: ROBERT E. KIRSCHMAN, JR., ESQUIRE JOHN WARSHAWSKY, ESQUIRE MICHAEL QUINN, ESQUIRE J. CHRISTOPHER KOHN, ESQUIRE U.S. Department of Justice 1100 L Street, N.W. Washington, D.C. 20005 (202) 307-0010

JOHN STEMPLEWICZ, ESQUIRE Senior Trial Attorney U.S. Department of Justice Commercial Litigation Branch Civil Division
Ben Franklin Station P.O. Box 975

Washington, D.C. 20044 (202) 307-1104

## Court Reporter:

REBECCA STONESTREET
Official Court Reporter
Room 6511, U.S. Courthouse 333 Constitution Avenue, N.W. Washington, D.C. 20001
(202) 354-3249

Proceedings reported by machine shorthand, transcript produced by computer-aided transcription.

WITNESS

MICHELLE HERMAN
By Mr. Quinn

NUMBER

DEFENSE:
152-158
571

## PROCEEDINGS

COURTROOM DEPUTY: This is Civil Action Number 96-1285, Cobell versus Kempthorne, et al.

THE COURT: Good morning, Mr. Quinn.
MR. QUINN: Good morning, Your Honor. I would like to continue if $I$ could with my examination of Ms. Herman. But before we call her back to the stand, I just would like to clarify one thing that I understand the Court has ordered with respect to Privacy Act material, that we're free to proceed with that and the public display of the information.

I think that's fine in terms of the overall
presentation of the witness' testimony in showing exhibit data on the screen. I just would like to inform the Court that in some sections of the DCV reports - I believe it's primarily all in Part $D$ of the regional reports - there are some pages that do disclose name and Social Security numbers, and I wanted to advise the Court of that fact.

I don't think it's a problem, I don't intend to show those pages today, but when we get to the point of offering the material into evidence, $I$ just wanted the Court to be aware of that.

THE COURT: All right. Thank you.
MR. QUINN: Could we recall Ms. Herman to the stand, please?

MR. SMITH: Your Honor, if I could address one
administrative matter.

THE COURT: Mr. Smith, yes.
MR. SMITH: Your Honor, you may recall that you gave the defendants leave to file an additional exhibit on the 30 th of September. It was actually produced to us October 3rd. And that is the DCV that Mrs. Herman has been talking about.

When she was testifying on Thursday, we actually
discovered the government's version was different than ours. The Bates stamp numbers were off. We have reconciled that; they immediately give us a new copy.

However, on Saturday night, about 10:00 o'clock, we were served with a new version, and there are two significant changes to that. Number one, there's a category of documents that have been changed; a sentence has been added, there are calculation changes, some of them minor, some of them significant.

Number two, there's an additional 1,750 pages to that document which were not originally produced. The original document had about 10,000 pages; now we have another 1,700 or so pages.

Interesting on -- we looked at some of the underlying codes for those pages, and some of those documents were created the day trial started. Some of those documents were created immediately after Ms. Herman testified. So we're not talking about documents that were just omitted; some of them were
actually created while this trial was proceeding.
Your Honor, we've discussed this with Mr. Quinn. And number one, we've agreed that because it's impossible for us to look at all these documents - they're not categorized, they're interspersed within the original document - that Ms. Herman will come back. We'll go as far as we can, and she will come back when we have an opportunity to look at those additional 1,700 pages, if that's satisfactory to the Court.

THE COURT: That's exactly the right resolution of it. Thank you.

MR. SMITH: The other concern we have is whether these pages are simply inserted in the original exhibit, or they are a new exhibit. And our concern with simply inserting these in the original exhibit is, that changes the Bates stamp numbers. And we've already got our documents on the system, we already have our exhibits. We would have to go back through and identify where our documents are in their new exhibit, and that would be an extreme task at this late date.

Plus the fact that we're dealing with a new document. The original exhibit was dated September 30 th; now we're dealing with a document that is really October 13 th and has changes to it.

So our suggestion is, this new document with the corrections be simply identified as a new exhibit instead of trying to intersperse pages in the original exhibit, if that's
satisfactory.
THE COURT: Any problem with that, Mr. Quinn? Makes sense to me.

MR. QUINN: There's one distinction, Your Honor, with respect to the additional pages versus the corrected pages. I think the corrected pages number 14 to 17. The underlying data was all in the report. What happened is, the numbers and information being transposed to the overall text, in some cases the incorrect number was put in or a statement was left out that should have been in. But it's all based on the underlying material that's in all the work papers that make up the overall component of the DCV reports.

The additional pages are pages actually that are -were in the September 30 binder set that FTI produced. The problem was, when it was electronically transmitted to the Department of Justice for production, certain components of tabs didn't get into the electronic version that was sent to us. So to say that those pages weren't part of the September 30 th report is absolutely incorrect. There are some corrected pages, but they're less than two dozen. And -THE COURT: All right. I don't hear Mr. Smith dwelling on the blame part of this. He's dwelling on the fix. MR. QUINN: I understand, Your Honor. But I believe that the exhibit that we had marked, and we were prepared to originally use when we started with Ms. Herman on Thursday,
should contain these additional pages that were inadvertently omitted from our set that we produced.

The corrected pages, I guess I would be willing, at minimal, to treating those separately as corrected pages to the September 30th report, because that's in fact what they were.

THE COURT: I thought his suggestion is, make the whole thing a new exhibit. Right?

MR. SMITH: Your Honor, if we could have the original one they produced to us originally as an exhibit, and then have the corrected version, that way we wouldn't have to go try to match up Bates stamp numbers with the new version we just got. THE COURT: What's wrong with that?

MR. QUINN: No problem, Your Honor, we can do that. THE COURT: So one is Exhibit 10 and the other Exhibit 10-A or something like that.

MR. QUINN: That's fine, Your Honor. We'll work on the numbers over a break.

THE COURT: All right. Good. Ms. Herman?
CONTINUED DIRECT EXAMINATION OF MICHELLE HERMAN
BY MR. QUINN:
Q. Good morning.
A. Good morning.
Q. When we broke on Thursday, we were just beginning to talk about the data completeness validation reports that you and FTI had prepared. And I would like to go back and just begin there
in terms of the overall reports, and review with the Court how they're organized and effectively what they contain. Okay?

MR. QUINN: Could we have defense table, please?
BY MR. QUINN:
Q. Is it up on your screen? It's not on mine. Is it on your screen, Ms. Herman?
A. No, it's not.

MR. QUINN: May I approach, Your Honor?
BY MR. QUINN:
Q. All right. Can you see that cover page, Ms. Herman?
A. Yes, I do.
Q. And it's identified as DX-152, and page 152-1. Can you identify what that cover page refers to?
A. It's the cover page to our overall report.
Q. Okay. If you would briefly describe for the Court what the overall report contains and how it relates to the regional reports?
A. The overall report contains a summary of all the work that we've done on all 12 regions to date. It covers both the data sets that we've used, how much information we've restored to the record to this point in time, a summary of our transaction mapping, and account number analyses.
Q. So if you wanted to find out information about a region that doesn't yet have a regional report, is this where you would look?
A. Yes, you would.
Q. And I would like to just briefly identify each of these reports for the record, if you would, Ms. Herman. I've put up another slide of a cover.

Could you identify this is Defendant's Exhibit 153, page 153-1?
A. That's our Alaska regional report.
Q. That's one of the six regional reports?
A. Yes, it is.
Q. Defendant's Exhibit 154 is now on the screen at page 154-1.

Could you describe and identify that document?
A. That's our Pacific region report.
Q. It says, "Sacramento area." Could you explain what that little subheading is?
A. Currently in TFAS they're referred to as regions, and in IRMS the data was referred to as areas. So Pacific refers to the name within the TFAS system, and Sacramento within the IRMS system.
Q. So you've included the corresponding names from the two computer systems for that area of the country?
A. Yes.
Q. Put up on the screen next, Ms. Herman, a slide of Defense Exhibit 155. It's 155, page one. That's another cover. Could you describe and identify that for the Court?
A. That's our western region report.
Q. And it mentions Phoenix area. Again, is that a cross reference?
A. Yes, it is.
Q. And the next slide $I$ have on the screen, Ms. Herman, is Defendant's Exhibit 156 at page 156-1. Could you identify that for the record, please?
A. That's our Northwest region Portland area report.
Q. Could you identify Defendant's Exhibit 157 , please, at page 157-1, for the record?
A. That's our Great Plains region Aberdeen area report.
Q. And Defendant's Exhibit 158 is next, at page 158-1. Could
you describe that, and identify it for the court?
A. This is our Rocky Mountain region Billings area report.
Q. Is that the six? Did we cover all six?
A. Yes, we have.
Q. If we could go to the next slide.

Ms. Herman, I put on the screen Defendant's Exhibit 154 at page two.

MR. QUINN: And could we zoom in to the title of that page, please?

BY MR. QUINN:
Q. Could you identify this document for the record?
A. This is the index to our Pacific region Sacramento area report.
Q. And what does this part of the regional report tell the
reader?
A. Each one of the regional reports is set up in the same
fashion and broken down into these same sections, and it's just
an overview of what's included at each tab.
Q. And the summary of findings, what would you find in the
summary of findings part?
A. An overview report for the region.
Q. A narrative report similar to what's in the overall report?
A. Yes, exactly.
Q. But for that specific region?
A. Correct.
Q. Tab B is titled "Data availability by agency." What does
that address?
A. It addresses the months and years that we have data for each
one of the agencies within the region.
Q. And Part C, "Data completeness," and the regional reports.
What does that address?
A. It summarizes the transactions that we've restored to the
database to this point in time, as well as a summary of the
accounts that are and are not in balance.
Q. So it's a status report of where you are on doing those
tests?
A. Yes, it is.
Q. And Part D is titled "Account number analyses." What does
that contain?
A. This contains the summary of our status with each one of our account number tests. As we discussed on Thursday, we have a reused account number analysis test. We look at accounts that have multiple names that we don't feel have been reused. Any accounts that we have not yet resolved would also be included in this section.
Q. And the next part, Part E, "Transaction mapping." What does that contain, that part?
A. This contains a summary of where we stand with our transaction mapping analysis, both what we've completed and what's undone, as well as any potential posting errors that we've identified to date.
Q. Okay. This might be a good place to talk about the types of transaction mapping results you've had overall.

When you talk about a potential posting error, what are you referring to?
A. This would be the result of looking at the transfers and reversals within the system. So typically, you would expect a transfer transaction to sum to zero. If we identified situations where that didn't occur and we couldn't find supporting documentation to support why that had happened, we've reported it as a potential posting error.
Q. Could you describe a little bit more about what you're saying, what you're looking for when you're saying it should sum to zero? What are you comparing that should cancel out?
A. Typically, if you debit an account or reduce an account, let's say a Special Deposit Account, by $\$ 100$ when you're transferring lease income, you would expect that you would credit that same $\$ 100$ to one or more individual accounts. In some instances, we found that that did not occur.
Q. So in your example with $\$ 100$, there's $\$ 100$ in a Special Deposit Account that's to be put into an individual IIM account?
A. That's correct.
Q. So as part of the bookkeeping entry, there's a debit, then, to the Special Deposit Account?
A. That's correct.
Q. And then you're looking to see that there's credit to the IIM account?
A. Yes, one or more credits that would add up to $\$ 100$.
Q. And then when you put those two together, they should offset one another?
A. Exactly.
Q. Besides potential posting errors, what's one of the other types of results you can find when you get a discrepancy and don't find offsetting bookkeeping entries?
A. In some instances - and this you'll see in Section E2 - we have something we refer to as mapped exceptions.
Q. Could you explain what that is for the Court?
A. These are examples where the group that we've associated does not sum to zero, but we've reviewed documentation that
tells us that, at the end of the day, that was the correct item to post.
Q. Let's see if I understand. You find two bookkeeping entries that don't cancel each other out. Right? That's what you're claiming here?
A. Correct.
Q. But you've found other documentation that somehow explains that? Is that what's going on?
A. Yes. The most typical example of a situation like that would be a partial reversal. So let's say you posted initially $\$ 1,000$ to the system, but you meant to post $\$ 800$ to the system. In some instances, instead of reversing the initial posting and then reposting the correct $\$ 800$, they would simply post a negative $\$ 200$.
Q. And do you have an example of that to show the Court?
A. Yes, I do.
Q. We'll cover that later this morning.

And in that same E section, there's another one in the
table of contents titled, "Unresolved transactions." Is that also a possible outcome of a transaction mapping?
A. Yes. These are transactions that were still in process, so potentially we have documents on request with the $A I R R$.
Q. And moving on to finish out the index for the regions, Part $F$ is "Descriptive statistics." Could you summarize for the Court what's contained in that part of the reports?
A. These are simply summary tables that give you information at an agency level. So the first, for instance, would tell you the number of credits, debits, associated dollars for that particular agency.
Q. As part of the data completeness validation work that you've done, how many individual transactions has FTI examined?
A. Just over 113 million at this point.
Q. If we could go to one of our examples. We were talking briefly on Thursday about account number changes and reused account numbers. And I would like to walk through an example or two for the Court as to how you've come across these and how you attempt to resolve them when you do.

MR. QUINN: Could we have the Exhibit 156?
BY MR. QUINN:
Q. Now, before we talk about this, could I just ask you about where you are in terms of the account name and reused account information? In terms of doing that analysis, how far along are you?
A. We performed this analysis on a subset of the accounts in the system, the land-based and judgment per capita accounts. We've analyzed approximately 645,000 accounts so far, and we have 786 left to resolve.
Q. 786?
A. That's correct.
Q. Do these accounts -- is this account set that you've checked
broader than what is part of what's been called the accounting reconciliation population?
A. Yes, it is.

MR. QUINN: If we could zoom in a little bit on the summary of that page.

BY MR. QUINN:
Q. This is DX-156, at page 109. Could you identify that document for the Court?
A. This is an excerpt from the account number section of our northwest region Portland area report.
Q. So this is from one of the regional reports?
A. Yes, it is.
Q. And this summary sheet, is this something that is a common component of the DCV reports?
A. Yes. For each one of the reused accounts that we've identified, there's a summary similar to this.
Q. Okay. And could you review for the Court -- we have a couple of account names that appear in this table. And could you describe what the problem is that you detected in your analysis?
A. Initially, if you'll look to the second column in the table section, you'll see that all of the lines have the same account number associated with them and the same agency, but there were four different names associated with this account over time. Q. How did you find the four different names associated with
the account over time? How did you discover that?
A. As I mentioned on Thursday, we took all of the available names within the system, both from the IRMS master file, the IRMS transaction file, and the TFAS account file, and we combined them into a single table so we could analyze all of the names for a given account.
Q. So you took all of these names, and then compared them against the account numbers to see if the names match?
A. Exactly.
Q. So these two names, you have Ms. Pichette and Ms. Paddock. Right?
A. Correct.
Q. What did you find out about these two names and this account number?
A. In this instance, we requested a --

MR. SMITH: Your Honor, object to this testimony.
Ms. Herman has not been designated as an expert witness. She's not an accountant, she's not qualified to reconcile things to perform accounting.

We're getting into the area of opinion testimony, and she has not been designated to testify about that.

THE COURT: I don't think I hear an expert opinion coming out of this. Overruled.

BY MR. QUINN:
Q. Go ahead and describe what you found.
A. In this instance, we requested a jacket file from the AIRR. And within that jacket file we reviewed a death certificate, which has been referenced in the summary information.
Q. Could I just stop you right there?

Describe for the Court what the jacket file is. What are you talking about when you refer to a jacket file?
A. A jacket file is typically kept in a file folder. And each agency maintains jacket files in different fashions, but some of the information that you might find within a jacket file would include an account ledger, a birth certificate, a death certificate, potentially a marriage or adoption certificate, sometimes financial documents. It really varies.
Q. And you referred to finding a what in the jacket file?
A. In this particular instance, a death certificate.
Q. I think we have a slide of that.

MR. QUINN: Will you put that up on the screen?
BY MR. QUINN:
Q. Okay. This is -- for the record, this is DX-156, 156 at page 00110 . And zoom in so we can see what the document is.

All right. Before I talk about the document, Ms. Herman, I see a series of numbers up at the top of this sheet, and included in there is an "http:" component. Could you describe what that number string is at the top?
A. We have access to the accounting reconciliation tool within our Los Angeles office, and as we pull up documents through that
tool, this is the information that would appear.
Q. Does this number coding at the top of the page indicate at
all that this information is available over the Internet?
A. No, this is a private line to our office in Los Angeles.
Q. Why is the http symbol there, if you know?
A. Because we opened the document through the Internet Explorer.
Q. So you used that browser protocol?
A. Yes.
Q. Is that right?
A. Yes.
Q. Now, if we could talk about the actual document. Could you just identify the document for the record?
A. This is a death certificate for one of the account holders on the previous page.
Q. Okay, Ms. Pichette. Where did this come from, this death certificate?
A. It was found within the jacket file.
Q. And how did this inform you in terms of the account number and names that appear on the summary sheet?
A. As you can see, the birth date for Ms. Pichette is March 15th, 1910. And if you flip back to the summary table. Q. Okay.
A. Within the master file, we had had a birth date for Rose Paddock, and Rose's birth date was September 28th, 1937.

So that's demonstrating to us that these are in fact two different people, not the same account holder.
Q. So once you were able to determine that, what did you do?
A. So you can see in the first column on the page, we discussed briefly on Thursday the NAAN, the $N-A-A-N$. And we've now at this point assigned two different numbers to this account, such that when we go to issue a statement, you would only print the transactions associated for Cecelia; and then secondly, the transactions associated with Rose.
Q. So in this case, even though these two names originally had the same account number, you've now been able to identify them separately. Is that right?
A. Yes.
Q. And have you provided this information to the Office of Historical Trust Accounting?
A. Yes, I have.
Q. Let's look at one other name example, and then go on to some of the other data tests, if we could.

I've put up on the screen another slide from DX-158. This is page 158 -- page 158. Could you identify that document for the Court, please?
A. This is an excerpt from our Rocky Mountain region Billings area report.
Q. And at the top there it says, "Account associated with multiple individuals." Is this another reused account issue?
A. This is a situation where the account has multiple names associated with it, but we don't feel that's multiple account holders.
Q. And describe for the Court, if you would, how you came to the determination that it's not multiple account holders.
A. Again, in this instance we requested a jacket file and reviewed the information contained within the jacket file. MR. QUINN: Can we put up the next page, please, in the slide? Thanks.

BY MR. QUINN:
Q. And this is DX-158, 158-159, for the record. And could you identify what that document is?
A. This is an IIA change order.
Q. And do you have an understanding, after working with the documents over almost a decade with the Department of Interior, what that document pertains to?
A. This is a document that was used to update names, dates of birth, and other types of similar information within the IRMS master file.
Q. And what did this document tell you with respect to the account that you were researching?
A. This particular document is showing the change from Beverly to Thomas, and if you scroll further down, the date of that change.
Q. And it has a signature there?
A. Correct.
Q. From the superintendent?
A. Exactly.
Q. We have another slide, I think, related to this.

For the record, this is -- we've now put on the screen DX-158, page 160, I think that is. Let me just double-check. Yes, 160.

Is this another document you found in researching the name information on this account?
A. Yes. This is a letter that the account holder sent to the agency.
Q. And what did this tell you in terms of which names were appropriately associated with the account?
A. Essentially, the account holder is indicating that Beverly Piper, who was the first name on the account, was his mother, and that, while he was a minor, that she received his checks. And asking to update his account name and address.
Q. And where was this document found, this handwritten note?
A. Again, within the jacket file.
Q. And this came from Interior's records relating to this individual?
A. Yes, it did.
Q. Okay. Now, you have a summary table on this worksheet, and again, for the record, page reference here is 158 of Exhibit 158.

Could you describe what the table is recording here? It says "Results," but what is that table recording?
A. In the top, similar to the first report we have, it's just a summary of what it was that we reviewed and the conclusion that we reached.

And then in the results section you'll see that in this instance there's only one man, meaning we didn't separate these accounts. The account number, the agency, again all the names associated with the account over time. And then there's an exclude mark next to Beverly's name.
Q. What does that mean?
A. That -- from our perspective, that this is Thomas' account and that the account statement should be issued to him.
Q. And I take it that information is based on the records that were located connected to this account?
A. Yes.
Q. And what do you do with this information?
A. Again, this information is provided to OHTA as a component of our reporting.
Q. And you expect that it will be used --
A. I'm sorry, we provide the information to OHTA, similar to the first instance. The Office of Historical Trust Accounting. Q. Do you have an understanding how OHTA would use this information?
A. The most current name, so the last name in this instance,

Thomas W. Piper estate, will appear on the historical statement. Q. So when the statement is issued, that would be the person or entity to whom it would be directed?
A. Exactly.
Q. Okay. Now, when we were looking at the index, the table of contents, if you will, to the regional reports, you talked briefly about the transaction mapping and what you find in the course of transaction mapping. You have different possible results based on your examination of the record.

Could we go on and talk about a couple of examples with respect to transaction mapping? But before we do, just what are the possible outcomes that can occur when you map a transaction, just briefly?
A. There's a possibility that we'll leave it in the unresolved bucket as we're waiting on documentation; there's a possibility that we'll map the transaction; there's a possibility that it will be in the explained difference section of the report, meaning the sum of the transactions is not zero.

There's a possibility that it will be categorized as a potential posting error, or that we'll identify missing data. Q. And after looking through these bookkeeping entries and mapping them, do you know offhand how many of these transactions have been mapped so far?
A. I would have to refer to our report, but I believe it's around 93 million.
Q. If we could, let's walk through an example for the court of the transaction mapping and talk about an explained exception.

MR. QUINN: Could we have Exhibit 154?

BY MR. QUINN:
Q. On the screen, I've just put a slide from Defendant's Exhibit 154. For identification, it's page 188.

Could you identify that page for the Court, please? THE COURT: Mr. Quinn, I have to tell you that as I'm listening to this, part of my mind is involved with the numbers 100-and-some-million and 93 million. And I would appreciate your taking a little detour and having the witness explain to me how on earth 93 million transactions get mapped: Who's doing it? Is it being done by a computer? Do you have five million people sitting out there in a cave? How is this being done?

MR. QUINN: Sure, Your Honor. I would be happy to walk through it.

BY MR. QUINN:
Q. Ms. Herman, could you describe overall what role you and FTI play in terms of transaction mapping, and how that gets implemented, how that gets conducted?
A. We initially took the transactions and broke them into different groups of related transactions, so reversals and transfers fundamentally.

And then within the transfer bucket --
THE COURT: No, no, no. I'm talking who does it, using
what kind of equipment, what kind of data. Let's get down to the weeds here.

THE WITNESS: Yes, Your Honor. That's what I'm going to explain.

So, for instance, once we have that transfer bucket -THE COURT: What is the transfer bucket?

THE WITNESS: Transfers the funds between accounts.
THE COURT: But I mean, is it a database? Is it -it's not a bucket of chips.

THE WITNESS: No. We have a database, Your Honor, and we try to separate first the transactions into associated groups so we can write a program to deal with each one of those groups.

So the important thing to start with is to create small enough groups so you that have similar transactions to evaluate. So the first step in the process is to take all of your transactions and break them into smaller groups.

So, for instance, you have different types of transfers. You have transfers from a Special Deposit Account to individual accounts; you have transfers from one region to another region; you may have transfers within an account from the income portfolio to the principal portfolio.

So we try to create smaller buckets of transactions, and then we write a program that addresses the particular characteristics of those smaller buckets. But at some point in time, we do have to go through a manual review process; but not
until those buckets are much smaller.

MR. QUINN: Does that help, Your Honor?
BY MR. QUINN:
Q. In terms of the computer system, let's talk about the database that you're using. And describe for the Court where you're drawing the information that you're analyzing. Let's start with that.
A. We have a database that we maintain in SQL server, and we combined all of the transactions into one single file. Q. And when you say one single file, this information is coming from where? Where are you sourcing the data?
A. We combined the IRMS transactional data and the TFAS transactional data into one table.
Q. And the IRMS transaction information is, generally speaking, the older electronic information?
A. That's correct.
Q. And that goes from roughly what periods of time, covers what periods?
A. 1985 through March of 2000 .
Q. So you have that data set. And then, for later periods, you have the TFAS transactional information?
A. Correct.
Q. And all this is combined into one database?
A. That's correct.
Q. Then when you try to identify, as you say, groups of
transactions to analyze, are you writing a program that culls through the database and identifies the appropriate transactions for further study? Is that what's happening?
A. Initially, we use some of the codes within the data and some of the information contained within the reference to create those smaller groups of transactions. And at that point is when we would write a program.
Q. Okay. Could you give the Court an example or two of the types of bits of information you would look for to identify a particular transaction type?
A. Typically, we would analyze the IRMS transactions and the TFAS transactions separately, because the codes within the system change.

One of the groups that we would analyze, for instance, is a journal voucher transaction, so that would have a code within the system of $13 . \quad$ So we could use the computer to pull out all of the Code 13 transactions, and we would do that one region at a time, because with that particular type of transaction, the rule for the computer system was, it had to stay within the same region.

And at that point we would take the reference field, which you can see in the example that's on the screen.

MR. QUINN: Zoom in on this slide. It's from 154, page 188.
A. So as I mentioned earlier, here you can see the type column.

So the type that I was talking about was a Type 13. And then you can see the reference column. And the reference column is a freeform text field within TFAS, meaning the data entry operator could have put whatever they liked into that field. BY MR. QUINN:
Q. Did you have something like that -- I'm sorry. Did you have something like that, a reference field like that from IRMS? A. Yes. This is from IRMS, this particular reference. Q. Okay.
A. And so we would use the information contained in that field. And in this particular example you can see that all four transactions have the same first component to the reference. Where it says, "CVJ 53-205," that's a document number.

And so we would extract that information from that field, and we would have the computer search for the transactions related with the same component of the reference, and that's how we would do our first pass to link transactions together.
Q. When you've identified groups of transactions for analysis as part of the data completeness project, what's the normal review process that goes on, in confirming that you've joined the appropriate entries, bookkeeping entries, together for study?
A. It depends on the type of transaction that's being processed. So as I mentioned, transaction type $13 s$ have to be
within the same area; they have to be processed on the same day; they have to sum to zero. And so that gives you enough rules that you can tell the computer: Go in and find transactions processed on the same day, in the same area, with the same reference, that sum to zero.
Q. So the computer does that part of it. And I think you mentioned that some of the review is manual. Describe for the Court if you would what the manual part of the review is, who undertakes it, and how it's checked out.

THE COURT: Before you get to that, I'm assuming from what you've told me that the vast majority of this process has to do with matching up transactions using the computer, the database in the computer?

THE WITNESS: Yes, it does, Your Honor.
THE COURT: And what we're about to learn about is the manual work that is done for those things that jump out unresolved?

THE WITNESS: Correct. And the computer process -THE COURT: Now, how long has it taken to do all the computer work that is reflected in these reports?

THE WITNESS: It took several years, Your Honor. I couldn't tell you definitively.

THE COURT: And how many people?
THE WITNESS: Our team has varied over time.
Typically, that team has approximately four to eight people.

THE COURT: Four to eight people?
THE WITNESS: Full-time.

THE COURT: Three or four years?
THE WITNESS: Yes.
THE COURT: 113 million transactions?

THE WITNESS: The computerized ones were clearly much faster than the manual review population. That's why the remaining regions will take longer, because we're down to the manual review component of the population.

THE COURT: Okay. Go ahead.
BY MR. QUINN:
Q. Could you describe the manual component of that review process for the Court?
A. The computerized process actually is iterative, so you start with your larger groups and you continue to narrow down. But at some point you don't necessarily have large patterns left anymore within the data. At that point, you have to aggregate your transactions into related groups.

So another example, for instance, would be a debit memo transaction. It has a code of 14. Sometimes the reference for the debit transaction isn't similar in nature to the credit transaction, and so you have to do a manual review of the unmatched transactions in the system to try to identify the appropriate match.
Q. Based on your experience in working through these various
data completeness validation tests, could you describe what the typical steps are that are involved in the manual review? You say you try to figure these out. But specifically, what are you looking for? What sources do you draw on to research the problem, to make sure you have the proper match?
A. The first thing we would do is, there's still some kind of pattern within the system. So a Type 14 debit always is associated with a Type 01 credit. So we would look at groups of related credits and try to determine, using the electronic data first, could we find the appropriate offset. Because in many instances they don't post on the same day, so the debit and credit transactions post on differing days.

And then we typically would request a sample of documents, once we felt that we had identified the appropriate pattern, to confirm that what we had found was correct.
Q. Okay. So in your example, you want to confirm that the entries are correct, that the coding is correct. So you said you put a request in for documents. Who are you requesting documents from, and where does that request go?
A. We request documents from OHTA, and it gets forwarded to the AIRR.
Q. That's in Lenexa, Kansas?
A. Yes, it is.
Q. Once your request gets to Lenexa, what happens next?
A. There's approximately 20 searchers that have been allocated
to our project, and they would search for the appropriate document.
Q. How many requests have you submitted over all?
A. I believe over 80,000.
Q. Does that include the accounting reconciliation, or is that just DCV?
A. That's just the DCV.
Q. And do you know approximately how many document requests are pending for $D C V$ at this moment?
A. I believe about 35,000.
Q. So how long is it, once you've placed the request for a
document to check out this information, before you get the document?
A. It can be as short as a week, or over a year.
Q. And how does the document find its way to you? Once the research has been done at Lenexa, how does it get to the person doing the data analysis?
A. The information is imaged while at the AIRR, and then it's added to the ART machine, which we have access to in Los Angeles.
Q. We're going to talk in more detail about the ART machine today in court. But could you first specify what ART stands for?
A. I'm sorry, the Accounting Reconciliation Tool.
Q. We talk about sometimes shorthand as ART. Right?
A. Yes.
Q. But ART is not a person in this instance. Right?
A. No, it's not.
Q. It's a software program. Okay.

How does a document get into the ART?
A. The E-Compex team in the AIRR images the document --

THE COURT: The what?
THE WITNESS: E-Compex is one of OHTA's vendors. They work in the AIRR, and they image the documents.

THE COURT: Where is that glossary I asked for?
MR. KIRSCHMAN: Actually, Your Honor, the parties have worked on that. Mr. Harper might want to address that.

MR. HARPER: Your Honor, I think we're very close to agreement on a glossary --

THE COURT: It may be too late by the time you get it to me.

MR. HARPER: We had a couple of issues. In light of some of the testimony, though, I think we're going to need to include some of the contractors that we haven't yet included. MR. QUINN: I'll try to review this when we introduce a new term, Your Honor. BY MR. QUINN:
Q. Who is E-Compex?
A. I'm sorry. E-Compex is an imaging and coding vendor for OHTA.
Q. If you can spell it -- could you spell it for the Court Reporter?
A. It's E-dash-C-O-M-P-E-X.

THE COURT: I think somebody mentioned E-Compex earlier
on. Go ahead.
BY MR. QUINN:
Q. And what is it they do?
A. They image the documents that are located in the AIRR, and then they code summary level information like the document's title, date, things of that nature.
Q. And where is this done?
A. In the AIRR.
Q. So E-Compex has employees at --

THE COURT: The American Indian Records Repository. And in the ether, I suppose.

MR. QUINN: It actually starts below ground, Your
Honor.
BY MR. QUINN:
Q. The AIRR, would you just describe that for the record so we have a clear record? The AIRR is the American Indian Records Repository?
A. Yes, it is.
Q. That's what you're referring to?
A. Yes, I am.
Q. That's the facility in Lenexa, Kansas?
A. Yes, it is.
Q. And could you briefly describe -- you've been there?
A. Yes, many times.
Q. Could you describe what that facility looks like, just briefly?

THE COURT: We've seen a slide show.
MR. QUINN: Oh, okay.
BY MR. QUINN:
Q. And E-Compex has staff working at that location. Is that right?
A. Yes, they do.
Q. And you mentioned that they image the documents. So are these scanned pictures of the documents?
A. Yes, they are.
Q. And I think you testified that they then code the documents.

Before I ask you about what the they're coding, where are they sending this information? Where is this information going that they're coding?

THE COURT: I think that I've heard most of this from Ms. Ramirez.

MR. QUINN: I just want to make sure --
THE COURT: I was listening. Sometimes I need a little refreshing when you say something like E-Compex out of the blue, but go on. BY MR. QUINN:
Q. The E-Compex puts the information in, and then how do you retrieve it?
A. Through the ART in Los Angeles.
Q. And once that document is accessible by you or your staff, what's done with it?
A. Similar to the example that we reviewed previously, we'll review the documentation for whichever tests that had been requested for.
Q. So in the account names example, the handwritten note, that would be something that would have been imaged and sent to you electronically?
A. Yes, loaded into the ART.
Q. And then that's how you refer to the document and examine it?
A. Yes. So the references within our report are to the document ID from the ART.
Q. I would like to go back to our example.

MR. QUINN: Does the Court have any other questions about the process?

THE COURT: I just have a question of my courtroom deputy.
(OFF THE RECORD.)
THE COURT: Go ahead, Mr. Quinn.
MR. QUINN: Thank you, Your Honor.
BY MR. QUINN:
Q. I can't remember now whether we identified this for the record, but it's DX-154 at page 188. Could you tell the Court what this document is?
A. This is an excerpt from our Pacific region Sacramento area report.
Q. And zoom in on the top part of that table there, get in a little closer maybe. Okay.

We're going to be talking, I think it's primarily about the tab one. Or is this all one exception that we're working through?
A. No, this report lists each one of the exceptions for this region, and then the associated documentation follows behind. Q. Okay. So at tab one there, the first item in the table, those are referring to different cases of exceptions?
A. Yes.
Q. And let's talk about the example at tab one. What did you find there? What was the problem?
A. So all of the related transactions in this particular instance add up to $\$ 18.30$. And as I mentioned earlier, our typical rule is that transactions of this nature should add to zero.
Q. Okay. So that's how it came to your attention in the first instance?
A. Exactly.
Q. Because they weren't offsetting transactions. Okay.

And in working through the problem, what does the table tell us happened?
A. So the first column in the table you'll see is a record ID. That's a number that our firm assigns so that we could uniquely identify each transaction in the system.
Q. Stop right there for a second. That number identifies a specific bookkeeping entry?
A. Yes, it does.
Q. Go ahead.
A. And as you move across the table, the account is the account number to which the transaction was posted, the agency where the transaction was posted; in this instance, the Palm Springs field office.
Q. Is that what "J-53" means?
A. Yes, it does.
Q. Okay.
A. Then the next column is the date the transaction was posted.

The next column tells you the type of transaction that was posted. So an 01, for instance, means a collection of money, and a 11 means a reversal of a collection.

The next column tells you the type of revenue. So in this instance, a 099 is miscellaneous revenue.

The next column, as I mentioned --
Q. There's a code there a little bit down. You have 099 and then you have 199. What's the 199?
A. The 099 is a miscellaneous credit, and the 199 is a miscellaneous debit.
Q. Okay.
A. The next column is the reference that we discussed earlier.

So this is a freeform text field, meaning the person who is entering the transaction decided what to enter into this field. Q. Okay. And the first part has a letter and code, a number combination, JVJ (sic) 53-205. Does that mean anything to you? A. CV is the abbreviation that's typically used for a bill for collection. J-53, as we saw, is the agency where the transaction was posted, Palm Springs. And this would have been the 205 th bill within that fiscal year.
Q. So that's the account within that agency?
A. Yes. And then the tax refund is just what the clerk decided to type in with that transaction.
Q. And then in the first line the amount is 18.50. Right?
A. Yes.
Q. What does the source code tell us, the source column tell us after the dollar amount?
A. This is the number that we've assigned to this group of transactions as a result of our transaction mapping.
Q. Then you have a series of, I assume related transactions below that. First one, we've just reviewed in the column, and we'll come back to the category one entry in a moment.

But what is going on in the next three entries in that

## table?

A. The reason this group of transactions was analyzed in the first place is, you can see in the last two records they say, "Type 11." That means that this is a reversing transaction. And so one of our steps in our transaction mapping was, any time you have a reversal, you need to identify the initial collection, and those two things should sum to zero.
Q. So you're expecting if something was entered and then you reverse it, you would wind up with a zero result?
A. That's our presumption, yes.
Q. In this case, you didn't?
A. Correct.
Q. So that led to the research that you talked about, doing different steps requesting documents?
A. Exactly. So in this instance, we would have requested the bill for collection based on the reference.
Q. That's the CVJ number?
A. Exactly.
Q. Did you find a document?
A. We didn't actually search for the document, but yes, it was found.
Q. I mean, you put in a request to search for the document?
A. Yes, exactly.

MR. QUINN: If you'd put up the next slide?

```
BY MR. QUINN:
```

Q. Now, this is for the record DX-154 at page 199. Could you identify what this is, for the record?
A. This was attached to the bill for collection that was provided to us.
Q. So this is one of the documents you got back?
A. Yes, it is.
Q. And what is this? What does it indicate to you?
A. You can see in the middle of the check is the account holder's name, and it has the dollar amount \$18.30.
Q. United States Treasury check?
A. Yes, it is.
Q. And did you encounter this frequently, finding tax refund money going into the IIM account of an individual?
A. Not necessarily tax refund money, but in some instances we saw stocks that had been negotiated or other types of miscellaneous income posting to the system.
Q. The next slide I put up on the screen is from the same exhibit, DX-154, at page 200. Could you identify this document for the record?
A. This is the bill for collection that we requested for this transaction group.
Q. So someone in Lenexa went researching and found the associated document?
A. Yes.
Q. Could you tell the Court what information you were able to
glean from this bill for collection that you had found? A. If you can scroll down just a tiny bit. You can see, each one of the numbers that you saw in the posting on the first tab are recorded somewhere on the bill. So the 18.50 , which was the first transaction that we saw posted, is recorded in the amount column, with the 30 pennies understood beneath it. And then in the center of the bill you can see the 1850 transaction, the 1830 transaction, and the 3680 transaction.
Q. So let me go back to the summary sheet. Then, after examining these documents, what were you able to conclude about this nonzero credit/debit transaction pair?
A. That while it took four postings, the correct posting was the $\$ 18.30$, which is the net amount of those four postings.
Q. So in a layman's sense, what's the story behind these documents, based on your review of the documents? What happened here?
A. Unfortunately, the first time the clerk posted the 18.50, and you can see one of the reversals is for 18.50. The second time they posted 36.80 incorrectly, and then they reversed an additional 18.50. So the net of those four transactions is the correct posting amount.
Q. So they started off giving the wrong credit, but eventually got down to the correct amount?
A. Correct.
Q. $\$ 18.30$.

So the net error that occurred there was \$0.20 in the original postings?
A. Yes.
Q. Do you have a sense, from your experience in the review that was involved and researching documents, that the work to figure out these bookkeeping entries costs a little bit more than \$0.20?
A. Absolutely.
Q. Costs more than perhaps the amount of the tax refund check?
A. Yes, it did.
Q. Do you have a sense -- I may have asked you this, and I beg the Court's indulgence if I've already covered this with you, but how many nonzero situations FTI has investigated?
A. I can't recall, but there have been thousands.
Q. Let's talk about potential mis-postings that you found in the course of your data analysis.

MR. QUINN: If we could put up the next set of slides.

For the record, this is Defendant's Exhibit 158, at page 2126.

Let me zoom in just a little bit on the table.

BY MR. QUINN:
Q. Ms. Herman, can you see that okay?
A. Yes, I can.
Q. Could you identify what that page is?
A. This is an excerpt from our Rocky Mountain region report.
Q. So we're on to a different region among the examples?
A. Yes.
Q. Can you describe -- this is another transaction that you investigated?
A. Yes, it is.
Q. Could you describe what this table is telling you, summarizing?
A. As I mentioned earlier, typically a journal voucher transaction was processed using a code of 13, which forced the transaction to balance within the system. But in this particular instance, as this was processed through a distribution program, instead of using a Type 13, a Type 21 was used, which is a check code.

The associated credits show up as Type 01 , and you can see that the sum of those transactions does not equal zero. Q. Okay. Now, I also note that in the second -- you have the first line, and that has 583.26?
A. Yes.
Q. The next group of five, those appear to be different account numbers. Can you describe what those entries reflect?
A. The fourth character in the account number typically tells you what type of account is receiving the income. In this particular instance, a $U$ means an unallotted account, an unallotted Indian.
Q. Would this be an individual IIM account?
A. Yes, it is.
Q. So the next set, if you will, rows of five entries in your summary sheet refer to transactions in different accounts? A. Yes, they do.
Q. So what was the problem here that sparked your investigation?
A. A journal voucher transaction should sum to zero, and in this instance it did not.
Q. And is that reflected in the total, where you have $\$ 9$ at the bottom --
A. Yes.
Q. -- of the accounts? Okay. That's under the amounts.

So did that lead to you requesting documents in connection with these bookkeeping entries?
A. Yes, we did.
Q. Did you find documents after you requested them?
A. Yes. The journal voucher was provided to us.

MR. QUINN: Could we go to the next slide? For the record, this is Defendant's Exhibit 158 at page 2127. BY MR. QUINN:
Q. And Ms. Herman, could you identify that document for the record?
A. This is the journal voucher that we had requested and received.
Q. And what does this journal voucher tell us about the series of transactions?
A. If you look at the journal voucher, the postings actually match the detail in the journal voucher, meaning the debit is posted in agreement with the $\$ 583.26$; and each one of the credits is posted in agreement with the journal voucher itself. However, the dollar amounts don't sum up to the correct posting.
Q. So if you were to add the credit column with the five entries, that should be off by --
A. $\$ 9$.
Q. It's off by $\$ 9$. That's why you had the nonzero --
A. Exactly.
Q. So what does that lead you -- what did you determine from investigating and looking at this document?
A. That this was a mis-posting due to the fact that the clerk entered what was on the bill, but the transaction should still sum to zero at the end of the day. So one of these credit postings is incorrect.
Q. So somewhere along the line someone made a mistake and didn't credit \$9?
A. That's correct.
Q. And let's go back to the summary sheet again, if we could.

So in this example on the potential mis-posting, are the accounting records, the data information you're looking at, there? Is it a problem with the data being missing or the bookkeeping being wrong?
A. In this instance, the bookkeeping is wrong.
Q. And what do you do when you find a category where there's a mis-posting like this? What do you do with the information? A. This information would be provided to OHTA, and would be reported on the statement of known difference.
Q. A statement of known difference? What is that?
A. It's a statement that's going to accompany that historical accounting statement.
Q. Okay. So if there's a -- are you saying that if there's an error found in the bookkeeping for a particular account in the course of your DCV work, that the Office of Historical Trust Accounting would take that into account when it prepares the historical statements of account?
A. Yes, they will.
Q. And then that information would appear where on the historical statement?
A. In the statement of known differences.
Q. Why wouldn't it appear in the transactional part of the report?
A. Because these are transactions -- the transactions as actually posted will be reflected in the historical statement, and then the differences that we've noted will be reflected in the statement of known difference.
Q. So when bookkeeping mistakes are found in the course of your work, that information will find its way ultimately to an explanation section within the historical statements of account?
A. Yes, they will.
Q. Let's do one more mis-posting example for the Court. MR. QUINN: If we could go to the next set of slides. BY MR. QUINN:
Q. For identification purposes I put up a slide, Ms. Herman, of Defendant's Exhibit 156. And that's 156-2849. Could you identify this for the record?
A. Yes. This is an excerpt from our northwest region report.
Q. And this is -- it says at the top there, "Potential
mis-postings." So this is a similar kind of result, similar category of result --
A. Yes, it is.
Q. -- to the last example. Okay.

Could you describe what the nonzero problem was that led you to investigate these series of transactions?
A. These transactions were initially investigated because of the third transaction in this group, the 14. Because typically, debit memos are either transfer or reversal transactions, and in this particular instance, when we pulled up the information in the account, we found four entries with the same reference, "original ledger balance."

Typically, this is the reference, or a similar one to this, that was used to post the beginning balance from the ledger card into the IRMS system.
Q. Could you describe historically what that process was that
you're referring to?
A. Each agency came on to IRMS at a slightly different point in time. But as the agency converted from the manual ledger cards that were used to the IRMS system, the beginning balance transaction had to be posted to their account.
Q. So this is going into -- beginning into the computer age, if you will, for the IIM accounts?
A. Yes, it is.
Q. Taking the old ledger card information, the paper. Is that right?
A. Correct.
Q. And then moving to electronic?
A. That's correct.
Q. And was this a common reference that you encountered in your research of the data?
A. Something similar to this, or conversion to computer. A similar type of reference.
Q. So what was the problem here? I see there's a nonzero total there at the bottom of $\$ 166.31$.
A. In this particular instance, it appeared that the Type 14 transaction was serving as a reversal. But as you can see, that transaction is $\$ 3,651.01$, and neither of the first two transactions are that same dollar amount.
Q. It doesn't match up. And then there's another entry after that. Correct?
A. Correct.
Q. Okay. So you had this nonzero set of transactions. And that, I take it, led to a request for documents from Lenexa? A. Yes. In this instance, because the reference didn't have a specific document number associated with it, there was no bill for collection or journal voucher that we could request. So in this instance we started by requesting the jacket file again. Q. This is the general file that the Department of Interior had with respect to IIM beneficiaries?
A. Yes, it is.
Q. Did you -- were you able to obtain a copy of an associated jacket file?
A. Yes, we did.

MR. QUINN: Could we go to the next slide?
BY MR. QUINN:
Q. This is on the screen. I put Defendant's Exhibit 156 at page 2850. Could you identify what this document is for the record, please?
A. This is a ledger card, an individual Indian account ledger.
Q. Is this a copy of the document that was sent to FTI as a result of the research request for this series of transactions?
A. Yes, it is.
Q. There's a lot of information on this individual Indian account ledger. What information guided you to an answer in terms of these account entries?
A. The relevant question for us with this transaction was: What was the ending ledger balance for this account?

So if you scroll to the bottom of the card, you can see that the second-to-last transaction, the balance is $\$ 3,389.17$. And if you flip back to the earlier slide, you can see that the first two transactions that were posted match that second-to-last transaction on the ledger card.
Q. The 3,389.17?
A. Exactly.

The third transaction that was posted matches the final transaction on the ledger card, the $\$ 3,561.32$.
Q. Go back to the summary page. Okay. That's the reversal?
A. Correct. The $\$ 267.68$ transaction -- I'm sorry, if we can go back to the ledger card. You can see that that transaction doesn't appear, but based on our review, it looks as if the interest transaction that posted after the initial balance, plus the differential, was what they were trying to post.

But when you sum all four of those transactions together, it should equal the $3,561.32$, and that was the final balance on the ledger card.
Q. And that's what should have been captured?
A. Correct. And so what this schedule is reflecting is the sum of the transactions that were posted, the transaction that should have been posted, and the difference between those two. Q. And the end result of all these bookkeeping entries?
A. The account holder was shorted in the initial IRMS beginning balance by \$166.31.
Q. And what did you do -- what do you do with this information when you come to that conclusion?
A. Again, this would be represented on the statement of known difference.
Q. So that you would provide the information to OHTA, and then that would be part of -- become part of the report to the beneficiary?
A. Yes, it would.
Q. And that's another potential mis-posting type?
A. Yes, it is.
Q. Let's talk about another situation where accounts don't roll forward. Describe what rolling forward means in the mapping context.
A. As I mentioned earlier, one of the tests that we perform is the comparison between the available balance files for an account and the transactions for that same account. And we compare those two files at each point where we have a balance to compare.

So in some accounts, that may be one balance that's available to us; in other accounts, that could be in excess of 100 balances that are available to us, and we compare at each one of those points to see if the sum of the transactions on a given day matches the balance on that day.
Q. And what if it doesn't match?
A. Then we need to investigate that account to determine whether or not there's missing data.

MR. QUINN: Can we put up the next slide, Defendant's Exhibit 154? For the record, this is Defendant's 154 on the screen at page 44.

BY MR. QUINN:
Q. Could you identify this, Ms. Herman, this document?
A. This is an excerpt from our Pacific region report.
Q. So this is another page within the DCV report set?
A. Yes, it is.
Q. And what is this table summarizing, what kind of information?
A. These are the remaining 31 accounts in the Pacific region where the balance file and the transactions do not agree. Q. So this is the list of what mismatches you have left to look at?
A. Yes, it is.
Q. Okay. Let's look at the first account listed there. Zoom in a little bit on line one.

Could you explain to the Court what each column is, and the entries with respect to the first account listed there? A. Again, the first column is the NAAN, the identifier that we associate with the account. The second is the first account number, if there were multiple for that particular account. In
this instance, the fourth letter code, the $N$, stands for "non-enrolled Indian."

The next column is the agency. J tells you that this is a Pacific region account, and 52 would tell you the particular agency within the Pacific region. The next column is the name for the account; in this instance, Aurelia Raglin. The next column is the fiscal year where we feel that the data is missing, and the final column is the net amount of information that we believe is missing.
Q. Okay. How did you make the determination that $\$ 812.96$ is missing?
A. That would be the difference between the balance file and the transaction file.
Q. Now, you go down through --

THE COURT: Does a negative number mean it's in the government's favor or the account holder's favor?

THE WITNESS: That would be in the government's favor, Your Honor.

THE COURT: So the account holder has been shorted by $\$ 812$ ?

THE WITNESS: These differences, I don't believe are actually transactions that weren't posted. The difference has arisen because the balance in the system doesn't equal the transactions in the system, and we have an excerpt of one of these accounts to show you.

THE COURT: These are all 1986. What's the significance of that?

THE WITNESS: Typically, there was more data missing from the system in earlier years than in later years. BY MR. QUINN:
Q. When you say "missing from the system," are you referring to the IRMS/IIM subsystem?
A. Yes, I am.
Q. Could you scroll down to the bottom of that exhibit?

So from this table, the number 31 is the number of accounts affected here, the number of accounts where this issue has arisen?
A. Yes, it is.
Q. And the net result is $\$ 34,139.08$ ?
A. Yes, it is.

MR. QUINN: If we could bring up the next slide, please. This is Defendant's Exhibit 154, at page 45. BY MR. QUINN:
Q. Now, the table we just had on the screen was at page 44, and this worksheet is at page 45. As you organized the DCV reports, did you keep the associated supporting documentation adjacent to the summary sheets that are in the reports?
A. It depends on the section of the report. This one would be just following this sheet.
Q. Could you identify and explain what this table shows us?
A. This is a summary of all of the transactions that were posted to the particular account that was on the summary page. So as you can see on the top again is the NAAN number that we've assigned, the account number, and the account holder's name. Q. And what about the reconstruction of the account? What does this adjusting entry mean?
A. So the first column, as I mentioned earlier, is the record

ID. And the one thing that $I$ would like to highlight is, you can see that system of the record IDs start with a four, and some of the record IDs start with a three.

MR. QUINN: Before we go on, could you zoom in on that a little bit more, please, so we can see it clearly? Thank you. BY MR. QUINN:
Q. Go ahead.
A. So transactions that have restored to the data set have been given a record ID that start with a four. So as you can see, there were quite a few transactions that were initially missing from this particular account.
Q. Can we stop right there for a second? Describe what you mean by "restored transaction."
A. This would have been a situation where we turned to a hard copy document, either a transaction register, a bill for collection, a journal voucher, something similar to that, to re-enter the transaction back into the data set.
Q. So when you say "missing data," are you talking about
missing completely from the information records that the Department of Interior has available to it?
A. No, missing from the electronic ledger.
Q. And when you talk about restored data, are you talking about making up data that just fits into the computer record?
A. No. These would have been transactions that we found, as I mentioned, either on a transaction register - which is a printout of what happened - posted historically, or from a financial document.
Q. So in these instances you've put in search requests for documentation?
A. Yes, we have.
Q. Describe for the Court what would have been involved in trying to resolve some of these Code 4 record ID transactions. What kind of documents would you look for to research this information?
A. It depends on how much information was missing. If we had a large gap in the data, we would have started by requesting a transaction register. And those are, as I mentioned, hard copy printouts from the IRMS system; and it includes all of the codes and values and references as they had been posted historically. Q. Where are those located?
A. Some of them are located in the AIRR in Lenexa, and occasionally we have located them in one of the field offices. Q. You say transaction record, transaction registers.

Physically, what are they?
A. They're green bar printout reports from the IRMS system. Q. Green bar. That takes me back in time, shows my age. I actually understand what this means. Green bar refers to what?
A. It's a specific type of paper --

THE COURT: I'm old enough, too.
A. -- that would have been printed out from the computer system.

THE COURT: With the holes on the side of the paper, too. Right?

MR. QUINN: That's, right, Your Honor.
THE WITNESS: Exactly, Your Honor.
MR. QUINN: Old style computer printer?
THE WITNESS: Exactly.
MR. QUINN: If we could get away from this exhibit just a moment, and flash those slides on the screen.

I tried to bring some transaction --
THE COURT: Let the record reflect that the air conditioning has just come on at 10:48 a.m.

Go ahead, Mr. Quinn.
MR. QUINN: Before the morning break, Your Honor. BY MR. QUINN:
Q. I had tried to bring, actually, some green bar in here to show you physically, but they wouldn't -- and Lenexa didn't want to let these out of their grasp. So we took -- did the next
best thing: Took a few pictures. I'm not going to offer any of these into evidence, but this just is what physically you might have been looking at in doing some of this investigation.

The slide that's on the screen, is this sort of hard copy paper that you're referring to?
A. Yes, it is.
Q. We can go to the next slide.

Sometimes they're big fat things like is in this photograph?
A. Yes, they are.
Q. Tall batches of pages.

MR. QUINN: Go to the next line. And this one, let's just zoom in on that.

BY MR. QUINN:
Q. Now, the time periods that are covered by these registers, how far back do they go?
A. They would go to the beginning of IRMS for that particular agency, which as $I$ mentioned would vary from agency to agency. Q. How early could they go? How early have you found some going back?
A. I believe some of the earliest that we've entered have been from the late '70s.
Q. Can we go back to our exhibit.

So when you request the information of transaction registers, Lenexa is not shipping you a big batch of hard copy?
A. No, these would be imaged just like the other documents.
Q. Let's go back to the slide.

So is that what happened here? You went back to some
transaction registers to try to sort through this?
A. In this particular instance, I would have to look at what document IDs we had referenced. As I mentioned, we used transaction registers, bills, account statements, different financial documents.
Q. And what is the code 13? Is there anything significant about the code type 13?
A. Yes. 13 is a journal voucher transaction, and the system enforced that those would balance. So that could have been the reason we started investigating these particular transactions. Because, as you can see, the first three are positive entries, and then the check disbursement, a subsequent check, a reversal of the check, and then another credit into the account.
Q. And what is the conclusion that you draw after investigating these transactions and having restored transactions to the data set?
A. I believe there's one additional disbursement missing from this account.
Q. And that's reflected in the adjusting entry?
A. Yes. And as you can see, there's no record ID associated with that transaction because we've not added that back into the record set. It's just where $I$ feel that there is a transaction
missing.
Q. Okay. But how did you get to the determination that that's where there's a missing entry?
A. Based on the pattern within the account. So as you can see, the first three transactions that were entered, a check was disbursed the same day as the final transaction. An additional check was disbursed, but then subsequently reversed. Interest was posted, which is the -- 025 is a manual interest posting. And the entries below the blue line are additional collections into the account, and a subsequent disbursement.

So it's a review based on the patterns within the account.
Q. So having looked at the pattern of transactions, you came to the conclusion there was an entry of 812.96 that was missing? A. Yes.

THE WITNESS: And I misspoke earlier, Your Honor, that the missing number was not posted. So this would appear that the account holder has more money in their account than they actually do.

BY MR. QUINN:
Q. Did you consider whether any money was misappropriated or taken, as opposed to data being missing?
A. No. It appears, based on the balance file, that the disbursement record was not -- that it's still missing from the record set. And as you can see, all of the transactions
previous to that had to be restored as well.
Q. Let's talk about one other type of data analysis that you conducted on check disbursement mapping.

Could you describe for the Court what the check disbursement mapping involved?
A. The Treasury Department provided OHTA a copy of the CP\&R file, which is the Check Payment and Reconciliation system for symbol 4844, which is the individual Indian money check symbol. Q. To your understanding, what is the $C P \& R$ ?
A. It's a listing of the checks from -- our earliest record is March of 1987 through December of 2002, that were issued from the IIM system.
Q. And this information is provided by?
A. The Treasury Department.
Q. Was there other check information that you used as part of the check mapping?
A. The Treasury Department also provided a file called Pacer, which is a listing of electronic disbursement.
Q. Electronic disbursements?
A. Yes.
Q. So this would be like an ECF?
A. EFT, yes.
Q. EFT, there we go. Another acronym.

How did you use this information in the check mapping?
A. We reviewed the information in the Treasury file, the CP\&R
file, and matched those records back to the IRMS and TFAS system.
Q. Do you recall offhand about how many checks you looked at?
A. There were over six million.
Q. Have you looked at all six million?
A. No. We still have, I believe approximately 300,000 to review.
Q. So you've looked at almost six million so far?
A. We've looked at over six million. I can't recall how large the file is, if it's 6.4 million or somewhere around there.
Q. Oh, somewhere around 6.4 million. And you've looked at over six million at this point?
A. Yes, we have.

MR. QUINN: Could we put up the next slide, please? BY MR. QUINN:
Q. Now, actually, before $I$ get into -MR. QUINN: That's not it. Just leave it.

BY MR. QUINN:
Q. The checks that you looked at, the six million checks that you've looked at, and the rest that you're going to look at, are those all checks from the accounting samples?
A. No, these are -- this was an evaluation of the complete file that we received from the Treasury Department.
Q. So every check that was in that file over that time period was part of your data analysis. Is that right?
A. Yes, it was.
Q. It wasn't restricted to the accounting population?
A. No, it was not.
Q. What did you find in your check mapping?
A. One of the primary ways we used that file was to identify checks that had not been negotiated. And once we had done that, we wanted to confirm that there was a re-credit to one of the accounts for that beneficiary.
Q. And do we have an example to show the Court about check mapping?
A. I believe we're going to show that through the LSA project examples.
Q. When we get into account reconciliation?
A. Yes.
Q. Did you detect -- in looking at the six million check disbursements, did you detect any pattern of fraud or irregularity in the disbursements?
A. That's not really something you can detect with that test. Q. What proportion of the six-plus million that you've looked at so far have mapped correctly?
A. The dollar amounts, we used several fields within the Treasury file: The check number, the issue date, and the dollar amount fields to perform that matching. There were several instances where the check range was off by one between the Interior and Treasury file.
Q. Off by one in terms of the numbering?
A. Exactly.
Q. All right.

THE COURT: Can you just leave that there? I don't know what that means, "number off by one."

THE WITNESS: For instance, Your Honor, if it was recorded as check number one in the IRMS system, it was recorded as check number two in the Treasury file.

THE COURT: And they did that all day long, so you have thousands of checks that have the wrong number on them?

THE WITNESS: For that particular day.
BY MR. QUINN:
Q. The amounts match up otherwise?
A. If you were to match the file offset by one, all of the amounts matched, yes.
Q. Could you describe, in terms of the data completeness validation work you've done, what part of your work has involved an examination of Special Deposit Accounts, how you've looked at Special Deposit Account information?
A. Those accounts would have been evaluated through the transaction mapping, as well and the account roll-forward test. I'm sorry, the transaction mapping and account roll-forward test.
Q. More specifically, can you give an example of how you've looked at Special Deposit Account information in the course of
your DCV work?
A. We would have mapped each one of the debits from the Special Deposit Account if it were a transfer or reversal. If there were checks issued from that Special Deposit Account, those would have been matched, as I mentioned, to the CP\&R file. THE COURT: CPN?

THE WITNESS: The Check Payment and Reconciliation file, from Treasury. BY MR. QUINN:
Q. So in the course of looking at the data set, is it reasonable to say that you also were looking at the transactions in and out of the Special Deposit Accounts from that time period?
A. Yes, we evaluate all of the accounts in the system.
Q. And that includes the Special Deposit Accounts as well as individual IIM accounts. Right?
A. Yes, it does.
Q. Let's go through one more example on your data completeness validation work.

MR. QUINN: If we could put up Exhibit 154. Did we do that already? Are we done with that? Okay, yes. Defendant's Exhibit 154 at page 58 for identification, and could you zoom in on the table a little more?

BY MR. QUINN:
Q. Ms. Herman, could you identify this document?
A. This is another one of the 31 accounts from the Pacific region that don't roll forward.
Q. And can you describe what is happening in connection with this account?
A. Again, as you can see, the first several transactions were restored to the record set based on the 4 series record ID.
Q. Let me just break this down a little bit. The record ID with the leading number 4 tells you what?
A. That it was a restored transaction.
Q. And when you say restored transaction, you're referring to what process?
A. That it was data entered from a support document, a transaction register or journal voucher, another financial document.
Q. Is that information that you or people working for you at FTI loaded on to the system?
A. Some of the transactions were rekeyed by our firm, and some were rekeyed by other firms.
Q. Okay. How did you determine who is rekeying what?
A. We have an identifier in the table that stores these transactions.
Q. I mean, who assigned the work in terms of rekeying the information? Who made a decision about what was being rekeyed? A. It was as a result of identifying the gap, the work that we had done.
Q. So you know from the first two entries, based on the number, the record ID is a re-entered transaction. Right?
A. Yes, it is.
Q. And the reference information is coming from where in those first two lines?
A. If this was entered from a transaction register from that particular field. If this had been entered from a journal voucher, while this particular reference may not appear on the journal voucher, we would have looked first to other transactions from that journal voucher that had been posted so that we could use the same reference.
Q. And what did you find with respect to this account?
A. So in this particular account, it's a little bit different than the first account that we evaluated. If you look to each one of the disbursement items in this account, you can see that all of them have the same code, a 31. The 31 code in the IRMS system is an auto-disburse code.

So each time the account received money, in this instance you can see that a check was issued on the same day. And so the one we're missing in this account, $\$ 1,129.05$ disbursement, which is the sum of the two credits that we restored on July 1st.
Q. So based on this pattern of --

MR. QUINN: I think we have another slide to go to, if we could, the next page.

BY MR. QUINN:
Q. Based on that pattern, what did you conclude?
A. That we're still missing one disbursement from this account, on July 1st.

MR. QUINN: I'm sorry, go back to the previous slide. We're not quite there yet.

BY MR. QUINN:
Q. And that's the third line where it says, "Adjusting entry"?
A. Yes, it is.
Q. Could you describe how you came to that conclusion that there was an adjusting entry that was required there?
A. As I mentioned, we would have been evaluating this account because the balance file and the transactions don't agree. And each time there's a credit into this account on a particular day, there's also a disbursement issued on that same day. And we had to restore the first two transactions to this account on July 1st, the sum of those transactions being \$1,129.05.
Q. So you're expecting, based on the auto-disbursement, that there was a disbursement of 1,129 ?
A. On that same day, yes.
Q. And with respect to this adjusting entry, are you still looking for a document, documentation to support the disbursement?
A. Yes, we are.
Q. So this might change. In the course of the follow-up
research, they may find a document that indicates -- or confirms
your expectation?
A. Yes, that's possible?
MR. QUINN: If we can go to the next slide, please.
BY MR. QUINN:
Q. That dollar figure shows up on this next page. This is
Defendant's Exhibit 154 at page 44 .
Could you describe what this document is?
A. As $I$ mentioned earlier, this is a summary of the 31 accounts
that still are not in balance in the Pacific region.
Q. So this is the document we looked at before. The line one
is the Raglin example we talked about?
A. That's correct.
Q. So now we're down, looking at number 12. So this is another
number of the one that's -- account entry -- an account that
doesn't roll forward, in other words?
A. That's correct.
MR. QUINN: Go to the next slide.
BY MR. QUINN:
Q. On the screen I put up Defendant's Exhibit 154 at page 42.
Could you identify this document for the record?
A. This is an excerpt from our Pacific region report.
Q. Okay. And what does this table tell us?
A. This is one of the tests that we used to measure
completeness of the IRMS data that we have available to us.

So the first column is from a balance file report from the system.
Q. Let me just stop you there.

MR. QUINN: Could we zoom in a little bit more on the upper end and get the titles of these columns captured? That's a little bit too much. I want to see the whole document, but I want to be able to read the titles. I mean, I want to see the whole column set. I guess we can't do that. Scroll across. Thanks.

BY MR. QUINN:
Q. All right. You started to describe the IM500 beginning balance. Could you describe what that is? What is the IM500? A. The IM500 is an IRMS system report that records balances at a point in time.
Q. Is that electronic or paper?
A. It's a paper report.
Q. So it's something that the Department of Interior printed out at the time?
A. Yes, it is.
Q. And what's the information in the IM500 that you use?
A. That report gives you a balance, as I mentioned, at a particular point in time, by general ledger account. So we used the sum of that in this schedule.
Q. Is that for a specific agency or region or what?
A. Most of the report is from an agency basis, so you would
have to add all of the agency reports to get the regional total.
Q. And did you do that in these instances?
A. Yes, we did.
Q. And that's what's reflected in column $A$, the one that's
listed as column A?
A. That's correct.
Q. And what is column B?
A. Column B is a sum of all of the credits in the Pacific
region by fiscal year.
Q. It says, "Original collections." What does that mean?
A. It's truly a sum of credits, not just collected dollars.
Q. So in addition to dollars, what else could be in that
number?
A. This column would include double counting. So every credit
within the system would be added in this column.
Q. So if a credit came into an SDA account and then was
disbursed to individual IIM accounts, and those accounts were
credited, would the SDA credit and the IIM credit both show up
in this number?
A. Yes, it would.
Q. Column C says, "Original disbursements." What are those?
A. It's a sum of all of the debits by fiscal year for this
region.
Q. And the calculated balance tells you what?
A. It's the beginning balance, plus the original collections
column, minus the disbursement column.
Q. And then column E, you have the IM500 ending balance. What does that information tell you?
A. That's where we're going to compute -- where we're going to compare our calculated balance to the balance that we found in the hard copy report.
Q. So you've calculated -- column D, if you will, is the calculated credits and debits. Right?
A. That's correct.
Q. So you have a balance from the IRMS. Right?
A. That's correct.
Q. And then column $E$ is the balance reported from the paper IM500?
A. Yes, it is.
Q. Okay. What is column F, "Original variance"?
A. That's the difference between the balance that we calculated and the balance in the system report.
Q. So that's the disparity between the two balance reports. Right?
A. That's correct.
Q. And column $G$ tells us what? What does that involve?
A. Column $G$ is a summary of all of the transactions that had been restored to that region for that particular fiscal year. Q. And by restored, are you speaking of where you found the paper record and have re-entered the information?
A. Yes, I am.
Q. So I guess then you're taking that number off of the original variance?
A. This is how we're going to determine if we found all of the information that's missing. So...
Q. And then column $H$ is what?
A. That's from the schedule that we just looked at previously. We realized that we had 31 accounts that are still out of balance, and that's the summary of the 31 accounts that are still out of balance.
Q. So having identified the source of the variance, then the final variance in the last column is checked off, essentially? You've identified where the variances are. Is that right?
A. Correct. That's the sum of the original variance, the net amount restored, and what we know is still remaining to restore. THE COURT: Is this a good time for the mid-morning break?

MR. QUINN: This would be a perfect time, Your Honor. THE COURT: We'll be in recess for about 10 minutes. (Recess taken at 11:11 a.m.) MR. QUINN: Ready, Your Honor? THE COURT: All right, sir. MR. QUINN: Thank you.

BY MR. QUINN:
Q. Ms. Herman, we were talking about different aspects of the
data completeness validation tests that you and people working with you at FTI have done. And examples taken from your DCV reports.

I'd like to just recap and go over with you some of the information in your report on an overall basis to give a sense of the size of this undertaking.

MR. QUINN: If we could put up 152-20.
BY MR. QUINN:
Q. I put up a slide from Defendant's Exhibit 152 at page 20, and I think we want to focus on the table.

But could you identify what this page is for the record?
A. This is an excerpt from our overall report.
Q. So this is in the first volume of the set?
A. Yes, it is.
Q. And what is this table summarizing?
A. This is a summary of the transactional data from the IRMS and TFAS systems.
Q. And in our last example, we were looking at an example from the Pacific region. Is that right?
A. That's correct.
Q. And as you go across, could you describe what each column is indicating in the table? You have it broken down in two pieces; first of all, IRMS transactions and TFAS transactions. How is that grouping, what is that grouping?
A. I'm sorry, those are the number of transactions for each of those systems for that particular region.
Q. And under IRMS transactions, original data, what does that reflect?
A. This is the original transactions provided to us by OHTA.
Q. This is a tally of the number of transactions?
A. That's correct.
Q. Then you have a column that says, restored pre-2/85, what does that mean?
A. Those are transactions that have been restored to date for the paper ledger era for IRMS.
Q. Why is that work going on? Why is there pre-February ' 85 restoration work going on?
A. To restore the ledger for the paper time frame for the accounting.
Q. So this column indicates work that's commencing on the paper ledger era work?
A. Yes, it does.
Q. The next column says, restored post-2/85. What does that column reflect?
A. Those are transactions that have been restored to the electronic ledger era IRMS data.
Q. And is that something of the sort of the example you gave where you had the code 4 transaction?
A. That's correct.
Q. That something had been re-entered into the data set?
A. That's correct.
Q. So this table sums the number of re-entered transactions?
A. Yes, it does.
Q. I notice there's one for Alaska and 135,000 for

Great Plains. So there's some difference as you go across regions?
A. Yes. Great Plains is a much larger region than Alaska, and the majority of the December ' 89 data from Great Plains was missing from the original records set.
Q. But you were able to find it?
A. Yes. On transaction registers.
Q. And then you have a total column summing up those three columns?
A. Yes.
Q. And what does that total represent?
A. The total currently available electronically IRMS data.
Q. And if you go and sum across the regions down to the bottom of the page, you see a number there, $56,881,225$. And what does that reflect?
A. The total IRMS transactions available currently electronically.
Q. And the next grouping, I'm assuming this is the same corresponding information from the TFAS system?
A. Yes, it is.
Q. So it's summing the actual TFAS count, but it references different periods. Why do you have two columns for two different periods?
A. The first represents the historical accounting time frame and the second are transactions to present.
Q. But they're all from the same system?
A. Yes, they are.
Q. This doesn't reflect data reentry or rekeying?
A. No, it does not.
Q. And then you have a total there, and that's total for all the TFAS transactions through current?
A. That's correct.
Q. And then the last is a grand total of all transactions?
A. Yes, it is.
Q. Broken down by region. Right?

So if you go down to the very bottom column and row in that table, the 113,892,296 number is the grand sum total of all transactions presently?
A. Yes, it is.
Q. Of available in the electronic database?
A. Yes.

MR. QUINN: If we could go to 271. Yes, thank you. BY MR. QUINN:
Q. On the next table, this is, for identification, Defendant's Exhibit 152 at page 271. Could you identify that page for the

Court?
A. This is a summary from our overall report of our account roll-forward analysis.
Q. Okay. And you have -- this table is broken down into two parts. You have account NAANs with a balance file. What is that?
A. As I mentioned, IRMS balance files are only available electronically beginning in February of 1986. In order to find earlier balances, we've had to turn to hard copy balance files and account statements. So we currently do not have a balance for every account within the system.
Q. Is that work ongoing?
A. Yes, it is.
Q. Are there people continuing to research documents to find transaction registers and rekey data?
A. In order to find a balance file, you'd search for either an account statement, a master file printed in hard copy, a trial balance report. There are several different reports that we use.
Q. So you have alternatives to look for?
A. Yes, we do.
Q. And then the second half of the table refers to accounts, or NAANs with a balance file transaction balances. What is that describing?
A. I'm sorry, the first column --
Q. I need to zoom in more, I think, on the screen.

With no balance file transactions. What is that part of the table telling us?
A. So these are the number of accounts for which we do not have a balance file.
Q. And going --

MR. QUINN: Go to the first half of the table, if you would.

BY MR. QUINN:
Q. And then this is separated by -- reported by region.

Correct?
A. That's correct.
Q. So if you look at the first half, the "no difference" column, what is that indicating?
A. That when you compare all of the available balance files and the transactions at each point in time, there's no difference between the balance files that are available and the transaction file.
Q. So those check out completely?
A. Yes, they do.
Q. And then "no difference calculated beginning balance." What's that indicating?
A. As I mentioned, the first electronically available IRMS data we have is February 1985. As many of the regions converted to IRMS prior to that date, we'll have to compute a balance as of

February 1985.
So in order to do that, we look for balance files from 1985 and roll back to compute a beginning balance. Q. And "one or more differences" column refers to what?
A. That means for those accounts we do have a balance file, and, as I mentioned, we check at each available point where we can check. So you may have one difference when you do that test or you may have more than one difference.

So these are accounts where we're either still missing a beginning balance or we're missing transactions within the span of the account.
Q. So if you go down to the total for all the regions, you have 418,603 accounts?
A. Where we have a balance file and can perform the test.
Q. And then 55,436 are the ones that have a balance that need to be investigated further?
A. Yes.

MR. QUINN: If we can go to the second half of the -BY MR. QUINN:
Q. Can you describe what we're seeing here with respect to the second half of the accounts with no balance file?
A. We've broken this into two different buckets; accounts that have a zero balance at the end of the day and accounts that have a nonzero balance at the end of the day.
Q. Why is that important?
A. If the account has a nonzero balance, we're either missing a beginning balance or we're missing transactions within the span of the account.
Q. And if you go over to the final column, that's the total across all accounts, total account count?
A. Yes, that's the total number of accounts that we analyzed.
Q. So in terms of your investigation, data completeness validation, you've looked at a grand total of 559,831 accounts?
A. For this test, yes.
Q. And that leaves about 100,000 or so to complete your analysis in terms of the balances?
A. Yes. I believe many of the accounts that are still remaining are a result of beginning balances that we don't have yet.

MR. QUINN: Can you slide back to the beginning of the columns a little bit?

BY MR. QUINN:
Q. So in terms of the differences, like in Great Plains, looking in column three, "one or more differences," 13,400, what's your expectation with respect to those that remain outstanding in terms of your work?
A. Actually, two weeks ago, account statements were located at the area office for these accounts, so my expectation is that we'll go and review those to determine what the beginning balance is for those accounts.
Q. So you recently have discovered further documentation that will aid you in examining these accounts?
A. Yes, we did.

MR. QUINN: If you could go to the next slide, please. BY MR. QUINN:
Q. If you could look at what's been put on the screen as Defendant's Exhibit 152 at page 276. Could you describe what that document is showing us?
A. This is a summary of our account number analyses that we were discussing earlier.
Q. These are the account name issues --
A. Yes, they are.
Q. -- that you're working on. Okay.

And the bottom right-hand corner reports a number, grand total of 645,691 . What does that represent?
A. The number of land-based and judgment per cap accounts that we've analyzed.
Q. And how many NAANs out of the 645,691 are still under review?
A. 786 .
Q. That's what you have left to try to resolve?
A. As you can see, we've broken that into two buckets. There are 751 that we're working on and 35 that we've asked for assistance from OHTA for.

MR. QUINN: Can we go to the next slide, please?

BY MR. QUINN:
Q. I put up one more slide from your report, Defendant's Exhibit 152 at page 280. Could you identify this page for the Court, please?
A. This is another summary from our overall report.

MR. QUINN: Could you scroll up just a bit so we can get the title? Thank you. BY MR. QUINN:
Q. This is the transaction mapping summary?
A. Yes. Through December 31st, 2000.
Q. So this is through the period --

THE COURT: What page is this again, Counsel?

MR. QUINN: If you go back to the number. It's 280, Your Honor, Exhibit 152.

THE COURT: Thank you.

BY MR. QUINN:
Q. You have -- the first half of the table is broken down by region, and it has a heading, "mapped transactions." Could you describe what this is reporting?
A. These are the number of transactions that we've grouped together similar to the examples that we reviewed today.
Q. And at the bottom of the first column you have a number

53,451,065. And what does that represent?
A. That's the total number of transactions that we've grouped together at this point. And again, only through 2000 .
Q. Right. Through 2000 .

Is there another table in the report that covers through 2007?
A. Yes, there is.
Q. I believe -- is it the next page in the report, or the page before, possibly?
A. One of the two, yes.
Q. It's nearby?
A. Nearby.
Q. The second column reports a percentage. What does that represent, the 80.8 percent through the period of December 31, 2000?
A. That's an overall percentage of the number of transactions mapped relative to the total number of transactions.
Q. Great. And "dollars throughput," what does that represent?
A. That's if you were to add up all of the absolute value of the credit and debit dollars.
Q. Is that the throughput that we were talking about on Thursday, where you're double counting the money by tracing each bookkeeping entry?
A. Yes, it is.
Q. So the 9.4 billion down there does not represent a real net sum total of money flowing through the IIM system?
A. This represents the flows of money, not the new money in and the money out.
Q. The bookkeeping --

THE COURT: Why would 80.8 percent of all transactions only yield 28.2 percent of the throughput?

THE WITNESS: Typically, Your Honor, if you look, for instance, at Rocky Mountain and at Great Plains, you can see that a large percentage of the transactions are actually transfers and reversals. And one of the examples we're going to show you from the accounting process will demonstrate how you start with $\$ 6,000$ and end up posting very small transactions.

And so oftentimes when you're distributing this money, you have very small credits associated with those transfers. If you had a large credit, it would mostly likely deposit directly into an individual's account, so it wouldn't be mapped. BY MR. QUINN:
Q. Let's walk through that. You have a receipt come in of money from a large pasture that's been leased. Is it likely to have more than one owner in the pasture?
A. Typically a range unit is going to compose multiple allotments, and each one of those allotments would have multiple owners.
Q. Is that what's known as fractionation, when you say multiple owners for an allotment?
A. Yes, it is.
Q. To your understanding, is that due to the inheritance over time and the bequests to generations that follow the original
allottee?
A. That's my understanding.
Q. So you may have one allotment that has several owners. Right?
A. That's correct.
Q. And then within a pasture or a range agreement, you might have one allotment that makes up several as part of an overall range agreement with a commercial farmer?
A. Yes. Typically, you would have multiple allotments as part of a range unit.
Q. So if the money comes in on the rental from that range example, what happens next? How does Interior go about distributing the money?
A. In that type of example, it would be posted to a Special Deposit Account and then distributed from that Special Deposit Account to the owners.
Q. To your understanding, why does it get posted first to the Special Deposit Account? What happens there?
A. In this particular type of example, it's typically because there are so many people that are going to receive the benefit of that money.
Q. So the Interior needs to figure out where it's going --
A. Exactly.
Q. -- how to divide it up?

So you have the mapped transactions through 2000, and
you've got almost 81 percent of $53-\mathrm{plus}$ million, 53-and-a-half million, almost, transactions mapped. Right?
A. Yes. And you wouldn't expect at the end of the day that you will map all of the transactions in the system, because some are initial postings and disbursements from the system.
Q. Could you go over that a little bit again to make that distinction between the original posting and how that fits into the mapping work that you've been doing?
A. In the example that we just used, the original posting would be the credit to the Special Deposit Account. That transaction would never be mapped because that's the first time you see the money in the system.
Q. So when it first hits the system, that's not part of your analysis? You're looking at how it flowed through the system? A. Exactly.

MR. QUINN: Could we slide over, scroll over to the right?

BY MR. QUINN:
Q. The next breaking, grouping here in this table refers to transactions to map. And what is that reporting?
A. These are the transactions that we believe still should be mapped within the system.
Q. And so you have -- you go across all the regions, you have that first column. Is that the total number left you think should be mapped?
A. Yes, it is.
Q. And what's -- the third column refers to number of docs. What does that mean?
A. Similar to the example that we saw initially at the tax refund situation. There were four transactions in that example that all had the same document reference, and so in that instance, you would count four transactions and one document. Q. I see. So in terms of what's left to map, there's really a group, 192 --
A. Groups of transactions.
Q. -- thousand groups of transactions to look at. Is that right?
A. Exactly.
Q. And that represents a grand total of 568 million, little bit more than 568 million?
A. Yes. And again, those are absolute dollars.
Q. You're double counting calculation of throughput?
A. Yes.

MR. QUINN: Let me go over to the last part, that group right here.

BY MR. QUINN:
Q. And then the last column just sums everything for the two types, both transactions that are mapped and transactions left to map?
A. No, this is a summary of all of the transactions for that
particular region.
So as I mentioned, we don't expect at the end of the day that we'll map every transaction in the region.
Q. So this is a grand total of every bookkeeping entry in the system, including those that aren't part of the mapping protocol?
A. Yes.

THE COURT: Just so we don't lose this in the record, Ms. Herman, when you say absolute dollars, you mean dollars that -- they may actually all be the same dollars, but they've been recorded several times as debits and credits?

THE WITNESS: Yes. And you --
THE COURT: And every time they're recorded in a transaction, the spreadsheet considers it an absolute dollar. Right?

THE WITNESS: Yes. And instead of considering a debit as a negative amount, you'd consider it as a positive amount. So if you had a positive 100 and a negative 100, you would count that as 200 absolute dollars.

THE COURT: So I would say they're absolute dollars, but they're absolutely not dollars?

THE WITNESS: That's correct, Your Honor.
THE COURT: All right.
MR. QUINN: I think we have another summary table to conclude on data completeness validation.

BY MR. QUINN:
Q. On the screen I put up -- our next table is from Defendant's Exhibit 152, again, the overall report at page 281. Is this the same thing?
A. This is the same chart, but through July 31st, 2007.
Q. So we did have the 2001 in here.

MR. QUINN: Go back to that page reference again so we're clear on where this is coming from, if we could. BY MR. QUINN:
Q. This is 152 at page 281. And this is the same table we just looked at, but it covers the data all the way through 2007?
A. Yes, it does.
Q. And so the numbers, the grand total numbers, are a little bit different in terms of the size?
A. That's correct.

MR. QUINN: So scroll to the right at the very end there.

BY MR. QUINN:
Q. So here the -- all transactions, this is again where it's the 113 million --
A. That's correct.
Q. -- number that you've looked at?
A. Yes.
Q. Or you're looking at as part of this? Okay.

MR. QUINN: Can we have the next slide, please?

BY MR. QUINN:
Q. This is also from the overview report, Defendant's Exhibit 152 at page 37.

MR. QUINN: And could we back out a little bit so the witness can identify it for the record? BY MR. QUINN:
Q. If you can read that, can you identify what that is?
A. This is an excerpt from our overall report.

MR. QUINN: And if you could highlight the middle paragraph that begins with the Treasury CP\&R? Thank you. BY MR. QUINN:
Q. In the middle of that page, just before the heading, "population specific data validations," there's a short paragraph that refers to the Treasury $C P \& R$ data, and it says, "includes 6,413,240 records of checks."

And that's what you were describing earlier?
A. Yes, it is.
Q. And it reports that it covers a period from March 1987 through December 2002 relating to IIM Trust?
A. Yes, it does.
Q. And it indicates here that "FTI has successfully mapped 6,278,229 of these records, or 97.9 percent, back to the corresponding record."

Does that reflect the successful mapping of the check distribution records?
A. That's where we've tied the Treasury record to the IRMS or TFAS record.
Q. And that's the percentage that have checked out at this point?
A. Yes.

MR. QUINN: Let's go back. Let's look at this for a second.

BY MR. QUINN:
Q. Ms. Herman, I showed you this chart on Thursday when you began your testimony from Defendant's Exhibit 152 at page 16. MR. QUINN: We need to go up to the chart. There we go. Okay. BY MR. QUINN:
Q. And the Court was asking you a moment ago about a great number of transactions only accounting for a small amount of throughput. Is that reflected also in this chart?
A. Yes, it is.
Q. Can you describe how it's reflected, how it's represented?
A. The blue columns in the chart represent the number of transactions, and the green columns is the number of dollars.
Q. And they're stratified, right, by dollar value group?
A. Yes, they are.
Q. So the big green bar at the end of this chart is representing what?
A. The number of dollars in the "greater than $\$ 10,000$ "
category.
Q. And the little, itty-bitty line next to it is representing what in the far right side?
A. The number of transactions associated with those dollars.
Q. So a small number of transactions in effect accounting for a large percentage of the money?
A. Yes.
Q. This is everything, though. Right? I don't want to mislead anybody. This is your data completeness validation, so it includes Special Deposit Accounts and everything else in there?
A. Right. This is just noninterest credits, though.
Q. Noninterest credit. So you filtered out credit transactions?
A. That's correct.
Q. So just looking at actual dollars of some kind of earnings or revenue or deposit, you get a small number of accounts reflecting a large amount of the value of what's flowed through the IIM Trust during this time frame. Right?
A. A small number of transactions, yes.
Q. And at the opposite end, the blue bars being much higher and actually visible compared to the far right, telling you what? A. There are a large number of transactions in the small dollar amount. So in the first column, which is zero to $\$ 1$, you have \$9.1 million transactions.
Q. Between zero and $\$ 1 ?$
A. Yes.

MR. QUINN: Could we go to the next line. BY MR. QUINN:
Q. During the opening statements --

MR. QUINN: This is from plaintiffs' exhibit set, but actually it had been used in the 1.5 trial, Your Honor. It's a chart used in opening statements.

BY MR. QUINN:
Q. Have you seen this chart before?
A. Yes. I created it.
Q. You prepared it?
A. Yes, I did.
Q. About when did you prepare this chart?
A. It was several years ago, for the 1.5 trial.
Q. Is this chart intended to reflect some of the same information that's in your data completeness validation report chart?
A. Yes. It's a similar chart, just slightly different buckets.
Q. The numbers are laid out a little bit differently.

MR. QUINN: Could you go to the next slide?
This was also used in the course of opening statements, and it's another one of plaintiffs' marked exhibits for this hearing. But it was marked by defendants in the 1.5 trial. BY MR. QUINN:
Q. Have you seen this chart before?
A. Yes, I have.
Q. And could you describe what it is for the Court?
A. It's the number of debit transactions for the February '85 through December 2000 period broken down by dollar stratum. Q. And what is this bar graph showing?
A. That you have a larger number of debits in the 10 to $\$ 100$ bucket, and that's a result of the auto-disbursement that typically happens at \$15.
Q. Can you describe the auto-disbursement, to your understanding what that is?
A. Many accounts, those that are established for people who are deemed to be competent adults, have the funds distributed automatically when it reaches $\$ 15$ in a balance. And more frequently for oil and gas payments.
Q. So if it was a $\$ 10$ balance in an account, it would sit there idle until it hit 15? Is that your understanding?
A. That's my understanding, yes.
Q. In terms of your overall work in the data completeness validation, do you have any particular observations about this data that you've looked at?
A. The data is very complex, as it differs by region. But we have been able to find answers to most of the items that we've investigated so far.

MR. QUINN: I think we have one more slide, the conclusion slide. Can you bring that up? No, that's later.

Excuse me, Your Honor, one moment.
(OFF THE RECORD.)

BY MR. QUINN:
Q. Wrapping up here, Ms. Herman, let me just go over a couple of things overall in terms of documents that you collected that are reflected in the $D C V$ reports.

Those documents, the source documents that you used to examine some of these transactions, are they, to your knowledge, records of the Department of Interior?
A. Yes, they are.
Q. Records maintained by the Department of Interior?
A. Yes, they are.
Q. Are they documents that to your knowledge were created in the ordinary course of Department of Interior's operations and administration of IIM accounts?
A. Yes, in addition to the file we received from Treasury.
Q. For the check information?
A. Yes.
Q. Okay.

MR. QUINN: Well, at this time, Your Honor, defendants would like to move the data completeness validation report into evidence that begins at Defendant's Exhibit 152 and continues for the next six exhibits, the regional and the overall reports.

MR. SMITH: Your Honor, we would object to that on these grounds: Number one, again, Ms. Herman has not been
designated as an expert witness. This report contains conclusions, opinions; she's done testing, someone has done testing and arrived at opinions based on that testing. For that --

THE COURT: It will be received, Mr. Smith. Your objections will go to weight.

MR. SMITH: Thank you.
MR. QUINN: Thank you, Your Honor.
THE COURT: They will be received, the Exhibits 152
through 158.

MR. QUINN: Yes, thank you, Your Honor.
(Defense Exhibits 152 through 158 were moved into evidence.)

BY MR. QUINN:
Q. Before we move into the next area and talk about the account reconciliation work that you've done, let me go back just for a moment and review some history with respect to the data sets that you were analyzing for the data completeness validation. When was the first time that you began to work at all with the IRMS IIM subsystem information?
A. In early 1997.
Q. And under what circumstances did you obtain access to that?
A. We received a copy of the IRMS data up and through that point in time from Justice.
Q. And do you know whether -- from your involvement in that,
whether anyone associated with the plaintiffs obtained access to that data?
A. At the time, Price Waterhouse was working for plaintiffs, and I believe they received a copy of that data as well. Q. Are you aware of any analysis performed by plaintiffs on that data set?
A. Initially we were working cooperatively. I don't know if additional analysis has been done.
Q. You have not seen any?
A. Not that I've personally seen.
Q. Okay.

MR. QUINN: We have that conclusion page? Great.
Can we identify it for the record? This is Defendant's
Exhibit 152, now in evidence, at page 38.
BY MR. QUINN:
Q. And if you can read it, Ms. Herman, can you identify it for the record, please?
A. This is the final page of our overall report.
Q. And in there you report a few observations about the data. And in particular you describe in the second paragraph that one of the complicating factors you encountered in doing the analysis, that many of the individual regions use systems in a way that were internally consistent but inconsistent across regions.

Can you describe that experience for the Court?
A. Different regions over time had different processes that they implemented. So perhaps an easy example is range, again. The Great Plains region used a different distribution program than the Rocky Mountain region used, and so as a result, the postings are reflected differently in the system.
Q. Does that mean that the data is in error or can't be compared?
A. No, it just made it more time-consuming for us because we had to learn how each region processed their transactions before we could evaluate them.
Q. Did you sometimes have to learn how even a particular agency might process transactions?
A. Yes. And some of that changed over time from the beginning of the IRMS system through the conclusion of the system and the movement into TFAS.

MR. QUINN: If you can scroll down a page there.
BY MR. QUINN:
Q. You mention in -- that paragraph begins, "it should be noted that each of the analyses described above are dependent on one another, with the results of one analysis impacting several other analyses in an iterative cycle."

What do you mean by that?
A. I think perhaps the easiest example is an overlap between our transaction mapping and our NABN example.
Q. That's the Native American Beneficiary Number?
A. That's correct.

So one of the things we evaluate in that analysis is whether or not there are transfers between two accounts, because that might be an indication that those are accounts that belong to the same individual.

So as we map new transactions, we have new transfers to analyze for our account number analysis.
Q. And so in the course of doing the analysis, you may identify still, even going from where we are now today, other accounts for particular individuals. Is that right?
A. Yes.
Q. And then what happens with those newly identified individual accounts?
A. It's not that the account is newly identified, it's that we now know that all of those accounts belong to the same person. Q. What does that do in terms of the reconciliation work? What impact does it have on that?
A. At this particular example, it wouldn't impact the reconciliation work; what would is if we identified transactions that weren't a part of the population when the sample was drawn. Q. And why is that important?
A. Because the sample was drawn from the group of transactions that was available at that point in time.

So to the extent that we add transactions after that point in time, the statisticians will need to evaluate those.
Q. To your knowledge, is the Office of Historical Trust Accounting taking that into consideration, if there are new information added to the group, population of accounts for transaction analysis?
A. It's my understanding that they are.
Q. Thank you. We'll talk a little bit about your account reconciliation work.

As part of the -- and I believe you testified already on Thursday that you've been involved in conducting account reconciliation?
A. Yes, I have.
Q. Is this also known as the litigation support accounting?
A. Yes, it is.
Q. And how does the reconciliation work compare with the data completeness validation work that we've been discussing up to this point?
A. The reconciliation work is focused around determining the accuracy of a given transaction as posted; whereas the data completeness project is focused more on determining the completeness of the historical record relative to today, relative to what existed historically.
Q. So what kinds of accounts were being examined as part of the litigation support accounting?
A. Land-based accounts.
Q. And as part of the overall reconciliation, were other types
of accounts being looked at?
A. Yes. Judgment and per capita accounts.
Q. What guidelines -- well, let me ask you this: Does the Office of Historical Trust Accounting have any guidelines that it's adopted with respect to the conduct of the reconciliation work?
A. Yes. The Accounting Standards Manual.
Q. Is that mentioned in the 2007 plan, do you know?
A. I believe it is.

MR. QUINN: Could we put up slide AR-556? We're jumping ahead a little bit.

BY MR. QUINN:
Q. I'm sorry, you referred to the Accounting Standards Manual?
A. Yes.
Q. Could you describe what that is for the Court?
A. The manual contains several components to it; one are guidelines to the firms performing the reconciliation; one are documents that are documents to be used in support of the accounting; and at the end of the document, there's a work program that firms use while performing the accounting.

MR. QUINN: I've put up on the screen here what's a piece of the administrative record, Your Honor. And this is identified as document AR-566 for purposes of indexing. BY MR. QUINN:
Q. Ms. Herman, if you would look at that first page and tell us
whether you've seen this document and can identify it for the record?
A. I believe this is a component of what we refer to as the green plan, or the current 2007 plan.

MR. QUINN: And could we go to page nine? And can we just zoom in on the bottom part of that page, if we could? BY MR. QUINN:
Q. Here on page nine under the heading, Ms. Herman, it refers to the Accounting Standards Manual. Is that the document you were just speaking of?
A. Yes, it is.
Q. And according to the plan here, the plan rationale refers to -- second sentence, "the ASM supports the accuracy objective of the historical accounting by creating, in advance, definitive standards as a guide to performing and reviewing the reconciliations."

It says that the -- it goes on to say that, "the ASM was developed by Interior, working with the accounting firms engaged for the historical accounting, and continues to be updated."

Did you participate at all in the development of the ASM?
A. Yes, I did.
Q. What was your role in developing the ASM?
A. My primary role was in identifying documents that had been
used historically in support of the different transactions that
we were going to be analyzing.

MR. QUINN: Could we go to AR-08?
I've put up on the screen here a document also from the administrative record identified as AR-008. BY MR. QUINN:
Q. And Ms. Herman, can you identify what that document is?
A. This is the cover page to the Accounting Standards Manual.
Q. And that's the manual you were referring to that you participated in developing?
A. Yes, it is.

MR. QUINN: If you go to the next page and zoom in on the preface.

BY MR. QUINN:
Q. Look at the preface page. You see a number of firms there.

Do you recognize those are the firms that were involved in
helping to develop the ASM?
A. Yes, they are.
Q. And is your firm among those?
A. Yes, it is.
Q. That's the FTI Consulting?
A. Yes.

MR. QUINN: And if we could look at the -- zoom in on -- this is the table of contents page from the ASM. If we could just go through this.

BY MR. QUINN:
Q. Principally, what does the ASM contain?
A. As I mentioned, it contains policies and procedures in terms of conducting a historical accounting, the guidelines, the standards, the documents to be used in support of the accounting, and then a work program for actually performing the reconciliation.
Q. Did you refer to the ASM when you were working on the litigation support accounting?
A. Yes, I did.
Q. Did other members of your staff refer to the ASM?
A. Yes, they did.
Q. How about the other accounting firms that were doing reconciliation work, would they refer to that?
A. All of the firms were to use the ASM.
Q. You mentioned you participated in helping to develop the Accounting Standards Manual. Are you a certified public accountant?
A. No, I'm not.
Q. Are you an accountant by training?
A. No, I'm not.
Q. So what contribution were you able to make to the Accounting Standards Manual?
A. As I mentioned, mine was primarily focused around identifying the documents that had been used by Interior
historically.
Q. And in terms of the accounting standards that are adopted or reflected in the Accounting Standards Manual, who participated in the decisions on adopting particular standards to govern the conduct of the reconciliation work?
A. The majority of the manual was written while our team was at KPMG, and we had on our team CPAs, as well as our professional standards practice, evaluate the standards implemented in the manual.
Q. So CPAs, certified public accountants, who were trained in this area participated in the standards review?
A. Yes, they did.

MR. QUINN: If you could go to the next page on the slide on this. I want to get to the introduction page, if we could. Okay, there you go. Just zoom in on this. BY MR. QUINN:
Q. Has the Accounting Standards Manual gone through changes over time since it was first adopted?
A. Yes, it has.
Q. And why is that? What kinds of changes have been made to the manual?
A. Complete chapters have been added to the manual, as well as documents in support of particular types of transactions. Q. Those changes in the ASM are made in response to what?
A. Any one of the firms involved in the accounting, or OHTA
themselves, can propose changes to the manual.
Q. Do those often grow out of the experience that you have in actually conducting reconciliation work?
A. Yes, it does.
Q. Would it involve changes that are made based on kinds of documents you're finding?
A. Yes.
Q. And I believe you testified that FTI has done some of the work with the reconciliations?
A. Yes, we have.
Q. Before we get to that and get into the meat of the account reconciliation work that you've done, I would like to talk about a couple of tests just briefly that $I$ could, about tests that did not appear in the data completeness validation, and review those with you for the court.

I think on Thursday you mentioned a test referred to as the land-to-dollars test. Do you recognize that term?
A. Yes, I do.
Q. And what does that term describe?
A. The test that's being performed going from outside the system, basically starting with the land, and determining whether or not funds that should have been collected were posted to the system.
Q. Who designed the land-to-dollars test?
A. Several of the firms working at OHTA designed the test.
Q. Have you had any involvement with the land-to-dollars testing?
A. Yes. In evaluating the leases that had been selected and whether or not the funds posted to the system.
Q. Could you explain for the Court what the land-to-dollars test does, what the steps are in the test and what its aim is?
A. Some of this is based on my review of documents prepared by NORC. But you start with creating a map of all of the allotments for a given reservation managed by an agency, and then once you have that map, you sample allotments from within that reservation.

Once you had sampled your allotments, you create a revenue history for that particular allotment. So if it had had leasing from 1985 to 2000 consistently, you would have each one of those data points represented.

And then they selected particular collection periods that the accounting firms would review.
Q. Did you participate in looking at any of those, any of those land-to-dollar transaction tests?
A. Yes, I did.

MR. QUINN: If you can put up, if you can locate it, AR-435.

BY MR. QUINN:
Q. I believe you referred to a NORC memo. Is this the memo you're referring to?

MR. QUINN: Zoom in on the top of it, please.

THE WITNESS: This is one of the memos that I've seen, yes.

MR. QUINN: And for the record, this is a March 31, 2000 memorandum, and it's indexed and part of the administrative -- indexed at AR-435. Okay?

BY MR. QUINN:
Q. This is a memorandum - reading the document, now - from Susan Hinkins, project manager, to Jeffrey Zippin. Do you know who Ms. Hinkins is?
A. She's a member of the NORC team.
Q. And who is Mr. Zippin? I guess he's the deputy executive director?
A. Yes, he is.
Q. You worked with him in the course of your work on the historical accounting?
A. Yes, I have.

MR. QUINN: If we can scroll down the page here.

BY MR. QUINN:
Q. This lays out a number of options for conducting land-to-dollars test.

MR. QUINN: If you go to the next page, and zoom in on the part with the heading in the middle of the page, if you would?

BY MR. QUINN:
Q. This refers to the Horton Agency and selection of the Horton Agency. Is that a land-to-dollars test that you participated in?
A. Yes, it is.
Q. I'm sorry, it is?
A. Sorry. Yes, it is.
Q. Do you need some water?
A. No, I'm fine. Thank you.
Q. Did you participate in the selection of the Horton Agency?
A. No, I did not.
Q. Describe what it is that you did at FTI.
A. I was provided with the lease periods that had been sampled to determine whether or not the postings were made to the IRMS and TFAS systems?
Q. So you were given particular leases to check out?
A. Yes, that's correct.
Q. And those were selected by, as far as you know, NORC?
A. Yes.
Q. And then what did you do with that information?
A. We looked to the IRMS and TFAS data to determine whether we could find a posting of the collection off of the lease.

MR. QUINN: Can you scroll down, next page, I think. BY MR. QUINN:
Q. This third page here refers to 21 allotments that were randomly selected. Those are the allotments you're referring
to?
A. As I mentioned, we actually received particular lease periods that we were testing.
Q. Within those allotment groups?
A. Yes.

MR. QUINN: And scroll down the page, please.
BY MR. QUINN:
Q. And then the memorandum at page three goes on to say, "the following list summarizes the findings for the 21 selected allotments."

Did you participate in the investigation leading to these findings?
A. No, I did not.
Q. What information did you provide for purposes of the Horton land-to-dollars test?
A. We actually evaluated the sampled items and reported back whether or not we found postings in the system for those sampled items.
Q. Is that reflected on here somewhere?

MR. QUINN: Go down, scroll down. More, next page.
THE WITNESS: It's discussed in the 33 cases. BY MR. QUINN:
Q. On this page at bullet point, refers to, "accountants tested 33 cases to verify that the revenue was received by all the listed owners." And it has a couple of findings underneath
that. "One case was found to be out of scope." What does that mean, out of scope?
A. This test was designed for the electronic ledger era, so this would have been money prior to February of ' 85.
Q. Not necessarily out of scope for the accounting, but out of scope for the purpose of the test?
A. Yes.
Q. And the next bullet point is, "32 expected payments were successfully traced to the IIM accounts." Can you describe for the Court what that means?
A. This is where we actually found the postings in the IRMS and TFAS systems reflecting the leases that had been provided.
Q. So in this study, the land-to-dollars, you were given 33 lease transactions to try to find?
A. Yes.
Q. And one was not within the test term, within the scope of the test, but all the other 32 that you tested you found entries in the IRMS data?
A. Or the TFAS system, yes.
Q. Or the TFAS system. All right.

Did anyone -- was there anybody else doing work similar to you on this Horton test, looking at other leases?
A. No. This was -- only our firm worked on this test.
Q. So the results of this test is: Everything that was in the scope of the time period for the test, you were able to find a
transaction record that recorded the information?
A. Yes, I was.
Q. Do you know whether the Office of Historical Trust
Accounting plans to conduct further land-to-dollars tests?
A. I believe they are, yes.
Q. Do you know, are there any underway at this moment?
A. Yes, there are.
Q. Are you working on any at this moment?
A. No, I'm not.
Q. They're in other regions?
A. Yes, they are.
Q. And other accounting firms are working on those?
A. Yes, they are.
Q. Do you know how many agencies with land-the-dollars test
that Interior plans to examine?
A. I believe one per region.
Q. So this is not an overall -- this is kind of a spot check on
the information?
A. I don't know how the sample was selected.
Q. Thank you.
MR. QUINN: Your Honor, the next part of my examination
of Ms. Herman involves a live demonstration, with the Court's
indulgence, of the account reconciliation software, the ART
software you've heard mentioned earlier today.
THE COURT: Are you suggesting that you're ready for
lunch?

MR. QUINN: I'm ready for lunch any time, Your Honor. But we do need to set up her laptop, which will take about five minutes or so. We can do that now if you like, or we can do that over lunch.

THE COURT: All right. We'll take -- it's a little earlier than usual, but we'll take a lunch break now. Let's be back here at, let's call it 1:30.

MR. QUINN: Thank you, Your Honor.
(RECESS taken at 12:16 p.m.)

CERTIFICATE OF OFFICIAL COURT REPORTER

I, Rebecca Stonestreet, certify that the foregoing is a correct transcript from the record of proceedings in the above-entitled matter.


484:3, 484:5, 485:4, 487:19, 487:20
487:21, 487:25,
488:15, 495:8, 498:7,
498:19, 518:2,
518:11, 522:7,
525:13, 525:21,
525:22, 526:14,
527:25, 528:11,
537:8, 538:20,
539:14, 539:16,
540:1, 543:9, 545:17,
547:8, 547:9, 552:22,
553:4, 554:5, 554:9,
554:13, 554:21,
554:22, 554:23
555:5, 555:6, 555:8,
555:12, 555:23,
555:25, 556:2,
556:16, 567:16,
569:11, 570:15,
574:3, 574:4, 574:9,
574:13, 574:15,
575:3, 575:22,
575:24, 576:1, 576:2,
586:9
accuracy - 575:18,
577:13
acronym - 535:23
Act-475:9
Action-472:3,
475:2
actual-491:12,
551:1, 567:15
add - 485:14,
510:19, 510:20,
519:6, 545:1, 558:16,
574:24
added - 476:14,
505:19, 533:24,
545:15, 575:3, 580:22
addition - 545:12,
570:16
additional - 476:4,
476:17, 477:7, 478:5,
478:13, 479:1,
515:20, 533:20,
534:6, 534:9, 572:8
address - 475:25,
483:13, 483:17,
494:17, 506:12
addresses - 483:14,
498:23
adjacent - 528:21
Adjusting-542:8
adjusting-529:6,
533:22, 542:11,
542:21
administration -
570:15
administrative -
476:1, 576:22, 578:5,
583:6
Admitted-474:6
adopted - 576:5,
580:2, 580:18
adopting - 580:4
adoption - 490:11
adults - 569:12
advance - 577:14
advise - 475:17
affected - 528:11
age - 522:6, 531:3
agencies-483:15,
587:14
Agency-584:1,
584:2, 584:9
agency - 483:12,
487:2, 487:4, 488:23,

511:11, 512:10, 512:13, 522:2, 522:3, 527:3, 527:5, 532:18,
544:24, 544:25,
545:1, 573:11, 582:9
aggregate - 503:17
ago - 555:22,
566:14, 568:14
agree - 526:15,
542:13
agreed - 477:3
agreement -
506:14, 519:3, 519:4,
560:6, 560:8
ahead - 489:25,
503:10, 507:5,
509:23, 511:9,
529:14, 531:20,
576:11
aid - 556:2
aided - 473:15
aim - 582:6
air-531:18
Airr-486:22, 490:1,
504:21, 505:18,
506:6, 506:9, 507:8,
507:12, 507:19,
507:20, 530:23
al - 472:3, 472:6,
475:3
Alaska-481:7,
550:5, 550:8
allocated - 504:25
allotment - 559:22,
560:3, 560:7, 582:13,
585:4
allotments - 559:19,
560:9, 582:9, 582:10,
582:12, 584:24,
584:25, 585:10
allottee - 560:1
almost - 493:15,
536:8, 561:1, 561:2 alternatives 552:20
American-507:14,
507:20, 573:25
amount - 512:16,
512:19, 514:9, 515:5,
515:13, 515:21,
515:23, 516:9,
522:23, 527:8,
537:23, 547:15,
563:17, 566:15,
567:17, 567:23
amounts - 518:11,
519:5, 537:21,
538:13, 538:15
analyses - 480:22,
483:24, 556:9,
573:19, 573:21
analysis - 484:3,
484:10, 487:17,
487:19, 488:20,
501:19, 505:17,
516:16, 535:2,
536:25, 552:3,
555:11, 561:14,
572:5, 572:8, 572:22, 573:20, 574:2, 574:7, 574:8, 575:4
analyze-489:5,
500:1, 500:11,
500:14, 574:7
analyzed - 487:21,
513:2, 555:6, 556:17
analyzing - 499:6,
571:18, 578:2
Angeles-490:25,
answer - 523:24
answers - 569:22
appear - 488:18,
491:1, 491:20, 496:1, 517:18, 520:14,
520:17, 524:15,
534:17, 541:8, 581:14
Appearances -
472:11
appeared - 522:20
appreciate - 497:10
approach - 480:8
appropriate -500:2,
501:22, 503:24,
504:10, 504:14, 505:1
appropriately -
494:13
Ar-008-578:5
Ar-08-578:3
Ar-435-582:22,
583:6
Ar-556-576:10
Ar-566-576:23
area - 481:13,
481:20, 482:1, 482:7, 482:10, 482:13,
482:23, 488:10,
489:20, 492:23,
502:1, 502:4, 510:4,
555:23, 571:15,
580:11
areas - 481:16
arisen-527:23,
528:12
arrived - 571:3
Art-505:19, 505:21,
505:22, 505:25,
506:2, 506:5, 509:3, 509:12, 509:16,
587:23
Asm-577:13,
577:17, 577:22,
577:24, 578:17 578:24, 579:2, 579:8, 579:11, 579:15,
580:24
aspects - 547:25
assigned - 492:6,
512:20, 529:4, 540:22
assigns - 511:4 assistance - 556:24
associate - 526:24
associated -
485:24, 487:3,
488:23, 488:24,
488:25, 492:8, 492:9,
492:24, 493:2,
494:13, 495:9,
498:11, 504:8,
510:12, 514:23,
517:13, 523:5,
523:11, 528:21,
533:23, 559:11,
567:4, 572:1
assume - 512:22
assuming - 502:10,
550:23
Atlanta-472:18
attached - 514:3
attempt - 487:12
attention - 510:22
Attorney-473:6
Aurelia-527:6
auto-541:17,
542:18, 569:7, 569:9
auto-disburse -
541:17
auto-disbursement

- 542:18, 569:7, 569:9
automatically -

569:13
availability - 483:12
available-489:2,
491:3, 525:17,
525:22, 525:23,
530:2, 543:25,
550:17, 550:21,
551:20, 552:7,
553:15, 553:17,
553:23, 554:6, 574:23
Avenue-473:12
aware-475:20,
572:5

## B

balance-483:20,
517:9, 521:21,
521:23, 522:4, 524:2,
524:4, 524:16,
524:20, 525:2,
525:17, 525:19,
525:21, 525:25,
526:15, 527:12,
527:23, 533:12,
534:23, 542:13,
543:10, 544:1,
544:12, 544:21
545:24, 545:25
546:2, 546:5, 546:10,
546:12, 546:16,
546:17, 546:18,
547:9, 547:10, 552:5,
552:7, 552:9, 552:10,
552:16, 552:18,
552:23, 553:2, 553:5,
553:15, 553:17,
553:21, 553:25,
554:2, 554:3, 554:5,
554:10, 554:14,
554:15, 554:21,
554:23, 554:24,
555:1, 555:2, 555:25
569:13, 569:15
balances - 525:23,
544:13, 552:9,
552:23, 555:11,
555:13
bar - 531:2, 531:3,
531:4, 531:23,
566:23, 569:5
bars - 567:20
Based-503:25,
534:4, 542:2
based - 478:10,
487:20, 495:14,
496:9, 513:16,
515:15, 524:15
534:11, 534:23,
540:6, 541:1, 541:23,
542:18, 556:16,
571:3, 575:24, 581:5,
582:7
basis - 544:25,
548:5
batch - 532:25
batches - 532:11
Bates-476:9,
477:14, 479:11
become - 525:8
beg - 516:11
began - 566:10,
571:19
begin - 479:25
beginning - 479:23,
521:23, 522:4, 522:6,
525:1, 532:17,
544:11, 545:25,
552:8, 553:21, 554:3,

555:13, 555:15,
555:24, 573:13
begins - 565:10,
570:22, 573:18
behind - 510:12,
515:14
belong - 574:4,
574:15
below - 507:16,
512:23, 534:9
Ben-473:8
beneath - 515:6
beneficiaries -
523:9
Beneficiary-573:25
beneficiary - 525:9,
$537: 8$
537:8
benefit - 560:20
bequests - 559:25
best -532:1
between - 498:7,
524:24, 525:17,
527:12, 537:24,
546:16, 546:18,
553:17, 561:7,
573:23, 574:3
Between-567:25
Beverly-493:22,
494:14
Beverly's - 495:10
big - 532:8, 532:25,
bill - 512:9, 512:12
513:16, 514:3,
514:20, 515:1, 515:4,
515:7, 519:14, 523:5,
529:22
Billings - 482:13,
492:22
billion - 558:22
bills - 533:7
binder - 478:14
birth - 490:10,
491:21, 491:24,
491:25, 493:18
bit - 484:23, 488:4,
511:24, 515:2, 516:6,
516:19, 526:20,
529:12, 540:7,
541:13, 544:4, 544:6,
555:16, 557:6, 561:6, 562:14, 564:14,
565:4, 568:19, 575:6,
576:11
bits - 500:9
bitty - 567:2
blame - 478:22
blue - 508:23,
534:9, 566:19, 567:20
bookkeeping -
485:9, 485:20, 486:3,
496:21, 501:22,
511:7, 516:6, 518:13,
519:24, 519:25,
520:9, 520:23,
524:25, 558:20,
559:1, 563:4
bottom - 518:9,
522:19, 524:3, 528:9,
550:18, 551:16,
556:14, 557:22, 577:6
Box-473:8
Branch - 473:7


509:23, 510:2,
514:25, 521:2,
526:21, 527:15,
527:19, 528:1,
530:13, 531:6, 531:9, 531:18, 535:4, 537:9, 538:4, 538:9, 539:6, 547:16, 547:19, 547:22, 552:1, 557:4, 557:12, 557:15, 559:2, 563:8, 563:13, 563:20, 563:23,
566:14, 569:2, 571:5, 571:9, 572:25,
576:15, 581:15,
582:5, 586:10,
587:25, 588:6, 589:1
Court's-516:12,
587:22
Courthouse-
473:12
courtroom - 509:20
Courtroom- 475:2
cover-480:10,
480:13, 480:14,
481:4, 481:23,
482:14, 486:17, 578:8
covered - 516:12,
532:15
covers - 480:19,
499:17, 558:2,
564:11, 565:18
Cp\&r- 535:6, 535:9,
535:25, 539:5,
565:10, 565:14
Cpas-580:7,
580:10
Cpn-539:6
create - 498:13,
498:22, 500:5,582:12
created - 476:22,
476:23, 477:1,
568:10, 570:13
creating-577:14,
582:8
credit - 485:4,
485:12, 503:21,
504:8, 504:12, 512:1,
515:22, 519:6,
519:15, 519:18,
533:16, 537:7,
542:14, 545:14,
545:16, 545:18,
558:17, 559:12,
561:10, 567:12
credit/debit -
515:11
credited - 545:18 credits - $485: 14$,
487:3, 504:9, 517:13,
519:4, 541:21, 545:8,
545:11, 546:8,
559:11, 563:11
567:11
Cross- 474:2
cross - 482:1
culls - 500:1
current-495:25,
551:11, 577:4
Cv-512:9
Cvj-501:13, 513:17
cycle - 573:21

| $\mathbf{D}$ |
| :---: |
| dash - 507:3 |
| data $-475: 12$, |
| $478: 6,479: 14$, |
| $480: 1,48116$, |
| $483: 14,487: 5$, |

492:18, 496:20,
498:1, 499:11,
499:12, 499:13, 499:20, 500:4, 501:3, 501:20, 503:17,
504:1, 504:9, 505:17, 516:16, 519:22, 519:23, 522:15, 526:3, 527:7, 528:3, 529:15, 529:24, 529:25, 530:4, 530:5, 530:18, 533:18, 534:22, 535:2, 536:25, 538:16, 539:10, 539:18,
540:12, 543:25,
548:1, 548:17, 549:3, 549:22, 550:1, 550:9,
550:17, 551:8,
552:15, 553:23,
555:7, 563:25,
564:11, 565:13,
565:14, 567:9,
568:16, 569:18,
569:20, 569:21,
570:21, 571:17,
571:18, 571:23,
572:2, 572:4, 572:6,
572:19, 573:6,
575:14, 575:18,
581:14, 582:15,
584:20, 586:18
Data-483:12,
483:16
database - 483:19,
498:8, 498:10, 499:5,
499:8, 499:23, 500:2,
502:13, 551:20
date - 477:18
480:19, 484:12,
491:21, 491:24,
491:25, 493:23,
507:10, 511:17,
537:22, 549:10,
553:25
dated-477:20
dates - 493:17
David-472:23
days - 504:12
Dc-472:4, 472:14, 472:22, 473:4, 473:9, 473:13
Dcv-475:14, 476:6,
478:12, 488:14,
505:6, 505:7, 505:9,
520:10, 526:10,
528:20, 539:1, 548:2,
570:6
deal - 498:12
dealing-477:19,
477:20
death - 490:2,
490:10, 490:14
491:14, 491:16
debit - 485:1, 485:9,
503:19, 503:21,
504:7, 504:11, 512:2,
519:2, 521:18,
558:17, 563:16, 569:3
debits - 487:3,
539:2, 545:22, 546:8,
563:11, 569:6
decade - 493:15
December-535:11, 550:9, 557:10
558:11, 565:19, 569:4
decided - $512: 6$,
512:14
decision - 540:23 decisions - 580:4
deemed - 569:12
Defendant's -
481:5, 481:10, 482:5,
482:8, 482:11,
482:17, 497:5,
516:18, 518:18
521:6, 523:16, 526:4,
526:5, 528:17,
539:21, 543:7,
543:20, 548:9,
551:24, 556:7, 557:2
564:2, 565:2, 566:10
570:22, 572:13
defendants - 476:4,
568:23, 570:20
Defendants-472:7,
473:1
Defense-474:8,
481:22, 571:12
defense-480:3
definitive - 577:14
definitively - 502:22
demonstrate -
559:8
demonstrating -
492:1
demonstration -
587:22
Dennis - 472:12
Department-473:3,
473:6, 478:16,
493:15, 523:8, 530:2,
535:6, 535:14,
535:17, 536:23,
544:17, 570:9,
570:11, 570:14
dependent - 573:19
deposit - 559:12,
567:16
Deposit-485:2,
485:7, 485:10,
498:18, 538:18,
538:19, 538:25,
539:3, 539:4, 539:12,
539:15, 560:15,
560:18, 561:10,
567:10
deputy-509:21,
583:12
Deputy - 475:2
describe - 480:15,
481:11, 481:24,
482:12, 484:23,
488:19, 489:25,
490:23, 493:4, 495:1
497:18, 499:5,
503:12, 504:1,
507:19, 508:2, 508:4
517:2, 517:5, 517:19,
521:14, 521:25,
535:4, 538:16, 540:3,
542:10, 543:8,
544:11, 544:12,
548:22, 554:20,
556:7, 557:19,
566:18, 569:2, 569:9,
572:20, 572:25,
576:15, 581:19, 586:9
Describe-490:5,
502:7, 525:14,
529:19, 530:13,
584:11
described - 573:19
describing -
552:24, 565:16
Descriptive-486:24
designated -
489:17, 489:21, 571:1
designed-581:24,
581:25, 586:3
detail - 505:21,
519:2
detect - 537:15,
537:16, 537:18
detected-488:19
determination -
493:5, 527:10, 534:2
determine - 492:3,
504:9, 519:11, 526:2,
540:19, 547:4,
555:24, 584:13,
584:20
determining -
575:17, 575:19,
581:21
detour-497:11
develop-578:17,
579:16
developed - 577:18
developing-
577:24, 578:10
development -
577:21
difference - 496:17,
520:4, 520:5, 520:22,
524:24, 525:6,
527:12, 527:22,
546:16, 550:6,
553:13, 553:16,
553:21, 554:7, 554:8

## differences -

520:16, 520:21,
527:21, 554:4,
555:18, 555:19
Different-573:1
different - 476:8,
488:24, 488:25,
490:8, 492:2, 492:6,
496:8, 497:22,
498:17, 510:14,
513:14, 516:25,
517:18, 518:2, 522:2,
533:7, 541:13,
547:25, 551:2, 551:3,
552:18, 554:22,
564:14, 568:18,
573:1, 573:3, 578:1
differential - 524:17
differently - 568:19,
573:5
differing-504:12
differs - 569:21
Direct-474:2,
479:19
directed - 496:3
directly - 559:12
director-583:13
Dirk - 472:6
disburse - 541:17
disbursed - 534:6,
534:7, 545:17
disbursement -
533:15, 533:20,
534:10, 534:24,
535:3, 535:5, 535:18,
541:15, 541:21,
542:3, 542:15,
542:18, 542:19,
542:23, 546:1, 569:7,
569:9
disbursements
535:19, 537:16,
537:17, 545:21, 561:5
disclose - 475:16
discover-489:1
discovered - 476:8,
556:1
discrepancy -
485:19
discussed - 477:2.

484:2, 492:4, 512:4,
585:21
discussing -
556:10, 575:15
disparity - 546:18
display-475:10
distinction-478:4,
561:7
distributed -
560:15, 569:12
distributing -
559:10, 560:13
distribution -
517:11, 565:25, 573:3
District-472:1,
472:10
divide - 560:24
Division- 473:7
docs - 562:2
document - 476:18,
476:19, 477:5,
477:19, 477:21,
477:23, 481:11,
482:22, 488:8,
490:19, 490:20,
491:6, 491:12,
491:13, 492:20,
493:12, 493:16,
493:17, 493:20,
493:22, 494:8,
494:18, 501:13,
505:2, 505:8, 505:12,
505:13, 505:15,
506:5, 506:6, 509:4,
509:13, 509:16,
510:3, 513:19,
513:20, 513:22,
514:18, 514:23,
518:20, 519:12,
523:5, 523:17,
523:20, 526:8,
529:22, 530:9, 533:6,
539:25, 540:12,
540:14, 542:22,
543:1, 543:8, 543:11,
543:21, 544:6, 556:8,
562:6, 562:7, 576:19,
576:23, 577:1, 577:9,
578:4, 578:7, 583:8
document's - 507:9
documentation -
484:21, 485:25,
486:7, 496:15, 509:7,
510:12, 528:21,
530:11, 542:22, 556:1
documents -
476:13, 476:22,
476:23, 476:25,
477:4, 477:15,
477:17, 486:22,
490:12, 490:25, 493:15, 504:14,
504:18, 504:19,
504:20, 506:9, 507:8,
508:12, 508:13,
508:15, 513:14,
514:5, 515:10,
515:15, 516:5,
518:12, 518:15,
523:3, 530:15, 533:1,
533:8, 552:14, 570:5,
570:7, 570:13,
576:18, 577:25,
579:5, 579:25,
580:23, 581:6, 582:7
dollar-512:19,

569:4, 582:19 dollars - 487:3
545:11, 545:12,
558:15, 558:17,
562:16, 563:9,
563:10, 563:19,
563:20, 563:21,
566:20, 566:25,
567:4, 567:15,
581:17, 581:24,
582:1, 582:5, 583:21,
584:2, 585:15,
586:13, 587:4, 587:14
done - 480:19,
487:6, 497:13,
497:14, 502:16,
505:16, 507:11,
509:5, 537:6, 538:17,
539:21, 540:25,
548:2, 571:2, 571:16,
572:8, 581:8, 581:12
Dorris - 472:16
double-494:6,
545:14, 558:19,
562:17
double-check -
494:6
down - 483:3,
493:23, 498:1, 503:8,
503:15, 511:24
515:2, 515:23,
527:14, 528:9, 540:7,
543:14, 548:23,
550:18, 551:15,
551:16, 552:4,
554:12, 557:17,
558:22, 569:4,
573:16, 583:18
584:22, 585:6, 585:20
dozen - 478:20
draw - 504:4,
533:17
drawing - 499:6
drawn-574:20,
574:22
due - 519:13,
559:24
during - 567:18
During - 568:4
dwelling - 478:21,
478:22
Dx-152-480:12
Dx-154-510:2,
514:1, 514:18
Dx-156-488:7,
490:18
Dx-158-492:19,
493:11, 494:6

| $E$ |
| :---: |
| E-compex-506:6, $506: 8,506: 23$, $506: 24,507: 4$, $507: 13,508: 9$, $508: 23,509: 1$ E-dash-c-o-m-p-e-x - $507: 3$ E2-485:21 earliest - $532: 21$, 535:10 early - 532:19, $571: 21$ earnings - $567: 15$ earth - 497:12 easiest - $573: 23$ easy $-573: 2$ Ecf- $535: 21$ effect $-567: 5$ effectively $-480: 2$ |

Eft - 535:22, 535:23 eight - 502:25,
503:1
either - 521:18, 529:22, 530:7, 552:16, 554:9, 555:1 electronic - 478:17, 499:15, 504:9, 522:12, 530:3, 535:18, 544:15, 549:22, 551:20, 586:3
Electronic - 535:19
electronically
478:15, 509:11,
550:17, 550:22
552:8, 553:23
Elliott - 472:15
Elouise-472:3
employees - 507:13
encounter - 514:12
encountered
522:14, 572:21
end - 486:1, 519:15,
524:25, 544:5,
554:23, 554:24,
559:9, 561:3, 563:2,
564:16, 566:23,
567:20, 576:19
ending - 524:2,
546:2
enforced - 533:12
engaged - 577:19
enrolled - 527:2
enter-512:6,
529:24
entered - 513:8,
519:14, 532:21,
534:5, 540:12, 541:2, 541:6, 541:7, 546:25,
550:1, 550:3
entering - 512:6
entitled - 589:5
entity - 496:3
entries - 485:20,
486:3, 496:21,
501:22, 504:17,
512:25, 516:6,
517:19, 518:1,
518:13, 519:7,
521:20, 523:25,
524:25, 526:22,
533:14, 534:9, 541:1,
586:17
entry - 485:9, 501:3,
511:7, 512:24,
522:24, 529:6,
533:22, 534:3,
534:14, 542:8,
542:11, 542:21
543:15, 558:20, 563:4
equal - 517:14
524:19, 527:23
equipment - 498:1
era-549:11,
549:17, 549:22, 586:3
error - 484:15,
484:22, 496:20,
516:1, 520:9, 573:6
errors - 484:11,
485:18
Esquire-472:12,
472:15, 472:16,
472:19, 472:20,
472:23, 473:1, 473:2,
473:5
Essentially - 494:14 essentially - 547:12 established -
569:11
estate - 496:1

479:15, 481:5,
481:10, 481:23
482:5, 482:8, 482:11,
482:17, 487:13,
494:25, 497:3, 497:6,
516:18, 518:18,
521:6, 523:16, 526:5,
528:17, 539:20,
539:22, 543:7,
543:20, 548:9,
551:25, 556:7, 557:3,
557:14, 564:3, 565:3,
566:10, 570:22,
572:14
exhibits - 477:16,
568:22, 570:23
Exhibits-571:9,
571:12
existed - 575:21
expect - 484:18,
485:3, 495:20, 561:3,
563:2
expectation - 543:2
555:20, 555:23
expected - 586:8
expecting - 513:8,
542:18
experience -
503:25, 516:4,
572:25, 581:2
expert -489:17,
489:22, 571:1
explain-481:13,
485:23, 497:11,
498:4, 526:21,
528:25, 582:5
explained-496:17,
497:2
explains - 486:7
explanation -
520:25
Explorer-491:7
extent - 574:24
extract - 501:14
extreme-477:18
519:21, 521:2,
521:13, 537:9,
538:24, 539:18,
543:12, 548:19,
549:23, 560:12,
560:14, 560:19,
561:9, 562:4, 562:5,
573:2, 573:23,
573:24, 574:18
examples - 485:24,
487:8, 496:10,
516:25, 537:12,
548:2, 557:21, 559:7
exception - 497:2,
510:9
exceptions -
485:22, 510:11,
510:14
excerpt - 488:9,
492:22, 510:4,
516:24, 521:8, 526:9,
527:24, 543:22,
548:13, 565:8
excess - 525:22
exclude - 495:10
Excuse-570:1
executive - 583:12
exhibit - 475:12,
476:4, 477:12,
477:13, 477:14,
477:17, 477:20,
477:24, 477:25,
478:24, 479:7, 479:9,
514:18, 528:9,
531:15, 532:23, 568:5

537:23
figure - 504:3,
516:5, 543:6, 560:22
file - 476:4, 489:3,
489:4, 490:1, 490:2,
490:5, 490:6, 490:7,
490:9, 490:13,
491:18, 491:24,
493:6, 493:7, 493:19,
494:19, 499:9,
499:10, 523:7, 523:8
523:12, 526:15,
527:12, 527:13,
534:23, 535:7,
535:17, 535:25,
536:1, 536:10,
536:22, 536:24,
537:5, 537:22,
537:25, 538:8,
538:14, 539:5, 539:8,
542:13, 544:1, 552:5,
552:16, 552:17,
552:23, 553:2, 553:5,
553:18, 554:5,
554:14, 554:21,
570:16
files - 490:8,
525:17, 525:19
552:7, 552:9, 553:15,
553:17, 554:2
filtered - 567:12
final - 524:10,
524:19, 527:8, 534:6,
547:12, 555:4, 572:18
financial - 490:12,
530:9, 533:8, 540:13
findings - 483:5,
483:6, 585:9, 585:12, 585:25
fine - 475:11,
479:16, 584:8
finish - 486:23
firm - 511:4, 540:17,
578:19, 586:23
firms - 540:18,
576:17, 576:20,
577:18, 578:15,
578:16, 579:13
579:15, 580:25,
581:25, 582:17,
587:12
First- 512:23
first - 487:2, 492:4,
494:15, 495:3, 495:22, 498:11, 498:15, 501:12,
501:17, 504:6,
504:10, 505:22,
510:13, 510:22
511:3, 512:7, 512:16,
513:3, 515:3, 515:5,
515:17, 517:16,
522:22, 524:6,
526:19, 526:22,
526:23, 526:24,
529:7, 533:14, 534:5,
540:5, 541:1, 541:5,
541:9, 541:14,
542:16, 544:1,
548:14, 548:24,
551:4, 552:25, 553:7,
553:13, 553:23,
557:17, 557:22,
560:17, 561:11,
561:13, 561:24,
567:23, 571:19,
576:25, 580:18
fiscal - 512:12,
527:7, 545:9, 545:22, 546:23

| fits - 530:5, 561:7 five - 497:13, | glossary - 506:10, $506 \cdot 14$ | 478:25, 479:18, | 510:1, 547:11, | $486$ |
| :---: | :---: | :---: | :---: | :---: |
| five - 497:13, $517: 18,518: 1,519: 6$, | 506:14 govern - 580:4 | $\begin{aligned} & 479: 19,480: 6, \\ & 480: 10,481: 3, \end{aligned}$ | $\begin{aligned} & 547: 13,574: 12, \\ & 574: 14,574: 19 \end{aligned}$ | $\begin{aligned} & \text { indexed - 583:! } \\ & 583: 6 \end{aligned}$ |
| 588:4 | government's - | 481:22, 482:4, | 576:23, 578:5 | indexing - 576:23 |
| fix - 478:22 | 476:8, 527:16, 527:17 | 482:17, 489:17, | identifier-526:23, | dian 507:14, |
| flash-531:16 | grand - 551:13, | 490:21, 497:18, | 540:20 | 19, 523.23, |
| flip - 491:22, $524: 5$ | 551:17, 555:8, | 516:21, 518:20, | dentifies - 500:2, | 523:19, 523:23, |
| Floor- 472:13 | 556:15, 562:14, | 521:5, 526:8, 539:25, | 511:6 | 527:2, 535:8 |
| flowed - 561:14 | 563:4, 564:13 | 547:25, 563:9, 566:9, | identify - | indicate-491:2 |
| 567:17 | graph - 569:5 | 570:4, 570:25, | 480:13, 481:2, 481 | 514:7 |
| flowing - 558:23 | grasp - 531:25 | 572:16, 576:25, | 481:11, 481:24, | indicates-543:1, |
| flows -558:24 | Great-482:10, | 577:8, 578:7, 587:22 | 482:5, 482:8, 482:12, | 549:16, 565:21 |
| focus -548:10 | 550:6, 550:8, 550:9 | higher - 567:20 | 482:22, 488:7 | indicating-494:14, |
| focused-575:17, $575: 19,579: 24$ | 555:18, 558:15, | highlight - 529:8, | 491:13, 492:1 | $548: 23,553: 14,$ |
|  | 559.5, | nkin |  | ca |
| follow - 542:25, | greater - 566:25 | 583:10 | 499:25, 500:9, | individual - 48 |
| 559:25 | green-531:2, | Historical-492:15, | 503:23, 511:5, 513:6, | 485:7, 487:6, 494:21, |
| follow-up - 542:25 | 531:23, 566:20, | 495:22, 520:10, | 514:2, 514:18, | 498:19, 514:13, |
| following-528:24, | 566:23, 577:4 | 575:1, 576:4, 587:3 | 516:23, 518:20, | 517:24, 523:19, |
| 585:9 | Green-531:3, 531:4 | historical-496:1, | 521:7, 523:17, 526:8, | 523:23, 535:8, |
| follows - 510:12 | ground - 507:16 | 520:6, 520:12, | 528:25, 537:5, | 539:16, 545:17, |
| forced - 517:8 | grounds - 570:25 | 520:15, 520:20 | 539:25, 543:21, | 572:22, 574:5, 574:12 |
| foregoing - 589:3 forward - 525:14, | group-485:24, | 520:25, 551:4, $575: 20,577: 14$ | 548:11, 551:25, | individual's $559: 13$ |
| 538:21, 538:22, | 514:21, 517:18, | 577:19, 579:4, 583:16 | 572:13, 572:16, | individuals |
| 540:2, 543:16, 552:3 | 521:17, 562:9, | historically - | 574:8, 577:1, 578:7 | 492:25, 574:10 |
| forwarded - 504:20 | 562:19, 566:21, | 521:25, 530:8, | identifying- | indulgence - |
| four-488:24, | 574:22, 575:3 | 530:21, 575:2 | 540:24, 577:25, | 516:12, 587:23 |
| 488:25, 501:11, | grouped - 557:20 | 578:1, 580:1 | 579:25 | inform-475:13, |
| 502:25, 503:3, | 557:24 | history - 571:17 | idle - 569:16 | 491:19 |
| 515:12, 515:13, | grouping - 548:25, | 582:13 | Ids - 529:9, 529:10, | information - |
| 515:20, 521:20, | 550:23, 561:19 | hit - 569:16 | 533:6 | 475:10, 478:8, |
| 524:18, 529:9, | groups -497:22 | hits - 561:13 | lia - 493:13 | 480:20, 480:23, |
| 529:16, 562:5, 562:7 | 498:11, 498:12, | holder - 492:2, | lim - 485:7, 485:13, | 487:1, 487:17, 49 |
| Four- 503:1 | 498:14, 498:16, | 494:10, 494:14, | 514:13, 517:24, | 490:9, 491:1, 491 |
| Fourth- 472:24 | 499:25, 500:6, | 525:1, 527:19, 534:18 | 522:7, 523:9, 535:12, | 492:14, 493:7, |
| fourth-517:20, | 500:14, 501:19, | holder's - 514:9, | 539:16, 545:17, | 493:18, 494:9, |
| 527:1 ${ }_{\text {fractionation - }}$ | 503:15, 503:18, | 527:16, 529:4 | 545:18, 558:23, | 495:14, 495:17, |
| fractionation - 559:21 | 504:8, 562:11, 585:4 | holders-491:14, | 565:19, 567:18, | 495:18, 495:21, |
| 559:21 | Groups-562:10 | 493:3, 493:5 | 570:15, 571:20, 586:9 | 495:24, 499:6, |
| frame-549:14, | grow - 581:2 | holes - 531:9 | Im500-544:11, | 499:10, 499:14, |
| 551:4, 567:18 | guess - 479:3, | Honor-475:5, | 544:12, 544:13, | 499:15, 499:21, |
| Franklin- 473:8 | 544:8, 547:2, 583:12 | 475:25, 476:3, 477:2, | 544:20, 546:2, 546:13 | 500:5, 500:9, 501:10 |
| fraud -537:16 free - $475: 9$ | guide - 577:15 | 478:4, 478:23, 479:8, | image - 506:9, | 501:14, 505:12, |
| free - 475:9 freeform -501:3, | guided - 523:24 | 479:13, 479:16, | 507:8, 508:12 | 505:18, 507:9, |
| $\begin{aligned} & \text { freeform - } 501: 3, \\ & 512: 5 \end{aligned}$ | guidelines - 576:3, | $\begin{aligned} & 480: 8,489: 16, \\ & 497: 15 \\ & 498: 3 \end{aligned}$ | imaged-505:18, 509:10, $533: 1$ | $\begin{aligned} & 508: 17,509: 1, \\ & 514: 25 \\ & 519: 20 \end{aligned}$ |
| frequently - 514:12, | Guilder-472:20 | 498:10, 499:2, | images - 506:6 | 520:2, 520:3, 520:14, |
| 569:14 |  | 502:14, 502:21, | maging - 506:2 | 520:24, 521:19, |
| Fti- 478:14, 479:24, | H | 506:11, 506:13, | immediately - | 522:9, 523:23, |
|  |  |  |  | 523:24, 525:3, 525:7, |
| 516:13, 523:20, | half - 552:22, 553:7, | 509:24, 52 | $\operatorname{impact}^{574: 18}$ - 574:17, | 526:13, 527:8, 530:1, |
| 565:21, 578:21, | 554:21, 557:17, | 531:21, 534:16, | impacting - 573:20 | 532:24, 535:13, |
| 581:8, 584:11 | hand - 556:14 | 538:6, 547:18, | implemented - | 535:15, 535:24, |
| Full- 503:2 | handwritten - | 547:21, 557:14, | 497:20, 573:2, 580:8 | 535:25, 538:19, |
| Full-time-503:2 | 494:18, 509:9 | 559:4, 563:22, 568:6, | important - 498:13, | 538:25, 540:15, |
| fundamentally - | happy - 497:15 | 570:1, 570:20, | 554:25, 574:21 | 540:23, 541:4, |
| 497:23 | hard-529:21, | 570:24, 571:8, | impossible - 477:3 | 544:20, 546:3, |
| funds - 498:7, | 530:19, 532:4, | 571:11, 576:22, | inadvertently - | 546:25, 547:5, 548:5 |
| 569:12, 581:22, 582:4 | 532:25, 546:6, 552:9, | 587:21, 588:2, 588:9 | 479:1 | $550: 24,568: 16,$ |
| G | Harpe | Horton-584:1, | 505:5, 506:19, $545: 14$ |  |
|  |  | 84:9, |  | 585:14, 587:1, |
| $\begin{gathered} \text { gap - } 530: 18, \\ 540: 24 \end{gathered}$ | 506:17 heading - 557:1 | http - 490:22, 491:5 | $\begin{aligned} & 483: 4,484: 5,490: 22, \\ & 506: 19 \end{aligned}$ | $\begin{aligned} & \text { inheritance } \\ & 559: 24 \end{aligned}$ |
| $\text { as - } 56$ | 565:12, 577:8, 583:23 | I | includes - 530:20, | initial - 486:12 |
| ( gener | hear | - 509:16, 5 |  | $\begin{aligned} & 513: 6, \\ & 561: 5 \end{aligned}$ |
| enerally - 499:14 | heard - 5 | 529:8, 529:16 | including - 563:5 | inserted - 477: |
| enerations - | 587:24 | 530:14, 533:23, | income-485:3, | inserting - 477:13 |
| 559:25 | Hearing- 472:8 | 540:6, 540:7, 541:2 | 498:21, 514:16, | instance - 487:2, |
| Georgia- 472:18 | hearing-568:23 | identification - | 517:21 | 489:15, 490:1, |
| Gingold- 472:12 | help - 499:2 | 497:6, 521:5, 539:22, | inconsistent - | 490:14, 493:6, 495:7, |
| given - 489:6, | helping-578:17, | 551:24 | 572:23 | 495:22, 495:25, |
| 525:25, 529:16, | 579:16 | identified - 477:24, | incorrect - 478:9 | 498:5, 498:17, |
| 575:18, 582:9, | Herman-474:3, | 480:12, 484:12, | 478:19, 519:16 | 500:14, 503:19, |
| 584:15, 586:13 glean - 515:1 | 475:6, 475:23, 476:6, | 484:19, 488:16, | incorrectly - 515:19 | 506:2, 510:19, |
| glean - 515:1 | 476:24, 477:5, | 501:19, 504:14 | index-482:23 | 510:23, 511:1 |




568:7, 568:21 operations - 570:14 operator - 501:3 opinion - 489:20, 489:22
opinions - 571:2, 571:3
opportunity - 477:7
opposed - 534:22
opposite - 567:20
options - 583:20
order - 493:13,
552:8, 552:16, 554:2
ordered - 475:8 ordinary - 570:14 organized - 480:2, 528:20
Original-545:10,
545:21, 546:15
original - 476:18,
477:5, 477:12,
477:14, 477:20,
477:25, 479:8, 516:2,
521:21, 545:25,
547:3, 547:14, 549:3, 549:5, 550:10,
559:25, 561:7, 561:9
originally - 476:18,
478:25, 479:9, 492:10
otherwise - 538:13
outcome - 486:20
outcomes - 496:12
outside - 581:20 outstanding -
555:21
overall - 475:11,
478:8, 478:11, 480:1,
480:14, 480:16,
480:18, 483:8,
484:14, 497:18,
548:5, 548:13, 552:2,
557:5, 558:13, 560:7,
564:3, 565:8, 569:18,
570:5, 570:23,
572:18, 575:25,
587:17
overlap - 573:23
Overruled-489:23
overview - 483:4,
483:7, 565:2
owner - 559:17
owners - 559:20,
559:22, 560:3,
560:16, 585:25
P
Pacer-535:17
Pacific-481:12,
481:16, 482:23,
510:4, 526:9, 526:14,
527:4, 527:5, 540:1,
543:10, 543:22,
545:8, 548:20
Paddock-489:10, 491:25
page - 480:10,
480:12, 480:13,
480:14, 481:6,
481:10, 481:23,
482:5, 482:8, 482:11,
482:18, 482:20,
488:5, 488:7, 490:19, 491:2, 491:15, 492:4, 492:20, 493:8, 494:6, 494:24, 497:6, 497:7, 500:23, 510:2, 514:1, 514:18, 516:18,
516:23, 518:18,
523:17, 524:12,

526:6, 526:10,
528:17, 528:19,
528:20, 529:2,
539:22, 541:25,
543:6, 543:7, 543:20,
548:9, 548:11,
550:19, 551:25,
556:7, 557:3, 557:12, 558:5, 564:3, 564:7,
564:10, 565:3,
565:12, 566:10,
572:12, 572:14
572:18, 573:16, 576:25, 577:5, 577:6, 577:8, 578:8, 578:12, 578:15, 578:24,
580:13, 580:14,
583:18, 583:22,
583:23, 584:22,
584:24, 585:6, 585:8,
585:20, 585:23
pages - 475:15,
475:19, 476:17,
476:19, 476:20,
476:22, 477:8,
477:12, 477:25,
478:5, 478:6, 478:13,
478:18, 478:20,
479:1, 479:3, 479:4,
532:11
pair - 515:11
Palm-511:12,
512:11
paper-522:9,
531:5, 531:9, 532:5,
544:15, 544:16,
546:12, 546:25,
549:11, 549:14,
549:16
papers - 478:11
paragraph -565:10,
565:14, 572:20,
573:18
Part - 475:15,
483:16, 483:24,
484:7, 486:24
part - 478:18,
478:22, 482:25,
483:6, 484:7, 484:8, 485:9, 486:25, 487:5, 488:1, 497:9, 501:20, 502:6, 502:8, 510:6, 512:7, 520:17, 525:8, 535:15, 536:25, 538:17, 553:2, 560:7, 560:9, 561:13,
562:19, 563:5,
564:24, 574:20,
575:8, 575:22,
575:25, 577:6, 583:5,
583:23, 587:21
partial - 486:10
participate
577:21, 582:18,
584:9, 585:11
participated -
578:10, 579:16,
580:3, 580:11, $584: 2$
particular - 487:4,
490:14, 493:22,
498:23, 500:10,
500:18, 501:8,
501:11, 510:18,
517:10, 517:22,
520:9, 521:19,
522:20, 526:25,
527:5, 529:2, 529:18,
532:17, 533:5,
533:13, 538:11,
541:7, 541:8, 541:13

542:14, 544:22,
$546: 1,5,59: 2$,
$560: 19,563: 1$,
569:19, 572:20,
573:11, 574:10,
574:18, 580:4,
580:23, 582:13,
582:16, 584:15, 585:2
parties - 506:11
parts - 552:5
pass - 501:17 pasture - 559:16,
559:17, 560:6 pattern - 504:7,
504:15, 534:4,
534:13, 537:16,
541:23, 542:2
patterns-503:16,
534:11
Payment - 535:7,
539:7
payments - 569:14,
586:8
Peachtree - 472:17
pending-505:9
pennies - 515:6
people-492:2,
497:14, 502:23
502:25, 503:1,
540:15, 548:1,
552:14, 560:20,
569:11
Pepion - 472:3
per-487:20,
556:16, 576:2, 587:16
percent - 558:11,
559:2, 559:3, 561:1, 565:22
percentage -
558:10, 558:13
559:6, 566:3, 567:6
perfect - 547:18
perform - 489:19,
525:16, 537:23,
554:14
performed - 487:19,
572:5, 581:20
performing -
576:17, 576:20,
577:15, 579:6
perhaps - 516:9,
573:2, 573:23
period - 536:24,
539:13, 557:11,
558:11, 565:18,
569:4, 586:25
periods - 499:17,
499:18, 499:20,
532:15, 551:2, 551:3,
582:16, 584:12, 585:3
person-496:2,
505:16, 506:2, 512:5,
574:15
personally - 572:10
perspective -
495:12
pertains - 493:16
Phoenix - 482:1
photograph - 532:9
Physically - $531: 1$
physically -531:24,
Pichette-489:10
491:16, 491:21
pictures - 508:13,
532:1
piece - 576:22
pieces - 548:23
Piper - 494:15,
place-484:13,
513:3
placed - 505:11
placed - 505:11
Plains - 482:10,
550:6, 550:8, 550:9,
555:18, 559:5, 573:3
Plaintiffs - 472:4,
472:12
plaintiffs -572:1,
572:3, 572:5
plaintiffs' - 568:5,
568:22
plan - 576:8, 577:4,
577:12
plans - 587:4,
587:15
play - 497:19
plus-524:16,
537:19, 545:25
Plus - 477:19
Pm - 588:10
Po-473:8
point - 475:19,
480:21, 483:19,
487:7, 492:6, 498:24,
500:6, 500:21,
503:16, 503:17,
522:2, 525:19,
536:12, 544:14,
544:22, 553:16,
554:6, 557:25, 566:4,
571:24, 574:23,
574:25, 575:16,
585:23, 586:8
points - 525:24,
582:15
policies - 579:3
population - 488:2,
503:7, 503:9, 537:2,
565:13, 574:20, 575:3
portfolio-498:21
Portland - 482:7,
488:10
positive-533:14,
563:17, 563:18
possibility-496:14,
496:15, 496:16,
496:19
possible - 486:20,
496:8, 496:12, 543:3
possibly - 558:6
post - 486:2,
486:11, 486:13,
504:11, 504:12,
521:23, 524:17
post-2/85-549:19
posted-486:10,
511:11, 511:12
511:17, 511:19,
512:11, 515:5,
515:17, 515:19,
519:3, 519:4, 520:20,
522:5, 524:6, 524:10,
524:16, 524:23,
524:24, 527:22
529:2, 530:8, 530:21,
534:8, 534:17,
541:10, 560:14,
560:17, 575:18,
581:22, 582:4
posting-484:11,
484:15, 484:22,
485:18, 486:12,
496:20, 514:16,
515:3, 515:12,
515:21, 519:5,
519:13, 519:21,
520:2, 521:2, 525:11,
534:8, 559:9, 561:7,
postings - 515:12,
515:13, 516:2,
516:15, 519:1,
519:16, 521:10,
561:5, 573:5, 584:13,
585:17, 586:11
potential - 484:11,
484:15, 484:22,
485:18, 496:20,
516:15, 519:21,
525:11
Potential - 521:9
potentially - 486:22,
490:11
practice-580:8
pre - 549:12
pre-2/85-549:8
pre-february -
549:12
preface - 578:13,
578:15
prepare - 568:13
prepared - 478:24,
479:25, 568:11, 582:7
prepares - 520:11
present - 551:5
presentation -
475:12
presently - 551:18
presumption -
513:10
previous-491:15,
535:1, 542:5
previously - 509:6, 547:7
Price - 572:3
primarily - 475:14,
510:8, 579:24
primary - 537:5,
577:25
principal - 498:21
Principally - 579:2
print - 492:7
printed - 531:7,
544:17, 552:17
printer-531:13
printout - 530:8,
531:2
printouts - 530:20
Privacy-475:9
private - 491:4
problem - 475:18,
478:2, 478:15,
479:13, 488:19,
504:5, 510:17, 511:1,
518:4, 519:23,
521:14, 522:18
procedures - 579:3
proceed - 475:9
proceeding - 477:1
proceedings -
589:4
Proceedings -
473:15
process - 486:21,
498:15, 498:25,
501:21, 502:11,
502:18, 503:13,
503:14, 509:19
521:25, 540:11,
559:8, 573:12
processed - 501:25,
502:1, 502:4, 517:8,
517:10, 573:9
processes - 573:1


558:10, 565:18,
Repository- 507:14, 507:21
reposting - 486:13 represent - 550:16,
556:15, 557:23,
558:11, 558:15,
558:22, 566:19
represented -
525:5, 566:18, 582:15
representing -
566:24, 567:2
represents - 551:4,
558:24, 562:14
request - 486:22,
504:13, 504:18,
504:19, 504:20
504:24, 505:11,
513:22, 523:3, 523:6,
523:21, 532:24
requested - 489:15,
490:1, 493:6, 509:8,
513:15, 514:20,
518:15, 518:22
requesting -
504:18, 513:14,
518:12, 523:7, 530:18
requests - 505:3,
505:8, 530:10
required - 542:11 research - 504:4,
505:16, 513:13,
522:15, 523:21,
530:15, 543:1, 552:14
researching
493:21, 494:8,
514:22, 516:5
reservation - 582:9,
582:11
resolution - 477:9
resolve-487:12
487:22, 530:14,
556:21
resolved - 484:5
respect - 475:9,
478:5, 493:20,
496:11, 523:9,
526:22, 541:12,
542:21, 554:20,
555:20, 571:17, 576:5
response - 580:24
rest - 536:20
restoration - 549:13
restore-542:16,
547:15, 549:14
restored - 480:20,
483:18, 529:15,
529:20, 530:4,
533:18, 535:1, 540:6,
540:9, 540:10,
541:22, 546:23,
546:24, 547:15,
549:8, 549:10,
549:19, 549:21
restricted - 537:2
result - 484:17,
512:21, 513:9,
521:10, 521:11,
523:21, 524:25,
528:14, 540:24,
555:13, 569:7, 573:4
Results- 495:2
results - 484:14,
485:19, 495:6, 496:9,
573:20, 586:24
retrieve - 509:2
reused - 484:3
484:4, 487:9, 487:16, $488: 15,492: 25$
revenue-511:21,
511:22, 567:16,
582:13, 585:24
reversal-486:10,
511:20, 513:6,
521:18, 522:21
524:12, 533:15, 539:3
reversals - 484:18,
497:22, 515:18, 559:7
reverse - 513:9
reversed - 515:19,
534:7
reversing - 486:12, 513:4
review - 480:1,
488:17, 498:25,
501:21, 502:7, 502:8,
503:7, 503:9, 503:12,
503:22, 504:2,
506:20, 509:7,
515:15, 516:4,
524:15, 534:11,
536:7, 555:24,
556:19, 571:17,
580:11, 581:14,
582:7, 582:17
reviewed - 485:25,
490:2, 493:7, 495:4,
509:6, 512:23,
535:25, 557:21
reviewing - 577:15
right-hand - 556:14
Robert- 473:1
Robertson- 472:9
Rocky- 482:13,
492:22, 516:24,
559:5, 573:4
role - 497:18,
577:24, 577:25
roll-525:13,
538:21, 538:22,
540:2, 543:16, 552:3,
554:3
roll-forward -
538:21, 538:22, 552:3
rolling - 525:14
Room- 473:12
Rose- 491:24, 492:9
Rose's- 491:25
roughly - 499:17
row - 551:16
rows - 518:1
rule-500:19,
510:20
rules - 502:2
S
Sacramento -
481:13, 481:17,
482:23, 510:4
salem - 472:25
sample-504:13,
574:20, 574:22,
582:10, 587:19
sampled - 582:12,
584:12, 585:16,
585:17
samples - 536:21
satisfactory -
477:8, 478:1
Saturday - 476:11
saw - 512:10,
$514: 15,515: 3,515: 5$,
562:4
scanned - 508:13
schedule-524:22,
544:23, 547:7
scope - 586:1,
586:2, 586:5, 586:

586:16, 586:25
screen - 475:13
480:5, 480:6, 481:10,
481:22, 482:4,
482:17, 490:16,
492:19, 494:5, 497:5,
500:22, 514:17,
523:16, 526:6,
528:19, 531:16,
532:4, 543:20, 553:1,
556:6, 564:2, 576:21, 578:4
Scroll-544:8
scroll - 493:23,
515:2, 524:3, 528:9,
557:6, 561:16,
564:16, 573:16,
583:18, 584:22,
585:6, 585:20
Sda-545:16,
545:18
search - 501:15,
505:1, 513:20,
513:22, 530:10,
552:16
searchers - 504:25 second-488:21,
511:6, 515:18
517:15, 524:4, 524:7,
526:24, 529:19,
551:5, 552:22,
554:18, 554:21,
558:10, 566:7,
572:20, 577:13
second-to-last -
524:4, 524:7
secondly - 492:8
Secretary - 472:6
Section - 485:21
section - 484:6,
486:18, 488:9,
488:22, 495:6,
496:17, 520:25, 528:23
sections - 475:14, 483:3
Security - 475:16
see - 480:10
485:12, 485:21
486:3, 488:22, 489:8,
490:19, 490:21,
491:21, 492:4, 495:6,
500:22, 500:25
501:2, 501:11, 511:3,
513:3, 514:8, 515:2,
515:7, 515:18,
516:21, 517:14,
522:18, 522:21,
524:3, 524:5, 524:14,
525:24, 529:3, 529:9, 529:12, 529:16, 533:14, 533:23,
534:4, 534:25, 540:5,
541:15, 541:19,
544:6, 544:7, 550:19,
556:22, 559:5,
561:11, 562:8, 578:15
seeing - 554:20
selected - 582:3,
582:16, 584:17
584:25, 585:9, 587:19
selection - 584:1,
584:9
sending - 508:17
Senior-473:6
sense-478:3,
515:14, 516:4,
516:11, 548:5
sent - 478:17,

523:20
sentence - 476:14,
577:13
separate - 495:7,
498:11
separated - 553:10
separately - 479:4,
492:12, 500:12
September - 476:5,
477:20, 478:14,
478:19, 479:5, 491:25
series - 490:21,
512:22, 518:24,
521:15, 523:21, 540:6
served - 476:12
server - 499:8
serving - 522:21
Session - 472:7
set - 478:14, 479:2,
483:2, 487:25,
499:20, 516:17
518:1, 521:3, 523:2,
526:10, 529:15,
529:24, 533:19
533:25, 534:25,
539:10, 540:6, 544:8,
548:14, 550:1,
550:10, 568:5, 572:6, 588:3
sets - 480:20,
571:17
several - 502:21,
537:21, 537:23,
540:5, 552:18, 560:3,
560:7, 563:11,
568:14, 573:20,
576:16
Several-581:25
sheet - 488:13,
490:22, 491:20,
515:9, 518:2, 519:20,
528:24
sheets - 528:22
shipping - 532:25
short - 505:14,
565:13
shorted-525:1,
527:19
shorthand - 473:15,
505:25
show - 475:18,
486:15, 508:6,
517:13, 527:25,
531:24, 537:9,
537:11, 545:18, 559:8
showed - 566:9
showing - 475:12,
493:22, 556:8, 569:5
shows - 528:25,
531:3, 543:6
sic - 512:8
side - 531:9, 567:3
signature - 493:25
significance - 528:2 significant -
476:12, 476:16, 533:9
similar - 483:8,
488:16, 493:18,
495:3, 495:21,
498:14, 503:21,
521:10, 521:22,
522:16, 522:17,
529:23, 557:21,
568:18, 586:21
Similar-509:6,
562:4
simply - 477:12,
477:13, 477:24,
486:13, 487:1

499:9, 499:10
sit - 569:15
sitting - 497:14
situation - 486:9,
493:1, 525:13,
529:21, 562:5
situations - 484:20,
516:13
six - 481:8, 482:14,
536:4, 536:5, 536:8,
536:9, 536:12,
536:19, 537:15,
537:19, 570:23
six-plus - 537:19
size - 548:6, 564:14
slide-481:4,
481:22, 482:4,
482:16, 490:15,
492:19, 493:9, 494:4,
497:5, 500:23, 508:6,
513:24, 514:17,
518:17, 521:5,
523:14, 524:5, 526:4,
528:16, 532:4, 532:7,
533:2, 536:14,
541:24, 542:5, 543:4,
543:18, 548:9,
555:15, 556:4,
556:25, 557:2,
561:16, 564:25,
568:20, 569:24,
569:25, 576:10,
580:14
slides - 516:17,
521:3, 531:16
slightly - 522:2,
568:18
small - 498:13,
559:9, 559:11,
566:15, 567:5,
567:16, 567:19,
567:22
smaller - 498:16,
498:22, 498:24,
499:1, 500:6
Smith - 472:23,
475:25, 476:2, 476:3,
477:11, 478:21,
479:8, 489:16,
570:24, 571:5, 571:7
Social-475:16
software - 506:4,
587:23, 587:24
someone-514:22,
519:17, 571:2
sometimes -
490:12, 505:25,
573:11
Sometimes -
503:20, 508:22, 532:8
somewhere - 515:4,
519:17, 536:10,
536:11, 585:19
Sorry-584:6
sorry - 495:21,
501:6, 505:24,
506:24, 524:13,
538:22, 542:5, 549:1,
552:25, 576:13, 584:5
sort - 532:4, 533:4,
549:23
source - 512:18,
547:11, 570:7


| 486:21, 487:6, 492:8, | 536:23, 537:22, | understood - 515:6 | voucher-500:15, | 567:23, 567:25 <br> Zippin-583:9, 583:12 <br> zoom-482:19, 488:4, 490:19, 510:6, <br> 516:19, 529:11, <br> 532:13, 539:22, <br> 544:4, 553:1, 577:6, <br> 578:12, 578:23, <br> 580:15, 583:22 <br> Zoom- 500:23, <br> 526:19, 583:1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 492:9, 496:18, | 537:25, 538:8, $539: 8$, | dertakes - 502:9 | 517:7, 518:6, 518:16, |  |  |
| 496:22, 497:12, | 565:10, 565:14, | undertaking-548:6 | 518:22, 518:24, |  |  |
| 497:21, 497:22, | 566:1, 570:16 | underway - 587:6 | 519:1, 519:2, 519:4, |  |  |
| 498:11, 498:14, | treating-479:4 | undone - 484:11 | 523:6, 529:23, |  |  |
| 499:9, 500:1, 500:2, | trial - 476:23, 477:1, | 515:17 | 541:8, 541:9, 541:10 |  |  |
| 500:6, 500:11, | 552:17, 568:6, | uniquely - 511:4 |  |  |  |
| 500:12, 500:17, | 568:14, 568:23 | unit-559:18, | W |  |  |
| 501:12, 501:16, | ried-531:17, | 560:10 |  |  |  |
| 501:17, 501:19, 502.3 502:12, 503.5 | 531:23 | United-472:1, | waiting-496:15 |  |  |
| 504:12, 510:18, | 495:22, 520:10, | 503:23 | Warshawsky- |  |  |
| 510:20, 510:25, | 565:19, 567:18, | Unresolved - | 473:1 |  |  |
| 512:21, 512:22, | 575:1, 576:4, 587:3 | 486:19 | Washington- |  |  |
| 513:2, 515:20, | try -479:10, 498:11, | unresolved - | 472:4, 472:14, |  |  |
| 517:14, 518:2, | 498:22, 499:25, | 496:14, 502:17 | 472:22, 473:4, 473:9, |  |  |
| 518:25, 520:19, | 503:23, 504:3, 504:9, | up - 478:11, 479:11, | 473:13 |  |  |
| 521:15, 521:16, | 506:20, 533:4, | 480:5, 481:3, 481:22, | water - 584:7 |  |  |
| 521:18, 522:23, | 556:21, 586:14 | 483:2, 485:14, | Waterhouse-572:3 |  |  |
| $523: 2,523: 21,524: 6$, $524: 18,524: 23$, | trying - 477:25, | 490:16, 490:21, | ways - 537:5 <br> weeds - 498:2 |  |  |
| 525:18, 525:24, | turn - 552:9 | 493:8, 502:12, | week - 505:14 |  |  |
| 526:15, 527:22, | turned - 529:21 | 510:19, 513:9, | weeks - 555:22 |  |  |
| 527:24, 529:1, | two-476:12, | 513:24, 514:17, | weight - 571:6 |  |  |
| 529:15, 529:17, | 476:17, 478:20, | 516:17, 517:13, | West-472:24 |  |  |
| 530:6, 530:14, | 481:19, 482:18, | 519:5, 521:5, 521:19, | western-481:25 |  |  |
| 533:13, 533:18, $534: 5,534: 13$, | 485:15, 486:3, | 522:24, $526: 4$, $528: 16,530: 5$ | whereas - $575: 18$ whichever - 509:7 |  |  |
| 534:5, 534:13, $53425,539: 11$, | 487:11, 489:10, 4892 , 492:2, 492:6, | 528:16, $536: 14,538: 5,13$, | whole - 479:6, |  |  |
| 540:5, 540:17, | 492:10, 500:8, 513:3, | 539:20, 542:25, | 544:6, 544:8 |  |  |
| 540:21, 541:10, | 513:7, 522:22, 524:6, | 543:6, 543:20, | William-472:16 |  |  |
| 542:13, 542:16, | 524:24, 525:19, | 545:18, 548:7, 548:9, | willing - 479:3 |  |  |
| 542:17, 546:22, | 538:8, 541:1, 541:5, | 550:13, 557:2, 557:6, | wind -513:9 |  |  |
| 548:24, 549:1, 549:3, | 541:21, 542:16, | 558:16, 559:9, 560:7, | Winston- 472:25 |  |  |
| 549:5, 549:6, 549:10, | 546:18, 548:23, | 560:24, 564:2, | Winston-salem- |  |  |
| 550:21, 551:5, | 555:22, 556:22, | 570:4, 571:23, | witness - 489:17 |  |  |
| 551:11, 551:13, | 558:7, 562:22, $574: 3$ | 575:15, 576:10, | 497:11, 565:5, 571:1 |  |  |
| 551:18, 553:2, | type - 500:10, | 576:21, 578:4, | Witness-474:2, |  |  |
| 553:16, 554:10, | 500:18, 500:25, | 582:21, 588:3 | 498:3, 498:7, 498:10, |  |  |
| $555: 2,557: 18$, $557: 20,557: 24$, | 501:1, $501: 24$, | update-493:17, | 502:14, 502:18, |  |  |
| 558:13, 558:14, | 511:21, 512:15, | 494.17 - 577.20 | 503:2, 503:4 503.6, |  |  |
| 559:2, 559:6, 559:9, | 517:21, 522:17, | upper - 544:5 | 506:8, 527:17, |  |  |
| 560:25, 561:2, 561:4, | 525:11, 531:5, | usual - 588:7 | 527:21, 528:3, |  |  |
| 562:5, 562:7, 562:10, | 560:14, 560:19 | V | 534:16, 538:6, |  |  |
| 562:11, 562:23, | Type-501:1, 504:7, |  | 538:11, 539:7, 559:4, |  |  |
| 562:25, 564:19, | 504:8, 513:4, 517:11, | validation - 479:24, | 563:12, 563:16, |  |  |
| 566:15, 566:20, | 517:13, 522:20 | 487:5, 504:1, 538:17, | 563:22, 583:2, 585:21 |  |  |
| 567:4, 567:5, 567:13, $56719,567: 22$ | types - 484:13, | 539:19, 548:1, 555:8, | witness' - 475:12 |  |  |
| 567:24, 569:3, 570:8, | 498:17, 500:9, | 568:16, 569:19, | words - 543.16 |  |  |
| 573:9, 573:12, 574:6, | 514:15, 562:23, | 570:21, 571:18, | 528:20 |  |  |
| 574:19, 574:22, | 575:25, 580:23, | 575:15, 581:14 | Wrapping- 570:4 |  |  |
| 574:24, 578:1, | typical - 486:9, | validations - 565:13 | write -498:12, |  |  |
| 580:23, 586:14 | $504: 2,510: 20$ tvpicallv - 484:18. | value - 558:16, 566.21, 567:17 | 498:23, 500:7 <br> writing - 500:1 |  |  |
| 589:4 | $490: 7,504: 13,512: 9,$ | values - 530:21 | written - 580:6 |  |  |
| Transcript- 472:8 transcription - | $\begin{aligned} & 517: 7,517: 20, \\ & 521: 17,560: 19,569: 8 \end{aligned}$ | variance - 546:15 547:3, 547:11, | Y |  |  |
| 473:15 | Typically- 485:1, | 547:12, 547:14 |  |  |  |
| transfer - 484:19, <br> $497 \cdot 24,498: 5,498: 6$ | $\begin{aligned} & 500: 11,502: 25, \\ & 521: 22,528: 3,559: 4 . \end{aligned}$ | variances-547:13 | year - 505:14, |  |  |
| 497:24, 498:5, 498:6, $521: 18,539: 3$ | $\begin{aligned} & 521: 22,528: 3,559: 4, \\ & 559: 18,560: 9 \end{aligned}$ | $\begin{aligned} & \text { varied - 502:24 } \\ & \text { varies - 490:12 } \end{aligned}$ | $545: 22,546: 23$ |  |  |
| transferring - 485:3 |  | various - 503:25 | years - 483:14 |  |  |
| Transfers- 498:7 transfers - 484:17 | U | vary - $532: 18$ | 502:21, 503:3, 528:4, |  |  |
| 497:23, 498:18, | ultimately - 520:24 | vendor -506:24 | yield - 559:3 |  |  |
| 498:19, 498:20, | unallotted-517:22, | vendors - 506:8 |  |  |  |
| 559:7, $559: 11,574: 3$, $574: 6$ | 517:23 | verify - 585:24 | Z |  |  |
| 574:6 transmitted - | $\begin{aligned} & \text { under - 518:11, } \\ & 549: 3,556: 18, \end{aligned}$ | $\begin{gathered} \text { version - 476:8, } \\ \text { 476:12, 478:17, } \end{gathered}$ | zero - 484:19, |  |  |
| 478:15 | 571:22, 577:8' | 479:10, 479:11 ${ }^{\text {, }}$ | 484:25, 485:25, |  |  |
| transposed - 478:8 | underlying- | versus-475:3, | 496:18, 502:2, 502:5, |  |  |
| Treasury- 514:10, | 476:21, 478:6, 478:10 | 478:5 | 510:21, 513:7, 513:9, |  |  |
| $\begin{aligned} & 535: 6,535: 14, \\ & 535: 17,535: 25, \end{aligned}$ | underneath - 585.25 | visible - 567:21 <br> volume - 548:14 | $\begin{aligned} & 517: 14,518: 6, \\ & 519: 15,554: 23, \end{aligned}$ |  |  |

