# UNITED STATES BANKRUPTCY COURT WESTERN DISTRICT OF NORTH CAROLINA CHARLOTTE DIVISION

In re

ALDRICH PUMP LLC, et al.,

Debtors.

ARMSTRONG WORLD INDUSTRIES, INC. ASBESTOS PERSONAL INJURY SETTLEMENT TRUST et al.,

Plaintiff(s),

v.

ALDRICH PUMP LLC, et al.

Defendant(s).

AC&S ASBESTOS SETTLEMENT TRUST, COMBUSTION ENGINEERING 524(G) ASBESTOS PI TRUST, GI HOLDINGS INC. ASBESTOS PERSONAL INJURY SETTLEMENT TRUST, GST SETTLEMENT FACILITY, KAISER ALUMINUM & CHEMICAL CORPORATION ASBESTOS PERSONAL INJURY TRUST, QUIGLEY COMPANY, INC. ASBESTOS PI TRUST T H AGRICULTURE & NUTRITION, L.L.C. ASBESTOS PERSONAL INJURY TRUST, and YARWAY ASBESTOS PERSONAL INJURY TRUST,

Petitioners,

v.

ALDRICH PUMP LLC and MURRAY BOILER LLC,

Respondents,

Chapter 11

Case No. 20-30608 (JCW)

(Jointly Administered)

Miscellaneous Pleading

No. 22-00303 (JCW)

(Transferred from District of Delaware)

Miscellaneous Pleading

No. 23-00300 (JCW)

(Transferred from District of New Jersey)

Case 23-00300 Doc 61 Filed 05/15/23 Entered 05/15/23 22:37:43 Desc Main Document Page 2 of 135

VERUS CLAIM SERVICES, LLC,

Interested Party,

NON-PARTY CERTAIN MATCHING CLAIMANTS,

Interested Party.

### **DECLARATION OF MICHAEL A. KAPLAN, ESQ.**

- I, Michael A. Kaplan, Esq., hereby declares under penalty of perjury:
- 1. I am a Partner at the law firm Lowenstein Sandler LLP, and counsel for the eight third-party asbestos settlement trusts identified below<sup>1</sup>.
- 2. Attached hereto as **Exhibit A** is a true and correct copy of Dr. Abraham J. Wyner's expert report, dated April 25, 2023.
- 3. Attached hereto as **Exhibit B** is a true and correct copy of the transcript from the May 8, 2023 deposition of Dr. Charles Mullin.

Dated: May 15, 2023 s/ Michael A. Kaplan

Michael A. Kaplan, Esq.

The eight trusts are: (i) ACandS Asbestos Settlement Trust; (ii) Combustion Engineering 524(g) Asbestos PI Trust; (iii) G-I Holdings Inc. Asbestos Personal Injury Settlement Trust; (iv) GST Settlement Facility; (v) Kaiser Aluminum & Chemical Corporation Asbestos Personal Injury Trust; (vi) Quigley Company, Inc. Asbestos PI Trust; (vii) T H Agriculture & Nutrition, L.L.C. Asbestos Personal Injury Trust; and (viii) Yarway Asbestos Personal Injury Trust.

# **EXHIBIT A**

# UNITED STATES BANKRUPTCY COURT WESTERN DISTRICT OF NORTH CAROLINA CHARLOTTE DIVISION

In re

ALDRICH PUMP LLC, et al.,1

Debtors.

ARMSTRONG WORLD INDUSTRIES, INC. ASBESTOS PERSONAL INJURY SETTLEMENT TRUST *et al.*,

Plaintiff(s),

v.

ALDRICH PUMP LLC, et al.

Defendant(s).

AC&S ASBESTOS SETTLEMENT TRUST, COMBUSTION ENGINEERING 524(G) ASBESTOS PI TRUST, GI HOLDINGS INC. ASBESTOS PERSONAL INJURY SETTLEMENT TRUST, GST SETTLEMENT FACILITY, KAISER ALUMINUM & CHEMICAL CORPORATION ASBESTOS PERSONAL INJURY TRUST, QUIGLEY COMPANY, INC. ASBESTOS PI TRUST TH AGRICULTURE & NUTRITION, L.L.C. ASBESTOS PERSONAL INJURY TRUST, and YARWAY ASBESTOS PERSONAL INJURY TRUST, TRUST,

Petitioners,

v.

Chapter 11

Case No. 20-30608 (JCW)

(Jointly Administered)

Miscellaneous Pleading

No. 22-00303 (JCW)

(Transferred from District of Delaware)

Miscellaneous Pleading

No. 23-00300 (JCW)

(Transferred from District of New Jersey)

<sup>&</sup>lt;sup>1</sup> The Debtors are the following entities (the last four digits of their respective taxpayer identification numbers follow in parentheses): Aldrich Pump LLC (2290) and Murray Boiler LLC (0679). The Debtors' address is 800-E Beaty Street, Davidson, North Carolina 28036.

Case 23-00300 Doc 61 Filed 05/15/23 Entered 05/15/23 22:37:43 Desc Main Document Page 5 of 135

ALDRICH PUMP LLC and MURRAY BOILER LLC,

Respondents,

VERUS CLAIM SERVICES, LLC,

Interested Party,

NON-PARTY CERTAIN MATCHING CLAIMANTS,

Interested Party.

# EXPERT REPORT OF ABRAHAM J. WYNER, PH.D.

# I. INTRODUCTION & QUALIFICATIONS

- 1. I am a Tenured Full Professor of Statistics and Data Science at University of Pennsylvania's Wharton School. I am also the Chair of the University's Undergraduate Program in Statistics. I also co-direct the Wharton People Analytics Initiative and the Wharton Sports Analytics and Business Initiative.
- 2. I completed my undergraduate education magna cum laude at Yale University with a Bachelor of Science in Mathematics in 1988. I then earned my Ph.D. in Statistics from Stanford University in 1993.
- 3. My conclusions in this report are based on my more than 25 years of professional and academic experience in the relevant field of statistics. During this time, I have worked with many large intersecting data sets (including asbestos trusts) and I am familiar with the complexities involved in extracting the data that is needed to do an analysis. My research interests have been broad. I have published across many methods and applications including Applied Probability, Information Theory, Mathematical Analysis of Algorithms, Machine Learning, Applied Statistical Analysis, and Bayesian Hierarchical Modeling.

4. I am being compensated at a rate of \$1,000 per hour for my efforts in connection with the preparation of this report. My compensation is in no way contingent on the results of this or any other proceeding. I have no financial interest in the outcome of this matter.

#### II. SCOPE OF MY REPORT

- 5. I have been asked by counsel for the DCPF Trusts<sup>2</sup>, the Delaware Claims Processing Facility, LLC, the Verus Trusts<sup>3</sup>, and Verus Claims Services, LLC, to respond to the Declaration of Charles H. Mullin, Ph.D.<sup>4</sup>, submitted in support of Aldrich Murray LLC and Murray Boiler LLC's (the "Debtors") Motion for Rehearing, regarding the relative cost/benefits of sampling versus a full population census of the 12,000 at-issue claimants. I will opine on the accuracy and sufficiency of a sample of 1,200 claimants (10% of total population) for reasonable purposes.
- 6. As described in detail below, it is my opinion that a random 10% sample of 1,200 claimants would fulfill all of the Debtors' reasonable needs. My opinion and others described herein reflect my evaluation of the sources listed in Exhibit A to this report. I expressly reserve the right to modify, amend, and/or supplement my opinions expressed herein to respond to any arguments made by the Debtors directly, or through the testimony of its experts, in response to my opinions expressed herein, or to consider any new evidence that becomes available.

<sup>&</sup>lt;sup>2</sup> The DCPF Trusts are the Armstrong World Industries, Inc. Asbestos Personal Injury Settlement Trust; The Babcock & Wilcox Company Asbestos PI Trust; Celotex Asbestos Settlement Trust; DII Industries, LLC Asbestos PI Trust; Federal-Mogul Asbestos Personal Injury Trust; Flintkote Asbestos Trust; Owens Corning / Fibreboard Asbestos Personal Injury Trust; Pittsburgh Corning Corporation Asbestos Personal Injury Settlement Trust; United States Gypsum Asbestos Personal Injury Settlement Trust; and WRG Asbestos PI Trust.

<sup>&</sup>lt;sup>3</sup> The Verus Trusts are ACandS Asbestos Settlement Trust; Combustion Engineering 524(g) Asbestos PI Trust; G-I Holdings Inc. Asbestos Personal Injury Settlement Trust; GST Settlement Facility; Kaiser Aluminum & Chemical Corporation Asbestos Personal Injury Trust; Quigley Company, Inc. Asbestos PI Trust; T H Agriculture & Nutrition, L.L.C. Asbestos Personal Injury Trust; and Yarway Asbestos Personal Injury Trust.

<sup>&</sup>lt;sup>4</sup> Declaration of Charles H. Mullin, Ph.D., No. 22-mc-303 (JCW) (Dkt. No. 55) (the "Mullin Declaration").

7. If called to testify, I may also explain principles and terminology referred and alluded to in this report, as well as any documents referenced herein. I may also use demonstrative exhibits, animations, and other such testimonial aids in support of my testimony to illustrate the bases of my opinion.

#### III. DR. MULLIN'S DECLARATION

8. Dr. Mullin's declaration is fundamentally an analysis that compares the costs of sampling (a potential increase in analysis time for recipient of data and loss of accuracy) to its benefits (reduction in privacy risk and lowering of administrative costs for provider). Most of the report is an attempt to downplay the privacy risks and emphasize a potential loss in accuracy, while attempting to downplay the contradictory, pro-samplings arguments made in the *Bestwall* case<sup>5</sup> by his colleague at Bates White, Jorge Gallardo-García, Ph.D., who clearly states that sampling is sufficient. At no point does Dr. Mullin quantify the potential loss of accuracy. He implies the loss is substantial enough to justify the costs without explanation, calculation, or quantification of any kind.

#### IV. SUMMARY OF MY OPINIONS

9. It is my opinion that a random sample that is large (10%), weighted or stratified towards larger settlement values, would be practically and materially no less accurate than a full census of the approximately 12,000 claimants in the targeted population. Such a sample has already been discussed in the *Bestwall* Declaration, which does not identify any attribute of the population that cannot be accurately studied with a sample. The Debtors have further proposed a

<sup>&</sup>lt;sup>5</sup> Declaration of Jorge Gallardo-García, PHD, *In re Bestwall LLC*, Bankr. No. 17-31795 (LTB) (Dkt. No. 2183) (the "Bestwall Declaration").

Case 23-00300 Doc 61 Filed 05/15/23 Entered 05/15/23 22:37:43 Desc Main Document Page 8 of 135

variation of that sampling design here, which they acknowledge provides a "reliable cross-section" of the targeted population.<sup>6</sup>

10. Consequently, there would be no practical or material benefit to requiring the production of the full population. In addition, there is a risk of an inadvertent dissemination of highly confidential data. The likelihood of such breach may be small, but the damage would be large if it occurred. If only 10% of the target population is produced, the damage in the resulting data breach to the individual claimants can be expected to be 10 times smaller because it would involve 10 times fewer claimants.

#### V. DISCUSSION

#### A. The accuracy of sampling versus a full census

11. Let me begin with an analogy. In the sport of football, it is generally regarded that taller quarterbacks are advantaged over shorter quarterbacks, if all other attributes are the same. Therefore, when drafting a quarterback, an NFL team has to consider height among the many considerations. If they were comparing two potential picks, one who is 6 feet and 1.00 inch (exactly) tall and another who is 6 feet and 0.99 inches tall, they would consider their heights to be practically and materially the same, even though it is technically true that there is a 0.01 inch difference in height. When comparing them, height would not be considered at all and only the other attributes would be discussed and weighed to make the determination. Similarly, when discussing samples of various sizes, it can often happen that there is no practical or material advantage gained with the larger dataset.

<sup>&</sup>lt;sup>6</sup> Dec. 19, 2022 Email from Morgan R. Hirst (the "December Sampling Proposal"). It is my understanding that, since the Debtors made the December Sampling Proposal, the Debtors nearly reached agreement with the Official Committee of Asbestos Personal Injury Claimants and the Future Claimants' Representative on a sampling proposal. I cannot opine specifically on this sampling proposal as it was not provided to the DCPF Trusts, the Delaware Claims Processing Facility, LLC, the Verus Trusts, or Verus Claims Services, LLC.

Case 23-00300 Doc 61 Filed 05/15/23 Entered 05/15/23 22:37:43 Desc Main Document Page 9 of 135

12. Dr. Mullin emphasizes that smaller samples can be less accurate than larger samples<sup>7</sup>, but he does not address the central question at issue here: *is a large, efficient 10% sample, materially and practically equivalent to a complete census*? As explained below, the answer to this question is yes – a 10% sample, as a practical matter, is just as good as a full census for the purposes described by Dr. Mullin and the Debtors' reasonable needs.

13. The starting point for this analysis requires an understanding of what can make a sample inaccurate. Samples are most familiar in matters that involve polling and surveys. These samples are indeed frequently deficient and inaccurate, but not because they are too small. The typical samples seen and discussed in the media suffer from "sampling bias." They have characteristics that are invariably different from the population in key ways. But sampling bias is not an issue here, since the population is enumerable and identifiable. In other words, all the claimants in the Debtors' database are known.

14. In fact, a trained statistician with access to an enumerated list of individuals in a targeted population can easily create a sample that makes optimal use of the data. Such a design was already proposed in the *Bestwall* Declaration, and a variation of that design was proposed by the Debtors here in the December Sampling Proposal.<sup>9</sup>

<sup>&</sup>lt;sup>7</sup> Mullin Decl., ¶ 10.

<sup>&</sup>lt;sup>8</sup> Sampling bias occurs when subjects with different attributes have different and unknown chances of inclusion in the sample.

<sup>&</sup>lt;sup>9</sup> The sample set forth in the *Bestwall* Declaration and the Debtors' December Sampling Proposal are of a stratified design, where samples of different sizes are taken from a large number of categories (called strata). Another approach, known as weighted sampling, would weight the probability of inclusion in the sample according to a specific attribute. For example, claimants can be included with probability in direct proportion to their settlement value. This "weighted" approach can be highly efficient and simple to analyze. It also requires fewer arbitrary decisions that may go into defining strata.

Case 23-00300 Doc 61 Filed 05/15/23 Entered 05/15/23 22:37:43 Desc Main Document Page 10 of 135

### B. A random 10% sample fulfills all of the Debtors' reasonable needs

15. With an unbiased sample, it is possible to measure the precision of a sample when there is a specific characteristic of the population (called a "parameter") that is the subject and purpose of the data analysis. Dr. Mullin does not specify precisely the parameter that he or the Debtors intend to measure. But he does sketch the general ideas:

Specifically, the data would allow us to compare exposure allegations to the products of the reorganized entities for which the trusts were established with the exposures those same claimants disclosed in their tort litigation against the Debtors. This would enable us to *quantify the proportion of alternative exposures* disclosed to the Debtors at the time of settlement.<sup>10</sup>

Thus, the first parameter of interest is a proportion of claimants that failed to disclose alternative exposures.

- 16. When the parameter of interest is a proportion (which is a percentage between 0% and 100%), then the equivalent sample proportion is an "estimate" of the parameter. The accuracy of an estimate is measured using the laws of probability theory, by calculating the "standard error" of the estimate, which is defined to be the typical<sup>11</sup> difference between the sample proportion and the population proportion.
- 17. For example, if the true population proportion of claimants that have undisclosed alternative exposures is 5%, and the sample proportion of the same quantity is 4% then the difference is called the sampling error, which in this example is 1%. The standard error quantifies this difference in frequency terms. For example, if the true population proportion were 10% and the standard error were 1% then most samples (about 2/3 of samples) would have a sample proportion between 9% and 11% and it would be very unusual (about 5% of samples) for the

<sup>&</sup>lt;sup>10</sup> Mullin Decl., ¶ 16 (emphasis added).

<sup>&</sup>lt;sup>11</sup> The standard error is the standard deviation of the difference between the sample proportion and the population proportion, where the variation is caused by sampling.

Case 23-00300 Doc 61 Filed 05/15/23 Entered 05/15/23 22:37:43 Desc Main Document Page 11 of 135

sample proportion to be greater than 12% or less than 8%. This means that any attribute that the whole population has will be mirrored closely in the population. If the population proportion is 10%, the sample proportion is very likely to be very close to 10%. If the population has a proportion of 2%, the sample proportion will be very close to 2%.

- One of the most useful formulas in statistics, tells us that, for a simple random sample, the standard error of a sample proportion is at most  $\frac{1}{2\sqrt{n}}$ , where n is the sample size. Thus, a simple sample of 1,200 drawn from a population of 12,000 (10% of the total) has a standard error that is *less than 1.5%*. This means that, whatever the true percentage of claimants that failed to disclose alternative exposures, the results from a simple random sample of 10% of the population would likely be within 1.5% of the true population proportion.
- 19. It is common to double the standard error to be extra sure about the range of possible values. So in the case of a simple random sample of size 1,200, we can be nearly certain that the true population proportion is within 3% of the number that is calculated from the sample. If there is a practical purpose for this data that requires more accuracy than this, it has never been disclosed or argued, certainly not by Dr. Mullin.
- 20. In practice, however, the standard error for a simple sample of 1,200 observations (10% of the total) will usually be a lot smaller than 1.5%. If the true population proportion were 5%, then the standard error would be less than 0.6%. A stratified sample (like the methodologies proposed in the *Bestwall* Declaration and the December Sampling Proposal) can even be more efficient.

<sup>&</sup>lt;sup>12</sup> The precise formula for the standard error of a sample proportion is  $\frac{\sqrt{p(1-p)}}{\sqrt{n}}$  where p= true proportion. This is always less than  $\frac{1}{2\sqrt{n}}$ .

Case 23-00300 Doc 61 Filed 05/15/23 Entered 05/15/23 22:37:43 Desc Main Document Page 12 of 135

21. A stratified sample groups the population into different "strata" and samples more frequently from strata with higher variability. This approach is more efficient in the sense that it makes optimal use of each data point. The reason for this has to do with the importance of each observation to the conclusion. In a simple random sample, every claimant has equal likelihood of inclusion. In a stratified sample, like the one in *Bestwall*, claimants that have very low settlements are less likely to be included. This is more efficient since the consequence of any improper disclosure in smaller for smaller settlements so fewer small settlements are needed to estimate their impact. In the end, this means that, with the same sample size, the resulting standard errors can be lower than in a simple random sample.

22. Thus, for purposes of testing the first parameter of interest, the proportion of claimants that failed to disclose alternative exposures, a simple or stratified random sample would provide an exceedingly accurate result. The very small uncertainty in the proportion that remains after sampling will have no practical impact on the claim evaluation process. In fact, as I will explain later, this uncertainty is very much smaller than the modeling uncertainty about claims valuations.

23. Dr. Mullin also discusses a second parameter of interest:

Further, if full disclosure has not occurred, then variation in disclosure patterns would allow us to model the impact of partial information on settlement amounts. If that information is not communicated to a defendant, a plaintiff can artificially increase settlement amounts in a number of different ways.<sup>13</sup>

Dr. Mullin suggests that he wants to measure the impact of non-disclosure on settlement amounts.

The assumption here is that a claimant who fails to disclose their exposure completely would have been owed a smaller settlement value had they in fact disclosed such information. The overall

<sup>&</sup>lt;sup>13</sup> Mullin Decl., ¶ 17.

Case 23-00300 Doc 61 Filed 05/15/23 Entered 05/15/23 22:37:43 Desc Main Document Page 13 of 135

average impact of such non-disclosures would be a population parameter of great interest. For this parameter, at issue before the Court is the following question: *If a sample were used to estimate this value, how precise would that estimate be*?

- 24. Because the *proportion* of non-disclosed claimants has a very small standard error, it follows, if all the settlements were the same size, that the standard error of the overall average impact would also be small. If the settlements are not the same size, a stratified sample can be drawn that oversamples the claims with the highest variation. When this happens an additional "finite sample correction factor" is added to the formula, which reduces the standard error.<sup>14</sup> Applying this here, since we know that the settlement amounts are not the same size for each claimant, a properly stratified sample of 1,200 claimants' data, would allow Dr. Mullin and the Debtors to calculate the average size of the impact of non-disclosure on settlement values with uncertainty that is extremely small.
- 25. Beyond the two parameters discussed above, Dr. Mullin does not specify precisely or intimate any other parameters of interest. In my review of the relevant materials, I have not encountered any argument or specific identification of any need that cannot be fulfilled by a sample and that would require a full census. As discussed above, a sample would provide an exceptionally accurate result that would be commensurate with a result derived from the total population.
- 26. It is possible that there may be a desire to do more than accurately and scientifically assess the Debtors' liability. For example, if the Debtors are looking for stories to support their arguments anecdotally, then having a larger pool of claimants would produce a larger pool of

<sup>&</sup>lt;sup>14</sup> The finite sample correction factor lowers the standard error by an amount  $c = \sqrt{\frac{(N-n)}{(N-1)}}$  where n = sample size in given strata and N=strata size. This can be substantial reduction in the standard error if the sample size is large relative to the size of the strata. This is why the sampling proportion will be high for certain strata with large settlements.

Case 23-00300 Doc 61 Filed 05/15/23 Entered 05/15/23 22:37:43 Desc Main Document Page 14 of 135

stories. To illustrate, if you want to study how much money gamblers lose on average in sports betting in an effort to marshal arguments to illegalize sports betting, then a random sample of sufficient size would be sufficient to accurately and reliably measure the economic losses. If, on the other hand, the best argument requires an example of a losing streak, then a full census will generate more extreme results that could be used to illustrate this point.

#### C. A full census provides no material benefit

- 27. What I have demonstrated is that a 10% sample is completely sufficient and not materially worse than a census for the purposes outlined by Dr. Mullin or the Debtors' reasonable needs. So what benefit is there to doing a complete census? Dr. Mullin indicates that there are a few benefits, I will consider them and show that any such benefit is exceedingly minor.
- 28. Dr. Mullin discusses the "analytical burden" of sampling without defining or explaining it.<sup>15</sup> He does not say what that burden is exactly or how extensive that burden would be. Simple random samples are trivially handled, and unweighted stratified samples are not substantively harder to implement and analyze (for appropriately qualified experts) since there are readily available or derivable formulas that can be applied to stratified or weighted samples.<sup>16</sup>
- 29. While there are a few extra statistical calculations that are required to compute standard errors (that are not needed when doing a census), this is not hard or particularly burdensome. Data analysis on the full dataset is not substantively easier especially since there will be statistical challenges of all types that will arise, sampling or no sampling. Even if a full census were taken and analyzed, there would still be uncertainty about the parameters at issue. There are

<sup>&</sup>lt;sup>15</sup> Mullin Decl., ¶¶ 25-31.

<sup>&</sup>lt;sup>16</sup> E.g., Ken Aho, Confidence Intervals for Stratified Random Samples, INST. FOR STATISTICS & MATHEMATICS, https://search.r-project.org/CRAN/refmans/asbio/html/ci.strat.html (last visited Apr. 25, 2023).

Case 23-00300 Doc 61 Filed 05/15/23 Entered 05/15/23 22:37:43 Desc Main Document Page 15 of 135

other unknowns that would have to be estimated and would require the creation of a statistical model. These will introduce new uncertainty, distinct and irreducible, and **not due to sampling.** 

- 30. For example, it may be quite important to compute what the dollar value of a settlement would have been, under the counterfactual that a full and accurate disclosure had been made. This cannot be known precisely and would have to be estimated using a model for each claimant who failed to accurately disclose. Consequently, even if all the data for every claimant is collected (without sampling), a statistical model would be required to make an estimate of a counterfactual settlement amount. The uncertainty of this can be guessed, but not known. Based on my experience in modeling and statistics, the uncertainty in estimating the counterfactual would far exceed the standard errors caused by sampling. In short, as a practical matter a 10% sample is just as good as a full census.
- 31. In his Declaration, Dr. Mullin also cites the Internal Revenue Service ("IRS") recommendation that samples should not be used when "it is reasonable to examine 100 percent of the items under consideration." This recommendation is given without any context and is not applicable. The IRS is not tasked with *estimating* the amount of taxes owed. It needs to know the amount exactly, if possible, thus the recommendation. The IRS is tasked with finding every incident of tax avoidance. If they were only interested in estimating the average size of underpayments then a sufficiently large sample can be practically and materially no worse than a complete census. In fact, sometimes a sample can be preferred because samples can sometimes be more carefully checked for inaccuracies. This is particularly important when some of the data fields consist of "narratives" (like descriptions of exposure histories) that require human readers and curation.

<sup>&</sup>lt;sup>17</sup> Mullin Decl., ¶ 20.

Case 23-00300 Doc 61 Filed 05/15/23 Entered 05/15/23 22:37:43 Desc Main Document Page 16 of 135

32. Because there is no practical loss in accuracy created by sampling, there is no need for, or material benefit from, taking a full census of the claimants' data, especially when balanced against the significant privacy benefits that sampling provides. It is always possible that a data breach will occur exposing the data and breaking the confidentiality that has been promised. The chance of such a breach can be minimized, but never eliminated. If the entire population of claimants is released than all the claimants private and confidential information is at risk. If a sample of 10% is released, then the size of the at-risk population is 10 times smaller. Since the damage in a confidentiality breach is measured in proportion to the size of the number of individuals that are exposed the potential damage to the individual claimants is 10 times smaller.

#### VI. CONCLUSIONS

- 33. Dr. Mullin has argued that sampling should not be used because a full census is more accurate and the burdens of a full census are not sufficiently large to outweigh the benefits. What Dr. Mullin fails to do is quantify, even approximately, how much less accurate a sample will be. I conclude that a random sample that is large (10%), weighted or stratified towards larger settlement values, would be practically and materially no less accurate than a full census of the approximately 12,000 claimants in the targeted population.
- 34. A proper stratified random sample can accurately estimate the proportion of claimants that did not consistently disclose their exposure histories and also estimate the average difference in settlement amount if exposures were properly disclosed. With respect to these issues, there would not be a practical or material difference in the information acquired from a large, targeted sample of 1,200 than would be gained from the full census of the entire population of 12,000.

Case 23-00300 Doc 61 Filed 05/15/23 Entered 05/15/23 22:37:43 Desc Main Document Page 17 of 135

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Dated: April 25, 2023

Philadelphia, PA

Abraham J. Wyner, Ph.D.

#### **EXHIBIT A**

#### **List of Sources**:

- 1. Motion of the Debtors for an Order Authorizing the Debtors to Issue Subpoenas on Asbestos Trusts and Paddock Enterprises, LLC [*In re Aldrich Pump LLC, et al.*, Dkt. No. 1111];
- Reply in Support of Motion of the Debtors for an Order Authorizing the Debtors to Issue Subpoenas on Asbestos Trusts and Paddock Enterprises, LLC [In re Aldrich Pump LLC, et al., Dkt. No. 1182];
- 3. Third-Party Asbestos Trusts' Motion to Quash or Modify Subpoenas [*DCPF Proceeding*, Dkt. No. 3];
- 4. Delaware Claims Processing Facility, LLC's (I) Motion to Quash or Modify Subpoena and (II) Joinder [*DCPF Proceeding*, Dkt. No. 4-2];
- 5. Aldrich Pump LLC and Murray Boiler LLC's Brief in Opposition to (A) Third-Party Asbestos Trusts' Motion to Quash or Modify Subpoenas; and (B) Delaware Claims Processing Facility, LLC's (I) Motion to Quash or Modify subpoenas and (II) Joinder [DCPF Proceeding, Dkt. No. 4-9];
- 6. Third-Party Asbestos Trusts' Reply in Support of Motion to Quash or Modify Subpoenas [*DCPF Proceeding*, Dkt. No. 6-2];
- 7. Delaware Claims Processing Facility, LLC's Reply in Support of its (I) Motion to Quash or Modify Subpoena and (II) Joinder [DCPF Proceeding, Dkt. No. 6-5];
- 8. Transcript for Hearing/Trial Held on November 30, 2022 [DCPF Proceeding, Dkt. No. 35];
- 9. December 19, 2022 Email from Morgan R. Hirst re: In re Aldrich Pump LLC, et al (Case No. 20-30608);
- 10. Debtors' Motion for Rehearing Concerning the Issue of Sampling on DCPF's Subpoena-Related Motions [*DCPF Proceeding*, Dkt. No. 54];
- 11. Declaration of Charles H. Mullin, Ph.D. [DCPF Proceeding, Dkt. No. 54];
- 12. Third-Party Asbestos Trusts' Opposition to Motion for Rehearing Concerning the Issue of Sampling on DCPF's Subpoena-Related Motions [*DCPF Proceeding*, Dkt. No. 70];
- 13. Declaration of Beth Moskow-Schnoll in Support of Third-Party Asbestos Trusts' Opposition to Motion for Rehearing Concerning the Issue of Sampling on DCPF's Subpoena-Related Motions [DCPF Proceeding, Dkt. No. 70];

- 14. Debtors' Reply in Support of Debtors' Motion for Rehearing Concerning the Issue of Sampling on DCPF's Subpoena-Related Motions [*DCPF Proceeding*, Dkt. No. 87];
- 15. Transcript for Hearing/Trial Held on March 30, 2023 [DCPF Proceeding, Dkt. No. 119];
- 16. Third-Party Asbestos Trusts' Motion to Quash Subpoenas and in Support of Stay [*Verus Proceeding*, Dkt. No. 2-1];
- 17. Verus Claims Services, LLC's Motion to Quash Subpoenas and to Stay [*Verus Proceeding*, Dkt. No. 2-6];
- 18. Respondents' Motion to Transfer Subpoena-Related Motions to the Issuing Court, the United States Bankruptcy Court for the Western District of North Carolina [Verus Proceeding, Dkt. No. 3-9];
- 19. Aldrich Pump LLC and Murray Boiler LLC's Opposition to (I) Third-Party Trusts' Motion to Quash Subpoenas and in Support of Stay; (II) Verus Claim Services, LLC's Motion to Quash Subpoenas and to Stay; and (III) Non-Party Certain Matching Claimants' Joinders and Motion to Quash [*Verus Proceeding*, Dkt. No. 5-2];
- 20. Third-Party Asbestos Trusts Reply in Further Support of their Motion to Quash Subpoenas[Verus Proceeding, Dkt. No. 5-10]; and
- 21. Verus Claim Services, LLC's Reply in Further Support of its Motion to Quash [*Verus Proceeding*, Dkt. No. 6-1].

### **EXHIBIT B**

# **Expert Testimony in the Last 4 Years:**

- 1. Grayson v. Gen. Elec. Co., No. 3:13-cv-01799 (D. Conn. Feb. 9, 2018) (Deposition Testimony);
- 2. *United States, ex rel. J. Scott v. Ariz. Ctr. for Hematology & Oncology*, No. 2:16-cv-03703 (D. Ariz. Aug. 21, 2019) (Deposition Testimony);
- 3. Arwood v. Broadtree Partners, LLC, C.A. No. 2019-0904-JRS (Del. Ch. Oct. 2020) (Trial Testimony);
- 4. Honeywell Int'l, Inc. v. N. Am. Refractories Co. Personal Inj. Settlement Tr. (In re N. Am. Refractories Co.), Adv. No. 21-2097-TPA (Bankr. W.D. Pa. May 2022) (Trial Testimony); and
- 5. Mann v. Nat'l Review, Inc., 2012 CA 008263 B (D.C. Super. Nov. 2020) (Trial scheduled for June 2023).

#### **EXHIBIT C**

#### **Publications in the Last 10 Years:**

- 1. Ryan Brill, Sameer Deshpande, Wyner, "A Bayesian Analysis of the Time Through the Order Penalty," Submitted to the JQAS, Published at https://arxiv.org/abs/2210.06724
- 2. Elizabeth Walshe EA, Elliott MR, Romer D, Cheng S, Curry AE, Seacrist T, Oppenheimer N, Wyner AJ, Grethlein D, Gonzalez AK, Winston FK, "Novel use of a virtual driving assessment to classify driver skill at the time of licensure," Transp. Res. Part F Traffic Psychol. Behav., 2022 May.
- 3. Elizabeth A. Walshe, Abraham J. Wyner, Shukai Cheng, Robert Zhang, Alexander K. Gonzalez, Natalie Oppenheimer, Daniel Romer, and Flaura K. Winston, "License Examination and Crash Outcomes Post-Licensure in Young Drivers: Are the youngest drivers most at risk?, 2022. JAMA Network.
- 4. "Is the Third Time Through the Order Penalty Real?," Abraham Wyner and Russel Walters, To Appear, SABR 2021 Conference.
- 5. Matthew Olson, Abraham J. Wyner, Richard Berk, "Generalizations of the Random Forest Kernel," KDD 2019.
- 6. Matt Olson and Abraham Wyner, "Modern Neural Networks Generalize Well on Small Data Sets," NIPS, 2019.
- 7. Matt Olson and Abraham Wyner, "Do Random Forests Estimate Class Probabilities?," Submitted Journal of Machine Learning Research, 2018.
- 8. Sameer K. Deshpande, Abraham J. Wyner, "A hierarchical Bayesian model of pitch framing," Journal of Quantitative Analysis in Sports, Volume 13, Issue 2, October 2017.
- 9. Phillip Earnst. Shepp, L. and Abraham Wyner, "Yule's 'nonsense correlation' solved!," The Annals of Statistics. Volume 45, Number 4 (2017), 1789-1809.
- 10. Abraham J Wyner, Matthew Olson, Justin Bleich, David Mease, "Explaining the Success of AdaBoost and Random Forests as Interpolating Classifiers," Journal of Machine Learning Research 18 (May, 2017) 1-33.
- 11. Mathieu E. Wimmer, Justin Rising, Raymond J. Galante, Abraham Wyner, Allan I. Pack, Ted Abel, "Aging in Mice Reduces the Ability to Sustain Sleep/Wake States," PloS one 8 (12), e81880, December 2013.
- 12. McShane, Blakely B.; Jensen, Shane T.; Pack, Allan I.; Wyner, Abraham J., "Modeling Time Series Dependence for Scoring Sleep in Mice," Journal of the American Statistical Association, 108 (504), 1147-1162, 2013.

- 13. McShane, Blakely B.; Jensen, Shane T.; Pack, Allan I.; Wyner, Abraham J., "Rejoinder: Modeling Time Series Dependence for Scoring Sleep in Mice," Journal of the American Statistical Association, 108 (504), 2013.
- 14. Driver, R. J., Lamb, A. L., Wyner, A. J., & Raizen, D. M. "DAF-16/FOXO Regulates Homeostasis of Essential Sleep-like Behavior during Larval Transitions in *C. elegans*," Current Biology (2013).
- 15. Richard Sander and Abraham Wyner, "Studies Fail to Support Claims of New California Ethnic Studies Requirement," Tablet Magazine, Mar. 29, 2022.
- 16. Abraham Wyner and Alan Salzburg, "The insanity of mandating boosters for Kids," Tablet Magazine, June 6, 2022.
- 17. "Not a Time for Politics or Bad Data," The Hill, Published May 28, 2020.
- 18. "I'm a Statistician Closing Camps would be a big Published Mistake," The Forward, May 5, 2020.
- 19. Wyner, Abraham, "A Statistician Reads the Sports Pages: Can the Skill Level of a Game of Chance Be Measured?," Shane Jensen (column editor) *Chance*, Vol. 25.3, 2012.
- 20. Wyner, Abraham, "Why Do Women's Salaries Still Lag Behind?," The Forward, December 20, 2013.

# **EXHIBIT B**

	Page 1
1	UNITED STATES BANKRUPTCY COURT
	WESTERN DISTRICT OF NORTH CAROLINA
2	CHARLOTTE DIVISION
3	X
	ARMSTRONG WORLD INDUSTRIES, )
4	INC. ASBESTOS PERSONAL ) Miscellaneous Proceeding
	INJURY SETTLEMENT TRUST, )
5	et al., ) No. 22-00303 (JCW)
	)
6	Plaintiffs, ) (Transferred from
	) District of Delaware)
7	v. )
	)
8	ALDRICH PUMP LLC, et al., )
	)
9	Defendants. )
	X
10	In re ) Chapter 11
	)
11	ALDRICH PUMP LLC, et al., ) Case No. 20-30608
	)
12	Debtors. )
	X
13	
14	DEPOSITION OF CHARLES HENRY MULLIN, PH.D.
15	Monday, May 8, 2023; 1:06 p.m. EDT
16	
17	
18	
	Reported by: Cindy L. Sebo, RMR, CRR, RPR, CSR, CCR,
19	CLR, RSA, NYRCR, NYACR, Remote CA CSR #14409, NJ CCR
	#30XI00244600, NJ CRT #30XR00019500, Washington State
20	CSR #23005926, Oregon CSR #230105, TN CSR 998, Remote
	Counsel Reporter, LiveLitigation Authorized Reporter,
21	Notary Public
22	Job No. 5905066

800-227-8440 973-410-4040

	Page 2		Page 4
1	Deposition of CHARLES HENRY MULLIN, PH.D.,	1	APPEARANCES (Continued):
2	held at the law offices of Jones Day, 51 Louisiana	2	
3	Avenue, Northwest, Washington, D.C. 20001, before		Attorneys for Plaintiff Claimants' Representative,
4	Cindy L. Sebo, Registered Merit Court Reporter,	3	Joseph Grier:
5	Certified Real-Time Reporter, Registered Professional	4	ORRICK HERRINGTON & SUTCLIFFE LLP
6	Reporter, Certified Shorthand Reporter, Certified	5	DEBRA L. FELDER, ESQUIRE
7	Court Reporter, Certified LiveNote Reporter, Real-Time	6	Columbia Center
8	Systems Administrator, California Shorthand Reporter	7	1152 15th Street, Northwest
9	#14409, New Jersey Certified Court Reporter,	8	Washington, D.C. 20005-1706
10	#30XI00244600, New Jersey Certified Realtime Reporter	9	202.339.8567
11	#30XR00019500, New York Realtime Certified Reporter,	10	dfelder@orrick.com
12	New York Association Certified Reporter, Washington	11	
13	State CSR #23005926, Oregon CSR #230105, Tennessee CSR	12	Attorneys for Custom Matching Claimants:
14	#998, Remote Counsel Reporter, LiveLitigation	13	HOGAN MCDANIEL
15	Authorized Reporter and Notary Public, beginning at	14	DANIEL K. HOGAN, ESQUIRE
16	approximately 1:06 p.m. EDT, when were present on	15	1311 Delaware Avenue
17	behalf of the respective parties:	16	Wilmington, Delaware 19806
18	behalf of the respective parties.	17	302.656.7540
19		18	dkhogan@dkhogan.com
20		19 20	
		$\begin{vmatrix} 20 \\ 21 \end{vmatrix}$	
21 22		22	
		22	
	Page 3	1	Page 5 A P P E A R A N C E S (Continued):
1	APPEARANCES:	2	Attorneys for Debtors/Defendants Aldrich Pump LLC and Murray Boiler LLC:
2	Attorneys for Plaintiff ACC:	3	and Murray Boner LLC.
3	ROBINSON & COLE LLP	4	EVERT WEATHERSBY HOUFF
4	AMANDA R. PHILLIPS, ESQUIRE		C. MICHAEL EVERT, JR., ESQUIRE
5	One Boston Place, 26th Floor	5	3455 Peachtree Road, Northeast, Suite 1550
6	Boston, Massachusetts 02108	6	
7	617.557.5916	7	Atlanta, Georgia 30326
8	aphillips@rc.com		678.651.1250
9	-and-	8	cmevert@ewhlaw.com
10	LAURIE A. KREPTO, ESQUIRE	9	-and-
11	1650 Market Street, Suite 3030	10	-anu-
12	Philadelphia, Pennsylvania 19103	11	CLARE M. MAISANO, ESQUIRE
13	215.398.0554		111 South Calvert Street, Suite 1910
14	lkrepto@rc.com	12	Baltimore, Maryland 21202
15	-and-	13	·
16	CAPLIN & DRYSDALE	14	443.573.8507
17	JEANNA RICKARDS KOSKI, ESQUIRE (Via Zoom)		cmmaisano@ewhlaw.com
	One Thomas Circle, Northwest, Suite 1100	15 16	
18		17	
18 19	Washington, D.C. 20005	10	
	Washington, D.C. 20005 202.862.5069	18 19	
19	·		

2 (Pages 2 - 5)

800-227-8440 973-410-4040

	Page 6					Page 8
1	APPEARANCES (Continued):	1	APPEARANCES	•	):	
2	Attorneys for DCPF:	2 3	Attorneys for Non-Party Ver LOWENSTEIN SANDLE			
3	YOUNG CONAWAY STARGATT & TAYLOR, LLP	4	MICHAEL A. KAPLAN,			
4		5	One Lowenstein Drive			
	KEVIN A. GUERKE, ESQUIRE	6	Roseland, New Jersey 070	068		
5	1000 North King Street	7 8	973.597.2302 mkaplan@lowenstein.com	1		
6	Wilmington, Delaware 19801	9	r	-		
7	302.571.6616		Attorneys for Verus Claim S	ervices, LL	C:	
8	kguerke@ycst.com	10	ANSELMI & CARVELL	LIID		
9		11	ANSELWI & CARVELL	i, LLI		
10	Attorneys for DCPF Trust:		ANDREW E. ANSELMI,	ESQUIRE		
11	BALLARD SPAHR LLP	12	101 4 64 4 1			
12	BETH MOSKOW-SCHNOLL, ESQUIRE (Via Zoom)	13	101 Avenue of the Americ	cas		
13	919 North Market Street, 11th Floor	15	8th & 9th Floors			
14	Wilmington, Delaware 19801-3034	14				
	Ç .	15	New York, New York 100	013		
15	302.252.4447	13	212.308.0070			
16	moskowb@ballardspahr.com	16				
17	-and-	17	aanselmi@acllp.com			
18	BRIAN N. KEARNEY, ESQUIRE	17 18	ALSO PRESENT:			
19	1735 Market Street, 51st Floor	19	PETER CUMBO, Bates V	Vhite (Via 2	Zoom)	
20	Philadelphia, Pennsylvania 19103-7599	20	ALLAN TANANBAUM,		lent, Deputy	General
21	215.864.8265	21	Counsel, Product Litigation Technologies (Via Zoom)			
22	kearneyb@ballardspahr.com	22	JOSEPH GRIER, Claimar		ntative	
	Page 7					Page 9
1	APPEARANCES (Continued):	1	000			
2	Attorneys for Debtors and Debtors in Possession:	2	INDEX OF EXAM	INATION		
3 4	JONES DAY BRAD B. ERENS, ESQUIRE (Via Zoom)	3	CHARLES HENRY		н D	
5	MORGAN R. HIRST, ESQUIRE					
6	110 North Wacker Drive, Suite 4800	4	Armstrong World, et al. v Ale	1	LLC, et al.	
7	Chicago, Illinois 60606	5	Monday, May 8, 20	)23		
8 9	312.782.3939 bberens@jonesday.com	6	oOo			
10	mhirst@jonesday.com	7				
11	•	8	EXAMINATION BY		PAGE	
12	Attorneys for Trane Technologies Company LLC and	9	Mr. Kaplan	11		
13	Trane U.S. Inc.:	10	Mr. Guerke	144		
13	MCCARTER & ENGLISH, LLP	11	Mr. Hogan	207		
14	,	12				
1.5	PHILLIP S. PAVLICK, ESQUIRE (Via Zoom)	13				
15	Four Gateway Center					
16	1 out Gateway Center	14	annavara :			
-	100 Mulberry Street	15	CERTIFICATE OF REPORT		217	
17		16	INSTRUCTIONS TO WITNE	SS	218	
10	Newark, New Jersey 07102	17	ERRATA	219		
18	973.849.4181	18	ACKNOWLEDGMENT OF V	VITNESS		221
19	7,5.017.1101	19				
	ppavlick@mccarter.com	20				
		1				
20 21		21				

3 (Pages 6 - 9)

Veritext Legal Solutions 973-410-4040

	Page 10		Page 12
1	oOo	1	Michael Kaplan. We met briefly off the record. I
2	INDEX TO EXHIBITS		
3	CHARLES HENRY MULLIN, PH.D.	2	represent the nonparty Verus Trust.
4	Armstrong World, et al. v Aldrich Pump LLC, et al.	3	And I think I've drawn the short
5	Monday, May 8, 2023	4	straw of of going first today, and maybe the
6	00o	5	only. We'll see.
8	(Exhibits Provided Electronically to Reporter.) CM DEPOSITION	6	You have been deposed before,
0	EXHIBIT NUMBER DESCRIPTION PAG	E 7	correct?
9		8	A. Correct.
	Number 1 Declaration of Charles H.	9	Q. I'd be lying if I told you I didn't
10		10	know that.
	Mullin, Ph.D. 17	11	So I'm going to give you the very
11	N 1 2 21 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12	abbreviated version of today's sort of ground rules
12	Number 2 Subpoena to Produce Documents, Information, or Objects or to	13	so that we can't ever have a disagreement.
14	Permit Inspection of Premises	14	You know all of your answers have to
15	in a Bankruptcy Case		•
16	(or Adversary Proceeding) 51	15	be verbal?
17		16	A. Correct.
	Number 3 Expert Report of Abraham J.	17	Q. We have to do our best not to talk
18	W N D	18	over one another, right?
19	Wyner, Ph.D. 101	19	A. That's the goal.
20		20	Q. Right.
21		21	You understand you're testifying
22		22	under the penalty of perjury, correct?
	Page 11		Page 13
1	000	1	A. Correct.
2	PROCEEDINGS	2	Q. You understand that from time to
3	oOo	3	time, maybe in response to every question, your
4	Washington, D.C.	4	counsel is going to potentially object to something
5	00	5	that I'm saying.
6		6	Unless he instructs you not to
	Monday, May 8, 2023; 1:06 p.m. EDT	7	answer, you know you can answer, right?
7	oOo		
8	000	8	A. I have the option of answering, yes.
9	CHARLES HENRY MULLIN, PH.D.,	9	Q. Okay. Lastly and, I think, most
10	after having been first duly sworn by the certified	10	importantly is if you don't understand my question,
11	stenographer to tell the truth, the whole truth, and	11	I'd like you to tell me that you don't understand
12	nothing but the truth, testified as follows:	12	it, and maybe we'll and I'll be able to rephrase
13	000	13	it for you so that you get a question you
14	CERTIFIED STENOGRAPHER: Thank	14	understand.
15	you.	15	If you answer, I'm going to assume
16	The witness is sworn.	16	that you understood the question.
17	MR. KAPLAN: Thank you.	17	Correct?
18	00	18	A. That may be a poor assumption.
		19	If I answer, I had a clear
19	EXAMINATION BY COUNSEL FOR NON-PARTY VERUS TRUST	20	
20	oOo		understanding of the question. I have no way of
21	BY MR. KAPLAN:	21	knowing if that aligned with your intent of the
	Q. Good afternoon, Dr. Mullin. I'm	22	question.

4 (Pages 10 - 13)

	Page 14		Page 16
1	So it doesn't necessarily mean that	1	And probably most germane to this
2	your understanding and mine are the same; it just	2	process, I have expertise in estimating future
3	means we both have one.	3	liabilities under various different sets of
4	Q. Well, the benefit will be that if you	4	assumptions and which get into the estimation
5	think there's a problem with the question in any	5	process itself but in terms of the data inputs and
6	way, you shouldn't answer; you should tell me.	6	how they affect that and the statistical properties
7	Because if you do, I promise you, when, we get to	7	and, hence, the precision.
8	court, I'm going to hold up the deposition	8	So it's really estimation and
9	transcript and say you answered, so you understood.	9	statistics are probably the two applications, but
10	All right?	10	there's a lot of underlying training and expertise
11	A. And I will tell the judge what I	11	that underlies those two areas.
12	understood, so it will be fine.	12	Q. Okay. Did anyone assist you in
13	Q. Terrific. And we will be off to the	13	preparing your declaration that was submitted here?
14	races there.	14	A. Yes.
15	Lastly, if you need a break in this	15	Q. Okay. And who are those people?
16	very, very short session, hopefully, that we	16	A. I couldn't give you a whole list
17	have we'll take one for sure, but please let me	17	sitting here. My process I work with a team
18	know at any time.	18	Q. Okay.
19	And, obviously, if there's any	19	A and I draft reports with the team.
20	question of privilege, somehow, that came up, we	20	I ultimately review them and edit them to make sure
21	can stop, take a break and get the privilege issue	21	they reflect my opinions. And that work done is
22	resolved and come back in. But I don't think we're	22	under my direction.
	Page 15		Page 17
1	going to have that issue today.	1	Q. Okay. And I'm going to mark for you,
2	All right.	2	just so that we have and we can get started with
3	(Pause.)	3	it
4	BY MR. KAPLAN:	4	MR. KAPLAN: Can we just call it
5	Q. So, Doctor, what is it that you're	5	CM-1? Anyone have a problem with that?
6	being being proffered as an expert in here?	6	MR. EVERT: Sure, that's fine.
7	A. I'm the proffer I don't control.	7	MR. KAPLAN: CM-1.
8	I've been asked to really explain the difference	8	It is your and I apologize for
9	between using a 10 percent sample or 10 percent	9	those in Zoom world. I don't have electronic
10	sample of what's really about a 3 percent sample of	10	copies to share, but it's Dr. Mullin's
11	the claims data already or using the 3 percent we	11	declaration at Docket 55, filed on March 9th,
12	asked for in the \$12,000 in totality and how that	12	2023.
13	would affect the precision of the ultimate analyses	13	I do have copies for the room
14	offered in estimation down the road.	14	some copies for the room.
15	Q. Okay. My question was a little more	15	oOo
16	straightforward than that. Let me rephrase it for	16	(CM Deposition Exhibit Number 1,
17	you because it might be you didn't understand.	17	Declaration of Charles H. Mullin,
18	What is your expertise in?	18	Ph.D., marked for identification, as
19	A. I'm trained as an economist. I have	19	of this date.)
20	extensive expertise in statistics, econometrics,	20	oOo
21	economic modeling. I have applied those in a mass	21	BY MR. KAPLAN:
22	tort setting frequently.	22	Q. Okay. Do you recognize this

5 (Pages 14 - 17)

	Page 18		Page 20
1	document, Dr. Mullin?	1	point today.
2	MR. EVERT: Hang on one second.	2	Did you meet with counsel in advance
3	I just wanted to make sure, for	3	of the deposition?
4	everybody on the phone, that they know	4	A. I did.
5	it's because he's filed more than one	5	Q. Okay. How many hours did you meet
6	declaration in the case. So it's Docket	6	with counsel for?
7	it's the declaration at Docket 55 is	7	A. In terms of this is the topic?
8	the declaration filed in association with the	8	Around an hour, maybe an hour and a
9	I believe with the Motion for	9	half.
10	Reconsideration, although	10	Q. Okay. And when was that?
11	MR. KAPLAN: Sure hope it is.	11	A. So a meeting on Thursday or Friday of
12	MR. EVERT: Yeah, that's right.	12	last week and then a little bit of time before the
13	MR. KAPLAN: Okay.	13	start of the deposition this morning.
14	BY MR. KAPLAN:	14	Q. Let me just say this: The document
15	Q. You recognize that document,	15	which we've showed you as CM-1, this declaration
16	Dr. Mullin?	16	for the motion for reconsideration is this the
17	A. I do.	17	only document that you are planning on relying on
18	Q. Okay. And the team that you talked	18	in the for the June 6th hearing?
19	about in the process you use is that what you	19	MR. EVERT: I'm sorry. Let me
20	used to prepare what we're calling CM-1?	20	ask, when you say "document," do you mean
21	A. Correct.	21	declaration?
22	Q. Okay. Do you know how many hours you	22	MR. KAPLAN: I'm sorry.
	Page 19		Page 21
1	spent in preparing this?	1	Declaration. Bad wording. Yes.
2	A. I do not.	2	THE WITNESS: I don't know the
3	Q. Okay. How much time did you spend	3	technicalities of it. I had a similar
4	preparing for your deposition today?	4	declaration that I think was in response to
5	A. Specifically for the deposition?	5	an action in New Jersey, and I don't know the
6	Probably five to eight hours.	6	technicalities of how that transfers over.
7	Q. Okay. Did you speak to anyone	7	But there's a lot of overlap in the content
8	besides counsel about your deposition today?	8	of those two. But, really, the content
9	A. I spoke with a couple members of my	9	across those would be the focus of that
10	team.	10	testimony as I see it.
11	Q. Okay. And what did you talk about	11	BY MR. KAPLAN:
12	there?	12	Q. Okay. Are you preparing any kind of
13	A. So, first, I'll clarify what I mean	13	supplemental declaration in response to Dr. Wyner?
14	by "prepare," because that will give context, which	14	MR. EVERT: I'm just going to
15	is I reviewed Dr. Wyner's rebuttal report	15	break in, Michael.
16	Q. Okay.	16	I think we agreed we weren't going
17	A and so I talked to my team about	17	to do that, that this was going to be his
18	that report and talked to principally, that was	18	supplemental declaration.
19	the main topic of conversation with my team.	19	You weren't part of those
20	Q. It was about Dr. Wyner's report?	20	discussions, so I apologize for jumping in
21	A. Correct.	21	and answering the question, but yeah. So

6 (Pages 18 - 21)

	Page 22		Page 24
1	we would be relying on any declarations	1	context.
2	Dr. Mullin has filed that are applicable to	2	I've done sampling in, I guess
3	the Trust discovery issue; but, no, he's not	3	with the Consumers Finance Bureau [sic]. There's
4	going to file his deposition is going to	4	probably other cases as well, but I've used
5	serve sort of as his response.	5	sampling in an array of different positions.
6	MR. KAPLAN: Excellent. All	6	Q. How about in any type of mass tort
7	right. Good. That will short-circuit some	7	case?
8	of some of those questions.	8	A. Most of those insurance coverage
9	BY MR. KAPLAN:	9	actions involve mass tort claims
10	Q. I apologize, Dr. Mullin. I was	10	Q. Okay.
11	not were you present at the March 30th, 2023	11	A so definitely, in relation to mass
12	hearing that sort of preceded this round of	12	torts, I've given opinions on sampling before.
13	exercises we're doing right now?	13	Q. Okay. Can you recall the last time
14	A. I was present at a hearing. If that	14	you gave an opinion on sampling in in a mass
15	was the date of it	15	tort case?
16	Q. Yeah.	16	A. It's common. I'd have to go look. I
17	A probably.	17	don't know the last time I did it.
18	MR. EVERT: Yes, he was.	18	Q. Okay. And you said in the insurance
19	MR. KAPLAN: He was there.	19	context.
20	BY MR. KAPLAN:	20	Who is it that retained you in those
21	Q. Okay. Excellent.	21	contexts in those cases excuse me, not
$\begin{vmatrix} 21\\22\end{vmatrix}$	All right. So I want to focus you in	$\begin{vmatrix} 21\\22\end{vmatrix}$	contexts, cases?
22		22	
1	Page 23	1	Page 25
1	on on, really, two questions two sets of	1	A. I've been retained by policyholders;
2	questions today others may have other questions,	$\begin{vmatrix} 2 \\ 2 \end{vmatrix}$	I've been retained by insurance companies; I've
3	but I want to focus you in on two. The first is	3	been retained by reinsurance companies, whether
4	that judge's question about why sampling doesn't	4	it's reinsurance and insurers in litigation, and
5	work for the Debtors' side, and the second is why	5	retrocession errors. So it's kind of up and down
6	sampling wouldn't reduce the risk of even human	6	the line.
7	error of missing some PII being disclosed.	7	Sampling is common regardless of who
8	Okay?	8	my clients are in those contexts.
9	A. Okay.	9	Q. Okay. You were involved in the in
10	Q. All right. By background, have you	10	the Mallinckrodt case, correct?
11	offered an expert opinion previously on the	11	A. Correct.
12	sufficiency of a sample side?	12	Q. What was it that you did there?
13	A. Yes.	13	A. I was retained relatively late in
14	MR. EVERT: In any case?	14	that case. There was a settlement in place. There
15	MR. KAPLAN: In any case.	15	were objectors to that plan, and I was brought in
16	MR. EVERT: Okay.	16	to discuss the reasonableness of the settlement
17	BY MR. KAPLAN:	17	Q. Okay.
18	Q. How many of the cases?	18	A with regard to opioid claimants in
19	A. I couldn't give you a count. I know	19	particular was the emphasis of that.
20	it's a common topic in the insurance coverage work	20	Q. Okay. If you flip to Page 17 of 30,
21	that I've done, so it comes up frequently in that	21	the ECF page numbers on the top of your
22	context. So that's going to be the principal	22	declaration, there is a list of selected

7 (Pages 22 - 25)

	Page 26		Page 28
1	experience.	1	sampling in the ACE Bermuda Insurance versus
2	Does that document help refresh your	2	3M arbitration.
3	recollection at all in terms of the case in which	3	(Whereupon, the witness continues to
4	you offered an expert opinion on sampling, outside	4	review the material provided.)
5	of this case, of course?	5	THE WITNESS: The General Re-SCOR
6	A. In general, this is the cases I'm	6	matter, about two-thirds, three-quarters of
7	allowed to publicly disclose at this point	7	the way down Page 19, had sampling.
8	Q. Okay.	8	(Whereupon, the witness continues to
9	A so there's numerous cases on this	9	review the material provided.)
10	list where I would have offered opinions on	10	THE WITNESS: My recollection is
11	sampling.	11	there was sampling in the bottom two on that
12	Q. Can you give me an example of of	12	page.
13	an opinion again, obviously, we can only ask you	13	MR. EVERT: That would be the
14	about publicly available cases and you can only	14	AIU Insurance and the THAN?
15	disclose publicly available cases.	15	THE WITNESS: Yep.
16	So looking at this list, which is the	16	(Whereupon, the witness continues to
17	universe we're working off here, can you give me an	17	review the material provided.)
18	example of a case which you offered an opinion on	18	THE WITNESS: I believe the fourth
19	sampling in?	19	bullet on Page 20, the National Indemnity
20	A. Some of the analyses that are in the	20	matter there versus the State of Montana.
21	public domain of what I've done on the Aearo	21	I believe the next one, Newco
22	bankruptcy originally dealt with the 1 percent	22	versus Allianz, had sampling.
	Page 27		Page 29
1	sample that had been drawn in the MDL	1	The U.S. Silica versus Ace matter
2	Q. Okay.	2	two-thirds the way down the page had
3	A so I didn't design that sample,	3	sampling.
4	but I utilized that sample.	4	I think the third from the bottom,
5	(Whereupon, the witness reviews the	5	Cannon Electric versus Affiliated, had
6	material provided.)	6	sampling.
7	THE WITNESS: Fourth bullet on	7	The Goodrich matter, penultimate
8	what's Page 18 of 30	8	one on the page, had sampling.
9	BY MR. KAPLAN:	9	I did a lot more insurance work
10	Q. Yeah.	10	earlier in my career, and we're going to
11	A is the Consumer Finance Protection	11	start to get a long list of them if not, we
12	Bureau case in which I've designed and utilized a	12	can keep going if that's sufficient.
13	sample.	13	BY MR. KAPLAN:
14	(Whereupon, the witness continues to	14	Q. Let me stop you there for a second
15	review the material provided.)	15	no. Let me stop you there, which is in in
16	THE WITNESS: I had input in some	16	the cases that you identified on these first few
17	of the sampling discussions in Bestwall. I	17	pages and I understand there's potentially
18	was not ultimately the person who signed off,	18	more were you a proponent or opponent of
19	but I had input into those.	19	sampling in those cases?
20	(Whereupon, the witness continues to	20	A. I don't really view it as either.
21	review the material provided.)	21	Q. Okay.
22	THE WITNESS: There was some	22	A. I mean, I'm trying to work towards

8 (Pages 26 - 29)

	Page 30		Page 32
1	getting sufficiently precise opinions for the	1	sense for the question at hand and the facts at
2	parties to resolve a matter. And it's	2	issue.
3	fact-specific as to any given matter whether	3	Q. Let's look at see if I can put
4	sampling or a census or some other process is	4	this into some specifics here.
5	what's going to be most efficient in getting to	5	You said that you offered an opinion
6	resolution of the case, in reality.	6	on sampling in the Aearo Technologies case,
7	And so that's really how I approach	7	correct?
8	these. I'm neither pro sampling or against	8	A. I said I used I had opinions that
9	sampling. I'm what's going to work most	9	utilized a sample
10	effectively in a given setting.	10	Q. Okay.
11	Q. So let me understand.	11	A and I utilized the 1 percent
12	Is it your testimony that different	12	sample that was preexisting from the underlying MDL
13	cases can have different outcomes with respect to	13	proceeding.
14	sampling in terms of whether it's efficient or not	14	Q. All right. And in your opinion, was
15	efficient?	15	that sample sufficient for the purpose you were
16	A. Correct. It's a cost-benefit	16	using it for?
17	analysis		
18	Q. Sure.	17 18	A. For the scope of the opinion I was doing, I mean, it was a constraint. It was the
19	A and you're looking at that	19	
20	cost-benefit analysis, which is going to be		only thing available at the time, so it more
21	fact-specific to the case. And sometimes it makes	20	prescribed the strength of the opinion I was able
22	sense to look at the census.	21 22	to offer.
22		22	So by construction, it was sufficient
1	Page 31  In this case, for example, we are	1	Page 33 for the opinion I offered. With more data, I could
2	using the entire Debtors' historical claims	2	have offered a more refined opinion.
3	database. We're not saying let's use a 10 percent	3	Q. Okay. How about in the Consumer
4	sample of data already in electronic format. We're	4	Financial Protection Bureau case? You said you
5	saying no, we use all of it because it's all	5	offered an opinion I don't want to misstate
6	already in electronic form. And that's going to,	6	it that utilized sampling or on sampling.
7	on a cost-benefit analysis, make sense as opposed	7	Which was it?
8	to sampling from the historical claims data.	8	A. I designed the sample on that case
9	You know, in contrast, when you look	9	
	at claim files in the case and you say what	10	<ul><li>Q. Okay.</li><li>A it involves literally millions of</li></ul>
10			
11	historical claim files might want to get produced	11	phone calls. So it would be completely time
12	and reviewed, that's an expensive operation; you do		prohibitive to have people listen to the millions
13	sampling.	13	of phone calls and do something comprehensive. So
14	So in one case, you turn over	14	from a cost-benefit analysis, it was necessary
15	everything because it's already in electronic	15	there to use sampling.
16	format. In the other case, because there's a large	16	Q. I think you said you participated in
17	volume of manual labor and cost and time, you use a	17	Bestwall, but I think we all understand you didn't
18	sample.	18	offer the principal opinion there, correct?
19	So even within this case, there's	19	A. I haven't filed any declarations or
I	places where my opinions are use all the data, and	20	reports in Bestwall.
20			-
20 21 22	there's other places where it's use a sample of the data. It's not one or the other; it's what makes	21 22	Q. Okay. Good.  How about you said ACE Bermuda

9 (Pages 30 - 33)

	Page 34		Page 36
1	you utilized a sample there?	1	This is where, if you say
2	A. Correct.	2	"specialized," I think HITRUST would say some of
3	Q. And what was the context in that	3	that is specialized, but I'm not sure what you mean
4	case?	4	by that.
5	A. Well, it's a Bermuda form insurance	5	So I've gone through the training
6	action, which I think means it's all	6	that goes along with the company getting all of the
7	confidential	7	security credentials.
8	Q. Okay.	8	Q. Okay. Have you taken any beyond
9	A so I don't think I can really tell	9	what the company is is offering, any specific
10	you the substance of it outside of it's insurance	10	type of coursework on data privacy?
11	coverage.	11	A. No.
12	Q. Okay. That makes it a little	12	Q. Do you have any certifications, you,
13	difficult to how about let's go down to the	13	yourself, in data privacy?
14	bottom of the page to the AIU versus	14	A. No.
15	Philips Electric that's in Delaware Chancery?	15	Q. All right. Have you ever been
16	Public that you can talk about?	16	proffered as an expert in data privacy previously?
17	A. I know the two the general	17	A. No.
18	theme the two that are there are connected to	18	Q. Okay. And finally I'm fairly
19	each other. It's really the same opinion in both.	19	certain I know the answer to this, but if you tell
20	They both stem from the THAN Trust. And AIG and	20	me "yes," I'm going to be pretty surprised which
21	the THAN Trust had coverage litigation, and they	21	is is you're not a lawyer, correct?
22	were seeking discovery on the underlying records	22	A. No.
	Page 35		Page 37
1	from the THAN Trust itself.	1	Q. All right. We're off to a good
2	Q. Okay. And what was it how did the	2	start.
3	opinion on sampling work in there?	3	You're not qualified to offer a legal
4	A. I have a recollection sampling was in	4	opinion on the question of law, right?
5	it, but I don't recall, sitting here. I haven't	5	A. That's a whole different question,
6	reread that even if I have it still. I don't think	6	but I don't intend to offer any.
7	those are both in the public domain, but I'm not	7	Q. Are you qualified to offer a legal
8	100 percent certain of that.	8	opinion on the Federal Rules of Civil Procedure?
9	Q. It's in the SDNY. Everything is in	9	A. I don't intend to offer any.
10	public there.	10	Q. Not my question.
11	Have you ever offered an expert	11	Are you qualified to offer an opinion
12	opinion on data privacy before?	12	on the Federal Rules of Civil Procedure, in your
13	A. No.	13	view? This is only your view.
14	Q. All right. Do you have any type of	14	A. No.
15	specialized training in data privacy?	15	Q. Okay.
16	A. I don't know what you consider	16	All right. I showed you before if
17	specialized. We have an entire technological	17	we can flip back to the meat of your sort of
* '	services department; we have HITRUST certification;	18	your declaration there, CM-1.
18	and the second s		
18 19	we have SOC 2 certification. Part of all of that	19	Anyining in there that needs to be
19	we have SOC 2 certification. Part of all of that certification is training for everybody at	19 20	Anything in there that needs to be corrected before we dive into it?
	we have SOC 2 certification. Part of all of that certification is training for everybody at Bates White, including myself. So I've had all of	19 20 21	corrected before we dive into it?  A. Not that I'm aware of.

10 (Pages 34 - 37)

	Page 38		Page 40
1	All right. In looking through the	1	and what's the cost of gaining access to that data.
2	declaration, Dr. Mullin, can you point me to which	2	That's the trade-off of sampling
3	paragraph or paragraphs contain your opinion on why	3	always. So to you can't answer questions absen
4	the proposed 10 percent sample is not sufficient	4	that framework about sampling.
5	for the Debtors?	5	Q. Okay. Let me try it this way: Why
6	(Whereupon, the witness reviews the	6	is why is a 10 percent sample not sufficient for
7	material provided.)	7	the stated purposes?
8	THE WITNESS: I think the core of	8	A. Well, so I think this is a place
9	that starts in Paragraph 15	9	where we need to clarify. One, the Debtors have
10	BY MR. KAPLAN:	10	over 400,000 historical claims. I have not asked
11	Q. Okay.	11	for 400,000 data through counsel as a request to
12	A and probably runs through	12	assist in our work. We asked for 12,000; less that
13	Paragraph 18 of how the data would be used in broad	13	3 percent.
14	brush strokes.	14	So this isn't like the examples where
15	Q. Okay. And is it your opinion that a	15	the Trusts say, Federal-Mogul asked for 435,000
16	10 percent sample is not sufficient for the	16	Claimants; they asked for 12,000; 3 percent. So I
17	purposes?	17	was prudent. I did take into a sense the costs of
18	A. So it's my opinion that on a	18	this, and I asked for 3 percent through counsel to
19	cost-benefit assessment, which is how you decide	19	get data on a very limited set of 3. And now I'm
20	whether you should sample or not, the benefits	20	being asked to go, for the sake of the analysis,
21	greatly outweigh the costs here, so it makes sense	21	from 3 percent to .3, 10 percent of 3 percent.
22	to get those benefits when they outweigh the costs.	22	So you're going to say it's
	Page 39		Page 41
1	So it's going to allow me an estimation to give a	1	10 percent?
2	much more precise answer and address some questions	2	I think you're asking me to take
3	that otherwise I may not be able to address or	3	.3 percent of the available data, not 10, and move
4	quantify reliably, so it so, yes, because it	4	from what was already a request for 3 down to .3.
5	passes that cross cost-benefit analysis.	5	So if we're going to say 10 percent,
6	Q. Okay. Yeah, the is your entire	6	let's make sure it's 10 percent of 3 percent, which
7	opinion related to the sufficiency tied to just	7	I think is the intent of your question. But I want
8	cost-benefit?	8	to make that very clear, if that's how we're going
9	A. I mean, that is the fundamental	9	to use the terms.
10	principle of designing a sample and when do you	10	Q. Well, let's see let's drill down
11	sample and when don't you, so you can't really	11	on that because I don't represent the Debtor as,
12	answer these questions about is sampling	12	you know; I represent one non-party.
13	appropriate or not in the absence of talking about	13	So can you explain to me how it is
14	what it costs.	14	you're getting from this 10 percent to 3 percent to
15	If there's zero cost to having all	15	.3 percent? Because I'm not I'm not following.
16	the data, you should use all the data because	16	A. Okay.
17	you'll be more precise, and why would you give up	17	So the Debtors have faced hundreds of
18	the precision? If it's impossible to get all the	18	thousands historical claims in the tort system.
19	data, it's a silly exercise to talk about what	19	Some requests that have gone to the Trusts from
20	would happen if we did get it. So the two are	20	prior parties have requested their entire
21	can't be separated, the what are the benefits,	21	historical data, so hundreds of thousands of
	what are the things that the data enable you to do	22	claims.

11 (Pages 38 - 41)

	Page 42		Page 44
1	I don't think I need that. I have	1	Debtors, you would be asking a request for over
2	tried to filter this down in how we think about	2	400,000 people.
3	this request. We asked for 12,000. We I	3	That's not what the request was. It
4	already said, anything before 2005, it's not going	4	was for 12,000, around 3 percent of the universe of
5	to give me enough information that I need to go	5	historical Claimants that these two Debtors have
6	after that right now.	6	received claims from.
7	I eliminated all dismissed claims.	7	So it started targeting at 3 percent,
8	Dismissed claims have been produced in other	8	3 out 100, and so it's the universe of Claimants
9	contexts. They were produced in Garlock. They	9	who brought tort claims against the Debtors'
10	contain a little bit of information that would help	10	prepetition. That's the initial universe.
11	but not a lot. That's 80 percent of the	11	Q. Is it your testimony that the Verus
12	mesothelioma claims, for example, against Murray	12	Trusts possess 400,000 Claimants' worth of
13	resulted in dismissal. I've already eliminated	13	information?
14	those. I've constrained it to just mesothelioma	14	A. I think you can look at reports, and
15	claims.	15	they have more than 400,000 Claimants that filed
16	So it's not that I asked for the	16	claims against entities by the Verus Trusts, but
17	ocean through counsel in these requests. I'm	17	what's the overlap the question of what's the
18	seeking for estimation a very targeted subset	18	overlap between the 400,000-plus the Debtors faced
19	that's going to be most informative. That's about	19	and which ones are in file a Trust claim against
20	3 percent of the historical Claimants. I'm seeking	20	Verus. But the Verus entities have received more
21	information on those three through the subpoenas	21	than claims on behalf of more than 400,000
22	or, really, the Debtors, on my behalf, are seeking	22	individuals.
	Page 43		Page 45
1	that. So that's where I'm saying we're starting at	1	Q. Let's try it this way: What is it
2	3 percent. And now others are saying, Let's go	2	that the Debtors need excuse me.
3	from 3 to .3, take 10 percent of that 3 percent.	3	Strike that.
4	Q. Okay. So you're talking about the	4	What is it that you need this
5	totality of the universe; you aren't being specific	5	information for that you asked the Debtors to go
6	to for instance, I represent the Verus Trusts.	6	get it?
7	Are you familiar with those?	7	A. So when estimating future
8	A. Yes.	8	liabilities, there's a few different steps in that
9	Q. Okay. Your testimony is that	9	process. One is, how many future people will
10	in in looking at the information the Verus	10	develop mesothelioma with the types of
11	Trusts potentially possess as a whole, that's how	11	characteristics that would make them compensable
12	you're drilling down from 10 percent to 3 percent	12	against these Debtors?
13	to .3 percent, correct?	13	When doing that exercise, the
14	A. No.	14	industry and occupational work backgrounds of
15	Q. Okay.	15	Claimants matters. That affects the odds that they
16	Are you only looking for what is	16	will be compensable. So when you're doing this
17	the limitation on the Verus Trust, then?	17	forecast, you'd really like to break Claimants down
18	A. So the Debtors, Aldrich and Murray,	18	into industry and occupational groups that have
19	combined have over 400,000 received claims on	19	different levels of valuation associated with them.
20	behalf of 400,000-plus Claimants. So if you wanted	20	So one of the things that this data
21	to collect information on all the historical	21	provides is, in electronic form already, a rich set
22	Claimants that have brought claims against the	22	of industry and occupational work history

12 (Pages 42 - 45)

	Page 46		Page 48
1	information, so you're able, then to forecast by	1	in 12 go to a subpopulation that I need to estimate
2	different industry and occupational groups because	2	something on behalf of; now I have only a sample
3	they have different demographic characteristics.	3	size of 100 to answer that question. And that's
4	So some of those groups taper off more quickly, so	4	not sufficient.
5	the claims would decrease faster. Some will	5	So when you start peeling down, if
6	decrease more slowly.	6	you really want to ask a question that's just one
7	So to get a more precise estimate of	7	average for the whole population, 1,200 claims, in
8	the number of future claims that the Trust would	8	general, would be enough. But as soon as you start
9	receive, you really want to do the analysis by	9	saying there's a subpopulation of interest, like
10	industry and occupational groups; that both gives	10	maybe pipefitters and electricians are different
11	you a more precise estimate of the totality of the	11	from carpenters, maybe certain jurisdictions are
12	liability and, probably just as importantly, it	12	different from others, so you need to look at a
13	helps you better protect future Claimants relative	13	subset, I no longer get to look at 1,200 claims,
14	to pending Claimants. Because when you do this	14	and so I need those subsets to also be big enough
15	type of a forecast, forecasting the number of	15	to give reliable opinions and accurately estimate
16	claims the Debtor would have received one year post	16	the future.
17	petition, that's easy, relative to forecasting the	17	Q. Okay. So let me is it before
18	number of claims the Debtor would receive 20 years	18	we go further, any other reasons why you ask the
19	post petition.	19	Debtor to go get this information?
20	The further into the future you go,	20	A. There's what's the bulk of
21	the more uncertainty. And so we want to minimize	21	Paragraphs 15 and 16, which is really what fraction
22	that because we really don't want to be in a	22	of a Claimant's exposures were known to the Debtors
	Page 47		Page 49
1	position where future Claimants are getting paid	1	at the time of settlement. So that's the thrust of
2	less than the pending Claimants, so improving that	2	Paragraphs 15 and 16 in my declaration, so that's
3	forecast is important.	3	another issue where this information would be
4	Q. Okay. Any other reason the Debtor	4	important.
5	needs the information?	5	Q. All right. Let's start with that
6	A. So there's a second piece besides	6	one, which is you say, What information was known
7	that uses that same type of information to help you	7	to the Debtors at the time of settlement?
8	design a claims resolution process and then,	8	That is, it's how does that help
9	similarly, helps you show that that claims	9	advance the ball of the case?
10	resolution process is feasible at confirmation, so	10	MR. EVERT: I'm going to object to
11	you're using it for those purposes as well.	11	the form of the question. I'm not sure what
12	Depending on the exercise you're	12	you're asking.
13	doing, but, in particular, under what is often the	13	THE WITNESS: So little bit of
14	Plaintiff's theory in these cases, you're trying to	14	history: Key aspect of the Garlock case was
15	do an estimate of what Claimants would have been	15	that Judge Hodges found that not all that
16	paid in the tort system; and that's something that	16	information had been revealed and concluded
17	varies by both industry, occupation but also law	17	that tainted the tort history, so
18	firm, jurisdiction.	18	extrapolating historical tort settlements
19	And so when you start asking these	19	into the future wasn't appropriate.
20	questions, it may be that only 100 of the 1,200	20	The Plaintiffs assert and it
21	claims apply to a question of interest, so that's	21	may turn out to be true that post Garlock,
		1	* '

13 (Pages 46 - 49)

	Page 50		Page 52
1	BY MR. KAPLAN:	1	Zoom world, the cover page is not filed
2	Q. What behavior specifically?	2	anywhere, but the thrust of what I'm about to
3	A. Not revealing the totality	3	talk about is filed at
4	suppressing information or not revealing	4	MR. EVERT: It's the order
5	Q. Okay.	5	granting the subpoenas
6	A all the alternative exposure	6	MR. KAPLAN: Yeah, Docket 1240.
7	information.	7	Yep.
8	Whether or not that stopped is an	8	MR. EVERT: right, Docket 1240
9	empirical question. For mine, maybe that did stop	9	in the main case.
10	completely. Maybe it's identical to what was in	10	MR. KAPLAN: Yes.
11	Garlock. I don't have an opinion about that. I	11	BY MR. KAPLAN:
12	want to look at the data and have the data tell me,	12	Q. All right. Have you seen that
13	is that going on or not going on.	13	document again, I want to focus in on the order
14	That was a very salient fact in the	14	here, Dr. Mullin.
15	estimation in Garlock. I would expect the outcome	15	Have you seen this document before?
16	of that empirical exercise to be a salient fact	16	A. I believe I've seen the order before.
17	here. So that speaks directly to an aspect of what	17	Q. Okay. Excellent.
18	you could potentially rely on a tort system	18	I want to focus you in on Paragraph 5
19	settlement for or not. So that's one spot where	19	of the order, which is, I believe, what we were
20	answering that question is going to directly enter	20	just covering a moment ago, which talks about what
21	into an estimation process.	21	the subpoenas are seeking evidence for.
22	Q. Okay. I want to show you the this	22	Do you see that?
	Page 51		Page 53
1	is just an exemplar subpoena of one. I believe	1	A. I do.
2	they all were fairly similar, but this was one that	2	Q. All right. And I believe that the
3	was issued to the ACandS Asbestos Trust in	3	first thing you spoke to me about was the the
4	connection with the when it was grouped	4	estimation of the Debtors' liability for current
5	in New Jersey.	5	and future asbestos-related claims and the
6	MR. KAPLAN: We'll mark this as	6	negotiation, formulation and confirmation of the
7	CM-2, and I have copies to share with	7	plan, correct?
8	everybody.	8	MR. EVERT: I'm sorry.
9	(Sotto voce discussion.)	9	Could you repeat that question?
10	oOo	10	MR. KAPLAN: Sure. I'm just
11	(CM Deposition Exhibit Number 2,	11	trying to he gave me if I recall, there
12	Subpoena to Produce Documents,	12	were three areas which he gave me to
13	Information, or Objects or to Permit	13	BY MR. KAPLAN:
14	Inspection of Premises in a	14	Q that you needed the data for: One
15	Bankruptcy Case (or Adversary	15	was forecasting; one was call it claims
16	Proceeding), marked for	16	resolution and and the Trust distribution; and
17	identification, as of this date.)	17	the third I'll generally refer to as the "Garlock
18	oOo	18	problem."
19	BY MR. KAPLAN:	19	Okay?
1	Q. Take a look at that, and let me know	20	Did I get those right, those three
20	<b>C</b> ,,,	1	E
20 21	whenever you're ready.	21	what the three purposes?

14 (Pages 50 - 53)

	Page 54		Page 56
1	have a lot of inputs into, the Garlock problem is a	1	mesothelioma claims provide a reliable basis for
2	subset of that, if it exists. You know, so there's	2	estimating the Debtors' asbestos liability, is it
3	estimating liability; and there's designing the	3	your opinion that a 10 percent sample would not be
4	plan; and then there's showing the plan as feasible	4	sufficient?
5	in confirmation.	5	A. For most aspects of that, I'm
6	Q. Okay.	6	actually constraining myself to a 10 percent sample
7	MR. ANSELMI: I'm sorry.	7	already.
8	Could you repeat that last answer?	8	So for most aspects of that like,
9	I couldn't hear.	9	for example, whether or not all the exposures have
10	Or could you repeat it back, what	10	been revealed there's a comparison of Trust data
11	the answer was?	11	to underlying Claimant information as collected
12	000	12	from the claim files, that's being envisioned as a
13	(Whereupon, the certified	13	comparison of claim file sample to the Trust data
14	stenographer read back the pertinent	14	and would likely be done with approximately 1,200
15	part of the record.)	15	Claimants.
16	oOo.	16	So for most of the things that I
17	MR. ANSELMI: Okay.	17	think would fall under that, the 10 percent sample
18	BY MR. KAPLAN:	18	is already being used, because it would be
19	Q. So that's what I was trying to drill	19	that's where the claim file production, which is
20	down on, what this is.	20	not already in electronic format so has a different
21	Your testimony is that this this	21	level of expense associated with it, has a
22	if we look at the colon past "specifically,"	22	different cost-benefit analysis. And so that's the
	Page 55		Page 57
1	there's a semicolon, and then we get to The	1	binding constraint on addressing the bulk of what
2	estimation of the Debtors' asbestos liability is	2	would fall under that first item.
3	the second phrase or clause there, correct?	3	Q. Okay. How about with respect to the
4	A. Correct.	4	estimation of the Debtors' asbestos liability is
5	Q. And that's where your testimony is is	5	it your opinion that a 10 percent sample would no
6	that the determining whether that there was a	6	be sufficient for that?
7	similar issue in Garlock falls in?	7	A. "Sufficient" is probably not the term
8	A. Correct. This is broken out a little	8	I would use.
9	different, probably the phrase before that	9	Could I perform an estimate with a
10	semicolon	10	10 percent sample if constrained? Yes. That
11	Q. The reliable basis	11	estimate would have a much broader range of
12	A in this context, is probably where	12	uncertainty about it, and so the Court would have
13	the Garlock part falls; but yes.	13	less guidance; the Trust would have a higher risk
14	Q. Okay. And this "permitted purposes"	14	of not reserving enough funds for future claims.
15	term is a defined term that I didn't design, but	15	So this is a question of precision,
16	I'm going to go with it.	16	right? It's is it worth gaining the extra
17	You see that term there which talks	17	precision for whatever costs are associated with
18	about the permitted purposes?	18	producing those data?
19	A. I do.	19	It's still feasible to give an
20	Q. Okay. My question is this: With	20	opinion, but you're just going to have a lot less
21	respect to the first permitted purpose, the	21	precise about that opinion.
22	determination of whether prepetition settlements of	22	Q. Let's stop there for a second with

15 (Pages 54 - 57)

	Page 58		Page 60
1	respect to precision.	1	or 10 percentage points of precision to the type of
2	Can you quantify how much less	2	estimate you're making, and that would be when
3	precise 10 percent would be versus, say, for	3	you're talking hundreds of millions of dollars, 5
4	example, a 12 percent sample size?	4	or 10 percentage points can be a lot of money.
5	A. So there are areas where I was	5	You know, I haven't done all that
6	comfortable doing that. You know, I did drop all	6	work. I don't have the data, so I don't know
7	the dismissed claims from the request. I dropped	7	exactly what it's going to move it. That's
8	everything that wasn't a mesothelioma from the	8	something you can't know until after the fact.
9	request. So there's areas where I felt like I had	9	Q. Again, I'm trying to understand if
10	the information to have confidence that	10	there is a way to so I think I understand you
11	constraining myself to 3 percent of the historical	11	said it's not quantifiable, but let me just make
12	claims that the Debtors have received would still	12	sure.
13	leave me in a position where I hadn't given very	13	The precision of a 10 percent versus
14	much up in terms of precision.	14	a 15 percent sample size again, this is all
15	Beyond that, it's very hard to	15	before you have the data you're not able to
16	quantify until you have the data, because you don't	16	quantify the mathematical difference in terms of
17	know what you're going to find.	17	how precise they would be?
18	So, for example, if you take the	18	A. So there are places where you could
19	Garlock-style question, if it turns out that the	19	be concrete.
20	assertions of the Plaintiffs' bar is validated and	20	Q. Okay.
21	all exposures are being revealed in a	21	A. So if you took, for example, a law
22	contemporaneous manner, that issue just drops out	22	firm that has 400 resolved claims and now we take a
	Page 59		Page 61
1	of the estimation. So I wouldn't need a large	1	10 percent sample of 400 paid claims during the
2	sample size if it turns out for that question if	2	sampling period. Now we take a 10 percent sample;
3	it turns out it never happens.	3	we'd expect to get 40. If it turns out that
4	In contrast, if it happens but it	4	breaking that law firm out and doing analyses by a
5	only happens in select jurisdictions or for select	5	law firm is important, I now have a sample size of
6	types of claims, then I need a lot more data,	6	40, which is going to have three-and-a-half times
7	potentially, to address that.	7	the uncertainty of what I would have had with 400.
8	So saying exactly how much data you	8	400 for that law firm probably would be enough; 40
9	need and the critique that Dr. Wyner said, if I	9	is almost assuredly not. And so now, I'm going to
10	haven't quantified it, that's because it's not	10	introduce a whole bunch of uncertainty.
11	actually quantifiable at the moment, but you're	11	Most of the law firms have well under
12	taking a big risk for you know, on that front.	12	400, so there's only a handful of law firms that
13	On other aspects, like estimating	13	have more than 400 paid claims during this period,
14	claims by industry and occupation group, I haven't	14	so is for all but a handful of them, if you
15	run it in this particular context, but I know the	15	needed to do something by law firm, you'd want the
16	for example, the occupational exposure curve for	16	totality of the available claims out of the 12,000.
17	construction claims goes out about 10 years further	17	There's a couple that have more than
18	as a shift from lots of traditional industrial	18	4- or 500 claims, but it's only a couple. So
19	exposures. So having a good understanding of that	19	that's an example where I know which law firms I'll
20	can move your estimate 5 or 10 percentage points.	20	need to break out and treat separately I don't
21	And so knowing the breakdown of those	21	know yet. When we do financial reporting work,
	<del>-</del>		it's common to break out 10 or 20 law firms in the

16 (Pages 58 - 61)

	Page 62		Page 64
1	analysis to get the most precise estimate of what	1	60 is not going to be enough for almost any
2	we would expect in the tort system.	2	reasonable statistical analysis.
3	So I expect I have to break it out by	3	In contrast, 600 would be.
4	law firm. I expect that analysis to matter	4	Q. Is it your testimony here that there
5	materially to the precision. And if I only get	5	is no percentage, in terms of sample size, that
6	10 percent, I'm going to lose an awful lot of	6	would be sufficient?
7	information from there and my work is going to be	7	MR. EVERT: I'm just going to
8	materially less precise.	8	object. I don't think that's what he said.
9	Q. How much less precise?	9	I think the problem is with the word
10	A. So at the law firm level, you're	10	"sufficient," but
11	going to be, again, more than tripling the amount	11	THE WITNESS: I think quite to the
12	of uncertainty. The baseline level of uncertainty	12	opposite
13	is unknown. You're tripling the uncertainty, but	13	BY MR. KAPLAN:
14	you don't know the baseline until the data comes in	14	Q. Okay.
15	and you do the analysis. So that's not answerable;	15	A I didn't I asked for 3 percent
16	the relative loss is.	16	of the data to start with.
17	Q. Okay. Let me turn to the sort of	17	And so the context that's being lost
18	last point there, and then I'll take a break for a	18	in your questioning is before the Trusts ever
19	couple of minutes.	19	received a request, I had already concluded I don'
20	The development and evaluation of	20	need this for 97 percent of the Claimants to do my
21	Trust distribution procedures for any plan of	21	work and get to a sufficiently precise estimate.
22	reorganization confirmed in these cases, the third	22	So quite to the contrary, I'm more
	Page 63		Page 65
1	purpose.	1	saying 3 percent's sufficient; .3 is not. Taking
2	Okay?	2	away 90 percent of the 3 percent request? No, that
3	Is a 10 percent sample sufficient for	3	wouldn't be sufficient; the 3 percent is.
4	that purpose?	4	So I did that work up front and
5	A. It may turn out to be sufficient for	5	constrained the request to only 3 percent of the
6	some occupational groups you'd want to look at and	6	data.
7	almost assuredly insufficient for others. So,	7	MR. KAPLAN: Okay. All right.
8	again, it's similar to law firm. Until you've done	8	Why don't we take five minutes here? Try to
9	the work, you don't know how you're going to bundle	9	actually make it five minutes, if we can. If
10	those groups together, but it's typical to have	10	not, it will be 10.
11	multiple groups.	11	We'll go off the record.
12	The smallest groups are frequently	12	oOo
	the most highly maid alaims, so you have a your	13	(Whereupon, a recess was taken from
13	the most highly paid claims, so you have a very	13	•
13 14	high per-claim value in a CRP for relatively small	14	1:59 p.m. EDT to 2:10 p.m. EDT.)
14	high per-claim value in a CRP for relatively small	14	1:59 p.m. EDT to 2:10 p.m. EDT.)
14 15	high per-claim value in a CRP for relatively small number of people fitting it, is the typical fact	14 15	1:59 p.m. EDT to 2:10 p.m. EDT.)oOo
14 15 16	high per-claim value in a CRP for relatively small number of people fitting it, is the typical fact pattern. So you're expecting the place that the	14 15 16	1:59 p.m. EDT to 2:10 p.m. EDT.)oOo BY MR. KAPLAN:
14 15 16 17	high per-claim value in a CRP for relatively small number of people fitting it, is the typical fact pattern. So you're expecting the place that the precision matters most to be the place exactly	14 15 16 17	1:59 p.m. EDT to 2:10 p.m. EDT.)oOo BY MR. KAPLAN: Q. All right. Dr. Mullin, we're back
14 15 16 17 18	high per-claim value in a CRP for relatively small number of people fitting it, is the typical fact pattern. So you're expecting the place that the precision matters most to be the place exactly where getting a 10 percent sample instead of all	14 15 16 17 18	1:59 p.m. EDT to 2:10 p.m. EDT.)oOo BY MR. KAPLAN: Q. All right. Dr. Mullin, we're back from the break.
14 15 16 17 18 19	high per-claim value in a CRP for relatively small number of people fitting it, is the typical fact pattern. So you're expecting the place that the precision matters most to be the place exactly where getting a 10 percent sample instead of all the data is going to cause you the biggest problem	14 15 16 17 18 19	1:59 p.m. EDT to 2:10 p.m. EDT.)oOo BY MR. KAPLAN: Q. All right. Dr. Mullin, we're back from the break. Any reason you can't continue?

17 (Pages 62 - 65)

	Page 66		Page 68
1	different times you were talking about you	1	claims that don't get paid. So you to figure
2	had there was a universe of 400,000 claims which	2	out what subsets of claims would be paid, dismissed
3	you limited to which you said was 3 percent of	3	claims are relevant.
4	that and then took it down to .3 were being	4	Q. How about where do administrative
5	asked to take it to .3 percent.	5	settlements factor into your analysis?
6	Do you remember we were discussing	6	A. So administrative settlements, in
7	that?	7	many ways, for estimating liability make the
8	A. Yes.	8	problem more difficult because, frequently, in the
9	Q. Okay. The 400,000 claims that you	9	context of administrative settlements, underlying
10	that the claims universe was starting with are	10	Defendants and these Debtors, in particular, have
11	they all mesothelioma claims?	11	not gone through as exhaustive a discovery process,
12	A. No.	12	so they contain less information about the
13	Q. Okay. Approximately how many of the	13	characteristics of those claims. And understanding
14	400,000 are mesothelioma claims?	14	the characteristics of the actual claims is
15	A. I don't know the exact count.	15	relevant for projecting the number of future
16	Q. That's why I asked for an	16	claims.
17	approximation, because I figured you didn't.	17	Q. Okay. So I think you said just a
18	A. More than 25,000, less than 50	18	moment ago that you were approximating somewhere
19	Q. Okay. And were you asked to do an	19	between 25- to 50- mesothelioma claims of the
20	analysis of nonmesothelioma claims?	20	universe of 400.
21	A. Estimation is currently constrained	21	Did I get that right?
22	to mesothelioma claims, but any plan of	22	A. It's thousands on end of all of those
	Page 67		Page 69
1	reorganization will have to address all claims.	1	numbers, but yes.
2	So for the purposes of the current	2	Q. For yes. Let's get that right for
3	scope of estimation, mesothelioma claims is what is	3	the record purposes because, otherwise, one of us
4	needed, but eventually you'll have to design a	4	will try and use it later.
5	claims resolution process for all claims.	5	A. Don't know which one that would be.
6	Q. Okay. And you also talked about	6	Q. You can bank on that
7	claims you eliminated claims that were	7	MR. ANSELMI: It depends.
8	dismissed, correct?	8	BY MR. KAPLAN:
9	A. Correct.	9	Q you can bank on no, I'm
10	Q. Were you asked to analyze claims that	10	kidding.
11	were dismissed?	11	Your testimony was, if I'm correct,
12	A. Yes.	12	that of the 400,000 or so claims, you believe that
13	Q. Okay. And how is it that you would	13	25- to 50,000 are mesothelioma claims?
14	be analyzing the claims that were dismissed?	14	A. Claims, yes. Claimants it might
15	A. A fundamental question when valuing	15	be a little lower. I'm 80 percent of the Murray
16	claims is which ones will be dismissed and which	16	claims were dismissed; 50 percent of the Aldrich
17	ones will be paid. So you often compare the	17	claims are dismissed. So you need more than double
18	characteristics of dismissed claims to paid claims.	18	the 12,000 because, over half, you have a dismissal
19	If you only look at characteristics	19	rate even for one that's half and 80 percent for
20	of paid claims and say these characteristics are	20	the other. So that's really where I got to the
21	associated with payment, it may turn out that those	21	lower number of about 25,000.
22	exact same characteristics are also associated with	22	But it could go how much higher

18 (Pages 66 - 69)

	Page 70		Page 7
1	than that it goes that could go I haven't	1	3 percent of the approximately 400,000. And I've
2	tabulated it. So it's more than 25,000, and I'm	2	been clear with you the whole time that that was
3	confident it's less than 50- but probably closer to	3	all diseases.
4	25- than 50	4	So if you switch the denominator, the
5	Q. And the subpoenas that brought us all	5	percentage will change no matter and you can
6	together on this lovely spring day in	6	switch it to anything else, and it will be a new
7	Washington, D.C they are seeking information	7	percentage, too. It's not what I was saying
8	about mesothelioma mesothelioma claims, correct?	8	before.
9	A. The request was constrained to 12,000	9	I was actually using the universe of
10	mesothelioma claims; that's correct.	10	claims historically brought against the debts is
11	Q. Okay. So how is it that we get to	11	what's north of 400,000.
12	the 3 percent, .3 percent when you have you're	12	Q. Right. And we agree that the
13	looking for information from 12,000 mesothelioma	13	universe of mesothelioma claims are lower than
14	mesothelioma Claimants out of 25- to 50,000? That	14	that, correct?
15	seems like a higher percentage. I'm not a	15	A. Correct. They have claims of people
16	statistician, but	16	without mesothelioma.
17	A. I answered this question before,	17	Q. Let's turn back let's look at
18	which is there's over 400,000 Claimants. I chose	18	Paragraph 15 of your declaration, which is CM 1 for
19	not to I chose I asked I did not ask the	19	the record purposes.
20	client to seek information on nonmesothelioma	20	And certainly feel free to look at
21	Claimants despite the fact that those could be	21	whatever, but I want to focus in on the last
22	relevant for designing claims resolution processes	22	sentence.
	Page 71		Page 7.
1	or claim or claim feasibility. They could still	1	Whenever you're ready, Doctor, the
2	be helpful in terms of the questions that are	2	last sentence in Paragraph 15.
3	relevant, but they are not as important as the	3	A. Yes.
4	mesothelioma.	4	Q. Yeah. So what you're talking about
5	So I made a choice to constrain and	5	here is that provide more data that will improve
6	not ask for anything that wasn't mesothelioma.	6	the quality of our estimation and
7	Q. You would agree with me that if there	7	claims forecasting work.
8	were, for example, 25,000 mesothelioma Claimants	8	And we've talked a lot about this
9	total, 12,000 is just shy of half, right?	9	previously.
10	A. It would be 48 percent if there were	10	Do you see that?
11	25,000. I can do that math on the fly.	11	A. I do see that.
12	Q. Thank goodness, because all the	12	Q. The number that we're sort of arguing
13	lawyers in the room were looking for their iPhones.	13	about in the context of this hearing are
14	All right. That's that's	14	somewhere a number between 1,200 claim files and
15	48 percent.	15	12,000 claim files, correct? Can we agree on that?
16	And if it were 50,000, can you do	16	A. I think these are electronic records,
10	that math on the fly?	17	not claim files. But 1,200 12,000 Claimants
17		1.0	the information on 12,000 Claimants versus the
	A. Just multiply by 2, so 24 percent.	18	, , , , , , , , , , , , , , , , , , , ,
17	<ul><li>A. Just multiply by 2, so 24 percent.</li><li>Q. Excellent.</li></ul>	18	information on 1,200 Claimants.
17 18			
17 18 19	Q. Excellent.	19	information on 1,200 Claimants.

19 (Pages 70 - 73)

	Page 74		Page 76
1	We're talking about the difference	1	precise; I don't know if we're going to rely on it.
2	between 1,200 Claimants and 12,000 Claimants,	2	So it's a question of how large of a
3	correct?	3	subpopulation are we able to analyze. And that's,
4	A. Correct.	4	I think, the main difference between what Dr. Wyner
5	Q. All right. How much can you	5	was looking at and myself. He's implicitly assumed
6	quantify for me how much getting the, say, 2,400	6	you always only care about a question for the
7	Claimant files would improve the estimation in	7	entire population so you get to use all 1,200
8	claims forecasting?	8	files.
9	A. So and what you can do	9	And as soon as you go to questions
10	definitively is talk about what's the relative	10	that involve a subset of the population maybe
11	improvement in precision. This is actually a place	11	the liability differs by gender, and you want to
12	where Dr. Wyner and I don't disagree. The basic	12	look at females separately, but they're only
13	statistical formulas move with the square root of	13	20 percent of the Claimants.
14	the sample size. So if you quadruple the sample	14	Now, if gender matters, I don't have
15	size, you double your precision. You take the	15	1,200; I have 240. I don't have 12,000. I'm
16	square root of the relative movement.	16	already down to a 20 percent sample, in essence,
17	So asking to take a 10th of the	17	because only 20 percent of the Claimants are
18	sample is asking you to slightly more than triple	18	female.
19	your level of uncertainty in everything you're	19	So as soon as you start looking at
20	doing.	20	subpopulations of interest, 1,200 within a
21	So we're going to present things to	21	subpopulation would be sufficient, but there's many
22	the Court that have three times a little bit	22	subpopulations that would have less than 1,200 if I
	Page 75		Page 77
1	more than three times the uncertainty about them	1	take a 10 percent sample.
2	than if we had the 12,000. We know that's going to	2	Q. Is there a way to design the sample
3	be the relative impact.	3	so that it addresses the subpopulations you're
4	Q. Let's start with the 1,200 out of the	4	interested in?
5	12,000.	5	A. You could attempt to mitigate. So
6	What can you quantify the level of	6	you could say I want 1,200 females out of the 2,400
7	precision there?	7	or so females, if you were to out of the
8	A. Again, it depends on the question.	8	yeah, 2,400 out of if it's about 20 percent, and
9	So I don't disagree with what Dr. Wyner put in,	9	then 1,200 males. You could make it bigger, and
10	where he said, If you're asking the question about	10	that might address that question.
11	a proportion for the totality of the population.	11	But then if you go to law firm if
12	He applied that formula correctly.	12	there's a law firm that only has 300 claims
13	If, on the other hand, you want a	13	Dr. Wyner and I, I think, agree that 30 claims is
14	proportion for one law firm, and that law firm has	14	not enough. We'll probably learn in his deposition
15	300 records that now we only sampled 30, you're	15	whether he thinks 30 claims is sufficient, but, you
16	going to apply that same formula to a population or	16	know, at 300, we'd probably agree I don't want
17	a sample of 30 and you're going to have very large	17	to put words in his mouth, but on the
18	confidence intervals. You can apply the same	18	statistical formulas, that you'd need all 300.
19	mathematical formula. I don't do those in my head.	19	So for any law firm that has less
20	But you will have confidence intervals that are	20	than somewhere usually in the 3- to 500 range, most
21	quite broad that in my experience, broad enough	21	statisticians are going to say you really need to
22	that most courts would say, that's not very	22	look at all of them if you want to be able to use

20 (Pages 74 - 77)

	Page 78		Page 80
1	that data to make projections about the future.	1	I guess your testimony am I
2	Q. Let's talk about turning back to	2	correct your testimony is you cannot quantify the
3	the the 10 percent sample that is being	3	risk sitting here today, put a number on it? If
4	discussed here, is there a way to design the sample	4	the sample what I mean by "quantify," I mean
5	size to address the stated purposes that you're	5	it's only 30 percent reliable or 40 percent
6	looking for?	6	reliable or 50 percent reliable.
7	A. You can mitigate, right you can	7	A. So, ultimately, the Court, in my
8	mitigate the risk. And that is what you do in	8	experience, is who tells me whether it's reliable
9	sample design. Whenever you take a sample, you're	9	or not. What I tell the Court is what's the
10	always taking a risk that you actually won't have	10	uncertainty of the estimate.
11	the information you need. It's in it's	11	And so every time you tell me to
12	intrinsic to sampling.	12	triple my uncertainty, I get nervous. If three
13	And the smaller you make the sample,	13	different inputs all tell me to triple my
14	the greater that risk becomes because the ultimate	14	uncertainty this is one input into estimation.
15	answer is only known after the fact. You don't	15	Now the uncertainty is 27 times as big.
16	know ahead of time.	16	Going into a court where I might have
17	And so, in this context, yes, you can	17	been able to say, Here's an estimate plus or minus
18	design things that mitigate that risk, but you	18	30 million, you tell me to triple, and now I have
19	can't eliminate it. And the smaller you make the	19	to say, Here's an estimate plus or minus 90. But I
20	sample, the greater that risk becomes.	20	have another input that also adds uncertainty of
21	Q. And sitting here today, can you give	21	threefold. Now, instead of plus or minus 90, it's
22	me can you quantify what the risk is if the	22	plus or minus 270.
	Page 79		Page 81
1	Court were to order just the 10 percent sample, or	1	Each uncertainty interacts with the
2	1,200 Claimants?	2	other ones, and they it's more multiplicative in
3	A. As I said, I can't give you a	3	nature. So it's not that this is the only
4	specific number because that's not known until	4	parameter that matters and creates uncertainty;
5	after you have the data and you do the analysis.	5	there are others. And as you fold them, they start
6	That said, in general, if you want to	6	to get larger.
7	forecast liability, particularly if you want to	7	So this is a place where sampling at
8	forecast what Claimants would have received in the	8	10 percent will likely approximately triple the
9	tort system, you need to control for law firm and	9	uncertainty for key inputs into the model.
10	jurisdiction. Those are two things that, when I do	10	Tripling that uncertainty means I'm going to triple
11	financial reporting disclosure work, I will control	11	my confidence with the uncertainty at the end.
12	for. When you're looking at future tort system	12	And I don't see the costs as
13	spend, you control for those two elements.	13	justifying that, given the benefit of being able to
14	If you start controlling for those	14	triple my precision and the guidance I give a
15	two here and you look at a law firm in a given	15	court, when, in the best case, a scenario is
16	jurisdiction, there's only a couple law firms and	16	already going to be you have tens of millions of
17	jurisdictions that have more than 400 claims. So	17	uncertainty; so now you're going to triple that.
18	in those, maybe you could sample, and you would	18	That's adding an awful lot of uncertainty tens
19	still end up with more than 10,000 claims, because	19	of millions at least of uncertainty to the
20	for the vast majority, this you're already at a	20	estimate.
21	size where you wish you had more data.	21	So you said "quantify." Going to the
22	Q. Maybe I just missed it.	22	10 percent sample will add tens of millions of

21 (Pages 78 - 81)

	Page 82		Page 84
1	uncertainty, maybe 100 million. I don't know. I	1	Do you see that, Doctor?
2	haven't done that work. But it will be at least in	2	A. I do.
3	the tens of millions based on historical	3	Q. Is it your testimony that a
4	experience.	4	10 percent sample of 1,200 Claimants wouldn't be
5	Q. When you say "uncertainty," can you	5	sufficient for that purpose?
6	explain what it is you mean there? There's	6	A. It may be. And, initially, that's
7	factors is that factors or variables you can't	7	what I'm going to try to do it with because, again,
8	account for? Or what is that?	8	I'm only going to have that quantified for the ones
9	A. I would have less data to be able to	9	that are contrasted with claim files.
10	refine an estimate. So that future estimate will	10	If you learn, for example a
11	have greater statistical that will add	11	complete hypothetical say Claimants represented
12	statistical uncertainty on top of the other types	12	by counsel or counsel represented by 25 let
13	of uncertainty that already exist. And so it's	13	me get it right. I'll start that over.
14	going to expand any level of confidence you have in	14	Let's say there's a subset of law
15	an estimate; "expand" in the sense of degrade your	15	firms that represent 25 percent of the historical
16	confidence, expand the uncertainty.	16	Claimants, where a small fraction of the exposures
17	Q. Let's look at Paragraph 16, which	17	are being disclosed, but for the law firms that
18	is again, I'm focusing on the end of it, which	18	represent the other 75 percent of Claimants, almost
19	is where you say, This would enable us to quantify	19	everything's been disclosed.
20	the proportion of alternative exposure disclosed to	20	I may not have enough data for that
21	the Debtors at the time of settlement.	21	25 percent, but then I would do a targeted
22	You see that?	22	follow-up of to try to fill that information in,
	Page 83		Page 85
1	A. I do.	1	and as opposed to asking for it over the whole
2	Q. Is it your testimony that the	2	universe.
3	1,200-Claimant sample is not sufficient for that	3	So I really view this as a two-step
4	purpose?	4	process: the first, which is really Paragraph 16,
5	A. No.	5	where, if at all, is full disclosure not occurring,
6	Q. It is sufficient for that purpose?	6	which gets so for which claims is the
7	A. I'm actually the sample of claim	7	Paragraph 17 even a relevant question.
8	files were going to juxtapose that with this	8	And then not knowing the answer to
9	currently approximately 1,200. So that compares	9	that, I view this as I may be able to do it with
10	that requires the comparison of the two. So that's	10	1,200. I may need to supplement at some point to
11	already being envisioned for that specific question	11	get precision.
12	of only looking at 1,200.	12	Q. Okay. Short of a I think you
13	And that's really motivated by the	13	referred to it as a "census" or a "population,"
14	cost of producing and reviewing claim files,	14	when you talk about all the claims.
15	because they're not already in electronic format.	15	Correct? That's what you're
16	If all that information was in electronic format,	16	referring to?
17	I'd use more data than that, but it's not, so the	17	You said in your report a couple
18	cost is materially higher.	18	times, you know, a census a population-level
19	Q. Paragraph 17, you talk about The	19	census analysis.
20	variations in disclosure patterns would allow us to	20	That would be all 12,000, correct?
21	model the impact of the partial information on	21	A. Correct.
22	settlement amounts.	22	Q. Okay. Is there a number you know,

22 (Pages 82 - 85)

	Page 86		Page 88
1	as you said a moment ago, it's the judge who's	1	is that you are not prepared to offer to suggest
2	going to tell you what ultimately is reliable, and	2	that any number short of 12,000 is sufficient,
3	I would probably agree with that statement to the	3	correct?
4	extent that I'm sure you're going to give the judge	4	MR. EVERT: Object to the form of
5	an opinion on what number he should come out at.	5	the question.
6	Is there some number short of 12,000	6	THE WITNESS: Again, "sufficient"
7	that you are comfortable opining to the judge would	7	I I don't think is the right term, which
8	be sufficiently reliable for the purposes we	8	is why I struggle with answering that
9	discussed?	9	question. I think you are taking unnecessary
10	A. As I said, I went about this really	10	risks relative to the cost of data production
11	asking that question ex ante and how could I	11	to reduce it further. And I would advise
12	minimize the size of the request counsel would make	12	against it.
13	on my behalf for data. And I already the things	13	BY MR. KAPLAN:
14	that I was comfortable eliminating, I've	14	Q. Okay. I'm using "sufficient" because
15	eliminated, which got me down to the 12,000. And	15	I believe the Judge's words were "doesn't work."
16	so I've gone through that process already.	16	So let me ask it this way, which is:
17	So I'm not at the point where I'd say	17	Is it your testimony that only the 12,000 Claimants
18	I'm comfortable making it smaller. You can do all	18	will work for the Debtors' purposes?
19	the analysis with a sample of 1,200; you can do all	19	A. I'll try this a different way, see if
20	the analyses with a sample of 6,000. You'll just	20	we can get on the same page.
21	have less precision.	21	No statistician can tell you the
22	Whether that precision turns out to	22	sample size you need before the data is produced in
	Page 87		Page 89
1	be binding on the ultimate reliability in the	1	a discovery exercise like this to say the number of
2	Court's eyes, one, it's a question for the Court;	2	claims at which it will work. What happens is the
3	but, two, it's where those numbers work out at the	3	more claims you get, the higher the probability
4	end.	4	that it will work becomes.
5	If you could give an estimate that	5	So it's not whether you there's
6	was plus or minus, you know, a dollar and it became	6	almost no difference, right, if you give 12,000
7	plus or minus \$3, the Court would probably be fine	7	claims or 11,999. The odds that that 12,000th
8	with that; but if it was plus or minus 50 million,	8	claim was the linchpin to take you from working to
9	it became plus or minus 150 million, the Court may	9	not working is almost zero, right? But at the same
10	really not be okay with that. That may be too	10	time, no one can tell if you go from 12,000 to
11	broad of a range.	11	11,000, that may be what swings it. Going from 11
12	But that's where, when you say	12	to 10 may be what does.
13	"trip" when I think of it as tripling my	13	But as you shrink, the odds that the
14	uncertainty, until you've done the work, I don't	14	analysis you would want to perform to give the
15	know if I'm going no, I'm not going from \$1 to	15	Court better guidance would become unfeasible. And
16	\$3; I can't be that precise but I don't know if	16	it's a statistical probability. It's not a known
17	I'm going from 50 to 150 million or if I'm going	17	thing until you have the data and it's after the
18	from 20 million to 60 million. I don't know the	18	fact.
19	answer to those things until I've done the work.	19	It's like default risk in that sense.
20	Q. Again, I want to focus you on just	20	As somebody becomes riskier, their odds of default
		I	-
21	the mesothelioma claims, because that's what	21	goes up. But it doesn't you don't know yet if

23 (Pages 86 - 89)

	Page 90		Page 92
1	odds are up.	1	you're envisioning with the 1,200 Claimants?
2	As you shrink the sample size, the	2	A. You can do it mathematically. Will
3	odds that you won't be able to give sufficient	3	it result in a level of precision I'll phrase it
4	guidance rise.	4	differently.
5	Q. Let me just see if we can get on the	5	I can always do the math, but if the
6	same page I appreciate that which is is can	6	precision is lacking sufficiently, it should still
7	you estimate and forecast based on 1,200 Claimants?	7	be thrown out on Daubert because you don't have
8	A. It is feasible to do all the math,	8	sufficient guidance. There are standards where you
9	and you will have a broader confidence interval, so	9	can't just say, Here's an estimate; I have no idea
10	you will give up precision. But you you will	10	how accurate it is. You actually need to give
11	get an estimate with a substantially broader	11	sufficient precision for someone to rely on it.
12	confidence interval of degree of uncertainty about	12	The Court ultimately decides what
13	that estimate.	13	that level of precision is; I don't. But I can do
14	Q. Can you quantify the proportion of	14	the math. It doesn't mean that the math will
15	alternative exposures disclosed to the Debtors at	15	produce a number that the Court finds useful.
16	the time of settlement with the 1,200 Claimants?	16	So the model can mechanically work.
17	A. As we said before, that's what I'm	17	But will it provide sufficient guidance to be
18	trying to do, is I'm using the 1,200 for which	18	deemed reliable by the Court? The odds that the
19	the claim files. That sample isn't finalized yet,	19	answer to that is no go up as you shrink the sample
20	but that's the size that's being discussed of the	20	size.
21	claims result for positive payment would be	21	Q. Okay. Turn to Paragraph 19 of your
22	using those 1,200 and comparing those to the Trust	22	declaration, if we could. You talk about cost and
	Page 91		Page 93
1	data to do that.	1	benefits of sampling, which is in a I have
2	My intent is to do that. I am	2	some just specific questions for you here, which
3	optimistic that will work. I can't guarantee it.	3	is, let's start with, What kind of sample is it
4	And if you needed to supplement, you may, for	4	that's being proposed here?
5	certain law firms, need to supplement additional	5	Assuming that the 1,200 would be
6	claim files, but you would already have the Trust	6	is how the Court what they stick with, what kind
7	data necessary.	7	of sample is being proposed?
8	Q. Can you create the model you discuss	8	A. Stratified random sampling.
9	in Paragraph 17 and the impact of partial	9	Q. Is there a different type of sample
10	information on settlement amounts with the 1,200	10	that would be more or less reliable or let's
11	Claimants?	11	just stick with more reliable.
12	A. Not as a materially higher	12	A. So ex post, again, once you know the
13	probability of not being feasible with the 1,200	13	answer, you can always go back and design a better
1 .		1	sample than the one you did ex ante because you
14	than the analysis in Paragraph 16, but it depends	14	sample man the one you did ex ante because you
14 15	than the analysis in Paragraph 16, but it depends on how large of a subpopulation actually is failing	14 15	have more information.
15	on how large of a subpopulation actually is failing	15	have more information.
15 16	on how large of a subpopulation actually is failing to disclose all of the exposures contemporaneously.	15 16	have more information.  So when you design a sample, you use
15 16 17	on how large of a subpopulation actually is failing to disclose all of the exposures contemporaneously.  It's really going to hinge on the	15 16 17	have more information.  So when you design a sample, you use historical experience to guide you on where there's
15 16 17 18	on how large of a subpopulation actually is failing to disclose all of the exposures contemporaneously.  It's really going to hinge on the answer to a question that is unknown until we	15 16 17 18	have more information.  So when you design a sample, you use historical experience to guide you on where there's likely to be more information or what types of
15 16 17 18 19	on how large of a subpopulation actually is failing to disclose all of the exposures contemporaneously.  It's really going to hinge on the answer to a question that is unknown until we observe the Trust data.	15 16 17 18 19	have more information.  So when you design a sample, you use historical experience to guide you on where there's likely to be more information or what types of Claimants are more important to the questions that

24 (Pages 90 - 93)

	Page 94		Page 96
1	stratifying will be more efficient than taking a	1	inconsistent with what's in here in any way, but
2	simple random sample.	2	for the Claimants themselves, Bates White already
3	There's really good reasons to	3	possesses the PII. If we don't have the PII, it's
4	believe that, for example, oversampling the	4	not in the request. It's only people where we know
5	high-value claims will lead to more precision. It	5	the name and we know the Social Security number.
6	could turn out not to be true, but in almost every	6	We're never asking the Trust to send
7	case like this in the past, almost every case I've	7	us PII. So the only PII that's at risk that would
8	ever done that's involved a mass tort, that	8	be incremental would be information that
9	produces greater efficiency than not doing it.	9	Bates White actually doesn't want. It's
10	Q. Okay. Let's skip ahead a	10	information that was in an exposure field that, as
11	couple minutes here, and I want to talk to you a	11	I understand it, the Delaware facility is going to
12	little bit about the Court's second question, which		
	-	12	take a pass at redacting that. Bates White has its
13	is the why sampling wouldn't reduce the risk of		own obligation to redact that. So it has to be in
14	even just human error, missing some of the PII	14	the field to start with, failed to get redacted by
15	being disclosed.	15	the Delaware facility, failed to get redacted by
16	Where in your declaration is it that	16	Bates White, and then have a data breach.
17	you're discussing that?	17	So if we had 12,000 Claimants, if
18	MR. EVERT: While he's looking,	18	5 percent of the Claimants had a field with some
19	Andrew and Michael, I was going to say	19	additional PII, 99 percent of it gets redacted by
20	earlier, the declaration sort of says what it	20	Delaware, 99 percent of what they gets missed gets
21	says, so I'd object. It's something that	21	redacted by Bates White, you're talking .01
22	limits the paragraph he picks, but I hear	22	incremental piece of PII, when you would have
	Page 95		Page 97
1	I hear the fair point of your question.	1	already 12,000 people's PII in a data breach.
2	(Whereupon, the witness reviews the	2	So going from 12,000 people to
3	material provided.)	3	12,001, I don't want to be trivial about anybody's
4	THE WITNESS: The bulk of that	4	PII, but it's one more out of 12,000. So when you
5	information expands Paragraphs 23 to	5	say, is this materially increasing the risk that
6	Paragraph 30.	6	already exists, going from 12,000 to 12,001, that's
7	BY MR. KAPLAN:	7	not a particularly material increase.
8	Q. And these are the paragraphs that	8	So this process, this specter that's
9	talk about the process in place to scrub the PII,	9	being put out there for this, is so remote that,
10	correct, as well as the base and what's the ability	10	no, I don't put a lot of weight on it, because by
11	to maintain that information, or are we looking at	11	the time you go through two levels of redaction and
12	different ones?	12	you need a data breach on top of it, you know, this
13	A. That is part of the content.	13	is not going to produce a material number of people
14	Q. Outside of what is contained in	14	relative to the PII that is already out there.
15	and, again, I certainly appreciate counsel's	15	Q. When you say "out there," you mean
16	point outside of what is contained in this in	16	already in Bates and White's system?
17	these paragraphs, are you going to offer any other	17	A. Well, it's in Bates White; it's in
18	opinion as to why the proposed 10 percent sample,	18	the Debtors', it's in Verus; it's in the Delaware
19	or 1,200 Claimants, doesn't reduce the risk of PII	19	facility
20	being disclosed?	20	Q. Sure.
21	A. So for the Claimants themselves I	21	A it's with, you know, Ankara, if
			-
22	mean, I don't know I don't think this is	22	they downloaded the claims database; it's with LAS

25 (Pages 94 - 97)

	Page 98		Page 100
1	I mean, all the various parties working in the case	1	A. No.
2	who have the Debtors' database or have the same	2	Q. Okay. Your testimony is not that
3	Claimants in a different context also all have that	3	Bates and White's Bates and White cannot be
4	PII, so all of these parties, in general, possess	4	hacked, correct?
5	the PII to start with. You're not fundamentally	5	A. As I said, I don't think there's any
6	changing that risk.	6	system out there
7	Q. You talked a moment ago about a data	7	Q. Right.
8	breach.	8	A that it's impossible for a
9	Are Bates and White's systems	9	sufficiently motivated party to potentially hack.
10	infallible?	10	MR. EVERT: If the Russian
11	A. I don't think there's any system	11	government wants your data, they can get your
12	that's infallible.	12	data.
13	Q. Okay. Are you aware of whether	13	MR. KAPLAN: I'm fairly certain
14	Bates and White's systems have ever been breached	14	they have mine, so I'm okay with it already,
15	prior to today?	15	just to be clear.
16	A. They have not.	16	MR. EVERT: We heard that, but
17	Q. In any form at all? No hacks? No	17	(Laughter.)
18	phishing? No nothing?	18	MR. KAPLAN: Yeah. It's because
19	I'm not talking about the Claimant	19	I'm a Philadelphia fan; they have everyone's.
20	files.	20	BY MR. KAPLAN:
21	A. So my technical services people will	21	Q. You agree with me, Doctor, that you
22	tell me people attempt to breach our systems	22	can't be 100 percent certain that the data will not
-			
1	Page 99 multiple times every day. That's probably the	1	Page 101 be improperly accessed, correct?
2	training that all of you get, too, right?	2	A. I agree. I don't think anybody in
3	We've never had a data loss.	3	any I mean, I don't think the data sitting at
4	A breach, has somebody ever clicked	4	Verus or the Delaware facility can be 100 percent
5	on a link somewhere, but there's so many layers of		certain. There's no such system.
6	security, it doesn't go anywhere.	6	Q. Thankfully, they're not sitting here
7	We've never had a data loss.	7	for your deposition today, so I'll ask them another
8	You know, what you call a "breach,"	8	time, maybe.
9	depending on how you define that, every single	9	All right. Let's turn now, as
10	entity in the world has. If you say, Did any of	10	promised much earlier, to Dr. Wyner's report.
	your employees ever click on a false link, then	11	MR. KAPLAN: And we'll mark this
11 12	every organization has. So but did it result in	12	as I think we're up to 3, correct to 3.
13	anything?	13	I was able to keep track of that,
			•
14	Bates White has never had a data	14 15	look at that.
15	loss.		
16	Q. Okay. And when you say I want to	16	(CM Deposition Exhibit Number 3,
17	make sure that we're talking about the same thing	17	Expert Report of Abraham J. Wyner,
18	because this would be a scenario where we we	18	Ph.D., marked for identification, as
19	would talk past each other.	19	of this date.)
20	Are you aware of proprietary	20	000
21	information on Bates White's system ever being	21	MR. KAPLAN: I don't know how many
22	accessed by an external actor?	22	I printed so

26 (Pages 98 - 101)

	Page 102		Page 104
1	(Sotto voce discussion.)	1	point he does he he covers two specific
2	BY MR. KAPLAN:	2	questions in his report, two. He entirely ignores
3	Q. Given that you've seen this	3	the question that the 90 percent of the data that
4	before, correct, Dr. Mullin?	4	the Trusts are requesting that not get produced
5	A. Correct.	5	would be used. He only addresses two questions,
6	Q. I believe you said you were	6	where my intent was to only use the 10 percent of
7	discussing it with your team in advance of today.	7	the data that would be produced in the sample.
8	Which part or parts of Dr. Wyner's	8	So if and the critique is, On the
9	opinion is it that you take issue with?	9	questions where Dr. Mullin's already only going to
10	MR. EVERT: I object to the form	10	use a 10 percent sample, a 10 percent sample
11	of the question.	11	suffices; ergo, it suffices for everything.
12	Is that really fair?	12	The latter doesn't follow. He
13	Do you want to walk him through	13	addressed the two places where I'm already
14	each paragraph, or do you want to	14	constraining myself to a 10 percent sample and
15	MR. KAPLAN: I just want to know	15	saying, There, it's enough.
16	what he disagrees with. You told me he's not	16	He doesn't talk anything outside of
17	going to produce a rebuttal report, so I'm	17	that scope anywhere. Yet it doesn't even define
18	not going to get an opportunity to hear to	18	what those other reasonable uses would be, yet has
19	get it on a line-by-line. I want to know	19	this universal statement with no backing anywhere
20	what he's got an issue with here.	20	in the report.
21	MR. EVERT: Do you think you can	21	So at its highest level, you can put
22	do that?	22	almost every complaint I have under that category.
	Page 103		Page 105
1	THE WITNESS: I'm going to be	1	I don't think he has any idea how I'm going to use
2	talking for a while. That's a very broad,	2	the data. I don't know how he could.
3	open question. I'm happy to answer it, but	3	I'm going to go forward and do an
4	I'm going to ask you not to ask follow-up	4	estimation report. I've given broad categories of
5	questions until I finish, because I need to	5	how I would use that. And he's made a statement
6	give a complete answer if we're going to do	6	that "all reasonable" ways.
7	that. I don't want to get segued halfway	7	As we talked through earlier, I
8	through by a follow-up and then be told that,	8	expect to have to condition things on law firm and
9	no, you didn't finish and so that's it.	9	jurisdiction because that's frequently very
10	BY MR. KAPLAN:	10	important.
11	Q. You have my absolute word. I'm ready	11	It may turn out not to be here, but
12	for you to tell me what it is you have an issue	12	it's much more likely that it would be than not.
13	with.	13	And he has no opinions about what happens as soon
14	A. Start on Paragraph 6.	14	as you need to address the subpopulation. All of
15	Q. Okay.	15	his opinions are assuming I'm only looking at the
16	A. He says, As described in detail	16	entire universe at once, that he's disclosed here
17	below, it is my opinion that a random sample a	17	at least.
18	random 10 percent sample of 1,200 Claimants would	18	And so I expect to have to look at
		19	subpopulations. Jurisdiction, law firm would be a
19	fulfill all of the Debtors' reasonable needs.	1)	sucpopulations: various transmit would be a
19 20	fulfill all of the Debtors' reasonable needs.  He never defines "reasonable needs."	20	key one. Gender could easily come up as one, you

27 (Pages 102 - 105)

	Page 106		Page 108
1	clustered groups that behave similarly and then do	1	conclusion without ever quantifying the loss, the
2	extrapolations based on each of those subgroups.	2	cost, and his one of his clients has done this
3	So he has entirely ignored what	3	exercise, so one of his clients has already
4	happens when only a subset of the sample is	4	redacted information for a different request.
5	applicable to the question of interest.	5	So instead of all of us sitting here
6	And if you look at simple tabulations	6	in the dark and saying, How often does this PII
7	in the data, like paid mesothelioma claims by law	7	show up in these exposure fields, there's one
8	firm, paid mesothelioma claims by gender, paid	8	one of his clients knows the answer to that in the
9	mesothelioma claims by jurisdiction, you see really	9	context of DPMP. He either didn't ask him for
10	quickly that if you sample, you're not going to	10	that, they didn't disclose it to him, but he could
11	have enough data to answer those questions.	11	know, oh, that occurs in one in a thousand records,
12	You know, so at a big level, that's	12	one in 100 records, one in two records, which could
13	the overarching problem with his whole report.	13	greatly inform this question.
14	He very much mischaracterizes the	14	He could also ask them, when they did
15	testimony of my partner, Dr. Jorge Gallardo-Garcia.	15	their redaction process and their quality control
16	He asserts in Paragraph 8 that Dr. Gallardo-Garcia	16	on it, did they think they eliminated half of them?
17	clearly states that sampling is sufficient.	17	Ninety-five percent? Ninety-nine percent? So how
18	He does not state that. If you go	18	many do you think slipped through?
19	read his report, he makes it clear that there's a	19	He's silent even though his client
20	court order that constrains him to 10 percent, and	20	actually has done this exercise once and has the
21	within that, he's going to design the most	21	data. So the person who could actually quantify
22	sufficient sample the most efficient sample he	22	the cost whose client has access to know exactly
	Page 107		Page 109
1	can but he actually is explicit that that's not	1	how many records have this information and
2	what he believes is best, but he's got an external	2	presumably has done quality control on that process
3	constraint forcing him.	3	to know what their rate of eliminating it is, he
4	To that point, I speak with	4	stays silent on, you know, that information. Yet
5	Dr. Gallardo-Garcia on a regular basis. His office	5	he concludes at the same time, even though his
6	is a few doors from mine. I know that is not his	6	client has this data, that the cost-benefit
7	opinion. So I don't know how he's reaching that	7	analysis isn't justified.
8	when you read that report in totality, but it is	8	So if we had that information, you
9	explicitly wrong.	9	would be able to be much more precise. I gave a
10	There's an irony. Well, he complains	10	hypothetical; 5 percent of the fields have it;
11	that At no point does Dr. Mullin quantify the	11	99 percent get cleaned up by the facility;
12	potential loss of accuracy.	12	99 percent get cleaned up of what was missed by
13	I think he very much knows that is an	13	Bates White to get to 0 or 1.
14	exercise you can't do ex ante when the very data	14	The first two numbers in that, they
15	you're seeking is fundamental to what	15	actually know. So those are knowable. So are we
16	subpopulations you need to analyze later. That's	16	really looking at a handful of PII coming through?
17	an impossibility.	17	Thousands? I hope not thousands of records, given
18	The irony is, he reaches a conclusion	18	they went through that process. But he doesn't
19	that the 10 percent sample is enough in a	19	access any of that even though his client has it.
20	cost-benefit without ever quantifying the cost. So		As an expert, if my client has
21	if he's going to complain that you have to quantify		information directly on point and doesn't share it
	6. 6 I		

28 (Pages 106 - 109)

	Page 110		Page 112
1	volunteer it. So I'm that part confuses me as	1	he's putting in that bucket, how he can reach that
2	to why that's not in his report, given he has	2	conclusion.
3	access. As I said, there's an irony because he has	3	His premise in Paragraph 13 is
4	the ability to quantify and stays silent.	4	actually incorrect. He we actually do have a
5	Going back to Paragraph 9, the second	5	potential problem of sampling bias. We're using
6	sentence, Such a sample has already been discussed	6	the historical Claimants to draw inferences about
7	in the Bestwall declaration, which does not	7	future Claimants. The demographics of Claimants is
8	identify any attribute of the population that	8	not constant through time. And so if you take
9	cannot be accurately studied with a sample.	9	if you erroneously conclude that I'm going to have
10	The purpose of that declaration is	10	the same ratio of men to women, the same age
11	not to answer that question. The purpose of that	11	distribution over the next 30 years of Claimants as
12	declaration is to say, What's the most efficient	12	I have in the last 10, you'll be very wrong. Those
13	sample we can get, given a third-party constraint	13	things shift through time.
14	that it's at 10 percent?	14	So we have a historical sample where
15	It wasn't a declaration intending to	15	we're not actually trying to value the historical
16	say, And these are the things that we can't do	16	claims; we're trying to use information about the
17	accurately with that.	17	historical Claimants to draw inferences about
18	So its absence drawing inference from	18	future claims.
19	that, when that's not the topic of the declaration,	19	So while the group I have to sample
20	is misleading.	20	is fixed, that group has different characteristics
21	So Paragraph 10, I think I've largely	21	than the future claims, and I need to control for
22	already covered.	22	those differences or I will have bias.
	Page 111		Page 113
1	And his NFL analogy, in 11, is really	1	So it's actually very much in the
2	quite misleading. We're talking about a tenfold	2	opposite direction of his conclusion. If he
3	difference in sample size, and he's talking about a	3	understood that, it reverses the point from what he
4	.001 difference in inches of height.	4	is making.
5	So the right analogy there is the one	5	That same flaw in logic really
6	I gave you before, where if you said if you told	6	applies throughout.
7	me I can't have 12,000 claims, I get 11,999, we	7	So while I don't disagree with any of
8	would probably just all go home. Right? That's	8	his math on Paragraphs 15 through 20, he bases it
9	the analogy to that. It's not you know, the	9	all on examples where the undisclosed alternative
10	proper analogy here would be more like, Oh, you	10	exposures is either 5 percent of what was available
11	have one that's 6-foot, 1 inches tall, and the	11	or 10 percent, and then he ends up concluding that
12	other is 5'4". You're talking about a very large	12	this will, in percentage points, create a really
13	difference, a tenfold difference, not a very small	13	small confidence interval amount. If he just
14	difference. So while the I think the proper	14	assumed that it never happened, then he would say
15	conclusion from that is actually in the exact	15	it's 0 and his confidence interval would be, I know
16	opposite direction.	16	that with virtual certainty and it's 0.
17	Paragraph 12 suffers the same flaw of	17	So when you push a probability
18	him saying, for the purposes described by	18	towards 0 or 1, you actually minimize the impact of
1	min saying, for the purposes described by		
19		19	these factors.
19 20	Dr. Mullin and the Debtors' reasonable needs.	19 20	
			these factors.  So if you ran the exact same math but it turned out there's a subpopulation where half of

29 (Pages 110 - 113)

	Page 114		Page 116
1	it's not in Paragraph 20, 1.5 percentage points any	1	very precise when under that assumption, our
2	longer. It gets dramatically bigger, and the	2	estimate is no impact.
3	difference is about fivefold. So you would be	3	So that it's a complete
4	saying, instead of 1.5 percent, 7.5 percent.	4	misrepresentation of the real world. He's
5	So he's chosen an example that skews	5	literally assumed it has no impact. It's like
6	things low in the direction of the outcome that his	6	assuming it never occurs and then estimating that
7	client desires as opposed to choosing the example	7	you don't need a lot of data for things that never
8	that's more that could go in the other	8	occurred to get get the probabilities very low.
9	direction, but it's not the you know, so this	9	So he's really in a corner solution
10	idea that, in practice, however, the standard error	10	that makes no sense. If settlements are not the
11	for a simple sample of 1,200 observations will	11	same size, so now we're, at least, in the relevant
12	usually be a lot smaller than 1.5 percent,	12	framework, a stratified sample can be drawn that
13	that's you know, you can get to certain things	13	over-samples the claims with the highest variation.
14	if you're not looking at a subpopulation, you're	14	You really can't. This, again, shows
15	looking at certain scenarios, that may be the	15	a fundamental misunderstanding.
16	outcome, but you may have a very large confidence	16	What we're trying to get is the
17	interval if you end up with there's a subpopulation	17	connection between the amount of disclosed
18	of interest and you need to get it for that.	18	exposures, which is unknown at the time of
19	And so his mathematical formulas are	19	designing the sample. So he's saying, Let's look
20	right, but he's really assuming throughout you only	20	at a parameter that we don't know right now and
21	care about the whole population, which, of course,	21	stratify on it.
22	gives you no ability to change for changing	22	This is not a classic statistics
	Page 115		Page 117
1	demographic characteristics because you have an	1	exercise. It also has discovery in it.
2	estimate for one mix of demographics only, and you	2	You're learning about one of these
3	really need the estimates for each of the	3	variables. You can't stratify on the variable that
4	demographic groups to know how to remix that going	4	you don't know yet. And that's what he's telling
5	forward to match the future population. And he's	5	me to do in this paragraph, is to stratify on a
6	completely ignoring that fact through this whole	6	variable that I won't know until after I get the
7	process.	7	data in the sample.
8	So Paragraph 24, he gets into	8	So that's actually completely
9	estimating impact of potential nondisclosure of	9	infeasible, but it shows a fundamental lack of
10	alternative exposures. His first sentence, Because	10	understanding that this is a discovery exercise and
11	the proportion of nondisclosed Claimants has a very	11	I don't know that. If I already knew it, I
12	small standard error, it follows, if all the	12	wouldn't need a sample, right? I would already
13	settlements were the same size, that the standard	13	have the information.
14	error of the overall average impact would also be	14	So that's a place that it's just
15	small.	15	disconnected from the exercise that's going on.
16	Not only does it follow that; under	16	He's suggesting something that's completely
17	that assumption, the impact is zero and you don't	17	infeasible.
18	need to estimate anything. So if you assume the	18	There is no finite sample correction
19	problem away, because everybody gets the same	19	factor, which he has in Paragraph 14, because we
20	settlement amount whether they disclosed or not	20	aren't trying to estimate the impact for the
21	so he's assumed there's no impact if we assume	21	historical Claimants. We're trying to use the
22	that it can't happen and has no impact, then we are	22	historical Claimants to talk about pending and

30 (Pages 114 - 117)

	Page 118		Page 120
1	future claims. So we are always estimating.	1	developing anecdotes is frequently done by both
2	The finite sample correction factor	2	defendants and plaintiffs in cases. So I don't
3	applies to people you want to estimate that you	3	know if he's trying to insinuate that's bad or
4	don't need to estimate now because the sample told	4	good. It's a little unclear. But he at least
5	you the answer for those people.	5	acknowledges that, to the degree anecdotes by
6	We don't have any of those. These	6	either side are important, a larger sample would
7	are all historical claims.	7	enable that better.
8	We're not estimating what they get	8	So it seems to be the one place where
9	paid. They've been paid. They've been released.	9	he acknowledges that that's something where a
10	So, again, it shows that fundamental	10	larger sample may be worthwhile.
11	misunderstanding of what we're actually trying to	11	So when we get into Paragraph 27,
12	accomplish.	12	again, he doesn't define "reasonable needs." He
13	If you don't understand how the data	13	doesn't appear to understand how it's being used.
14	is being used, you don't know how to design the	14	So I don't know what he actually knows, but based
15	sample, you don't know what sample size you need,	15	on what's he's written, you know, he makes
16	and he's just repeatedly displaying his ignorance	16	statements that are inconsistent with how the data
17	as to how the data are actually being used in	17	would be used. So I don't know, without him
18	estimations.	18	stating what he believes the reasonable needs
19	And, you know, it's things like this	19	are either his list is incomplete or his
20	that are huge red flags that he doesn't actually	20	conclusion is wrong.
21	know the facts of the situation, so he's applying	21	It's wrong either way, but whether
22	the wrong statistical tools to the question.	22	it's because he has an incomplete list of the
	Page 119		Page 121
1	Paragraph 25 is just wrong. He says,	1	reasonable needs or he actually does know the full
2	Beyond the two parameters discussed above,	2	list, hasn't specified them, then the data is
3	Dr. Mullin doesn't specify precisely or intimate at	3	important for that list.
4	any other parameter of parameters of interest.	4	So Paragraph 28 makes me suspicious
5	We can go back, where this is	5	that Dr. Wyner has not spent much time in a
6	where he has entirely ignored Paragraph 15 of my	6	litigation environment. The analytical burden of
7	report. He chose to do an example for	7	sampling, I do discuss. When you sample in a
8	Paragraph 16, an example for Paragraph 17. But	8	discovery process, so you learn more information
9	Paragraph 16, where you're really talking about the	9	after having seen it, it is not uncommon for
10	need to control maybe for industry and occupational	10	experts to assert some form of ex post
11	groups, the need all the uses beyond is where	11	stratification on the data to improve the
12	all the composure is revealed, he's ignored that	12	efficiency of an extrapolation.
13	entire discussion in my report.	13	There is lots of room for experts to
14	And, apparently, according to him, I	14	disagree about that. And I have been in many cases
15	didn't even intimate any other parameters of	15	where months, if not more, have been spent on
16	interest. So he seems to have skipped certain	16	parties litigating over what is the proper way to
17	paragraphs in the reading of my report to reach	17	extrapolate.
18	that conclusion.	18	If you're in the pure ivory tower
19	He talks, in Paragraph 26, about	19	academic, prespecified population and I'm not
20	anecdotes. In my experience, it's common for both	20	extrapolating outside of that population but I'm
21	sides in a litigation to use anecdotes. They're	21	going right back to the population I sampled from,
22	not necessarily statistically representative, but	22	those problems don't exist, and then it's

31 (Pages 118 - 121)

	Page 122		Page 124
1	relatively straightforward mathematically.	1	than if there wasn't irreducible error for other
2	But in a litigation setting, where	2	sources.
3	you need to control for differences going forward,	3	So the fact that those other things
4	this can become a very expensive and drawn-out	4	are irreducible and you can't reduce them
5	process, and so steps to minimize that, I would	5	dramatically increases the return for reducing them
6	advise clients on, because it otherwise, you can	6	in the places where you can, because these interact
7	get into a lot of gamesmanship in that phase.	7	with each other.
8	So Paragraph 29, I agree that if you	8	That's really the same critique of
9	used statistical calculations that are required to	9	Paragraph 30.
10	compete with the standard errors is not	10	The IRS critique in Paragraph 31, I
11	particularly burdensome, that's correct, if all the	11	don't agree with. The IRS does not have the
12	experts agree on which methodology to use to do it	12	resources to do what he is asking them to do, as he
13	in the first place. So it's a methodological	13	says is their charge, so they definitely, because
14	fight, not a computational fight. The computations	14	they are resource-constrained, can't do that. So
15	are straightforward. The methodology is not	15	they do at times use sampling. Other times, they
16	necessarily straightforward.	16	use a census.
17	He is correct and he nods a little	17	They're making the point that when
18	bit to this in the next sentence data analysis	18	it's all available electronically, a census doesn't
19	on the full data set. He says, It's not	19	cost particularly more, so, okay, when it's all
20	substantial substantively easier, especially	20	available electronically, we'll take a much broader
21	since there will be statistical challenges of all	21	review than if it's not available electronically.
22	types that will arise, sampling or no sampling.	22	They are resource-constrained. The
	Page 123		Page 125
1	It's an interesting sentence because	1	cost of doing nonelectronic records is higher, so
2	most of his opinions are based in the framework	2	we take fewer. The cost of electronic records is
3	where that doesn't happen, so acknowledging that,	3	lower, so we take more. That's the only point of
4	you're exacerbating that if you sample from this	4	citing to it. It's no different than the Debtors
5	group. So he's correct that many of the problems	5	here who said, Our historical claims database will
6	will still exist, but you will exacerbate those	6	produce the entirety of it; you can have all of it;
7	problems and you will get likely more litigation	7	it's in electronic form; no need to sample.
8	around it as opposed to if you exacerbate the	8	Underlying claim files, there's a
9	issue.	9	need to sample. Those aren't already in electronic
10	He's definitely correct at the end of	10	form.
11	that paragraph that he puts in bold. The sentence	11	So the main point is, things in
12	before it defines the "these," but These will	12	electronic form are low cost to produce and you
13	introduce new uncertainty, distinct and	13	take dramatically more, potentially all, than
14	irreducible, and not due to sampling.	14	things not already in electronic form.
15	That is correct, but that emphasizes	15	Paragraph 32, he says, Because
16	the need for as much precision as you can get	16	there's no practical loss in accuracy created by
17	through the sampling exercise. If I have two	17	sampling and he goes on there's no need for,
18	sources of error, they compound each other; so the	18	draws other conclusions.
19	gain in precision, knowing that I have other	19	He appears to be focused entirely on
20	irreducible error of improving my precision through	20	estimating a proportion for the entire universe of
21	this sampling exercise, gets larger. That means	21	12,000 historically paid claims. And on that,
22	there's a bigger return having a larger sample size	22	there isn't really a practical loss in accuracy.

32 (Pages 122 - 125)

	Page 126		Page 128
1	And if that was the only thing you needed, I, too,	1	you discussed very early on and I wrote this
2	am already only using 1,200 claims for that because	2	down this fundamental misunderstanding of the
3	that's what the claims file sample is. But to go	3	subpopulation that you would like to study and work
4	broader, if you're using it to estimate the number	4	off of. I think you said it in response to almost
5	of future claims and you want to do that by	5	the first paragraph, Paragraph 6, where you were
6	industry and occupational groups, again, if you're	6	talking about when we were discussing reasonable
7	going to value by law firm or by jurisdiction, that	7	needs.
8	no longer applies.	8	Do you recall that?
9	So, again, it shows it just goes	9	A. Yes.
10	back to that lack of fundamental understanding of	10	Q. Where in your declaration,
11	what is the exercise.	11	Dr. Mullin, do you talk about the subpopulations
12	His last part about a data breach, in	12	that you want to study?
13	Paragraph 32, there's already 12,000 people whose	13	(Whereupon, the witness reviews the
14	PII is at risk. We're going to add a small number	14	material provided.)
15	to that, a number that were in the data field in	15	THE WITNESS: So this is in
16	the exposure fields that the Trusts failed to	16	Paragraph 15. In particular, if you go to
17	redact and Bates White fails to redact.	17	the middle of that paragraph, there's a
18	So we're not really getting if	18	sentence, Further, the relationship of
19	there were a data breach, we aren't going from	19	exposures alleged to the various occupations
20	we don't get a 90 percent reduction. The 12,000 is	20	and trades of the Debtors' historical
21	the same 12,000. So you're going to have the	21	Claimants and the extent to which the full
22	12,000 and you're going to add a few more, or	22	range of the alleged exposures is changing
	Page 127		Page 129
1	instead of saying adding 10 more, maybe add one	1	over time are important to estimating a
2	more; instead of adding one more, maybe add 0, but	2	Defendant's legal liability share.
3	the 12,000 is still there.	3	So that's talking specifically
4	So the real risk of the data breach	4	about industry and occupation and being able
5	is the 12,000 we already have, not the handful that	5	to do things at that level to control for
6	are going to make it through all the screenings	6	those changes through time.
7	that come along first. So saying this is	7	BY MR. KAPLAN:
8	fundamentally changing the risk of data breach is	8	Q. You agree with me that sentence
9	ignoring the amount of data that's sitting at risk.	9	doesn't talk about various law firms, though,
10	You know, and there's lots of things being done to	10	correct?
11	minimize the odds of that. I don't disagree that	11	A. That does not. The reference to
12	you can't drive it to 0, but it's a very low	12	if you're familiar with the Garlock record, I
13	possibility.	13	didn't try to rehash the entire Garlock record.
14	Q. Excellent.	14	There's a paragraph on that.
15	I kept my bargain that I wasn't going	15	In Garlock, Claimants represented by
16	to interrupt you in the middle of it, so	16	about or law firms who represented about
17	MR. EVERT: That, you did. Thank	17	25 percent of the Claimants are the ones where
18	you very much, Michael.	18	there appeared to be you know, not all the
19	MR. KAPLAN: Yes.	19	exposures were being revealed, and for the other
20	BY MR. KAPLAN:	20	75 percent, they were.
20 21		20	So I wrote this assuming you had some
22	then I think it's time for another break, which is,	22	knowledge of the case. I understand from this that

33 (Pages 126 - 129)

	Page 130		Page 132
1	you, personally, do not, in terms of these details	1	the one of the questions you one of the areas
2	in the background, but with the with that	2	you do talk about is Claimants that have multiple
3	knowledge, I didn't try to give the whole history	3	areas of exposure multiple potential exposure
4	again.	4	sources, correct? That's one of the issues, you
5	But if you're familiar with the	5	said, and you talk about it in the context of
6	process and you're an expert in this field:	6	Garlock also.
7	Controlling by law firm, controlling by	7	Am I right?
8	jurisdiction are fundamental things. It's done	8	A. I'm in the wrong report. Give me a
9	routinely.	9	second.
10	So I didn't state things that, to any	10	Q. I'm sure Dr. Wyner's report has a lot
11	expert or person who does this regularly, would	11	of excellent information for you.
12	seem obvious	12	MR. ANSELMI: If you want to adopt
13	Q. You assumed?	13	his findings, we'll be fine.
14	A it's very much in the Garlock	14	(Laughter.)
15	record.	15	THE WITNESS: I'm going to have to
16	I didn't I didn't write it for a	16	ask you to repeat your question.
17	complete layperson who knew nothing about the	17	BY MR. KAPLAN:
18	context of estimation. That is correct. I did not	18	Q. Yeah. It's not a problem. I'm just
19	write it for a person completely ignorant about	19	trying to bring us into in Paragraph 15, one of
20	that entire process.	20	the things you talk about is the alternative
21	MR. KAPLAN: All right. Let's	21	exposure allegations. And that was one of the
22	take I don't know five or so minutes,	22	things you I believe that you criticized
	Page 131		Page 133
1	same as we did last time, and we'll come on	1	Dr. Wyner for not talking about, was the
2	back.	2	alternative exposure sources.
3	oOo	3	Correct?
4	(Whereupon, a recess was taken from	4	A. He talks about that in the sense of
5	3:26 p.m. EDT to 3:39 p.m. EDT.)	5	what proportion of them are disclosed, right.
6	oOo	6	What I was making reference to, in
7	BY MR. KAPLAN:	7	particular, was to the fact that the occupational
8	Q. Dr. Mullin, I just have a few more	8	industrial mix changes through time. So you
9	questions, and then I'm going to switch pass	9	actually need to estimate those by industry or
10	and and move on, which is, we were before the	10	occupational groups, and you can't just have one
11	break, we were talking about the the	11	answer for the whole population.
12	subpopulations, and you pointed me to Paragraph 15.	12	So industry and occupation is going
13	And then you spoke about Garlock and the	13	to create subpopulations of interest where you're
14	assumptions you would make.	14	going to need to estimate parameters for each of
15	Where is it in your report that you	15	those subpopulations.
16	talk about the gender subpopulations that you	16	Q. I want to focus on something a little
17	wanted to analyze?	17	more narrow, which is we can agree, correct,
18	A. I don't think I call out gender	18	because although I'm not an expert in this
19	specifically. There's numerous subpopulations that	19	particular field that a mesothelioma Claimant
20	could turn out to be relevant. It's not intended	20	likely has multiple sources of exposure?
۱		0.1	A 3.6 1
21	to be an itemized list of everything.	21	A. Many do

34 (Pages 130 - 133)

	Page 134		Page 136
1	A those that have material exposure	1	Q. Okay. So we're the unit, then, is
2	to gaskets typically do. In other settings, that	2	Claimant and not claim for estimation purposes?
3	may not be true, so I don't want to overgeneralize.	3	A. To be clear, it's two distinct
4	But for these Debtors, I think, typically, a	4	Debtors in a consolidated action. But as I
5	Claimant would have exposure to a multitude of	5	understand my charge, I don't say, Here's their
6	products.	6	combined liability at the end of the day. At the
7	Q. Okay. And one of the you've made	7	end of the day, I may be asked to have one estimate
8	the point of highlighting the Garlock matter, which	8	for Aldrich and an alternative estimate for Murray.
9	is where, you know, as you stated, certain	9	So there's it's not if there's
10	Claimants did not disclose all of their alternative	10	an individual that claimed against Aldrich but
11	sources of exposure, correct?	11	never filed a claim against Murray, that Claimant
12	A. That was ultimately the findings of	12	is not going to be informative about estimating
13	Judge Hodges.	13	Murray's future liability.
14	Q. Sure.	14	So I won't have all that's
15	Let's I want to understand with	15	probably your most obvious two-set populations of
16	this subset of data that you this set of data	16	interest, the two Debtors. Some Claimants sued
17	that we're looking at here with the 12,000	17	named both. Many Claimants named one but not the
18	Claimants, which is, how is it that you're counting	18	other.
19	it? And let me break that down for you, which is	19	Q. Where is that discussed in your
20	that if one Claimant has five sources of exposure,	20	report?
21	we agree that's five potential separate claims they	21	A. In the report?
22	could make, right?	22	Q. Yeah.
	Page 135		Page 137
1	A. It could be more than that depending	1	A. That's that's not discussed. I
2	on what the exposure is to.	2	mean, many things in this report this
3	Q. I agree. I'm using five because	3	declaration is filed within the context of the case
4	that's how many fingers I have on one hand.	4	to the benefit of the judge, who actually confirmed
5	Okay?	5	the Garlock plan and has seen prior filings.
6	A. Okay.	6	So I'm not writing, as I said, to a
7	Q. It looked good when I held it up.	7	lay audience that has zero context or knowledge.
8	How is it that you are counting that?	8	I'm writing to an individual that has a lot of
9	Because is that five separate claims for	9	context and knowledge. So many of those things
10	estimation, or is that one Claimant?	10	aren't stated for a second time here.
11	A. So the unit of analysis is going to	11	Q. How is it, then, that parties
12	be the Claimant. You're ultimately evaluating a	12	excuse me nonparties to the case who aren't the
13	future Claimant or a pending Claimant's claim	13	judge, who didn't confirm the Garlock plan how
14	against these Debtors. So it may be two claims in		are they supposed to know what the basis of your
15	that sense that you may value: one, their claim	15	opinion are, then, if they're not stated?
16	against Aldrich; and, two, their claim against	16	MR. EVERT: I'm going to object to
17	Murray.	17	the form of the question.
18	But you want to know what are the	18	THE WITNESS: Again, it's done
19	totality of exposures for that one individual. And	19	within the context. There's a lot of other
20	the breadth of alternative exposures is directly	20	filings in the case. I think the the
21	relevant to the strength of their claim against	21	two I don't I would never assume I
22	Aldrich or Murray.	22	don't know why a party would assume you

35 (Pages 134 - 137)

	Page 138		Page 140
1	estimate one number for two Debtors. That's	1	lawyer. It looks great.
2	a strange assumption, in my mind.	2	The my question for you is this:
3	So if you're saying that's to	3	If you start with an uncertainty of, let's say, for
4	me, that's obvious. So if that's not obvious	4	instance, 1 percent uncertainty and you're tripling
5	to a reading audience, okay. I didn't call	5	that, you're now at 3 percent uncertainty, correct?
6	out that particular item. I don't really	6	A. Correct.
7	view that as fault, although it may be	7	Q. So my question for you is and you
8	beneficial to some parties.	8	have said you have said 50 million, 100 million
9	But, typically, I think you hire	9	150 million. You've said 400,000 today. You've
10	somebody who's familiar with the context who	10	said a lot of big numbers, but what what you
11	can fill you in on context. That's, in my	11	haven't said to me is what level what is the
12	experience, what my clients do. If something	12	the uncertainty associated with using 1,200
13	comes in their lap that they don't have	13	Claimants for this sample.
14	firsthand knowledge of, they gain that	14	MR. EVERT: I think this is when
15	knowledge through who they hire to advise	15	I'm supposed to say asked and answered.
16	them.	16	MR. KAPLAN: Okay. That's fine.
17	BY MR. KAPLAN:	17	That's good. You say whatever you want.
18	Q. Okay. You've talked a few times	18	You're fine.
19	today about tripling your uncertainty or	19	BY MR. KAPLAN:
20	quadrupling your uncertainty or doubling your	20	Q. You answer the questions.
21	uncertainty.	21	MR. EVERT: I think he's said,
22	We've had a few of those exchanges,	22	Michael, a number of times
	Page 139		Page 141
1	correct?	1	MR. ANSELMI: Let him say it.
2	A. Correct.	2	MR. EVERT: Okay.
3	Q. When you say "tripling your	3	THE WITNESS: Again, I believe
4	uncertainty," what number is it that you're	4	I've addressed this at least two if not three
5	starting from?	5	times. I believe those answers were
6	A. So we've gone around this barn two or	6	complete. I will try this one more time for
7	three times now, at least.	7	you.
8	Q. I'm aware. Yeah.	8	You can't know the answer to how
9	A. Do you want me to say asked and	9	much uncertainty you have before you have the
10	answered, or I mean, you're saying you're aware		data in front of you. That is impossible.
11		11	So nobody can tell you and this is true of
12	MR. ANSELMI: That's his	12	every single sampling exercise that's done
13	THE WITNESS: okay. I don't	13	when it has a discovery component leading to
14	understand your question because it seems to	14	an analysis not estimating a proportion for
15	be identical to what you've already asked me	15	the historical population but an actual
16	three times. And if you are asking me the	16	estimation component to it, particularly out
17	same thing again, I stand by my answer.	17	of sample, like this would be done. You
18	If you intend a different meaning	18	don't know that ahead of time. It's it's
19	than what you asked me before, I don't	19	an infeasible question to give a precise
20	understand your question, and please clarify.	20	number to.
21	BY MR. KAPLAN:	21	That said, based on my experience
21 22	Q. Excellent. I enjoy when experts play	21 22	doing this, if I'm going to look at something

36 (Pages 138 - 141)

	Page 142		Page 144
1	like but-for tort spend, which is typically	1	been provided and at least I guess not the
2	the plaintiff theory in these cases and	2	Trust, but the FCR, the ACC have all had
3	I'm probably going to have to address that at	3	access to that underlying database for a long
4	some point the uncertainty if we had	4	time.
5	the baseline uncertainty is very likely	5	MR. KAPLAN: Okay. That's all the
6	initially in the tens of millions. Whether	6	questions I have for now. I'm going to step
7	that's 15 million, 30 million, I don't know,	7	aside to whoever Mr. Guerke.
8	but it's it's very likely in the tens of	8	MR. GUERKE: I will go next.
9	millions, not single-digit millions, not	9	
10	hundreds. That's just based on having done	10	EXAMINATION BY COUNSEL FOR DCPF
11	this exercise across numerous entities	11	000
12	through time.	12	BY MR. GUERKE:
13	Now, if I triple that, I'm adding	13	
14	30 to maybe 200 million of uncertainty,		<ul><li>Q. Good afternoon, Dr. Mullin.</li><li>A. Good afternoon.</li></ul>
	depending on where we are initial our	14	
15	-	15	Q. My name is Kevin Guerke.
16	initial uncertainty may be 20. If our	16	I represent the Delaware Claims
17	initial uncertainty was 10 I don't think	17	Processing Facility, sometimes referred to as
18	we're going to be that low you would be	18	"DCPF."
19	adding plus or minus 20 million. If the	19	Are you familiar with that?
20	initial uncertainty was 70 million, now	20	A. I am.
21	you're at plus or minus 210 million.	21	Q. If if I ask you questions and
22	It's going to have an effect in	22	refer to "DCPF," will you know what I'm talking
	Page 143		Page 145
1	that range. I don't know where, but it's	1	about?
2	almost assuredly going to fall somewhere in	2	A. Yes.
3	that range, based on historical experience.	3	Q. You just were discussing that 400,000
4	But I can't give you a precise	4	Claimants with with counsel.
5	number. I can only give you that kind of	5	And I think, earlier today, you
6	general guidance because no one can answer	6	testified that there were roughly 400,000 Claimants
7	the question you're actually asking.	7	that submitted claims to the two Debtor entities;
8	BY MR. KAPLAN:	8	is that correct?
9	Q. Okay. Last question is, Is the sort	9	A. I said there's more than 400,000.
10	of mathematical extrapolation we did from the	10	Q. More than 400,000?
11	400,000 down to the 12,000 where is that in your	11	A. Claimants?
12	declaration?	12	Q. Yeah. Is that your testimony?
13	You can phone a friend, and he's	13	A. Across the two, that's my
14	shaking his head.	14	recollection, sitting here. I think there's an
15	MR. EVERT: Yeah. I'm just going	15	exact tabulation somewhere.
16	to interrupt. You're thinking of your	16	Q. And of those 400,000 or so, roughly
17	earlier declaration it was in your initial	17	25- to 50,000 were mesothelioma Claimants, correct?
18	declaration; it wasn't in this the sample	18	A. That was I hadn't looked at the
19	declaration.	19	exact number, but it's likely in that range.
20	THE WITNESS: I was going to say	20	Q. How many of those 25- to 50-
21	that information is in the record; it's not	21	mesothelioma Claimants also submitted claims to one

37 (Pages 142 - 145)

	Page 146		Page 148
1	A. I don't know the answer to that.	1	dismissed against all the predecessor entities that
2	It's a high proportion, I think, as we've gone	2	could file against the Trust.
3	through the reconciliation we've done some of	3	There would also be a number of
4	the claims reconciliation process, but I don't	4	mesothelioma claims that predate 2005 that could
5	remember what the number is, sitting here.	5	have submitted claims against those Trusts. I
6	Q. Can you quantify any better what you	6	haven't sought discovery on those, so there's no
7	mean by "high proportion"?	7	reconciliation process. I can't I haven't seen
8	MR. EVERT: I'm sorry. I want to	8	data that will give a precise qualification for
9	make sure he's asking, of the 25- to	9	those.
10	50,000 mesothelioma Claimants in total, what	10	But those two populations of claims
11	proportion. I just want to make sure that	11	would produce a material number of additional
12	is the question, right?	12	mesothelioma Claimants against the two Debtors that
13	MR. GUERKE: I mean, the question	13	would file one or more claims against entities in
14	is what I asked him, and he gave an answer.	14	the Delaware facility.
15	BY MR. GUERKE:	15	Q. I'm eliminating dismissed claims,
16	Q. Did you understand my question, and	16	focusing only on mesothelioma claims.
17	was your answer responsive to my question?	17	Do you know how many more than the
18	A. I was answering with regard to the	18	12,000 Claimants submitted claims to the Debtor
19	12,000 because those are the only ones I directly	19	entities and also the DCPF Trusts?
20	see any information on that were in the request.	20	MR. EVERT: Object to the form of
21	Any claims outside of that request, I could make	21	the question because I don't understand
22	inferences or draw from experience and other	22	there are dismissed mesothelioma claims you
	Page 147		Page 149
1	places, but I don't have knowledge of within this	1	said you're eliminating, right?
2	case.	2	THE WITNESS: I ask a couple of
3	Q. Are there more than 12,000 Claimants	3	clarifying questions.
4	who have submitted claims to the Debtor entities	4	BY MR. GUERKE:
5	and also have submitted claims to DCPF Trusts?	5	Q. Sure.
6	A. Yes.	6	A. There's two Debtors
7	Q. So there's more than 12,000?	7	Q. Two Debtors.
8	A. Who have submitted claims to the	8	A one fact pattern is Aldrich paid a
9	Debtor entities and submitted a claim to one or	9	claim. The same Claimant had a claim against
10	more of the Trusts, yes, there's more than 12,000.	10	Murray, and the claim against Murray was dismissed.
11	Q. Are there more than 12,000	11	So they both have a paid claim against one Debtor
12	mesothelioma claims that both submitted claims to	12	and a dismissed claim against the other Debtor.
13	the Debtor entities and also one of the DCPF	13	When you say I can differentiate the
14	Trusts?	14	two claims but the Claimant was paid by one
15	A. Almost assuredly, but I haven't read	15	Debtor, right? So the Claimant's neither dismissed
16	an exact number. But almost assuredly.	16	nor paid; they're both, right? We have two
17	Q. In relation to the 12,000 that have	17	individual claims.
18	been requested, how many more, roughly?	18	So when you say "dismissed," I need a
19	A. It's going to double or triple the	19	little more clarity as to what you mean because I
20	number because there's all the dismissed claims.	20	have two Debtors involved, when you asked the
1	A d : h d	21	
21	And just because they were dismissed against	21	questions, to be precise, so we don't commingle

38 (Pages 146 - 149)

	Page 150		Page 152
1	Q. The subpoena that's directed at DCPF	1	A. For the Debtors as clients, it would
2	seeks information on 12,000 Claimants, correct?	2	have been roughly contemporaneous with that.
3	A. Yes.	3	Q. Bates White is also involved in
4	Q. What I'm trying to get at is is,	4	Bestwall and DBMP, correct?
5	for the subject of the subpoena, how many more	5	A. Correct.
6	Claimants are out there beyond the 12,000?	6	Q. What's your personal involvement in
7	A. Well, the subpoena constrains itself	7	those two cases?
8	to a Claimant who was paid by one or both Debtors	8	A. I advise on those at times. There's
9	where that payment occurred 2005 or later, all	9	select issues where my colleagues, counsel or
10	right it's got a date cutoff for the date of the	10	client seek me out on certain topics.
11	payment and it has to be mesothelioma. All the	11	I don't think I'm at liberty to
12	mesothelioma Claimants that don't fit one of those	12	disclose what those topics are at the current time,
13	three criteria have been excluded.	13	particularly in the context of this case, but it's
14	So that's if you were dismissed	14	been constrained to advising on select issues at
15	against if neither Debtor paid you, if you were	15	the moment.
16	paid earlier in time than the temporal cutoff or if	16	Q. Do you anticipate using sampling in
17	you were not nonmesothelioma, you've been excluded	17	either Bestwall or DBMP?
18	from the data request.	18	A. At the moment, I don't anticipate
19	Q. So the 12,000 Claimants the entire	19	testifying in either of those cases. So if you're
20	population has been included?	20	asking am I, personally, going to do that, I don't
21	A. Well, it's got a definition	21	anticipate testifying in either of those cases.
22	Q. Using that definition	22	Q. Do you know if Bates White
	Page 151		Page 153
1	A so the definition it is the	1	anticipates using sampling in either Bestwall or
2	it is a census or the total population of Claimants	2	DBMP?
3	who resolved after the cutoff date, who had	3	MR. KAPLAN: Kevin, I'm going to
4	mesothelioma and one or both Debtors made a	4	object.
5	positive payment. That's the definition of what	5	Is that appropriate for this
6	went in. So by construct, it's 100 percent of that	6	setting? He said he's not a testifying
7	definition.	7	expert in those cases or the fact that his
8	Q. All right. When did you start	8	firm is.
9	working on this bankruptcy case?	9	Do you know?
10	Based on and I'll just tell you,	10	THE WITNESS: I mean, I'm going to
11	based on the docket, Bates White was formally	11	stick to what's in the public record, because
12	retained August 18th, 2020.	12	it's I don't think I should talk in the
13	A. I mean, we were working for the	13	context of Aldrich/Murray about anything
14	Debtors as of the petition date. I think the	14	that's not in the public record for Bestwall
15	retention went through subsequent to that. There's	15	or DBMP.
16	a lag between when typically in a bankruptcy	16	There's been back-and-forth in
17	when you first start doing work for a client and	17	Bestwall about what sample of historical
18	when all the paperwork goes through the bankruptcy	18	claim files to take. The fact that there's
19	court.	19	back-and-forth on that is in the public
20	Q. How about you, personally? When did	20	record. So the fact that they're looking at
21	you, personally, start working on this bankruptcy	21	various samples of claim files in the same
22	case?	22	way that that issue is being looked at in

39 (Pages 150 - 153)

	Page 154		Page 156
1	this case, that's true.	1	A. We're likely to rely on various
2	I don't know the DBMP public	2	historical samples. So, for example, prior to
3	record well enough to know what's in it or	3	2001, there's not a census of historical
4	not, so I'm not going to say anything because	4	mesothelioma diagnoses in the United States. So
5	I just don't have confidence as to what's in	5	what's available is a sample by the Survey of
6	the public domain.	6	Epidemiological End Results.
7	BY MR. GUERKE:	7	2001 forward, we have census. So we
8	Q. You testified earlier that you you	8	use the census for 2001 forward, but when we're
9	anticipate that sampling will be used in the	9	looking at things of forecasting future disease
10	Aldrich Pump case, in some respect, right?	10	incidents in the population, we'll rely on samples,
11	A. With regard to the historical claim	11	but we're not that's because it's a constraint;
12	files, I suspect that's correct. It's also I	12	it's what's the only thing that was available.
13	mean, with regard to Trust data, I would say that's	13	You can't go back to 1995 and complete that sample
14	exactly what we're doing here, too. We didn't ask	14	any longer.
15	for all the claims; we asked for a subset. So it's	15	Q. The subpoena that was issued to DCPF
16	a version of sampling.	16	and, I think, all of them go back to 2005 seek
17	Q. That's what I was getting at earlier	17	data that goes back to 2005; is that correct?
18	about the the 12,000 Claimants.	18	A. Correct.
19	What's the what are the 12,000	19	Q. Why do you need data going back to
20	Claimants that you seek in the subpoena or	20	2005?
21	your your attorneys seek in the subpoena what	21	A. So part of this is you do have
22	is that a sample of?	22	changing demographics through time. So, ideally,
	Page 155		Page 157
1	A. The over 400,000 historical claims.	1	you don't just look at a snapshot of the most
2	Q. But modified based on the parameters	2	current. You want to be able to see if there's
3	of the of the subpoena, correct?	3	trends or changes, and you want to be able to model
4	A. Well, I I did not feel I needed	4	those changes.
5	all 400,000 claims to do my work, information from	5	So for questions such as Dr. Wyner
6	the Trusts. I reduced that down. So it's we're	6	focused on are all the disclosures being revealed.
7	not requesting a census from the Trusts of every	7	2005 is not particularly important to my analysis.
8	historical claim to merge to the claims database of	8	The more recent data is going to be much more
9	all of the Claimants. That's not what we're doing.	9	important because it's really what's happening more
10	We're taking a very select	10	recently in the tort system.
11	subpopulation that's about 3 percentage of the	11	In contrast, for controlling for
12	total population of Claimants and asking for the	12	industry and occupational group mixes and seeing
13	data for that 3 percent of the subpopulation	13	how those are evolving through time, you need a
14	that subpopulation. We're asking for 100 percent	14	time series of data. So the reason to reach back
15	of that subpopulation.	15	further is so, as opposed to getting a snapshot at
16	So it's a census of that	16	a moment in time, you can see the underlying trends
17	subpopulation, which is 3 percent of the total	17	in data, line that up with large government
18	data.	18	datasets that are informative and create a more
19	Q. And other than sampling for	19	reliable forecast.
20	historically historical claim files, do you	20	So the reaching back further has a
21	anticipate any other sampling in the Aldrich Pump	21	lot more to do with accurately estimating the
22	or Murray bankruptcy case?	22	number of future Claimants than the questions
~~	of multay bankrupicy case:	~~	number of future Claimants than the questions

40 (Pages 154 - 157)

	Page 158		Page 160
1	related to are the totality of exposures being	1	the analysis.
2	contemporaneously revealed.	2	BY MR. GUERKE:
3	Q. Doesn't Bates White already have the	3	Q. Couldn't wouldn't it be sufficient
4	Garlock database?	4	for your purposes to use the the Garlock
5	A. So there's a public version of the	5	database the information you have and supplement
6	Garlock database that any party who cares to get,	6	it with the subpoenaed information from 2010
7	can have it. And Bates White has a copy of those	7	forward?
8	data.	8	MR. EVERT: Objection: asked and
9	Q. Does Bates White have a copy of a	9	answered.
10	nonpublic version of the Garlock database?	10	THE WITNESS: So there's going to
11	A. No. That was destroyed at the	11	be a few issues with that. You could
12	conclusion of the bankruptcy, which is why I made	12	potentially make some progress on that route
13	the distinction. There was another version of that	13	with regard to the Delaware facility. There
14	database that had more information in it than the	14	was no discovery on the Verus facility in the
15	public version, which no longer exists.	15	Garlock matter, so there is no data in the
16	Q. Garlock filed bankruptcy in 2010,	16	Garlock record of Trusts related to that
17	right?	17	facility. So any of this would apply only to
18	A. June 2010.	18	the Delaware facility as a starting point.
19	Q. Why wouldn't going back only to 2010	19	Two, to the degree Claimants in
20	be sufficient for your purposes, considering	20	Garlock have filed Trust claims post the
21	Bates White already has the Garlock database?	21	Garlock discovery, because not all of those
22	MR. EVERT: I'll just object to	22	claims were resolved at the time there's a
	Page 159		Page 161
1	the form of the question because no sample	1	number of claims that were pending you
2	back to 2010 has been proposed.	2	would want to learn the status of those
3	Go ahead.	3	pending claims.
4	THE WITNESS: The Garlock database	4	So you would need to go back
5	is constrained to individuals at least on	5	and if there was a single pending claim to
6	Trust discovery aspect of it, is Claimants	6	figure out what was the resolution of that.
7	against Garlock who were resolved prior to	7	So it's not as simple as if you got the
8	their bankruptcy. So in all the pending	8	discovery before, what's the ultimate
9	claims, that database there's not the	9	resolution.
10	Trust discovery on it's similar to this	10	BY MR. GUERKE:
11	one, resolved claims.	11	Q. Can you use for your purposes the
12	And not every Claimant who names	12	data that was produced in Bestwall and DBMP from
13	Aldrich or Murray named Garlock back then.  So that would be a nonrandom subset of the	13	DCPF and the DCPF Trusts?
14		14	A. I believe that would violate numerous
15	data.	15	confidentiality orders and be illegal for us to do.
16	And then you'd introduce all sorts	16	So I don't think, legally, we could do that.
17 18	of questions about what biases have you	17	If that issue were solved,
19	brought in by using this nonrandom subset, requiring it to be in the Garlock data and be	18	statistically, it has a similar issue. DBMP is a
20	resolved by Garlock prior to bankruptcy, as	19 20	fundamentally different product than Aldrich. You could see Claimants who were dismissed against DBMI
20 21	opposed to being able to take the universe of	20	who might be a high-value claim against Aldrich, or
22	claims and not have any of those biases enter	22	vice versa.
44	cramis and not have any of those blases effer	~~	vice veisa.

41 (Pages 158 - 161)

	Page 162		Page 164
1	So and they won't be in Claimants	1	you structure that TDP. So as opposed to
2	who named Aldrich that never named one of those two	2	intermediate steps that are building up to
3	entities.	3	something like that, it's these final documents or
4	So, again, you would have these	4	these final high-level opinions.
5	selection effects you're layering over. It	5	Q. But a final high-level opinion on
6	wouldn't be a representative sample. And that's	6	estimating present and future claim value, not
7	going to create potential biases, and then we would	7	TDPs, can you tell us specifically what the
8	be litigating over those biases.	8	decrease in precision is that you're referencing in
9	Q. I don't want to go through all the	9	Paragraph 9?
10	questions and answers you gave prior counsel on	10	A. So one issue in the case, as I
11	this subject. And I am I correct that strike	11	understand it, is the parties disagree about what
12	that.	12	it is we're supposed to be estimating there, which
13	In your declaration in Paragraph 9,	13	if you want me to get into that, I can, but I'm not
14	you discuss the decrease in precision. You had	14	really intending to in this answer.
15	several questions with Mr. Kaplan about decrease in	15	The Plaintiffs' theory of what would
16	precision.	16	the Claimants have received in the tort system is
17	My question is, Specifically, what is	17	likely to have a larger aggregate estimate than the
18	the decrease in precision referenced in	18	Defendant theory of what's kind of the intrinsic or
19	Paragraph 9? And if if your answer is, I	19	underlying legal liability. Those two numbers are
20	already explained that for half an hour, that's	20	going to differ.
21	fine.	21	So while the percentage of
22	But is there a way for you to answer	22	uncertainty may be the same, suppose they're both
	Page 163		Page 165
1	that question?	1	plus or minus 15 percent, clearly that's going to
2	A. You're asking specifically about kind	2	be more dollars of uncertainty on something that's
3	of Romanette i, Decreased precision of the ultimate	3	at a higher baseline number.
4	analysis?	4	So it's going to have a bigger dollar
5	Q. Yes.	5	impact under the Plaintiffs' theory than under the
6	A. I believe that's focusing probably	6	Debtors' theory. It's going to approximately, on
7	on the most salient issue, which is the ultimate	7	many of the parameters, triple the uncertainty.
8	the final design of the CRB, the final estimate of	8	But the rest is similar to the answer
9	liability in an estimation proceeding.	9	I gave before, right? I think that uncertainty is
10	When I say "the ultimate," it's	10	probably on the order of tens of millions of
11	not what's the precision of an intermediate number	11	dollars as a baseline. Until I do the work and
12	that then feeds in, but "the ultimate" in that is	12	I've seen the data, I can't tell you something more
13	referring to the final opinions of interest of	13	precise than that.
14	which the sample is providing inputs into.	14	Q. Do you expect your final estimated
15	Q. And and the final opinion, is	15	claim number, present and future claims, the
16	that is what you mean the value the estimated	16	ultimate analysis that you're referencing in
17	claim value that you would present to the Court of	17	Paragraph 9 will that be in the form of a range?
18	the ultimate analysis you were referring to?	18	A. These have been presented in
19	A. It could be the final claim the	19	different ways in different estimation proceedings
20	estimate of total value of pending and future	20	so I don't know if we're at that point.
21	claims against Aldrich. It could be the final TDP	21	There's many times, that's
22	that's filed where you've used these data to help	22	presented as a scenario and a point estimate, but

42 (Pages 162 - 165)

	Page 166		Page 168
1	then analyses around that to describe the amount of	1	MR. EVERT: Okay. If you know the
2	uncertainty you could present that as a range,	2	answer, if you can answer it.
3	but likely, if you were to present a range, you	3	THE WITNESS: So as an empirical
4	would give the Court some indication about what	4	exercise, you ultimately reduce these
5	area within that range you find more likely.	5	questions to a mathematical model. Whether
6	So I don't view those as too	6	you're doing legal liability, but-for tort
7	different, but the one may not go all the way to a	7	spend, ultimately these become reduced to
8	point estimate. You may say, I'm very confident	8	mathematical models of every expert I've ever
9	it's in this \$50 million or most confident it's	9	seen do it. So the model, like all models,
10	most likely in a \$50 million range, but maybe it	10	is a simplification of the real world. Every
11	has this broader range that's feasible for	11	single model simplifies that on some
12	uncertainty.	12	dimension. But, ultimately, they will be
13	So which of those is a better form of	13	expressed as a form of mathematics.
14	exposition depends a little bit on the types of	14	BY MR. GUERKE:
15	uncertainty and what you learn as you go through	15	Q. Along the way in the legal liability
16	the process.	16	process, there will be subjective determinations
17	Q. You don't anticipate providing the	17	that are made by Bates White, correct?
18	Court with a single final number, correct?	18	MR. EVERT: Object to the form of
19	A. If I concluded there was a scenario	19	the question.
20	that I found most likely, I will probably present	20	THE WITNESS: There may be.
21	that number but then characterize the uncertainty	21	Again, I haven't done all that work.
22	about that number. If I don't have one scenario	22	As much as possible, I try to root
-	Page 167		Page 169
1	that I think is more likely, there may be a range	1	things in data and empirical analyses, but,
2	that I think is most likely but within that range,	2	at times, there are things can arise where
3	I can't differentiate, and then there's uncertainty	3	that's not feasible. And then you start
4	about that range.	4	you invoke some assumptions and usually do
5	You know, until you do all the	5	scenario analysis.
6	analysis, which of those is going to be where I	6	BY MR. GUERKE:
7	ultimately present opinions, I don't know, sitting	7	Q. Some of the steps in the legal
8	here today.	8	liability analysis include estimates, right?
9	Q. You reference in your declaration the	9	A. Every estimate of future liability
10	legal liability analysis that you're performing in	10	includes estimates. That's correct.
11	this case.	11	Q. And also includes forecasts, correct?
12	Are you familiar with that?	12	A. I don't know what distinction you're
13	A. Yes.	13	drawing between the word "estimate" and "forecast."
14	Q. The legal liability analysis that you	14	If you intend those to mean something different,
15	will go through includes multiple steps, correct?	15	tell me.
16	A. It does.	16	Q. For the legal liability analysis that
17	Q. Do you agree that legal liability is	17	you're going through, the the end game is for
18	not a mathematical equation?	18	the Debtors to estimate the value of claims,
19	MR. EVERT: Let me ask, How is	19	correct?
20	that relevant to sampling?	20	A. Correct, the value of pending and
21	MR. GUERKE: It's a foundational	21	future claims. That's correct.
22	question.	22	Q. Why is estimating sufficient for the
	440000000000000000000000000000000000000		Q. They is communing sufficient for the

43 (Pages 166 - 169)

	Page 170		Page 172
1	analysis but sampling within the analysis is not?	1	review of the DCPF-produced information to fulfill
2	A. I don't agree with the predicate. I	2	its obligation to redact PII that's in the
3	am sampling. So certain there's a cost-benefit	3	subpoena?
4	analysis as to when you should sample and when you	4	A. So I'm not personally in charge of
5	should use the totality of the available data.	5	doing that review at the moment, but the we do a
6	So on certain aspects where the cost	6	lot of document review in different settings. This
7	of producing the data is relatively small, I use	7	really isn't documents. It's electronic.
8	the I intend to use the totality of the data,	8	So I would have to go and ask to see
9	like, I will use the entire claims history from the	9	the exact specifics. But we've done similar
10	Debtor. I won't take a 10 percent sample of the	10	exercises in the past. We typically will do a
11	Debtors' claim history in their settlements.	11	review conceptually. There will be a first pass.
12	Okay?	12	We'll see what it flags. There will be a second
13	So things that are already in	13	pass to get an error rate. That second pass may
14	electronic format, you tend to use all the data;	14	not be for the totality of the claims. It may be
15	things that aren't already in electronic format,	15	for a subset to see what the error rate is, how
16	you tend to use the sample.	16	many claims are you missing, if at all, right?
17	It doesn't always have to work out	17	And you're really assessing are you
18	that way. I've done cases where we took a census	18	getting the vast majority of them, as you're going
19	of everything that was not in electronic format,	19	on, and will determine some acceptable error rate
20	too, so it it's a cost-benefit analysis that's	20	at the end of the day in the same sense that the
21	specific. And I've done ones where I've taken a	21	data being produced to us probably, despite DCPF
22	sample where everything was in electronic format	22	going through it, will still have missed a few. So
	Page 171		Page 173
1	because it was still too large to work with.	1	we will go through a similar process of quality
2	So it's there's no absolutes	2	controlling, quantifying our error rate and then
3	there, but that's how it generally breaks down. So	3	being able to say what's the maximum number of
4	I'm using the census at times for certain	4	claims statistically where there is remaining PII.
5	questions; I'm using a sample for other questions,	5	Q. Forgive me if this was embedded in
6	and it's that cost-benefit analysis.	6	your answer, but that first pass and the second
7	Q. Whether DCPF produces 100 percent of	7	pass you just testified about, is that is that
8	the information requested or 10 percent of the	8	100 percent review of all the data on a first pass
9	information requested, will Bates White review	9	and then a 100 percent review of all the data on a
10	every single document that DCPF produces?	10	second pass?
11	A. We will use the totality of the	11	A. The second pass is likely to be a
12	electronic information to the degree that it's	12	subset where you're doing a quality control. If
13	populated, so we will review it, but if if a	13	you determine that your error rate is too high, you
14	record was produced and all the fields were empty,	14	would actually do a full second pass, because
15	we probably wouldn't incorporate that record into	15	you've determined your error rate is too high.
16	our analysis, because it actually had no data. But	16	So it's when you do the quality
17	we the intent is to pull all of that into the	17	control pass, if you learn you're missing you're
18	analysis. Which of it will ultimately be germane	18	getting 99.9 percent of them, you would probably
19	at the end is an empirical question, but I'm	19	say, We've done a good job, and we're done.
20	expecting in terms of these trends for future	20	If you found that you're only getting
21	Claimants to use all of it.	21	80 percent of them, you would probably do a second
22	Q. And how will Bates White go about its	22	pass on all the data, because missing 20 percent is

44 (Pages 170 - 173)

	Page 174		Page 176
1	not an acceptable error rate.	1	It will also be directly relevant to
2	So it's the extent of the second	2	what type of actuarial curve the claim should be
3	pass is a function of what is your effective rate	3	mapped to for projecting the number of future
4	of capturing the information.	4	claims, so doing this industry/occupation, what
5	Q. If a sample is ordered, a 10 percent	5	trades are they in, what industries are they in for
6	sample, Bates White would end up reviewing	6	figuring out how to extrapolate to get the best
7	90 percent fewer claims that were produced from	7	estimate you can of the number of future claims.
8	DCPF, right?	8	So it's going to enter into that type
9	A. I think, yes.	9	of analysis. It will also be direct in terms of
10	Q. That's the extent of my math right	10	what exposures were disclosed at the time by the
11	there.	11	time of the Debtors' settlement versus what had
12	(Pause.)	12	been disclosed in totality across the multitude of
13	BY MR. GUERKE:	13	Trusts.
14	Q. Forgive the pause. I'm trying not to	14	Q. Is it the is it this all-exposure
15	ask you questions that have been asked.	15	related fields where Bates White will use to
16	MR. EVERT: Much appreciated.	16	compare claims information submitted to the
17	BY MR. GUERKE:	17	Debtors?
18	Q. Can you take a look at the subpoena	18	A. On the questions that were, if I'm
19	that I believe is	19	remembering right, Paragraphs 16 and 17 in my
20	MR. EVERT: CM-2, I think.	20	declaration, yes.
21	BY MR. GUERKE:	21	Q. Do you intend to look at every
22	Q which is Exhibit 2?	22	historical claim submitted to the Debtors in the
	Page 175		Page 177
1	Paragraph 10 of the subpoena lists	1	tort system for that comparison process?
2	data fields that's being requested from the	2	A. No. We're intending to use a sample
3	recipient of the subpoena.	3	for that comparison, but to the extent we can, the
4	Do you agree with that?	4	totality of claims in terms of these industry and
5	A. It's a list of the requested	5	occupational trends for forecasting the counter
6	information; that's correct.	6	future claims, so it depends on the which
7	Q. And this isn't the DCPF subpoena, but	7	analysis you're referring to.
8	they're all very similar, with the same paragraph	8	Q. And that sample is what you're
9	and the same request.	9	referring to earlier that's being negotiated with
10	Part g, 10, requests information for	10	the ACC and the FCR; is that right?
11	all exposure-related fields.	11	A. Correct.
12	Do you see that?	12	Q. So for the the 12,000 Claimants
13	A. I do.	13	that are being requested in the subpoena directed
14	Q. Why does Bates White need all	14	to DCPF, are the Debtors providing Bates White with
15	exposure-related fields for its analysis?	15	all the claim files?
16	A. That's going to enter the analysis in	16	A. No.
	1 1100	17	Q. Why not?
17	a couple different ways: One, it's going to allow		
17 18	a couple different ways: One, it's going to allow us to get a much more complete picture of people	18	A. So producing a claim file it's a
		18 19	A. So producing a claim file it's a set of documents that are typically not in
18	us to get a much more complete picture of people		
18 19	us to get a much more complete picture of people the nature of Claimants' exposure. So that will go	19	set of documents that are typically not in

45 (Pages 174 - 177)

	Page 178		Page 180
1	interrogatory or out of the deposition haven't been	1	controlling for industry and occupations to
2	culled from that.	2	forecast the number of future claim counts, that's
3	So turning a claim file into usable	3	about getting the totality of the exposure history
4	data for analyses is very expensive on a	4	and that, we would use all 12,000 Claimants for.
5	file-by-file basis because it's not already in	5	So there's certain exercises where we would only
6	electronic format to be used, so the cost	6	use the 1,200 Claimants' information that overlaps
7	associated with each datum that you want to pick up	7	with the 1,200 for which we went through the claim
8	is relatively high. And so in the cost-benefit	8	file exercise. And for other aspects of the
9	analysis, we have gotten comfortable that looking	9	estimation, we would use all 12,000 Claimants'
10	at the 1,200 claims for that will be sufficient for	10	information.
11	some of these questions from a cost-benefit	11	Q. So if you're ultimately constrained
12	perspective.	12	to a 10 percent sample in this case for Trust
13	That's around the point benefit where	13	information, you don't know yet whether that
14	the cost benefits are, as best you can tell you	14	10 percent sample will match up with the sample
15	don't know for sure but as best as you can tell,	15	that you're working on right now with the ACC and
16	getting close to even.	16	the FCR, right?
17	In contrast, the Trust data is	17	A. So there's no agreement at the moment
18	already in electronic format, so the compared to	18	as to what the sample of claim files will be.
19	a claim file, the ability to turn that exposure	19	There's been back-and-forth. The concept is that
20	history into a basically combining that	20	it will be the same. If they weren't the same and
21	information across Trusts to characterize an	21	they were both 10 percent samples, then you would
22	exposure history for a Claimant is relatively	22	only have on average 1 percent; you would be down
-			
1	Page 179 inexpensive compared to reviewing a claim file and	1	Page 181 to 120 claims which would be in both, which would
2	trying to review depositions and Answers to	2	be insufficient to do almost anything with.
3	Interrogatories and pull all of that information	3	Q. You can't use it for the intended
4	out. So it goes back to that fundamental	4	purpose unless the two samples line up, right?
5	cost-benefit analysis.	5	MR. EVERT: Object to the form of
6	Q. So for that comparison or that	6	the question.
7	evidence suppression analysis, don't you need to	7	THE WITNESS: If I want to look at
8	have the same Claimants from the Debtors' sample	8	a comparison, I need both points in the
9	matched up with the same Claimants in the DCPF	9	comparison, for when for that exercise, I
10	subpoena?	10	need both sets of data.
	•	11	BY MR. GUERKE:
11 12	<ul><li>A. Yes.</li><li>Q. And how are you doing that?</li></ul>	12	
13	-		Q. So before you can determine a
	A. So for the 1,200 that are in the paid	13	sufficient sample for the Trust information, you
14	claims sample, those same 1,200 would be in the	14	would first need to know what the agreement is on
15	would be in the Trust data because it's a subset of	15	the sample for the the Debtor historical files,
16	the 12,000. So for those 1,200, we can make that	16	right?
17	comparison.	17	A. No.
18	If we were constrained to a	18	Q. What why is that "no"?
19	10 percent sample from the Trusts, we would want	19	A. So the fact that the historical files
20	that sample to be identical to the claim file	20	are not already in an electronic format means that
21	sample so you can make the comparison on all 1,200.	21	each Claimant you sample there comes at a
22	For the other aspects, like	22	materially higher cost, thousands of dollars, if

46 (Pages 178 - 181)

	Page 182		Page 184
1	not 10,000, to collect all that information and	1	in this case overlap with the the Bestwall and
2	process it.	2	DBMP case?
3	So there's a substantial cost for	3	A. I'm not allowed to nor have I merged
4	each data point you're taking in.	4	those databases. They're two separate cases.
5	So that data, the review of the claim	5	What I know about each of them that I
6	file data and the cost associated with it becomes	6	am allowed to use is that each of them receives
7	the binding constraint for doing the comparison	7	about three-quarters of the claims that are filed
8	because it's the higher cost source of data. So	8	in the tort system. So if I have two defendants
9	what I need to determine for this comparison is the	9	that each are receiving 75 percent of the claims,
10	higher cost source, which is the claim files.	10	50 percentage points of that has to overlap because
11	I'm using the Trust data for multiple	11	there's only 25 percent left that could go to the
12	purposes, not just that comparison. The other	12	other Debtor that's not in the prior one.
13	purposes are what apply to the 90 percent of the	13	So I know there's substantial
14	sample that doesn't overlap with the 10 percent	14	overlap. I know it's at least 50 percent of their
15	that would line up with the claim files.	15	claims. It might be much higher. I don't know the
16	So when I'm talking about asking for	16	exact number. That's why it's written the way it
17	the 12,000 and constraining myself to 100 percent	17	is. I'm not allowed to merge those. They're two
18	of that subpopulation, it's because that's the	18	separate cases.
19	subpopulation that's going to inform me about, in	19	You know, if parties waived and said,
20	particular, future claim counts, controlling for	20	Go ahead and merge them, we could give you an exact
21	industry and occupation, potentially controlling	21	answer. But that's not the status. They're
22	for gender, controlling for different demographic	22	each case is in its own silo. And so I know it's
	Page 183		Page 185
1	characteristics as we go forward.	1	substantial, but I don't know the exact number.
2	So they're serving the binding	2	Q. In Paragraph 22 of your declaration,
3	constraint differs between the two, so in that	3	you state that retrieving information for any
4	sense, they don't overlap. I'm going to have a	4	specified Claimant should involve a relatively
5	broader sample ideally of Trust data because it's	5	straightforward automated extraction of data as the
6	less expensive to produce than claim files, and I'm	6	match Claimants have already been identified.
7	going to have the claim file sample be a strict	7	Do you see that in Paragraph 22?
8	subset of the Trust sample.	8	A. I do.
9	Q. In Paragraph 21 of your declaration,	9	Q. What is your basis for that
10	you state that DCPS DCPF has already produced	10	statement?
11	the same or substantially similar information for	11	A. Well, as I understand the nature of
12	similarly sized and likely substantially	12	the databases, there's a Claimant identifier. The
13	overlapping claims population in response to nearly	13	crosswalk process of identifying which Claimants in
14	identical subpoenas from DBMP and Bestwall.	14	the 12,000 actually filed a claim against any of
15	Do you see that part of your	15	the Trusts as I understand it, that process has
16	declaration?	16	been completed, because we've gone through a
17	A. Which paragraph?	17	reconciliation process on the matches that were
18	MR. EVERT: Twenty-one.	18	uncertain.
19	BY MR. GUERKE:	19	So there's already a mapping from
20	Q. Twenty-one.	20	that matching key to the records or at least the
21	A. Yes.	21	key identifier of each Claimant in the Trust data.
22	Q. So what of the 12,000 Claimants' data	22	So now you're extracting specific

47 (Pages 182 - 185)

1 2 3		1	Page 188
	data fields from a data fact a database that's	1	legal question, are we offering him to have
3	just a query from a database.	2	an opinion. So to the extent, yes, he's
1	Any redaction the Trust wants to do	3	going to testify about the fact of what it
4	after that query is a different question. All	4	costs DCPF to do it and DBMP, then I think,
5	right? But the actual extraction of those fields	5	yes, we are offering him.
6	is just a database query at this point.	6	BY MR. GUERKE:
7	Q. And the review-and-redaction process	7	Q. You can answer.
8	that DCPF goes through is separate and apart what	8	A. The opinions in my report, if I'm
9	you're saying in this paragraph, correct?	9	asked, I'm going to give. Whether they fall under
10	A. Correct.	10	that definition, I don't know.
11	This is just retrieving from the	11	Q. What are your qualifications for
12	information from the field is straightforward.	12	offering an opinion on DCPF's burden?
13	There is a redaction process that the Trust has	13	A. I think if the opinions in the report
14	stated it wants to do before producing the data.	14	talk about doing an extract from a relational
15	Q. Do you do you dispute the fact	15	database, once you've completed the matching, that
16	that the that DCPF will do a	16	is simple. That takes almost no time to write a
17	review-and-redaction process for whatever	17	query, to take an extract from a relational
18	information is required to be produced in response	18	database.
19	to these subpoenas?	19	I work with relational databases all
20	A. They state they will do it. They did	20	the time. You know, that if you consider that
21	it in DBMP. I have no reason to question it.	21	as following as an expert opinion on their burden,
22	Q. You have no firsthand knowledge of	22	it's one aspect of looking at what's the actual
	Page 187		Page 189
1	DCPF's business, do you?	1	cost, given they've already done the matching
2	A. No.	2	exercise, to extract the fields. That's minimal.
3	Q. You don't know specifically what DCPF	3	Otherwise, in terms of the redaction,
4	has to do in that review-and-redaction process,	4	the evidence I have as an economist to look at is
5	correct?	5	the bill that got in the public for what that cost
6	A. No, I don't know the specifics.	6	in DBMP, so that gives us a benchmark of what it
7	Q. And, similarly, you don't know the	7	may cost here to put a dollar figure on that
8	inner workings of DCPF, correct, on the business	8	burden.
9	side?	9	Q. Is there anything else any other
10	A. No.	10	information you're relying on to offer an opinion
11	Q. And you don't know you don't have	11	on DCPF's burden in this case?
12	personal knowledge of DCPF's burden in responding	12	A. Not beyond anything that's in my
13	to the subpoena, correct?	13	report.
14	A. No.	14	Q. You rely on the Richard Wyner
15	Q. "No," you don't have personal	15	declaration in your declaration, correct?
16	knowledge, correct?	16	A. On the if you can point me to
	A. I don't have I've seen the bill	17	where.
17	from other cases. I don't have personal knowledge.	18	Q. The Richard Richard Wyner is the
17 18		I	
	Q. Are you offering an expert opinion on	19	DCPF COO, and there was a declaration submitted.
18	Q. Are you offering an expert opinion on DCPF's burden in responding to the subpoena?	19 20	DCPF COO, and there was a declaration submitted.  It's cited in your report.
18 19			

48 (Pages 186 - 189)

	Page 190		Page 192
1	where in my report do I rely on it?	1	declaration correctly?
2	I'm not I don't have that mapping	2	A. You did.
3	at the tip of my fingertips.	3	Q. Specifically, what are the algorithms
4	If you point me to where, that's	4	DCPF has already developed that are referenced in
5	Q. Sure.	5	that declaration?
6	It's Footnote 16 13 and 16.	6	A. Extracting the data fields would be
7	A. Okay.	7	an almost identical query to the query that was run
8	Q. You are relying on the Richard Wyner	8	in the other, particularly DBMP. The review for
9	declaration in forming your opinions related to	9	looking for whatever protocols I don't know what
10	DCPF's burden in this case, correct?	10	protocols they used but whatever protocols they
11	A. I'm relying on the specific statement	11	developed to review and remove any PII or PHI that
12	that the data all resides in electronic format.	12	might be in the fields. They've already developed
13	Q. Any other part of the declaration	13	those protocols and applied them before. So they
14	that you're relying on?	14	have the benefit of that experience to work on when
15	A. I'm looking at these two sentences in	15	they do it again. And so almost always, your
16	the footnotes therein and that it's organized by	16	second time doing that exercise is less expensive
17	Claimant.	17	than your first time because you have the benefit
18	Q. Anything else?	18	of that experience.
19	A. Without reviewing the totality, I'm	19	Q. So so the benefit of the
20	not sure it relates to anything else. The two	20	experience, is that what you're referring to as an
21	sentences of those two footnotes that's what the	21	algorithm?
22	footnotes are supporting.	22	A. Writing the algorithm and then the
	Page 191		Page 193
1	Q. Have you reviewed the entirety of	1	protocols, the processes they put in place. They
2	Richard Wyner's deposition declaration submitted	2	had to develop some process for reviewing and
3	in this case?	3	redacting. And the other piece that's in there
4	A. I did read that at one point in time.	4	because of the likely overlap, if they chose to
5	Q. Do you dispute any part of it?	5	cross-reference with the records that they already
6	A. I don't recall, one way or the other,	6	produced in DBMP in their production process, the
7	sitting here.	7	ones that had information that needed to be
8	Q. Sitting here today, do you dispute	8	redacted from DBMP, they could bring over the
9	any statement made in Mr. Wyner's declaration?	9	redacted field and not have to redo the redaction.
10	A. I don't to the degree he has a	10	So the overlap should make it less
11	statement that any of my opinions are contradictory	11	expensive because they've already done it for
12	of, then the answer to that would be yes, but I	12	subpopulation, and the fact that they have the
13	haven't tried to map specifically his statements to	13	experience of having done it before and they aren't
14	my opinions.	14	developing the protocols should make it less
15	Q. In Paragraph 22 of your declaration,	15	expensive.
16	you state, In fact, I would expect the	16	Q. Do you have any firsthand knowledge
17	Aldrich/Murray data production process would be	17	of the process that DCPF employs to review and
18	even less burdensome than the Bestwall and DBMP	18	redact these records?
19	process because DCPF DCPF has already developed	19	MR. EVERT: Objection: asked and
20	applicable algorithms through responding to similar	20	answered.
21	requests for the Bestwall and DBMP Debtors.	21	THE WITNESS: No.
22	Did I read that part of your	22	THE WITHESS. NO.
	Did i read that part of your	L 44	

49 (Pages 190 - 193)

	Page 194		Page 196
1	BY MR. GUERKE:	1	goes would file a claim against. You can take
2	Q. Even though the subpoena doesn't	2	the \$86,000, the number of claims that were
3	specifically request personal identifying	3	reviewed, divide, and you're going to be on the
4	information, you agree that it would capture	4	order for that of about ten cents a record.
5	certain personal identifying information, right?	5	Now, that doesn't mean we will come
6	A. That is the allegation by the Trusts.	6	in at exactly ten cents a record here, but it was
7	I understand their allegation. You know, it is	7	kind of if you do that back-of-the-envelope math,
8	not there's traces when you build a database and	8	you'll see it more on that order.
9	the exposure fields. If they've chosen to include	9	Q. You're speculating what what it
10	that type of information in an exposure field, then	10	would be speculation to try to determine what
11	it could be there.	11	DCPF's costs would be to respond to these Debtors'
12	They assert that some of those	12	subpoena, right?
13	exposure fields contain that information. So	13	A. I wouldn't go and say it's
14	that's their position is it does.	14	speculation. You have an estimate. You can look
15	You could imagine a database about	15	at what did it cost them to respond to the DBMP
16	exposure that doesn't have PII in because that's	16	subpoena, which was substantively identical in
17	really not relevant to the exposure.	17	nature. And so you have a very good benchmarking
18	So if you had a clean exposure field,	18	exercise.
19	then you wouldn't have that issue. Right? So it's	19	It's not pure speculation. That
20	the fact that their exposure field isn't clean,	20	would be you know, it is an estimate, but I
21	it's contaminated with PII, that creates this	21	wouldn't call that pure speculation. You know, the
22	issue. It wasn't obvious at the time of issuing,	22	almost perfect comparable to gauge what the cost
	Page 195		Page 197
1	seeking the data that that would be the case.	1	would be.
2	Q. But you don't dispute that that is	2	Q. DBMP included roughly 9,000
3	the case, right?	3	Claimants, right?
4	A. I I don't dispute the assertion.	4	A. Correct.
5	Q. Are you measuring DCPF's burden by	5	Q. Aldrich and Murray include roughly
6	using the \$86,000 billed in production costs in	6	12,000 Claimants, correct?
7	DBMP?	7	A. Correct.
8	A. I view it as a relevant data point.	8	Q. So there are 3,000 more Claimants in
9	I don't think they're going to be at the exact same	9	play in this case, right?
10	number next time.	10	A. Correct.
11	I mean, from a burden perspective,	11	Q. So you would expect the costs of
12	it's more about the hours, because that's	12	production in this case to be greater than in DBMP,
13	ultimately, that was paid by the Debtors and DBMP,	13	correct?
14	as I understand it. So the financial burden was	14	A. I don't think you can draw that
15	borne by the Debtors, but it's the scope of the	15	conclusion. If there was zero overlap in the
16	exercise.	16	Claimants and your exercise is one-third larger,
17	Q. You don't know what the per record	17	rough order, you would probably expect it to cost
18	review costs for these Debtors' subpoenas will be	18	one-third more.
19	for DCPF, right?	19	There may be some start-up costs, and
17			
20	A. So you can get a rough estimate. And	20	so the start-up costs you have once, and then the
	A. So you can get a rough estimate. And if you can look at things like the Garlock data	20 21	so the start-up costs you have once, and then the per-claim file review. So maybe it's a little less

50 (Pages 194 - 197)

	Page 198		Page 200
1	the start-up costs an extra time. You still have	1	MR. GUERKE: Let me just go
2	that once, but that's ignoring the overlap in the	2	through
3	Claimants.	3	MR. EVERT: You want to try to
4	So if, hypothetically, 6,000 of the	4	make it to 5:00, and then Dan will take it
5	Claimants overlapped and that redaction had already	5	from there?
6	been completed, maybe you only have to look at	6	MR. GUERKE: I will go through
7	6,000 Claimants, because those are the ones that	7	this series of questions and hand it off.
8	haven't been done. And then you would expect it	8	Thank you.
9	would be less expensive.	9	BY MR. GUERKE:
10	If only 2,000 overlapped and so you	10	Q. Are you aware that November 30th, the
11	had to look at 10,000, you would expect it to be a	11	Court ruled on DCPF and the DCPF's Trusts motion to
12	little more expensive. I don't know the exact	12	quash?
13	overlap, but I would think they would take	13	A. I know there was such a ruling. I
14	advantage over that overlap because they could	14	couldn't tell you the date.
15	materially reduce their cost.	15	Q. And it was a 10 percent sample
16	Q. Whatever the review costs would be,	16	ruling, right?
17	it would be less with a sample, correct?	17	A. There I'm aware that his
18	A. Correct.	18	decision for 10 percent sample, yes.
19	MR. EVERT: Kevin, let me	19	Q. In December, after that that
20	interrupt you for a second.	20	decision was rendered, the Debtors proposed a
21	He's available from 1:00 to 5:00,	21	stratified random sampling protocol to the parties
22	and it will be 5:00 it's four minutes to	22	involved in in this case.
	Page 199		Page 201
1	5:00. We I know you got a little more to	1	Are you familiar with that?
2	go, but I'm just wondering would it assist	2	A. I'm very familiar with that.
3	things if we can try to expedite to take	3	Q. Were you involved in preparing that
4	five minutes and get organized, or are you	4	stratified random sample?
5	close to finishing or just trying to get a	5	A. Yes.
6	sense	6	Q. Were you in charge of that that
7	MR. GUERKE: I'm using the	7	process? Is that your work product?
8	5:00 p.m. as where I'm trying to finish.	8	A. I directed all the work on that;
9	It's up to you. I will take five minutes and	9	that's correct.
10	try to streamline it	10	Q. The proposed sample that was
11	MR. EVERT: No. If you think	11	circulated December 19th was sufficient for your
12	you're there	12	purposes in this case, correct?
13	MR. GUERKE: I will go until	13	MR. EVERT: Object to the form of
14	you tell me to stop.	14	the question.
15	So you when are you going to	15	THE WITNESS: I would not describe
16	tell me to stop?	16	it that way.
17	MR. EVERT: I'm not going to tell	17	So given there's now external
18	you stop at dead 5:00 is he last? Anybody	18	constraint, the most data you can have is
19	else?	19	10 percent. I want all 10 percent. That's
20	MR. HOGAN: I have one I had	20	the most I'm allowed to have, and I'm going
21	one series of questions about Paragraph 16,	21	to try to design a sample that will get me
22	and that will take me probably 10 minutes.	22	the greatest level of efficiency I can out of

51 (Pages 198 - 201)

Veritext Legal Solutions 800-227-8440 973-410-4040

	Page 202		Page 204
1	those data.	1	circulated to the parties was seeking information
2	All right. But it's a constraint	2	for the period 2014 to the present, right?
3	now. If the Court orders it, whether you	3	A. Well, part of that negotiation was if
4	like it or not, whether you think it's the	4	we are going to be constrained to just 1,200
5	right decision or not, you live with it.	5	Claimants, the more recent Claimants are answer
6	So it was going I just accepted	6	more questions than the ones further back. I gave
7	that things weren't going to be as precise	7	some answers before about the further back ones are
8	and I'd give less guidance to the Court than	8	to get demographic trends. The more recent ones
9	I believe was optimal given the cost-benefit	9	contribute both to the demographic trends and to
10	analysis here.	10	this question of were all the exposures disclosed.
11	BY MR. GUERKE:	11	So there's more information for the purpose of
12	Q. And the sample that you prepared	12	estimation.
13	would have worked in your analysis, correct?	13	So I made the determination that
14	MR. EVERT: Object to the form of	14	dropping all the earlier claims and losing that
15	the question.	15	information on trend was better than risking not
16	THE WITNESS: So the question I	16	being able to answer the questions on full
17	gave before to work could be the same answer	17	disclosure. It's a trade-off. It may render,
18	now the answer I gave to the similar	18	being able to control for the trends properly,
19	question would be the same now.	19	impossible. But I'm now facing an external
20	BY MR. GUERKE:	20	constraint, and I'm trying to do the best I can
21	Q. The are you finished with your	21	within that constraint.
22	answer? I didn't mean to interrupt you.	22	Q. And you could have performed your
	Page 203		Page 205
1	A. Yes.	1	analysis with Trust data from 2014 to the present,
2	Q. The proposed stratified random sample	2	right?
3	that that the Debtors circulated is a	3	MR. EVERT: I object.
4	representative and efficient sample.	4	And, Kevin, I've got to say I
5	You would agree with that, correct?	5	object to this entire line of questioning,
6	A. That is its intent, is to be as	6	because that was a 408 effort to compromise a
7	efficient it is definitively representative.	7	disputed issue in the case. And I think it's
8	It's trying to squeeze as much efficiency out of	8	inappropriate to use an e-mail that a lawyer
9	the sample of 1,200 as one can.	9	wrote to cross-examine him about what
10	Q. And the the the proposed	10	about what the lawyer's intent was in trying
11	stratified random sample would provide a reliable	11	to get the case settled.
12	cross-section of Debtors' mesothelioma claims	12	MR. GUERKE: This was after the
13	settlement history, correct?	13	ruling
14	A. Reliable? I can't go to that point	14	MR. EVERT: I understand, but we
15	at this. I haven't done the analysis.	15	still had a disputed issue about how to draw
16	This is where it goes back to the	16	the sample.
17	same as does it work. For certain questions, that	17	But I just I'm sorry. Note
18	is very likely to turn out to be enough. And for	18	note for the record my objection to the to
19	other questions, I think there's a very high	19	the entire line of questioning. I think it's
20	probability that it's not sufficient and will end	20	inappropriate.
21	up with very broad confidence intervals.	21	But you're welcome to have the
22	Q. The sample that you prepared and was	22	question read back or ask it again.

52 (Pages 202 - 205)

	Page 206		Page 208
1	THE WITNESS: I, as a person who	1	exercise"?
2	is going to ultimately potentially file an	2	Q. Well, the statement, in in and of
3	estimation report, made the judgment call	3	itself, is a statement about what the Debtors were
4	that I'd rather risk not being able to I'd	4	aware of.
5	rather risk not being able to control for the	5	An awareness is a state of mind.
6	industry and occupation mix of Claimants and	6	Would you agree?
7	those trends demographically than not being	7	A. "Knowledge" in this sense is probably
8	able to reliably quantify the number of	8	the word I would use.
9	exposures that were being disclosed.	9	Q. Okay. And from a temporal aspect,
10	I was forced into having to make a	10	there's a point in time at which somebody is either
11	trade-off I would not want to make that I	11	aware or has knowledge of something or they don't
12	don't think the cost-benefit analysis	12	have knowledge of something.
13	supports. But I'm very much putting at risk	13	Would you agree?
14	being able to properly control for the	14	A. Correct.
15	demographic trends by constrained 2014.	15	Q. Okay. And so from from this
16	But I had to give something up. I	16	statement's standpoint, at some point in the
17	had a Court order. So I decided what would	17	Trust or in in the Debtors' database, there
18	create an expectation the least harmful	18	is a determination about what the Debtor knew and
19	within that month.	19	when they knew it.
20	MR. GUERKE: Based on the time,	20	Would you agree?
21	Dr. Mullin, I'm going to pass the witness.	21	MR. EVERT: Object to the form of
22	Thank you very much.	22	the question.
	Page 207		Page 209
1	THE WITNESS: Thank you.	1	THE WITNESS: I don't think, in
2	oOo	2	their database, that information is there. I
3	EXAMINATION BY COUNSEL FOR	3	think that's something, generally, you have
4	CERTAIN MATCHING CLAIMANTS	4	to go to underlying claim records for.
5	000	5	That's not, in general, available in their
6	BY MR. HOGAN:	6	claims database in electronic form.
7	Q. Good afternoon, Dr. Mullin. It's	7	BY MR. HOGAN:
8	Daniel Hogan on behalf of the Certain Matching	8	Q. Okay. So your statement is that the
9	Claimants. I will try not to take too much of your	9	Trust data from DCPF from Verus is needed to assess
10	time, but I appreciate your time today.	10	whether the Debtors entered into settlements aware
11	A. Good afternoon.	11	of the totality of alternative exposures.
	O. I'd ask you to direct your attention	12	So let's just break it down.
12	Q. I'd ask you to direct your attention to Paragraph 16 of your declaration. I'm going to	12 13	So let's just break it down.  At some point, there's a there's a
12 13	to Paragraph 16 of your declaration. I'm going to	13	At some point, there's a there's a
12 13 14	to Paragraph 16 of your declaration. I'm going to attempt to endeavor to limit it my questions to	13 14	At some point, there's a there's a state of mind of the Debtors about what they knew
12 13 14 15	to Paragraph 16 of your declaration. I'm going to attempt to endeavor to limit it my questions to this paragraph.	13 14 15	At some point, there's a there's a state of mind of the Debtors about what they knew about alternative exposures. And if you look at
12 13 14 15 16	to Paragraph 16 of your declaration. I'm going to attempt to endeavor to limit it my questions to this paragraph.  If you would, the first sentence	13 14 15 16	At some point, there's a there's a state of mind of the Debtors about what they knew about alternative exposures. And if you look at that on a timeline, there's some point at which
12 13 14 15 16 17	to Paragraph 16 of your declaration. I'm going to attempt to endeavor to limit it my questions to this paragraph.  If you would, the first sentence provides that The Trust data are also needed to	13 14 15 16 17	At some point, there's a there's a state of mind of the Debtors about what they knew about alternative exposures. And if you look at that on a timeline, there's some point at which they didn't know it. And somewhere along that
12 13 14 15 16 17 18	to Paragraph 16 of your declaration. I'm going to attempt to endeavor to limit it my questions to this paragraph.  If you would, the first sentence provides that The Trust data are also needed to assess whether the Debtors entered into settlements	13 14 15 16 17 18	At some point, there's a there's a state of mind of the Debtors about what they knew about alternative exposures. And if you look at that on a timeline, there's some point at which they didn't know it. And somewhere along that continuum up till now, they became aware.
12 13 14 15 16 17 18 19	to Paragraph 16 of your declaration. I'm going to attempt to endeavor to limit it my questions to this paragraph.  If you would, the first sentence provides that The Trust data are also needed to assess whether the Debtors entered into settlements aware of the totality of alternative exposures.	13 14 15 16 17 18 19	At some point, there's a there's a state of mind of the Debtors about what they knew about alternative exposures. And if you look at that on a timeline, there's some point at which they didn't know it. And somewhere along that continuum up till now, they became aware.  Would you agree?
12 13 14 15 16 17 18	to Paragraph 16 of your declaration. I'm going to attempt to endeavor to limit it my questions to this paragraph.  If you would, the first sentence provides that The Trust data are also needed to assess whether the Debtors entered into settlements	13 14 15 16 17 18	At some point, there's a there's a state of mind of the Debtors about what they knew about alternative exposures. And if you look at that on a timeline, there's some point at which they didn't know it. And somewhere along that continuum up till now, they became aware.

53 (Pages 206 - 209)

the temporal part. I don't know if they're,  even as of today, aware of the totality of  the exposures. So I don't I can't agree  that as of at some point in time, they  became aware of the totality.  This sentence is very much looking  at the time of settlement.  BY MR. HOGAN:  Q. At the time of what settlement?  A. When the Debtors entered into a  settlement with a given Claimant.  Q. Okay. So you would agree with me, I  hope, that at the time that the Debtors entered  the temporal part. I don't know if they're,  allegations to the products of the reallegations of the reallegations to the products of the reallegations of the reallegatio	reorganized established with ame Claimants gainst the
2 even as of today, aware of the totality of 3 the exposures. So I don't I can't agree 4 that as of at some point in time, they 5 became aware of the totality. 6 This sentence is very much looking 7 at the time of settlement. 8 BY MR. HOGAN: 9 Q. At the time of what settlement? 9 A. Pretty close, I think. 10 Maybe that'll help. 11 A. When the Debtors entered into a 12 settlement with a given Claimant. 13 Q. Okay. So you would agree with me, I 14 hope, that at the time that the Debtors entered  2 allegations to the products of the real allegations to the retities of antities for which the Trusts were antities for which the Trusts were antities for which the Trusts were approach as entities for which the Trusts were approach as exposure with exposure rewith exposure rewith exposure rewith as exposure with exposure rewith exposure rewith exposure rewith exposure rewith exposure rewith exposure rewith exposure	established with ame Claimants gainst the
the exposures. So I don't I can't agree that as of at some point in time, they became aware of the totality.  This sentence is very much looking This sentence is very much looking BY MR. HOGAN: BY MR. HOGAN:  Q. At the time of what settlement?  Maybe that'll help.  A. When the Debtors entered into a settlement with a given Claimant.  Q. Okay. So you would agree with me, I hope, that at the time that the Debtors entered  a entities for which the Trusts were exposure with exposure those s disclosed in their tort litigation age Debtors.  A list that a fair statement?  A Pretty close, I think.  Q You had testified earlier largely have a mathematical mode is isn't that right?  A Ultimately, you're going things to computations if you're defined.	established with ame Claimants gainst the
that as of at some point in time, they  became aware of the totality.  This sentence is very much looking  the time of settlement.  BY MR. HOGAN:  Q. At the time of what settlement?  Maybe that'll help.  A. When the Debtors entered into a settlement with a given Claimant.  Q. Okay. So you would agree with me, I hope, that at the time that the Debtors entered  that as of at some point in time, they  exposure with exposure those s disclosed in their tort litigation age  Debtors.  A. Did I read that correctly?  A. Pretty close, I think.  Q. You had testified earlier largely have a mathematical mode isn't that right?  A. Ultimately, you're going things to computations if you're described.	ame Claimants gainst the
5 became aware of the totality. 6 This sentence is very much looking 7 at the time of settlement. 8 BY MR. HOGAN: 9 Q. At the time of what settlement? 9 A. Pretty close, I think. 10 Maybe that'll help. 10 Q. You had testified earlier 11 A. When the Debtors entered into a 12 settlement with a given Claimant. 12 isn't that right? 13 Q. Okay. So you would agree with me, I 14 hope, that at the time that the Debtors entered 15 disclosed in their tort litigation age 6 Debtors. 7 Is that a fair statement? 9 A. Pretty close, I think. 10 Q. You had testified earlier 11 largely have a mathematical mode isn't that right? 12 isn't that right? 13 A. Ultimately, you're going things to computations if you're described.	gainst the
6 This sentence is very much looking 7 at the time of settlement. 8 BY MR. HOGAN: 9 Q. At the time of what settlement? 10 Maybe that'll help. 11 A. When the Debtors entered into a 12 settlement with a given Claimant. 12 Q. Okay. So you would agree with me, I 13 Q. Okay. So you would agree with me, I 14 hope, that at the time that the Debtors entered 16 Debtors. 7 Is that a fair statement? 9 A. Pretty close, I think. 10 Q. You had testified earlier largely have a mathematical mode isn't that right? 11 A. Ultimately, you're going things to computations if you're defined.	r that you
7 Is that a fair statement? 8 BY MR. HOGAN: 9 Q. At the time of what settlement? 9 A. Pretty close, I think. 10 Maybe that'll help. 10 Q. You had testified earlier 11 A. When the Debtors entered into a 12 settlement with a given Claimant. 13 Q. Okay. So you would agree with me, I 14 hope, that at the time that the Debtors entered 15 Is that a fair statement? 16 Q. You had testified earlier 17 Is that a fair statement? 18 Did I read that correctly? 10 Q. You had testified earlier 11 largely have a mathematical model isn't that right? 12 isn't that right? 13 A. Ultimately, you're going things to computations if you're defined.	r that you
9 Q. At the time of what settlement? 10 Maybe that'll help. 11 A. When the Debtors entered into a 12 settlement with a given Claimant. 13 Q. Okay. So you would agree with me, I 14 hope, that at the time that the Debtors entered 19 A. Pretty close, I think. 10 Q. You had testified earlier largely have a mathematical model isn't that right? 11 A. Ultimately, you're going things to computations if you're defined.	r that you
9 Q. At the time of what settlement? 10 Maybe that'll help. 11 A. When the Debtors entered into a 12 settlement with a given Claimant. 13 Q. Okay. So you would agree with me, I 14 hope, that at the time that the Debtors entered 19 A. Pretty close, I think. 10 Q. You had testified earlier largely have a mathematical model isn't that right? 11 A. Ultimately, you're going things to computations if you're defined.	r that you
10 Maybe that'll help. 11 A. When the Debtors entered into a 12 settlement with a given Claimant. 13 Q. Okay. So you would agree with me, I 14 hope, that at the time that the Debtors entered 10 Q. You had testified earlier largely have a mathematical model isn't that right? 12 isn't that right? 13 A. Ultimately, you're going things to computations if you're defined and the properties of	•
11 A. When the Debtors entered into a 12 settlement with a given Claimant. 13 Q. Okay. So you would agree with me, I 14 hope, that at the time that the Debtors entered 15 largely have a mathematical mode isn't that right? 16 A. Ultimately, you're going things to computations if you're described.	•
12 settlement with a given Claimant. 13 Q. Okay. So you would agree with me, I 14 hope, that at the time that the Debtors entered 15 isn't that right? 16 A. Ultimately, you're going things to computations if you're described.	el for everything
Q. Okay. So you would agree with me, I  hope, that at the time that the Debtors entered  13 A. Ultimately, you're going things to computations if you're described.	
hope, that at the time that the Debtors entered 14 things to computations if you're d	g to reduce
	-
15 into a settlement with any particular matching 15 analysis, which is what I'm doing.	
16 Claimant or any Claimant that they settled with, 16 Q. So have you reduced the	
that they they either knew or didn't know of 17 knowledge as it relates to settlement	
alternative exposures? 18 their knowledge of other alternati	
19 A. There would be a set of alternative 19 were?	1
20 exposures they would be aware of, typically, and 20 MR. EVERT: Object to	the form of
21 there may be zero or multiple exposures they're not 21 the question.	
22 aware of. 22 THE WITNESS: Not at	this stage.
Page 211	Page 213
1 Q. Okay. And how they came to that 1 BY MR. HOGAN:	
2 awareness is critical. 2 Q. Will you?	
3 Yes or no? 3 A. Ultimately, my task is to give	/e a
4 MR. EVERT: Object to the form of 4 numerical quantification, so I have to	reduce
5 the question. 5 everything to numbers eventually. So	that's
6 Critical to what? 6 mathematics. So, ultimately, I will be	doing that
7 BY MR. HOGAN: 7 through mathematics.	
8 Q. Critical to their understanding and 8 Q. So the answer is yes, you will	ill be
9 determination about whether to make the settlement. 9 doing that? You will be reducing the	Debtors'
10 A. So it's the that is not the 10 knowledge of alternative exposures at	the time of
11 only determinant that goes into a settlement 11 settlement?	
12 decision 12 MR. EVERT: Object to the f	form of
2 Q. I understand that 13 the question.	
14 A so 14 BY MR. HOGAN:	
15 Q but it is 15 Q. Is that a correct answer is	that a
16 A context 16 correct question do you understand	the question?
17 Q but it is one pardon me. 17 A. No. I think you needed ano	ther
18 A it is one it is one element 18 phrase at the end of it for it to make se	ense.
that goes into a settlement. It's not the only 19 Q. My apologies. I'll rephrase	the
20 element. So context of many other things could 20 question. I'll strike that.	
21 matter. 21 You testified that there is a	

54 (Pages 210 - 213)

Veritext Legal Solutions 973-410-4040

	Page 214		Page 216
1	to.	1	of administrative settlements in the asbestos
2	And I'm asking you about with	2	environment.
3	regard to settlements that the Debtor entered into,	3	Q. Okay. So you understand that in a
4	you're going to make a determination in a	4	large share of those administrative settlement
5	mathematical model which will address whether or	5	constructs, that there weren't questions asked
6	not they were aware of alternative exposures when	6	about alternative exposures.
7	they made that settlement?	7	Do you understand that?
8	A. Well, there's a factual question of	8	A. I am aware that there are
9	what fraction of them they're aware of. That's a	9	administrative settlements where that information
10	ratio	10	is not exchanged.
		11	Q. You're aware that there's
11			
12	A so the impact of that on the	12	administrative settlements where that information
13	settlement is really going to Paragraph 17.	13	is not requested?
14	So if we're transitioning to	14	A. I believe that's true as well.
15	Paragraph 17, which I didn't think we were doing,	15	MR. HOGAN: All right. I don't
16	we're getting into the impact. The Paragraph 16	16	have anything else. Thanks for your time.
17	is just if you're exposed to 38 products and the	17	MR. EVERT: All right. Thanks,
18	Debtor only knew about three of those at the time	18	everybody.
19	they settled or maybe the Debtor knew about 38 at	19	(Witness excused.)
20	the time they settled, that's a factual question	20	
21	Q. Sure.	21	(Deposition concluded at
22	A that's all Paragraph 16 is talking	22	approximately 5:11 p.m. EDT.)
	Page 215		Page 217
1	about, that factual question.	1	CERTIFICATE
2	How that enters into an estimate	2	I, Cindy L. Sebo, Nationally Certified Court
3	estimate of future liability becomes a modeling	3	Reporter herein do hereby certify that the foregoing
4	question, which is moving into Paragraph 17.	4	continued deposition of CHARLES HENRY MULLIN, PH.D.
5	Q. Okay. Before we do that, let's talk	5	was taken before me pursuant to notice, at the time and place indicated; that said witness was previously
6	about what you just said about the mathematical	7	duly sworn remotely by a certified stenographer to
7	aspect of that.	8	tell the truth, the whole truth, and nothing but the
8	If I take that calculus that you just	9	truth under penalty of perjury; that the testimony of
9	undertook and overlay an administrative settlement	10	said witness was correctly recorded to the best of my
10	on top of it, how does that factor into that	11	ability in machine shorthand and thereafter
11	calculation?	12	transcribed under my supervision with computer-aided
		13 14	transcription; that the deposition is a true and accurate record of the testimony given by the witness;
12	MR. EVERT: Object to the form of	15	and that I am neither of counsel nor kin to any party
13	the question.	16	in said action, nor interested in the outcome thereof.
14	THE WITNESS: It depends on the	17	N
15	nature of the administrative settlement. It	18	Cender Jeso
16	becomes fact-specific.		Cindy L. Sebo, RMR, CRR, RPR, CSR, CCR,
17	BY MR. HOGAN:	19	CLR, RSA, NYRCR, NYACR, CA CSR #14409,
18	Q. Okay. And you understand generally	20	NJ CCR #30XI00244600, NJ CRT
19	how administrative settlements work?	20	#30XR00019500, Washington CSR #23005926, Oregon State #230105,
20	A. There's a whole range of them	21	TN #CSR 998, Remote Counsel Reporter,
21	Q. I		LiveLitigation Authorized Reporter
22	A I understand generally the range	22	

55 (Pages 214 - 217)

Veritext Legal Solutions 973-410-4040

	Page 218		Pag	e 220
1	C. Michael Evert, Jr., Esq.	1 2	E R R A T A WITNESS: CHARLES HENRY MULLIN, PH.D.	
2	cmevert@ewhlaw.com	3	DATE: April 28, 2023	
3	May 9, 2023.	4	CAPTION: Armstrong World Industries v. Aldrich, et al., In Re; Aldrich Pump, LLC	
4	RE: Armstrong World Industries, Inc., et al. v. Aldrich Pump	5	PAGE LINE REASON FOR CHANGE:	
	LLC, et al.	6		
5	5/8/2023, Charles Henry Mullin , Ph.D. (#5905066)	7		
6	The above-referenced transcript is available for	8	PAGE LINE REASON FOR CHANGE:	
7	review.	9		
8	Within the applicable timeframe, the witness should		PAGE LINE REASON FOR CHANGE:	
9	read the testimony to verify its accuracy. If there are	10		
10	any changes, the witness should note those with the	11	PAGE LINE REASON FOR CHANGE:	
11	reason, on the attached Errata Sheet.	12	THE BUILD OF THE WOLL	
12	The witness should sign the Acknowledgment of	13		
13	Deponent and Errata and return to the deposing attorney.	14	PAGE LINE REASON FOR CHANGE:	
14	Copies should be sent to all counsel, and to Veritext at	15		
15	cs-ny@veritext.com.		PAGE LINE REASON FOR CHANGE:	
16	Return completed errata within 30 days from	16		
17	receipt of testimony.	17	PAGE LINE REASON FOR CHANGE:	
18	If the witness fails to do so within the time	18	THE BUILD OF THE WOLL	
19	allotted, the transcript may be used as if signed.	19		
20		20 21		
21	Yours,	22		
22	Veritext Legal Solutions	22	DATE CHARLES HENRY MULLIN, PH.D.	
	Page 219		Pag	e 221
1 2	Page 219 ERRATA WITNESS: CHARLES HENRY MULLIN, PH.D.	1	Pag ACKNOWLEDGMENT OF WITNESS	e 221
2	E R R A T A WITNESS: CHARLES HENRY MULLIN, PH.D. DATE: May 8, 2023	1 2	· · · · · · · · · · · · · · · · · · ·	e 221
2 3 4	E R R A T A WITNESS: CHARLES HENRY MULLIN, PH.D.		· · · · · · · · · · · · · · · · · · ·	
2 3 4 5	E R R A T A WITNESS: CHARLES HENRY MULLIN, PH.D. DATE: May 8, 2023 CAPTION: Armstrong World Industries v. Aldrich,	2	ACKNOWLEDGMENT OF WITNESS	
2 3 4	E R R A T A WITNESS: CHARLES HENRY MULLIN, PH.D. DATE: May 8, 2023 CAPTION: Armstrong World Industries v. Aldrich, et al., In Re; Aldrich Pump, LLC	2 3	ACKNOWLEDGMENT OF WITNESS  I, CHARLES HENRY MULLIN, PH.D., do hereby	
2 3 4 5	E R R A T A WITNESS: CHARLES HENRY MULLIN, PH.D. DATE: May 8, 2023 CAPTION: Armstrong World Industries v. Aldrich, et al., In Re; Aldrich Pump, LLC	2 3 4	ACKNOWLEDGMENT OF WITNESS  I, CHARLES HENRY MULLIN, PH.D., do hereby certify that I have read the foregoing pages herein,	
2 3 4 5	E R R A T A WITNESS: CHARLES HENRY MULLIN, PH.D. DATE: May 8, 2023 CAPTION: Armstrong World Industries v. Aldrich, et al., In Re; Aldrich Pump, LLC PAGE LINE REASON FOR CHANGE:	2 3 4 5	ACKNOWLEDGMENT OF WITNESS  I, CHARLES HENRY MULLIN, PH.D., do hereby certify that I have read the foregoing pages herein, and that the same is a correct transcription of the	
2 3 4 5 6	E R R A T A WITNESS: CHARLES HENRY MULLIN, PH.D. DATE: May 8, 2023 CAPTION: Armstrong World Industries v. Aldrich, et al., In Re; Aldrich Pump, LLC  PAGE LINE REASON FOR CHANGE:  PAGE LINE REASON FOR CHANGE:	2 3 4 5 6	ACKNOWLEDGMENT OF WITNESS  I, CHARLES HENRY MULLIN, PH.D., do hereby certify that I have read the foregoing pages herein, and that the same is a correct transcription of the answers given by me of the proceedings taken remotely	
2 3 4 5 6 7 8	E R R A T A WITNESS: CHARLES HENRY MULLIN, PH.D. DATE: May 8, 2023 CAPTION: Armstrong World Industries v. Aldrich, et al., In Re; Aldrich Pump, LLC PAGE LINE REASON FOR CHANGE:	2 3 4 5 6 7	ACKNOWLEDGMENT OF WITNESS  I, CHARLES HENRY MULLIN, PH.D., do hereby certify that I have read the foregoing pages herein, and that the same is a correct transcription of the answers given by me of the proceedings taken remotely to the questions therein propounded under penalty of	
2 3 4 5 6 7 8	E R R A T A WITNESS: CHARLES HENRY MULLIN, PH.D. DATE: May 8, 2023 CAPTION: Armstrong World Industries v. Aldrich, et al., In Re; Aldrich Pump, LLC  PAGE LINE REASON FOR CHANGE:  PAGE LINE REASON FOR CHANGE:  PAGE LINE REASON FOR CHANGE:	2 3 4 5 6 7 8	ACKNOWLEDGMENT OF WITNESS  I, CHARLES HENRY MULLIN, PH.D., do hereby certify that I have read the foregoing pages herein, and that the same is a correct transcription of the answers given by me of the proceedings taken remotely to the questions therein propounded under penalty of perjury, except for the corrections or changes in form	
2 3 4 5 6 7 8 9	E R R A T A WITNESS: CHARLES HENRY MULLIN, PH.D. DATE: May 8, 2023 CAPTION: Armstrong World Industries v. Aldrich, et al., In Re; Aldrich Pump, LLC  PAGE LINE REASON FOR CHANGE:  PAGE LINE REASON FOR CHANGE:  PAGE LINE REASON FOR CHANGE:	2 3 4 5 6 7 8 9	ACKNOWLEDGMENT OF WITNESS  I, CHARLES HENRY MULLIN, PH.D., do hereby certify that I have read the foregoing pages herein, and that the same is a correct transcription of the answers given by me of the proceedings taken remotely to the questions therein propounded under penalty of perjury, except for the corrections or changes in form or substance, if any, noted in the attached errata	
2 3 4 5 6 7 8 9 10 11 12	E R R A T A WITNESS: CHARLES HENRY MULLIN, PH.D. DATE: May 8, 2023 CAPTION: Armstrong World Industries v. Aldrich, et al., In Re; Aldrich Pump, LLC  PAGE LINE REASON FOR CHANGE:  PAGE LINE REASON FOR CHANGE:  PAGE LINE REASON FOR CHANGE:	2 3 4 5 6 7 8 9	ACKNOWLEDGMENT OF WITNESS  I, CHARLES HENRY MULLIN, PH.D., do hereby certify that I have read the foregoing pages herein, and that the same is a correct transcription of the answers given by me of the proceedings taken remotely to the questions therein propounded under penalty of perjury, except for the corrections or changes in form or substance, if any, noted in the attached errata sheet.	
2 3 4 5 6 7 8 9 10 11 12 13	E R R A T A WITNESS: CHARLES HENRY MULLIN, PH.D. DATE: May 8, 2023 CAPTION: Armstrong World Industries v. Aldrich, et al., In Re; Aldrich Pump, LLC  PAGE LINE REASON FOR CHANGE:	2 3 4 5 6 7 8 9 10	ACKNOWLEDGMENT OF WITNESS  I, CHARLES HENRY MULLIN, PH.D., do hereby certify that I have read the foregoing pages herein, and that the same is a correct transcription of the answers given by me of the proceedings taken remotely to the questions therein propounded under penalty of perjury, except for the corrections or changes in form or substance, if any, noted in the attached errata sheet.	
2 3 4 5 6 7 8 9 10 11 12 13	E R R A T A WITNESS: CHARLES HENRY MULLIN, PH.D. DATE: May 8, 2023 CAPTION: Armstrong World Industries v. Aldrich, et al., In Re; Aldrich Pump, LLC  PAGE LINE REASON FOR CHANGE:	2 3 4 5 6 7 8 9 10 11	ACKNOWLEDGMENT OF WITNESS  I, CHARLES HENRY MULLIN, PH.D., do hereby certify that I have read the foregoing pages herein, and that the same is a correct transcription of the answers given by me of the proceedings taken remotely to the questions therein propounded under penalty of perjury, except for the corrections or changes in form or substance, if any, noted in the attached errata sheet.  DATE  SIGNATURE	
2 3 4 5 6 7 8 9 10 11 12 13	E R R A T A WITNESS: CHARLES HENRY MULLIN, PH.D. DATE: May 8, 2023 CAPTION: Armstrong World Industries v. Aldrich, et al., In Re; Aldrich Pump, LLC  PAGE LINE REASON FOR CHANGE:	2 3 4 5 6 7 8 9 10 11 12 13	ACKNOWLEDGMENT OF WITNESS  I, CHARLES HENRY MULLIN, PH.D., do hereby certify that I have read the foregoing pages herein, and that the same is a correct transcription of the answers given by me of the proceedings taken remotely to the questions therein propounded under penalty of perjury, except for the corrections or changes in form or substance, if any, noted in the attached errata sheet.  DATE  SIGNATURE  Subscribed and sworn to before me	
2 3 4 5 6 7 8 9 10 11 12 13	E R R A T A WITNESS: CHARLES HENRY MULLIN, PH.D. DATE: May 8, 2023 CAPTION: Armstrong World Industries v. Aldrich, et al., In Re; Aldrich Pump, LLC  PAGE LINE REASON FOR CHANGE:	2 3 4 5 6 7 8 9 10 11 12 13 14	ACKNOWLEDGMENT OF WITNESS  I, CHARLES HENRY MULLIN, PH.D., do hereby certify that I have read the foregoing pages herein, and that the same is a correct transcription of the answers given by me of the proceedings taken remotely to the questions therein propounded under penalty of perjury, except for the corrections or changes in form or substance, if any, noted in the attached errata sheet.  DATE  SIGNATURE  Subscribed and sworn to before me	
2 3 4 5 6 7 8 9 10 11 12 13 14	E R R A T A WITNESS: CHARLES HENRY MULLIN, PH.D. DATE: May 8, 2023 CAPTION: Armstrong World Industries v. Aldrich, et al., In Re; Aldrich Pump, LLC  PAGE LINE REASON FOR CHANGE:	2 3 4 5 6 7 8 9 10 11 12 13 14 15	ACKNOWLEDGMENT OF WITNESS  I, CHARLES HENRY MULLIN, PH.D., do hereby certify that I have read the foregoing pages herein, and that the same is a correct transcription of the answers given by me of the proceedings taken remotely to the questions therein propounded under penalty of perjury, except for the corrections or changes in form or substance, if any, noted in the attached errata sheet.  DATE  SIGNATURE  Subscribed and sworn to before me	
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	E R R A T A WITNESS: CHARLES HENRY MULLIN, PH.D. DATE: May 8, 2023 CAPTION: Armstrong World Industries v. Aldrich, et al., In Re; Aldrich Pump, LLC  PAGE LINE REASON FOR CHANGE:	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	ACKNOWLEDGMENT OF WITNESS  I, CHARLES HENRY MULLIN, PH.D., do hereby certify that I have read the foregoing pages herein, and that the same is a correct transcription of the answers given by me of the proceedings taken remotely to the questions therein propounded under penalty of perjury, except for the corrections or changes in form or substance, if any, noted in the attached errata sheet.  DATE SIGNATURE  Subscribed and sworn to before me this day of, 20	
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	ERRATA WITNESS: CHARLES HENRY MULLIN, PH.D. DATE: May 8, 2023 CAPTION: Armstrong World Industries v. Aldrich, et al., In Re; Aldrich Pump, LLC  PAGE LINE REASON FOR CHANGE:  PAGE LINE REASON FOR CHANGE:	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	ACKNOWLEDGMENT OF WITNESS  I, CHARLES HENRY MULLIN, PH.D., do hereby certify that I have read the foregoing pages herein, and that the same is a correct transcription of the answers given by me of the proceedings taken remotely to the questions therein propounded under penalty of perjury, except for the corrections or changes in form or substance, if any, noted in the attached errata sheet.  DATE SIGNATURE  Subscribed and sworn to before me this day of, 20	
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	E R R A T A WITNESS: CHARLES HENRY MULLIN, PH.D. DATE: May 8, 2023 CAPTION: Armstrong World Industries v. Aldrich, et al., In Re; Aldrich Pump, LLC  PAGE LINE REASON FOR CHANGE:	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	ACKNOWLEDGMENT OF WITNESS  I, CHARLES HENRY MULLIN, PH.D., do hereby certify that I have read the foregoing pages herein, and that the same is a correct transcription of the answers given by me of the proceedings taken remotely to the questions therein propounded under penalty of perjury, except for the corrections or changes in form or substance, if any, noted in the attached errata sheet.  DATE SIGNATURE  Subscribed and sworn to before me this day of, 20	
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	ERRATA WITNESS: CHARLES HENRY MULLIN, PH.D. DATE: May 8, 2023 CAPTION: Armstrong World Industries v. Aldrich, et al., In Re; Aldrich Pump, LLC  PAGE LINE REASON FOR CHANGE:  PAGE LINE REASON FOR CHANGE:	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	ACKNOWLEDGMENT OF WITNESS  I, CHARLES HENRY MULLIN, PH.D., do hereby certify that I have read the foregoing pages herein, and that the same is a correct transcription of the answers given by me of the proceedings taken remotely to the questions therein propounded under penalty of perjury, except for the corrections or changes in form or substance, if any, noted in the attached errata sheet.  DATE SIGNATURE  Subscribed and sworn to before me this day of, 20	
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	ERRATA WITNESS: CHARLES HENRY MULLIN, PH.D. DATE: May 8, 2023 CAPTION: Armstrong World Industries v. Aldrich, et al., In Re; Aldrich Pump, LLC  PAGE LINE REASON FOR CHANGE:  PAGE LINE REASON FOR CHANGE:	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	ACKNOWLEDGMENT OF WITNESS  I, CHARLES HENRY MULLIN, PH.D., do hereby certify that I have read the foregoing pages herein, and that the same is a correct transcription of the answers given by me of the proceedings taken remotely to the questions therein propounded under penalty of perjury, except for the corrections or changes in form or substance, if any, noted in the attached errata sheet.  DATE SIGNATURE  Subscribed and sworn to before me this day of, 20	

56 (Pages 218 - 221)

[& - 15th] Page 1

Г	1		
&	126:2 140:12	<b>100</b> 7:16 35:8	111:7 125:21
<b>&amp;</b> 3:3,16 4:4	178:10 179:13	44:8 47:20	126:13,20,21
6:3 7:13 8:10	179:14,16,21	48:3 82:1	126:22 127:3,5
8:13	180:6,7 203:9	100:22 101:4	134:17 143:11
0	204:4	108:12 140:8	146:19 147:3,7
	<b>1.5</b> 114:1,4,12	151:6 155:14	147:10,11,17
0 109:13 111:4	<b>10</b> 15:9,9 31:3	171:7 173:8,9	148:18 150:2,6
113:15,16,18	38:4,16 40:6	182:17	150:19 154:18
127:2,12	40:21 41:1,3,5	<b>1000</b> 6:5	154:19 177:12
<b>01</b> 96:21 111:4	41:6,14 43:3	<b>10013</b> 8:14	179:16 180:4,9
<b>02108</b> 3:6	43:12 56:3,6	<b>101</b> 8:12 10:18	182:17 183:22
<b>07068</b> 8:6	56:17 57:5,10	<b>10th</b> 74:17	185:14 197:6
<b>07102</b> 7:17	58:3 59:17,20	<b>11</b> 1:10 9:9	<b>12,000th</b> 89:7
1	60:1,4,13 61:1	89:11 111:1	<b>12,001</b> 97:3,6
<b>1</b> 10:9 17:5,7	61:2,22 62:6	<b>11,000</b> 89:11	<b>120</b> 181:1
17:16 18:20	63:3,18 65:10	<b>11,999</b> 89:7	<b>1240</b> 52:6,8
20:15 26:22	77:1 78:3 79:1	111:7	<b>13</b> 112:3 190:6
32:11 37:18	81:8,22 84:4	<b>110</b> 7:6	<b>1311</b> 4:15
72:18 87:15	89:12 95:18	<b>1100</b> 3:18	<b>1372</b> 217:18
109:13 111:11	103:18 104:6	<b>111</b> 5:11	<b>14</b> 117:19
113:18 140:4	104:10,10,14	<b>1152</b> 4:7	<b>144</b> 9:10
180:22	106:20 107:19	<b>11th</b> 6:13	<b>14409</b> 1:19 2:9
<b>1,200</b> 47:20,22	110:14,21	<b>12</b> 48:1 58:4	217:19
48:7,13 56:14	112:12 113:11	111:17	<b>15</b> 38:9 48:21
63:22 73:14,17	127:1 142:17	<b>12,000</b> 15:12	49:2 60:14
73:19 74:2	170:10 171:8	40:12,16 42:3	72:18 73:2
75:4 76:7,15	174:5 175:1,10	44:4 61:16	113:8 119:6
76:20,22 77:6	179:19 180:12	69:18 70:9,13	128:16 131:12
77:9 79:2 83:3	180:14,21	71:9 73:15,17	132:19 142:7
83:9,12 84:4	182:14 199:22	73:18 74:2	165:1
85:10 86:19	200:15,18	75:2,5 76:15	<b>150</b> 87:9,17
90:7,16,18,22	201:19,19	85:20 86:6,15	140:9
91:10,13 92:1	<b>10,000</b> 79:19	88:2,17 89:6	<b>1550</b> 5:5
93:5 95:19	182:1 198:11	89:10 96:17	<b>15th</b> 4:7
103:18 114:11		97:1,2,4,6	

Veritext Legal Solutions

# [16 - 302.252.4447]

Page 2

<b>16</b> 48:21 49:2	<b>2,000</b> 198:10	<b>207</b> 9:11	<b>26th</b> 3:5
82:17 85:4	<b>2,400</b> 74:6 77:6	<b>21</b> 183:9	<b>27</b> 80:15
91:14 119:8,9	77:8	<b>210</b> 142:21	120:11
176:19 190:6,6	<b>20</b> 28:19 46:18	212.308.0070	<b>270</b> 80:22
199:21 207:13	61:22 76:13,16	8:15	<b>28</b> 121:4 220:3
214:16,22	76:17 77:8	<b>21202</b> 5:12	<b>29</b> 122:8
<b>1650</b> 3:11	87:18 113:8	215.398.0554	<b>2:10</b> 65:14
<b>17</b> 10:10 25:20	114:1 142:16	3:13	3
83:19 85:7	142:19 173:22	215.864.8265	<b>3</b> 10:17 15:10
91:9 119:8	221:14	6:21	15:11 40:13,16
176:19 214:13	<b>20-30608</b> 1:11	<b>217</b> 9:15	40:18,19,21,21
214:15 215:4	<b>200</b> 142:14	<b>218</b> 9:16	40:21 41:3,4,4
<b>1735</b> 6:19	<b>20001</b> 2:3	<b>219</b> 9:17	41:6,14,15
<b>18</b> 27:8 38:13	<b>20005</b> 3:19	<b>22</b> 185:2,7	42:20 43:2,3,3
<b>18th</b> 151:12	<b>20005-1706</b> 4:8	191:15	43:3,12,13
<b>19</b> 28:7 92:21	<b>2001</b> 156:3,7,8	<b>22-00303</b> 1:5	43.3,12,13
<b>1910</b> 5:11	<b>2005</b> 42:4	<b>221</b> 9:18	64:15 65:1,1,2
<b>19103</b> 3:12	148:4 150:9	<b>23</b> 95:5	65:3,5 66:3,4,5
19103-7599	156:16,17,20	<b>23005926</b> 1:20	70:12,12 71:20
6:20	157:7	2:13 217:20	71:21 72:1
<b>19801</b> 6:6	<b>2010</b> 158:16,18	<b>230105</b> 1:20	77:20 87:7,16
19801-3034	158:19 159:2	2:13 217:20	101:12,12,16
6:14	160:6	<b>24</b> 71:18 115:8	140:5 155:11
<b>19806</b> 4:16	<b>2014</b> 204:2	<b>240</b> 76:15	155:13,17
<b>1995</b> 156:13	205:1 206:15	<b>25</b> 68:19 69:13	<b>3,000</b> 197:8
<b>19th</b> 201:11	202.339.8567	70:4,14 84:12	<b>30</b> 25:20 27:8
<b>1:00</b> 198:21	4:9	84:15,21 119:1	75:15,17 77:13
<b>1:06</b> 1:15 2:16	202.862.5069	129:17 145:17	77:15 80:5,18
11:6	3:20	145:20 146:9	95:6 112:11
<b>1:59</b> 65:14	<b>2020</b> 151:12	184:11	124:9 142:7,14
2	<b>2023</b> 1:15 9:5	<b>25,000</b> 66:18	218:16
<b>2</b> 10:12 35:19	10:5 11:6	69:21 70:2	<b>300</b> 75:15
51:7,11 71:18	17:12 22:11	71:8,11	77:12,16,18
174:20,22	218:3 219:3	<b>26</b> 119:19	302.252.4447
177.20,22	220:3		6:15
			0.15

Veritext Legal Solutions

# [302.571.6616 - able]

Page 3

			,
302.571.6616	66:14 69:12	<b>5:00</b> 198:21,22	9
6:7	70:18 72:1,11	199:1,8,18	9 110:5 162:13
302.656.7540	140:9 143:11	200:4	162:19 164:9
4:17	145:3,6,9,10,16	<b>5:11</b> 216:22	165:17 218:3
<b>3030</b> 3:11	155:1,5	6	<b>9,000</b> 197:2
<b>30326</b> 5:6	<b>408</b> 205:6	<b>6</b> 103:14	<b>90</b> 65:2 80:19
<b>30th</b> 22:11	<b>435,000</b> 40:15	111:11 128:5	80:21 104:3
200:10	443.573.8507	<b>6,000</b> 86:20	126:20 174:7
30xi00244600	5:13	198:4,7	182:13
1:19 2:10	<b>48</b> 71:10,15	<b>60</b> 63:22 64:1	<b>919</b> 6:13
217:19	<b>4800</b> 7:6	87:18	<b>97</b> 64:20
30xr00019500	5	<b>600</b> 64:3	973.597.2302
1:19 2:11	<b>5</b> 52:18 59:20	<b>60606</b> 7:7	8:7
217:20	59:22 60:3	617.557.5916	973.849.4181
<b>31</b> 124:10	63:20 96:18	3:7	7:18
312.782.3939	109:10 113:10	678.651.1250	<b>99</b> 96:19,20
7:8	<b>5'4</b> 111:12	5:7	109:11,12
<b>32</b> 125:15	<b>5/8/2023</b> 218:5	6th 20:18	<b>99.9</b> 173:18
126:13	<b>50</b> 66:18 68:19	7	<b>998</b> 1:20 2:14
<b>3455</b> 5:5	69:16 70:3,4		217:21
<b>38</b> 214:17,19	80:6 87:8,17	<b>7.5</b> 114:4	9th 8:13 17:11
<b>3:26</b> 131:5	140:8 145:20	<b>70</b> 142:20	a
<b>3:39</b> 131:5	166:9,10	<b>75</b> 84:18	
<b>3m</b> 28:2	184:10,14	129:20 184:9	aanselmi 8:16
4	<b>50,000</b> 69:13	8	abbreviated
<b>4</b> 61:18	70:14 71:16	<b>8</b> 1:15 9:5 10:5	12:12
<b>40</b> 61:3,6,8	145:17 146:10	11:6 106:16	ability 95:10
80:5	<b>500</b> 61:18	219:3	110:4 114:22
<b>400</b> 60:22 61:1	77:20	<b>80</b> 42:11 69:15	178:19 217:11
61:7,8,12,13	<b>51</b> 2:2 10:16	69:19 173:21	able 13:12
68:20 79:17	<b>51st</b> 6:19	<b>86,000</b> 195:6	32:20 39:3
<b>400,000</b> 40:10	<b>55</b> 17:11 18:7	196:2	46:1 60:15
40:11 43:19,20	<b>5905066</b> 1:22	<b>8th</b> 8:13	76:3 77:22
44:2,12,15,18	218:5		80:17 81:13
44:21 66:2,9			82:9 85:9 90:3
			101:13 109:9

Veritext Legal Solutions

[able - agree] Page 4

129:4 157:2,3	accurately	173:14 185:14	adversary
159:21 173:3	48:15 110:9,17	187:22	10:16 51:15
204:16,18	157:21	actuarial 176:2	advise 88:11
206:4,5,8,14	ace 28:1 29:1	add 59:22	122:6 138:15
<b>above</b> 119:2	33:22	81:22 82:11	152:8
218:6	acknowledges	126:14,22	advising
<b>abraham</b> 10:17	120:5,9	120:14,22	152:14
101:17	acknowledging	adding 81:18	aearo 26:21
<b>absence</b> 39:13	123:3	127:1,2 142:13	32:6
110:18	acknowledg	142:19	<b>affect</b> 15:13
absent 40:3	9:18 218:12	additional 91:5	16:6
absolute	221:1	96:19 148:11	affects 45:15
103:11	acllp.com 8:16	address 39:2,3	affiliated 29:5
absolutes 171:2	action 21:5	59:7 67:1	afternoon
academic	34:6 136:4	77:10 78:5	11:22 144:13
121:19	217:16	105:14 142:3	144:14 207:7
acands 51:3	actions 24:9	214:5	207:11
acc 3:2 144:2	actor 99:22	addressed	age 112:10
177:10 180:15	actual 68:14	104:13 141:4	aggregate
acceptable	141:15 186:5	addresses 77:3	164:17
172:19 174:1	188:22	104:5	ago 52:20
accepted 202:6	actually 56:6	addressing	68:18 86:1
access 40:1	59:11 65:9	57:1	98:7
108:22 109:19	72:9 74:11	adds 80:20	agree 71:7
110:3 144:3	78:10 83:7	administrative	72:12 73:15
accessed 99:22	91:15 92:10	68:4,6,9 215:9	77:13,16 86:3
101:1	96:9 107:1	215:15,19	100:21 101:2
accomplish	108:20,21	216:1,4,9,12	122:8,12
118:12	109:15 111:15	administrator	124:11 129:8
account 82:8	112:4,4,15	2:8	133:17 134:21
accuracy	113:1,18 117:8	adopt 132:12	135:3 167:17
107:12 125:16	118:11,17,20	advance 20:2	170:2 175:4
125:22 218:9	120:14 121:1	49:9 102:7	194:4 203:5
accurate 92:10	133:9 137:4	advantage	207:20 208:6
217:14	143:7 171:16	198:14	208:13,20
			,

## [agree - answer] Page 5

209:19,22	<b>allan</b> 8:20	analogy 111:1	analyzing
210:3,13	allegation	111:5,9,10	67:14
agreed 21:16	194:6,7	analyses 15:13	andrew 8:11
agreement	allegations	26:20 61:4	94:19
180:17 181:14	132:21 212:2	86:20 166:1	anecdotes
<b>ahead</b> 78:16	alleged 128:19	169:1 178:4	119:20,21
94:10 141:18	128:22	analysis 30:17	120:1,5
159:3 184:20	allianz 28:22	30:20 31:7	ankara 97:21
<b>aided</b> 217:12	allotted 218:19	33:14 39:5	<b>anselmi</b> 8:10,11
<b>aig</b> 34:20	<b>allow</b> 39:1	40:20 46:9	54:7,17 69:7
<b>aiu</b> 28:14 34:14	83:20 175:17	56:22 62:1,4	132:12 139:12
<b>al</b> 1:5,8,11 9:4	212:1	62:15 64:2	141:1
9:4 10:4,4	allowed 26:7	66:20 68:5	<b>answer</b> 13:7,7
218:4,4 219:4	184:3,6,17	79:5 85:19	13:15,19 14:6
220:4	201:20	86:19 89:14	36:19 39:2,12
<b>aldrich</b> 1:8,11	alternative	91:14 109:7	40:3 48:3 54:8
5:2 9:4 10:4	50:6 82:20	122:18 135:11	54:11 78:15
43:18 69:16	90:15 113:9,22	141:14 157:7	85:8 87:19
135:16,22	115:10 132:20	160:1 163:4,18	91:18 92:19
136:8,10	133:2 134:10	165:16 167:6	93:13 103:3,6
147:22 149:8	135:20 136:8	167:10,14	106:11 108:8
153:13 154:10	175:22 207:19	169:5,8,16	110:11 118:5
155:21 159:13	209:11,15	170:1,1,4,20	133:11 139:17
161:19,21	210:18,19	171:6,16,18	140:20 141:8
162:2 163:21	212:18 213:10	175:15,16	143:6 146:1,14
175:21 191:17	214:6 216:6	176:9 177:7	146:17 162:19
197:5 218:4	amanda 3:4	178:9 179:5,7	162:22 164:14
219:4,4 220:4	americas 8:12	202:10,13	165:8 168:2,2
220:4	<b>amount</b> 62:11	203:15 205:1	173:6 177:22
algorithm	113:13 115:20	206:12 212:15	184:21 188:7
192:21,22	116:17 127:9	analytical	191:12 202:17
algorithms	166:1	121:6	202:18,22
191:20 192:3	amounts 83:22	analyze 67:10	204:5,16 213:8
aligned 13:21	91:10	76:3 107:16	213:15
		131:17	

800-227-8440 973-410-4040

Veritext Legal Solutions

# [answerable - assume]

Page 6

answerable	<b>appears</b> 125:19	<b>area</b> 166:5	155:12,14
62:15	applicable 22:2	areas 16:11	163:2 182:16
answered 14:9	106:5 191:20	53:12 58:5,9	189:22 214:2
70:17 139:10	218:8	132:1,3	aspect 49:14
140:15 160:9	applications	arguing 73:12	50:17 159:6
193:20	16:9	armstrong 1:3	188:22 208:9
answering 13:8	applied 15:21	9:4 10:4 218:4	215:7
21:21 50:20	75:12 192:13	219:4 220:4	aspects 56:5,8
88:8 146:18	applies 113:6	array 24:5	59:13 170:6
answers 12:14	118:3 126:8	asbestos 1:4	179:22 180:8
141:5 162:10	<b>apply</b> 47:21	51:3 53:5 55:2	<b>assert</b> 49:20
179:2 204:7	75:16,18	56:2 57:4	121:10 194:12
221:6	160:17 182:13	216:1	assertion 195:4
<b>ante</b> 86:11	applying	<b>aside</b> 144:7	assertions
93:14 107:14	118:21	<b>asked</b> 15:8,12	58:20
anticipate	appreciate 90:6	40:10,12,15,16	asserts 106:16
152:16,18,21	95:15 207:10	40:18,20 42:3	assess 207:18
154:9 155:21	appreciated	42:16 45:5	209:9
166:17	174:16	64:15 66:5,16	assessing
anticipates	approach 30:7	66:19 67:10	172:17
153:1	appropriate	70:19 136:7	assessment
anybody 101:2	39:13 49:19	139:9,15,19	38:19
199:18	153:5	140:15 146:14	assist 16:12
anybody's 97:3	approximately	149:20 154:15	40:12 199:2
<b>apart</b> 186:8	2:16 56:14	160:8 174:15	associated
aphillips 3:8	66:13 72:1	188:9 193:19	45:19 56:21
apologies	81:8 83:9	216:5	57:17 67:21,22
213:19	165:6 216:22	asking 41:2	140:12 178:7
apologize 17:8	approximating	44:1 47:19	182:6
21:20 22:10	68:18	49:12 74:17,18	association
apparently	approximation	75:10 85:1	2:12 18:8
119:14	66:17	86:11 93:20	assume 13:15
<b>appear</b> 120:13	<b>april</b> 220:3	96:6 124:12	115:18,21
appeared	arbitration	139:16 143:7	137:21,22
129:18	28:2	146:9 152:20	

Veritext Legal Solutions

# [assumed - behalf]

Page 7

assumed 76:5	automated	121:21 126:10	123:2 141:21
113:14 115:21	185:5	131:2 153:16	142:10 143:3
116:5 130:13	available 26:14	153:19 156:13	151:10,11
assuming 93:5	26:15 32:19	156:16,17,19	155:2 206:20
105:15 114:20	41:3 61:16	157:14,20	baseline 62:12
116:6 129:21	113:10 124:18	158:19 159:2	62:14 142:5
assumption	124:20,21	159:13 161:4	165:3,11
13:18 115:17	156:5,12 170:5	179:4 180:19	<b>bases</b> 113:8
116:1 138:2	198:21 209:5	196:7 203:16	<b>basic</b> 74:12
assumptions	218:6	204:6,7 205:22	basically
16:4 93:21,21	<b>avenue</b> 2:3 4:15	background	178:20
131:14 169:4	8:12	23:10 130:2	<b>basis</b> 55:11
assuredly 61:9	average 48:7	backgrounds	56:1 107:5
63:7 143:2	115:14 180:22	45:14	137:14 178:5
147:15,16	<b>aware</b> 37:21	<b>backing</b> 104:19	185:9
atlanta 5:6	98:13 99:20	<b>bad</b> 21:1 120:3	<b>bates</b> 8:19
attached	139:8,10	<b>ball</b> 49:9	35:21 96:2,9
218:11 221:9	200:10,17	<b>ballard</b> 6:11	96:12,16,21
attempt 77:5	207:19 208:4	ballardspahr	97:16,17 98:9
98:22 207:14	208:11 209:10	6:16,22	98:14 99:14,21
attention	209:18 210:2,5	<b>baltimore</b> 5:12	100:3,3 109:13
207:12	210:20,22	<b>bank</b> 69:6,9	126:17 151:11
attorney	214:6,9 216:8	bankruptcy 1:1	152:3,22 158:3
218:13	216:11	10:15 26:22	158:7,9,21
attorneys 3:2	awareness	51:15 151:9,16	168:17 171:9
4:2,12 5:2 6:2	208:5 211:2	151:18,21	171:22 174:6
6:10 7:2,12 8:2	awful 62:6	155:22 158:12	175:14 176:15
8:9 154:21	81:18	158:16 159:8	177:14
attribute 110:8	b	159:20	<b>bberens</b> 7:9
audience 137:7	<b>b</b> 7:4	<b>bar</b> 58:20	<b>beginning</b> 2:15
138:5	<b>back</b> 14:22	bargain 127:15	behalf 2:17
<b>august</b> 151:12	37:17 54:10,14	<b>barn</b> 139:6	42:22 43:20
authorized	65:17 72:17	base 95:10	44:21 48:2
1:20 2:15	78:2 93:13	based 82:3 90:7	86:13 207:8
217:21	110:5 119:5	106:2 120:14	

Veritext Legal Solutions

# [behave - burdensome]

Page 8

			_
<b>behave</b> 106:1	bermuda 28:1	<b>billed</b> 195:6	briefly 12:1
behavior 49:22	33:22 34:5	binding 57:1	<b>bring</b> 132:19
50:2	<b>best</b> 12:17	87:1 182:7	193:8
believe 18:9	81:15 107:2	183:2	<b>broad</b> 38:13
28:18,21 51:1	176:6 178:14	<b>bit</b> 20:12 42:10	75:21,21 87:11
52:16,19 53:2	178:15 204:20	49:13 74:22	103:2 105:4
69:12 88:15	217:10	94:12 122:18	203:21
94:4 102:6	bestwall 27:17	166:14	broader 57:11
132:22 141:3,5	33:17,20 110:7	<b>blanket</b> 103:21	90:9,11 124:20
161:14 163:6	152:4,17 153:1	boiler 5:2	126:4 166:11
174:19 202:9	153:14,17	<b>bold</b> 123:11	183:5
216:14	161:12 183:14	<b>borne</b> 195:15	broken 55:8
believes 107:2	184:1 191:18	<b>boston</b> 3:5,6	brought 25:15
120:18	191:21	<b>bottom</b> 28:11	43:22 44:9
benchmark	<b>beth</b> 6:12	29:4 34:14	70:5 72:10
189:6	<b>better</b> 46:13	brad 7:4	159:18
benchmarking	89:15 93:13	<b>breach</b> 96:16	<b>brush</b> 38:14
196:17	120:7 146:6	97:1,12 98:8	bucket 112:1
beneficial	166:13 204:15	98:22 99:4,8	<b>build</b> 194:8
138:8	beyond 36:8	126:12,19	<b>building</b> 164:2
benefit 14:4	58:15 119:2,11	127:4,8	<b>bulk</b> 48:20 57:1
30:16,20 31:7	150:6 189:12	breached 98:14	95:4
33:14 38:19	bias 112:5,22	<b>breadth</b> 135:20	bullet 27:7
39:5,8 56:22	<b>biases</b> 159:17	<b>break</b> 14:15,21	28:19
81:13 107:20	159:22 162:7,8	21:15 45:17	<b>bunch</b> 61:10
109:6 137:4	<b>big</b> 48:14 59:12	61:20,22 62:3	<b>bundle</b> 63:9
170:3,20 171:6	80:15 106:12	62:18 65:18,21	burden 121:6
178:8,11,13	140:10	127:22 131:11	187:12,20
179:5 192:14	<b>bigger</b> 77:9	134:19 209:12	188:12,21
192:17,19	114:2 123:22	breakdown	189:8,11
202:9 206:12	165:4	59:21	190:10 195:5
benefits 38:20	<b>biggest</b> 63:19	breaking 61:4	195:11,14
38:22 39:21	<b>bill</b> 187:17	breaks 171:3	burdensome
93:1 178:14	189:5	<b>brian</b> 6:18	122:11 191:18

Veritext Legal Solutions

# [bureau - characterize]

Page 9

			T
bureau 24:3	career 29:10	120:2 121:14	certificate 9:15
27:12 33:4	<b>cares</b> 158:6	142:2 152:7,19	certification
business 187:1	carolina 1:1	152:21 153:7	35:18,19,20
187:8	carpenters	170:18 184:4	certifications
c	48:11	184:18 187:18	35:22 36:12
<b>c</b> 3:1 4:1 5:1,4	carvelli 8:10	categories	certified 2:5,6
6:1 7:1 8:1	case 1:11 10:15	105:4	2:6,7,9,10,11
11:2 217:1,1	18:6 23:14,15	category	2:12 11:10,14
218:1	24:7,15 25:10	104:22	54:13 217:2,7
ca 1:19 217:19	25:14 26:3,5	<b>cause</b> 63:19	certify 217:3
calculation	26:18 27:12	<b>ccr</b> 1:18,19	221:4
215:11	30:6,21 31:1	217:18,19	challenges
calculations	31:10,14,16,19	census 30:4,22	122:21
122:9	32:6 33:4,8	85:13,18,19	chancery 34:15
calculus 215:8	34:4 49:9,14	124:16,18	change 72:5
california 2:8	51:15 52:9	151:2 155:7,16	114:22 219:5,7
call 17:4 53:15	81:15 94:7,7	156:3,7,8	219:9,11,13,15
99:8 131:18	98:1 129:22	170:18 171:4	219:17,19,21
138:5 196:21	137:3,12,20	<b>center</b> 4:6 7:15	220:5,7,9,11,13
206:3	147:2 151:9,22	cents 196:4,6	220:15,17
calling 18:20	152:13 154:1	certain 35:8	changes 129:6
calls 33:11,13	154:10 155:22	36:19 48:11	133:8 157:3,4
<b>calvert</b> 5:11	164:10 167:11	91:5 93:21	218:10 221:8
	180:12 184:1,2	100:13,22	changing 98:6
	184:22 189:11	101:5 114:13	114:22 127:8
capdale.com 3:21	190:10 191:3	114:15 119:16	128:22 156:22
caplin 3:16	195:1,3 197:9	134:9 152:10	chapter 1:10
_	197:12 200:22	170:3,6 171:4	characteristics
<b>caption</b> 219:4 220:4	201:12 205:7	180:5 194:5	45:11 46:3
	205:11	203:17 207:4,8	67:18,19,20,22
capture 194:4	<b>cases</b> 23:18	certainly 72:20	68:13,14
capturing	24:4,21,22	95:15	112:20 115:1
174:4	26:6,9,14,15	certainty	183:1
care 76:6	29:16,19 30:13	113:16	characterize
114:21	47:14 62:22		166:21 178:21

Veritext Legal Solutions

# [charge - claims]

Page 10

			_
<b>charge</b> 124:13	91:6 125:8	claimants 4:2	159:6 160:19
136:5 172:4	135:13,15,16	4:12 8:22	161:20 162:1
201:6	135:21 136:2	25:18 40:16	164:16 171:21
charles 1:14	136:11 147:9	42:20 43:20,22	175:19 177:12
2:1 9:3 10:3,9	149:9,9,10,11	44:5,8,12,15	179:8,9 180:4
11:9 17:17	149:12 153:18	45:15,17 46:13	180:6,9 183:22
217:4 218:5	153:21 154:11	46:14 47:1,2	185:6,13 197:3
219:2 220:2,22	155:8,20 161:5	47:15 56:15	197:6,8,16
221:3	161:21 163:17	64:20 69:14	198:3,5,7
charlotte 1:2	163:19 164:6	70:14,18,21	204:5,5 206:6
chicago 7:7	165:15 170:11	71:8 73:17,18	207:4,9 212:4
choice 71:5	176:2,22	73:19,21 74:2	<b>claimed</b> 136:10
choosing 114:7	177:15,18	74:2 76:13,17	<b>claims</b> 15:11
<b>chose</b> 70:18,19	178:3,19 179:1	79:2,8 84:4,11	24:9 31:2,8
119:7 193:4	179:20 180:2,7	84:16,18 88:17	40:10 41:18,22
chosen 114:5	180:18 182:5	90:7,16 91:11	42:7,8,12,15
194:9	182:10,15,20	92:1 93:19	43:19,22 44:6
<b>cindy</b> 1:18 2:4	183:6,7 185:14	95:19,21 96:2	44:9,16,21
217:2,18	196:1 197:21	96:17,18 98:3	46:5,8,16,18
circle 3:18	209:4	103:18 112:6,7	47:8,9,21 48:7
circuit 22:7	claimant 56:11	112:7,11,17	48:13 53:5,15
circulated	74:7 83:3	115:11 117:21	56:1 57:14
201:11 203:3	98:19 133:19	117:22 128:21	58:7,12 59:6
204:1	134:5,20	129:15,17	59:14,17 60:22
<b>cited</b> 189:20	135:10,12,13	132:2 134:10	61:1,13,16,18
<b>citing</b> 125:4	136:2,11 149:9	134:18 136:16	63:13,20,22
<b>civil</b> 37:8,12	149:14 150:8	136:17 140:13	66:2,9,10,11,14
<b>claim</b> 8:9 31:10	159:12 178:22	145:4,6,11,17	66:20,22 67:1
31:11 44:19	181:21 185:4	145:21 146:10	67:3,5,5,7,7,10
47:22 56:12,13	185:12,21	147:3 148:12	67:14,16,18,18
56:19 63:14	190:17 195:22	148:18 150:2,6	67:20 68:1,2,3
71:1,1 73:14	210:12,16,16	150:12,19	68:13,14,16,19
73:15,17 83:7	claimant's	151:2 154:18	69:12,13,14,16
83:14 84:9	48:22 135:13	154:20 155:9	69:17 70:8,10
89:8 90:19	149:15	155:12 157:22	70:22 71:22

Veritext Legal Solutions 800-227-8440 973-410-4040

# [claims - complete]

Page 11

_	•			
	72:10,13,15	203:12 204:14	clustered 106:1	commission
	73:7 74:8	209:6	<b>cm</b> 10:8 17:5,7	221:17
	77:12,13,15	<b>clare</b> 5:10	17:16 18:20	<b>common</b> 23:20
	79:17,19 85:6	clarify 19:13	20:15 37:18	24:16 25:7
8	85:14 87:21	40:9 139:20	51:7,11 72:18	61:22 119:20
8	89:2,3,7 90:21	clarifying	101:16 174:20	companies 25:2
9	94:5 97:22	149:3	cmevert 5:8	25:3
	106:7,8,9	<b>clarity</b> 149:19	218:2	company 7:12
	111:7 112:16	classic 116:22	cmmaisano	36:6,9
	112:18,21	clause 55:3	5:14	comparable
	116:13 118:1,7	<b>clean</b> 194:18,20	<b>cole</b> 3:3	196:22
	125:5,21 126:2	<b>cleaned</b> 109:11	colleagues	<b>compare</b> 67:17
	126:3,5 134:21	109:12	152:9	176:16 212:1
	135:9,14	<b>clear</b> 13:19	collect 43:21	compared
	144:16 145:7	41:8 72:2	182:1	178:18 179:1
	145:21 146:4	100:15 106:19	collected 56:11	compares 83:9
	146:21 147:4,5	136:3	<b>colon</b> 54:22	comparing
	147:8,12,12,20	<b>clearly</b> 106:17	columbia 4:6	90:22
	148:4,5,10,13	165:1	combined	comparison
-	148:15,16,18	<b>click</b> 99:11	43:19 136:6	56:10,13 83:10
-	148:22 149:14	clicked 99:4	combining	177:1,3 179:6
-	149:17 154:15	<b>client</b> 70:20	178:20	179:17,21
	155:1,5,8	108:19,22	<b>come</b> 14:22	181:8,9 182:7
-	159:9,11,22	109:6,19,20	86:5 105:20	182:9,12
-	160:20,22	114:7 151:17	127:7 131:1	compensable
	161:1,3 163:21	152:10	196:5	45:11,16
	165:15 169:18	clients 25:8	<b>comes</b> 23:21	<b>compete</b> 122:10
	169:21 170:9	108:2,3,8	62:14 138:13	complain
	172:14,16	122:6 138:12	181:21	107:21
	173:4 174:7	152:1	comfortable	complains
	176:4,7,16	<b>close</b> 178:16	58:6 86:7,14	107:10
	177:4,6 178:10	199:5 212:9	86:18 178:9	complaint
	179:14 181:1	<b>closer</b> 70:3	<b>coming</b> 109:16	104:22
	183:13 184:7,9	<b>clr</b> 1:19 217:19	commingle	complete 84:11
	184:15 196:2		149:21	103:6 116:3

Veritext Legal Solutions

# [complete - continues]

Page 12

•	-		
130:17 141:6	concluding	consider 35:16	consumers 24:3
156:13 175:18	113:11	188:20	contain 38:3
completed	conclusion	considering	42:10 68:12
185:16 188:15	107:18 108:1	158:20	194:13
198:6 218:16	111:15 112:2	consolidated	contained
completely	113:2 119:18	136:4	95:14,16
33:11 50:10	120:20 158:12	constant 112:8	contaminated
115:6 117:8,16	197:15	constrain 71:5	194:21
130:19	conclusions	constrained	contemporan
component	125:18	42:14 47:22	58:22 152:2
141:13,16	concrete 60:19	57:10 65:5	contemporan
composure	condition 105:8	66:21 70:9	91:16 158:2
119:12	confidence	124:14,22	<b>content</b> 21:7,8
compound	58:10 75:18,20	152:14 159:5	95:13
123:18	81:11 82:14,16	179:18 180:11	context 19:14
comprehensive	90:9,12 113:13	204:4 206:15	23:22 24:1,19
33:13	113:15 114:16	constraining	34:3 55:12
compromise	154:5 203:21	56:6 58:11	59:15 64:17
205:6	confident 70:3	104:14 182:17	68:9 73:13
computational	166:8,9	constrains	78:17 98:3
122:14	confidential	106:20 150:7	108:9 130:18
computations	34:7	constraint	132:5 137:3,7
122:14 212:14	confidentiality	32:18 57:1	137:9,19
computer	161:15	107:3 110:13	138:10,11
217:12	<b>confirm</b> 137:13	156:11 182:7	152:13 153:13
conaway 6:3	confirmation	183:3 201:18	211:16,20
<b>concept</b> 180:19	47:10 53:6	202:2 204:20	contexts 24:21
conceptually	54:5	204:21	24:22 25:8
172:11	confirmed	construct 151:6	42:9
conclude 112:9	62:22 137:4	construction	continue 65:19
concluded	confuses 110:1	32:22 59:17	continued 4:1
49:16 64:19	connected	constructs	5:1 6:1 7:1 8:1
166:19 216:21	34:18	216:5	217:4
concludes	connection	consumer	continues
109:5	51:4 116:17	27:11 33:3	27:14,20 28:3

Veritext Legal Solutions

# [continues - court]

Page 13

28:8,16	<b>correct</b> 12:7,8	197:4,6,7,10,13	57:17 81:12
continuum	12:16,22 13:1	198:17,18	188:4 195:6,18
209:18	13:17 18:21	201:9,12	196:11 197:11
contradictory	19:21 25:10,11	202:13 203:5	197:19,20
191:11	30:16 32:7	203:13 208:14	198:1,16
contrary 64:22	33:18 34:2	213:15,16	counsel 1:20
contrast 31:9	36:21 43:13	221:5	2:14 8:20
59:4 64:3	53:7 55:3,4,8	corrected 37:20	11:19 13:4
157:11 178:17	67:8,9 69:11	correction	19:8 20:2,6
contrasted 84:9	70:8,10 71:20	117:18 118:2	40:11,18 42:17
contribute	72:14,15 73:15	corrections	84:12,12 86:12
204:9	74:3,4 80:2	221:8	144:10 145:4
control 15:7	85:15,20,21	correctly 75:12	152:9 162:10
79:9,11,13	88:3 93:22	192:1 212:8	207:3 217:15
108:15 109:2	95:10 100:4	217:10	217:21 218:14
112:21 119:10	101:1,12 102:4	<b>cost</b> 30:16,20	counsel's 95:15
122:3 129:5	102:5 122:11	31:7,17 33:14	<b>count</b> 23:19
173:12,17	122:17 123:5	38:19 39:5,8	66:15
204:18 206:5	123:10,15	39:15 40:1	counter 177:5
206:14	129:10 130:18	56:22 83:14,18	counting
controlling	132:4 133:3,17	88:10 92:22	134:18 135:8
79:14 130:7,7	134:11 139:1,2	107:20,20	<b>counts</b> 180:2
157:11 173:2	140:5,6 145:8	108:2,22 109:6	182:20
180:1 182:20	145:17 150:2	124:19 125:1,2	couple 19:9
182:21,22	152:4,5 154:12	125:12 170:3,6	61:17,18 62:19
conversation	155:3 156:17	170:20 171:6	65:22 79:16
19:19	156:18 162:11	178:6,8,11,14	85:17 94:11
<b>coo</b> 189:19	166:18 167:15	179:5 181:22	127:21 149:2
<b>copies</b> 17:10,13	168:17 169:10	182:3,6,8,10	175:17
17:14 51:7	169:11,19,20	189:1,5,7	course 26:5
218:14	169:21 175:6	196:15,22	114:21
<b>copy</b> 158:7,9	177:11 186:9	197:17 198:15	coursework
<b>core</b> 38:8	186:10 187:5,8	202:9 206:12	36:10
<b>corner</b> 116:9	187:13,16	costs 38:21,22	<b>court</b> 1:1 2:4,7
	189:15 190:10	39:14 40:17	2:9 14:8 57:12

Veritext Legal Solutions

-			E
74:22 79:1	critique 59:9	daniel 4:14	127:4,8,9
80:7,9,16	104:8 124:8,10	207:8	134:16,16
81:15 87:2,7,9	<b>cross</b> 39:5	<b>dark</b> 108:6	141:10 148:8
89:15 92:12,15	193:5 203:12	<b>data</b> 15:11 16:5	150:18 154:13
92:18 93:6	205:9	31:4,8,20,22	155:13,18
106:20 151:19	crosswalk	33:1 35:12,15	156:17,19
163:17 166:4	185:13	36:10,13,16	157:8,14,17
166:18 200:11	<b>crp</b> 63:14	38:13 39:16,16	158:8 159:15
202:3,8 206:17	<b>crr</b> 1:18 217:18	39:19,22 40:1	159:19 160:15
217:2	<b>crt</b> 1:19 217:19	40:11,19 41:3	161:12 163:22
<b>court's</b> 87:2	<b>cs</b> 218:15	41:21 45:20	165:12 169:1
94:12	<b>csr</b> 1:18,19,20	50:12,12 53:14	170:5,7,8,14
<b>courts</b> 75:22	1:20,20 2:13	56:10,13 57:18	171:16 172:21
<b>cover</b> 52:1	2:13,13 217:18	58:16 59:6,8	173:8,9,22
111:21	217:19,20,21	60:6,15 62:14	175:2 178:4,17
coverage 23:20	<b>culled</b> 178:2	63:19 64:16	179:15 181:10
24:8 34:11,21	<b>cumbo</b> 8:19	65:6 73:5 78:1	182:4,5,6,8,11
<b>covered</b> 110:22	current 53:4	79:5,21 82:9	183:5,22 185:5
covering 52:20	67:2 152:12	83:17 84:20	185:21 186:1,1
<b>covers</b> 104:1	157:2	86:13 88:10,22	186:14 190:12
<b>crb</b> 163:8	currently 66:21	89:17 91:1,7	191:17 192:6
<b>create</b> 91:8,22	83:9	91:19 96:16	195:1,8,21
113:12 133:13	<b>curve</b> 59:16	97:1,12 98:7	201:18 202:1
157:18 162:7	176:2	99:3,7,14	205:1 207:17
206:18	custom 4:12	100:11,12,22	209:9 212:1
created 125:16	<b>cutoff</b> 150:10	101:3 104:3,7	database 31:3
creates 81:4	150:16 151:3	105:2,22 106:7	97:22 98:2
194:21	d	106:11 107:14	125:5 144:3
credentials	<b>d</b> 11:2	108:21 109:6	155:8 158:4,6
36:7	<b>d.c.</b> 2:3 3:19	116:7 117:7	158:10,14,21
criteria 150:13	4:8 11:4 70:7	118:13,17	159:4,9 160:5
critical 211:2,6	damages	120:16 121:2	186:1,2,6
211:8	212:14	121:11 122:18	188:15,18
criticized	dan 200:4	122:19 126:12	194:8,15
132:22	200.1	126:15,19	208:17 209:2,6

Veritext Legal Solutions

# [databases - defendant's]

Page 15

_	_		C
databases	172:21 174:8	49:7 53:4 55:2	declaration
184:4 185:12	175:7 177:14	56:2 57:4	10:9 16:13
188:19	179:9 183:10	58:12 68:10	17:11,17 18:6
datasets 157:18	186:8,16 187:3	82:21 88:18	18:7,8 20:15
<b>date</b> 17:19	187:8 188:4	90:15 97:18	20:21 21:1,4
22:15 51:17	189:19 191:19	98:2 103:19	21:13,18 25:22
101:19 150:10	191:19 192:4	111:19 125:4	37:18 38:2
150:10 151:3	193:17 195:19	128:20 134:4	49:2 72:18
151:14 200:14	200:11 209:9	135:14 136:4	92:22 94:16,20
219:3 220:3,22	dcpf's 187:1,12	136:16 138:1	110:7,10,12,15
221:12	187:20 188:12	148:12 149:6,7	110:19 128:10
<b>datum</b> 178:7	189:11 190:10	149:20 150:8	137:3 143:12
daubert 92:7	195:5 196:11	151:4,14 152:1	143:17,18,19
day 2:2 7:3	200:11	165:6 169:18	143:22 162:13
70:6 99:1	dcps 183:10	170:11 176:11	167:9 176:20
136:6,7 172:20	<b>dead</b> 199:18	176:17,22	183:9,16 185:2
221:14	<b>dealt</b> 26:22	177:14 179:8	189:15,15,19
days 218:16	debra 4:5	191:21 195:13	190:9,13 191:2
<b>dbmp</b> 152:4,17	<b>debtor</b> 41:11	195:15,18	191:9,15 192:1
153:2,15 154:2	46:16,18 47:4	196:11 200:20	192:5 207:13
161:12,18,20	48:19 145:7	203:3,12	declarations
183:14 184:2	147:4,9,13	207:18 208:3	22:1 33:19
186:21 188:4	148:18 149:11	208:17 209:10	decrease 46:5,6
189:6 191:18	149:12,15	209:14 210:11	162:14,15,18
191:21 192:8	150:15 170:10	210:14 212:6	164:8
193:6,8 195:7	181:15 184:12	212:16 213:9	decreased
195:13 196:15	208:18 214:3	<b>debts</b> 72:10	163:3
197:2,12	214:18,19	december	deemed 92:18
<b>dcpf</b> 6:2,10	debtors 1:12	200:19 201:11	default 89:19
144:10,18,22	5:2 7:2,2 23:5	decide 38:19	89:20,22
145:22 147:5	31:2 38:5 40:9	decided 206:17	defendant
147:13 148:19	41:17 42:22	decides 92:12	164:18
150:1 156:15	43:18 44:1,5,9	decision 200:18	defendant's
161:13,13	44:18 45:2,5	200:20 202:5	129:2
171:7,10 172:1	45:12 48:22	211:12	

Veritext Legal Solutions

# [defendants - different]

Page 16

defendants 1:9	demographics	described	determined
5:2 68:10	112:7 115:2	103:16 111:18	173:15
120:2 184:8	156:22	description	determining
define 99:9	denominator	10:8	55:6
104:17 111:21	72:4	design 27:3	develop 45:10
120:12	department	47:8 55:15	193:2
defined 55:15	35:18	67:4 77:2 78:4	developed
<b>defines</b> 103:20	depending	78:9,18 93:13	191:19 192:4
103:21 123:12	47:12 99:9	93:16 106:21	192:11,12
definitely 24:11	135:1 142:15	118:14 163:8	developing
123:10 124:13	depends 69:7	201:21	120:1 193:14
definition	75:8 91:14	designed 27:12	development
150:21,22	166:14 177:6	33:8	62:20
151:1,5,7	215:14	designing	dfelder 4:10
188:10	deponent	39:10 54:3	diagnoses
definitively	218:13	70:22 116:19	156:4
74:10 203:7	deposed 12:6	desires 114:7	<b>differ</b> 164:20
degrade 82:15	deposing	despite 70:21	difference 15:8
degree 90:12	218:13	172:21	60:16 74:1
120:5 160:19	<b>deposition</b> 1:14	destroyed	76:4 89:6
171:12 191:10	2:1 10:8 14:8	158:11	111:3,4,13,13
delaware 1:6	17:16 19:4,5,8	<b>detail</b> 103:16	111:14 114:3
4:15,16 6:6,14	20:3,13 22:4	details 130:1	differences
34:15 96:11,15	51:11 77:14	determinant	112:22 122:3
96:20 97:18	101:7,16 178:1	211:11	different 16:3
101:4 144:16	191:2 216:21	determination	24:5 30:12,13
148:14 160:13	217:4,13	55:22 204:13	37:5 45:8,19
160:18	depositions	208:18 211:9	46:2,3 48:10
demographic	179:2	214:4	48:12 55:9
46:3 115:1,4	deputy 8:20	determinations	56:20,22 66:1
182:22 204:8,9	derivative	168:16	80:13 88:19
206:15	175:21	determine	93:9 95:12
demographic	describe 166:1	172:19 173:13	98:3 108:4
206:7	201:15	181:12 182:9	112:20 125:4
		196:10	139:18 161:19

Veritext Legal Solutions

# [different - doing]

Page 17

- 8-			C
165:19,19	<b>disclose</b> 26:7,15	discussing 66:6	district 1:1,6
166:7 169:14	91:16 108:10	94:17 102:7	<b>dive</b> 37:20
172:6 175:17	134:10 152:12	128:6 145:3	<b>divide</b> 196:3
182:22 186:4	disclosed 23:7	discussion 51:9	division 1:2
differentiate	82:20 84:17,19	102:1 119:13	dkhogan 4:18
149:13 167:3	90:15 94:15	discussions	dkhogan.com
differently 92:4	95:20 105:16	21:20 27:17	4:18
differs 76:11	113:22 115:20	disease 156:9	<b>docket</b> 17:11
183:3	116:17 133:5	diseases 72:3	18:6,7 52:6,8
difficult 34:13	176:10,12	dismissal 42:13	151:11
68:8	204:10 206:9	69:18	doctor 15:5
<b>digit</b> 142:9	212:5	dismissed 42:7	73:1 84:1
dimension	disclosure	42:8 58:7 67:8	100:21
168:12	79:11 83:20	67:11,14,16,18	document 18:1
<b>direct</b> 176:9	85:5 204:17	68:2 69:16,17	18:15 20:14,17
207:12	disclosures	147:20,21	20:20 26:2
directed 150:1	157:6	148:1,15,22	52:13,15
177:13 201:8	disconnected	149:10,12,15	171:10 172:6
direction 16:22	117:15	149:18 150:14	documents
111:16 113:2	discovery 22:3	161:20	10:12 51:12
114:6,9	34:22 68:11	displaying	164:3 172:7
directionally	89:1 117:1,10	118:16	177:19,20
93:22	121:8 141:13	<b>dispute</b> 186:15	<b>doing</b> 22:13
directly 50:17	148:6 159:6,10	191:5,8 195:2	32:18 45:13,16
50:20 109:21	160:14,21	195:4	47:13 58:6
135:20 146:19	161:8	disputed 205:7	61:4 74:20
175:20 176:1	discuss 25:16	205:15	94:9 125:1
disagree 74:12	91:8 121:7	<b>distinct</b> 123:13	141:22 151:17
75:9 113:7	162:14	136:3	154:14 155:9
121:14 127:11	discussed 78:4	distinction	168:6 172:5
164:11	86:9 90:20	158:13 169:12	173:12 176:4
disagreement	110:6 119:2	distribution	179:12 182:7
12:13	128:1 136:19	53:16 62:21	188:14 192:16
disagrees	137:1	112:11	212:14,15
102:16			213:6,9 214:15

Veritext Legal Solutions

# [dollar - emphasizes]

Page 18

-			9
dollar 87:6	125:13	204:14 212:10	153:1 208:10
165:4 189:7	draw 112:6,17	early 128:1	210:17
dollars 60:3	146:22 197:14	<b>easier</b> 122:20	electric 29:5
165:2,11	205:15	easiest 91:21	34:15
181:22	drawing	easily 59:22	electricians
<b>domain</b> 26:21	110:18 169:13	105:20	48:10
35:7 154:6	<b>drawn</b> 12:3	easy 46:17	electronic 17:9
<b>doors</b> 107:6	27:1 116:12	ecf 25:21	31:4,6,15
<b>double</b> 69:17	122:4	econometrics	45:21 56:20
74:15 147:19	draws 125:18	15:20	73:16 83:15,16
doubling	<b>drill</b> 41:10	economic 15:21	125:2,7,9,12,14
138:20	54:19	economist	170:14,15,19
downloaded	drilling 43:12	15:19 189:4	170:22 171:12
97:22	<b>drive</b> 7:6 8:5	<b>edit</b> 16:20	172:7 177:20
<b>dpmp</b> 108:9	127:12	<b>edt</b> 1:15 2:16	177:21 178:6
<b>dr</b> 11:22 17:10	<b>drop</b> 58:6	11:6 65:14,14	178:18 181:20
18:1,16 19:15	dropped 58:7	131:5,5 216:22	190:12 209:6
19:20 21:13	dropping	<b>effect</b> 142:22	electronically
22:2,10 38:2	204:14	effective 174:3	10:7 124:18,20
52:14 59:9	<b>drops</b> 58:22	effectively	124:21
65:17 74:12	drysdale 3:16	30:10	<b>element</b> 107:22
75:9 76:4	<b>due</b> 123:14	effects 162:5	211:18,20
77:13 101:10	<b>duly</b> 11:10	efficiency 94:9	elements 79:13
102:4,8 104:9	217:7	121:12 201:22	eliminate 78:19
106:15,16	e	203:8	eliminated 42:7
107:5,11	e 3:1,1 4:1,1 5:1	efficient 30:5	42:13 67:7
111:19 119:3	5:1 6:1,1 7:1,1	30:14,15 94:1	86:15 108:16
121:5 128:11	8:1,1,11 11:2,2	106:22 110:12	eliminating
131:8 132:10	205:8 217:1,1	203:4,7	86:14 109:3
133:1 144:13	219:1 220:1	<b>effort</b> 205:6	148:15 149:1
157:5 206:21	earlier 29:10	<b>eight</b> 19:6	embedded
207:7	94:20 101:10	either 29:20	173:5
<b>draft</b> 16:19	105:7 143:17	108:9 113:10	emphasis 25:19
dramatically	145:5 150:16	120:6,19,21	emphasizes
114:2 124:5	154:8,17 177:9	152:17,19,21	123:15

Veritext Legal Solutions

# [empirical - evert]

Page 19

_			
empirical 50:9	145:7 147:4,9	esq 218:1	54:3 56:2
50:16 168:3	147:13 148:1	<b>esquire</b> 3:4,10	59:13 68:7
169:1 171:19	148:13,19	3:17 4:5,14 5:4	115:9 116:6
employees	162:3 212:3	5:10 6:4,12,18	118:1,8 125:20
99:11	<b>entity</b> 99:10	7:4,5,14 8:4,11	129:1 136:12
<b>employs</b> 193:17	envelope 196:7	essence 76:16	141:14 157:21
<b>empty</b> 171:14	environment	established	164:6,12
enable 39:22	121:6 216:2	212:3	169:22
82:19 120:7	envisioned	estimate 46:7	estimation
endeavor	56:12 83:11	46:11 47:15	15:14 16:4,8
207:14	envisioning	48:1,15 57:9	39:1 42:18
<b>ends</b> 113:11	92:1	57:11 59:20	50:15,21 53:4
english 7:13	epidemiologi	60:2 62:1	55:2 57:4 59:1
<b>enjoy</b> 139:22	156:6	64:21 80:10,17	66:21 67:3
<b>enter</b> 50:20	equation	80:19 81:20	73:6 74:7
159:22 175:16	167:18	82:10,10,15	80:14 105:4
176:8	erens 7:4	87:5 90:7,11	130:18 135:10
entered 207:18	<b>ergo</b> 104:11	90:13 92:9	136:2 141:16
209:10 210:11	errata 9:17	115:2,18 116:2	163:9 165:19
210:14 214:3	218:11,13,16	117:20 118:3,4	180:9 204:12
<b>enters</b> 215:2	221:9	126:4 133:9,14	206:3
entire 31:2	erroneously	136:7,8 138:1	estimations
35:17 39:6	112:9	163:8,20	118:18
41:20 76:7	<b>error</b> 23:7	164:17 165:22	et 1:5,8,11 9:4
105:16 119:13	94:14 114:10	166:8 169:9,13	9:4 10:4,4
125:20 129:13	115:12,14	169:18 176:7	218:4,4 219:4
130:20 150:19	123:18,20	195:20,22	220:4
170:9 205:5,19	124:1 172:13	196:14,20	evaluating
entirely 104:2	172:15,19	215:2,3	135:12
106:3 119:6	173:2,13,15	estimated	evaluation
125:19	174:1	163:16 165:14	62:20
entirety 125:6	errors 25:5	estimates 115:3	eventually 67:4
191:1	122:10	169:8,10	213:5
entities 44:16	especially	estimating 16:2	<b>evert</b> 5:3,4 17:6
44:20 142:11	122:20	45:7 53:22	18:2,12 20:19

Veritext Legal Solutions

# [evert - experience]

Page 20

-			
21:14 22:18	ewhlaw.com	excellent 22:6	exhibit 10:8
23:14,16 28:13	5:8,14 218:2	22:21 37:22	17:16 51:11
49:10 52:4,8	<b>ex</b> 86:11 93:12	52:17 71:19	101:16 174:22
53:8 64:7 88:4	93:14 107:14	127:14 132:11	exhibits 10:2,7
94:18 100:10	121:10	139:22	<b>exist</b> 82:13
100:16 102:10	exacerbate	except 221:8	121:22 123:6
102:21 127:17	123:6,8	exchanged	exists 54:2 97:6
137:16 140:14	exacerbating	216:10	158:15
140:21 141:2	123:4	exchanges	expand 82:14
143:15 146:8	<b>exact</b> 66:15	138:22	82:15,16
148:20 158:22	67:22 111:15	excluded	expands 95:5
160:8 167:19	113:20 145:15	150:13,17	<b>expect</b> 50:15
168:1,18	145:19 147:16	excuse 24:21	61:3 62:2,3,4
174:16,20	172:9 184:16	45:2 137:12	105:8,18,22
181:5 183:18	184:20 185:1	<b>excused</b> 216:19	165:14 191:16
187:21 193:19	195:9 198:12	exemplar 51:1	197:11,17
198:19 199:11	exactly 59:8	exercise 39:19	198:8,11
199:17 200:3	60:7 63:17	45:13 47:12	expectation
201:13 202:14	108:22 154:14	50:16 89:1	206:18
205:3,14	196:6	107:14 108:3	expecting
208:21 209:20	examination	108:20 117:1	63:16 171:20
211:4 212:20	9:2,8 11:19	117:10,15	expedite 199:3
213:12 215:12	144:10 207:3	123:17,21	expense 56:21
216:17 218:1	examine 205:9	126:11 141:12	expensive
everybody 18:4	example 26:12	142:11 168:4	31:12 122:4
35:20 51:8	26:18 31:1	180:8 181:9	178:4 183:6
115:19 216:18	42:12 56:9	189:2 192:16	192:16 193:11
everyone's	58:4,18 59:16	195:16 196:18	193:15 198:9
100:19	60:21 61:19	197:16 207:21	198:12
everything's	71:8 84:10	208:1	<b>experience</b> 26:1
84:19	94:4 114:5,7	exercises 22:13	75:21 80:8
evidence 52:21	119:7,8 156:2	172:10 180:5	82:4 93:17
179:7 189:4	175:20	exhaustive	119:20 138:12
evolving	examples 40:14	68:11	141:21 143:3
157:13	113:9		146:22 192:14

Veritext Legal Solutions

# [experience - feasible]

Page 21

- <b>-</b>	_		
192:18,20	178:22 180:3	extracting	factor 68:5
193:13	194:9,10,13,16	185:22 192:6	117:19 118:2
<b>expert</b> 10:17	194:17,18,20	extraction	215:10
15:6 23:11	212:1,4,4	185:5 186:5	<b>factors</b> 82:7,7
26:4 35:11	exposures	extrapolate	113:19
36:16 101:17	48:22 56:9	121:17 176:6	<b>facts</b> 32:1
109:20 130:6	58:21 59:19	extrapolating	118:21
130:11 133:18	84:16 90:15	49:18 121:20	factual 214:8
153:7 168:8	91:16 113:10	extrapolation	214:20 215:1
187:19 188:21	113:22 115:10	121:12 143:10	<b>failed</b> 96:14,15
expertise 15:18	116:18 128:19	extrapolations	126:16
15:20 16:2,10	128:22 129:19	106:2	<b>failing</b> 91:15
<b>experts</b> 121:10	135:19,20	<b>eyes</b> 87:2	<b>fails</b> 126:17
121:13 122:12	158:1 175:22	f	218:18
139:22	176:10 204:10	<b>f</b> 217:1	<b>fair</b> 95:1
<b>expires</b> 221:17	206:9 207:19	<b>faced</b> 41:17	102:12 212:7
explain 15:8	209:11,15	44:18	<b>fairly</b> 36:18
41:13 82:6	210:3,18,20,21	<b>facility</b> 96:11	51:2 100:13
explained	212:18 213:10	96:15 97:19	<b>fall</b> 56:17 57:2
162:20	214:6 216:6	101:4 109:11	143:2 188:9
explicit 107:1	expressed	144:17 148:14	<b>falls</b> 55:7,13
<b>explicitly</b> 107:9	168:13	160:13,14,17	<b>false</b> 99:11
exposed 214:17	extensive 15:20	160:13,11,17	familiar 43:7
exposition	extent 86:4	<b>facing</b> 204:19	129:12 130:5
166:14	128:21 174:2	fact 30:3,21	138:10 144:19
exposure 50:6	174:10 177:3	50:14,16 60:8	167:12 201:1,2
59:16 82:20	188:2	63:15 70:21	<b>fan</b> 100:19
96:10 108:7	external 99:22	78:15 89:18	faster 46:5
126:16 132:3,3	107:2 201:17	115:6 124:3	<b>fault</b> 138:7
132:21 133:2	204:19	133:7 149:8	<b>fcr</b> 144:2
133:20 134:1,5	<b>extra</b> 57:16	153:7,18,20	177:10 180:16
134:11,20	198:1	181:19 186:1	feasibility 71:1
135:2 175:11	extract 188:14	186:15 188:3	feasible 47:10
175:15,19,21	188:17 189:2	191:16 193:12	54:4 57:19
176:14 178:19		194:20 215:16	90:8 91:13
	1	1	1

Veritext Legal Solutions

973-410-4040 800-227-8440

## [feasible - focus] Page 22

166:11 169:3	182:6 183:7	financial 33:4	<b>first</b> 11:10 12:4
<b>federal</b> 37:8,12	196:1 197:21	61:21 79:11	19:13 23:3
40:15	206:2	195:14	29:16 53:3
<b>feeds</b> 163:12	<b>filed</b> 17:11 18:5	<b>find</b> 58:17	55:21 57:2
<b>feel</b> 72:20 155:4	18:8 22:2	166:5	85:4 109:14
felder 4:5	33:19 44:15	<b>findings</b> 132:13	115:10 122:13
<b>felt</b> 58:9	52:1,3 136:11	134:12	127:7 128:5
<b>female</b> 76:18	137:3 158:16	<b>finds</b> 92:15	151:17 172:11
females 76:12	160:20 163:22	<b>fine</b> 14:12 17:6	173:6,8 181:14
77:6,7	184:7 185:14	87:7 132:13	192:17 207:16
<b>fewer</b> 125:2	<b>files</b> 31:10,11	140:16,18	firsthand
174:7	56:12 73:14,15	162:21	138:14 186:22
<b>field</b> 96:10,14	73:17 74:7	fingers 135:4	193:16
96:18 126:15	76:8 83:8,14	fingertips	<b>fit</b> 150:12
130:6 133:19	84:9 90:19	190:3	<b>fitting</b> 63:15
186:12 193:9	91:6 98:20	<b>finish</b> 103:5,9	<b>five</b> 19:6 65:8,9
194:10,18,20	125:8 153:18	199:8	108:17 130:22
<b>fields</b> 108:7	153:21 154:12	<b>finished</b> 202:21	134:20,21
109:10 126:16	155:20 177:15	<b>finishing</b> 199:5	135:3,9 199:4
171:14 175:2	180:18 181:15	<b>finite</b> 117:18	199:9
175:11,15	181:19 182:10	118:2	fivefold 114:3
176:15 186:1,5	182:15 183:6	<b>firm</b> 47:18	<b>fixed</b> 112:20
189:2 192:6,12	<b>filings</b> 137:5,20	60:22 61:4,5,8	<b>flags</b> 118:20
194:9,13	<b>fill</b> 84:22	61:15 62:4,10	172:12
<b>fight</b> 122:14,14	138:11	63:8 75:14,14	<b>flaw</b> 111:17
<b>figure</b> 68:1	filter 42:2	77:11,12,19	113:5
161:6 189:7	<b>final</b> 163:8,8,13	79:9,15 105:8	<b>flip</b> 25:20 37:17
<b>figured</b> 66:17	163:15,19,21	105:19 106:8	<b>floor</b> 3:5 6:13
<b>figuring</b> 176:6	164:3,4,5	126:7 130:7	6:19
<b>file</b> 22:4 44:19	165:14 166:18	153:8	<b>floors</b> 8:13
56:13,19 126:3	<b>finalized</b> 90:19	<b>firms</b> 61:11,12	<b>fly</b> 71:11,17
148:2,13	<b>finally</b> 36:18	61:19,22 79:16	<b>focus</b> 21:9
177:18 178:3,5	finance 24:3	84:15,17 91:5	22:22 23:3
178:5,19 179:1	27:11	129:9,16	52:13,18 72:21
179:20 180:8			87:20 133:16

Veritext Legal Solutions 800-227-8440 973-410-4040

# [focused - gallardo]

Page 23

<b>focused</b> 125:19	88:4 98:17	<b>found</b> 49:15	fundamentally
157:6	102:10 121:10	166:20 173:20	98:5 127:8
focusing 82:18	125:7,10,12,14	foundational	161:19
148:16 163:6	137:17 148:20	167:21	<b>funds</b> 57:14
<b>fold</b> 81:5	159:1 165:17	<b>four</b> 7:15	further 46:20
<b>follow</b> 84:22	166:13 168:13	198:22	48:18 59:17
103:4,8 104:12	168:18 181:5	fourth 27:7	88:11 128:18
115:16	187:22 201:13	28:18	157:15,20
<b>following</b> 41:15	202:14 208:21	fraction 48:21	204:6,7
188:21	209:6,20 211:4	84:16 214:9	future 16:2
<b>follows</b> 11:12	212:20 213:12	framework	45:7,9 46:8,13
115:12	215:12 221:8	40:4 116:12	46:20 47:1
<b>foot</b> 111:11	formally	123:2	48:16 49:19
<b>footnote</b> 190:6	151:11	<b>free</b> 72:20	53:5 57:14
footnotes	<b>format</b> 31:4,16	frequently	68:15 78:1
190:16,21,22	56:20 83:15,16	15:22 23:21	79:12 82:10
<b>forced</b> 206:10	170:14,15,19	63:12 68:8	112:7,18,21
<b>forcing</b> 107:3	170:22 177:20	105:9 120:1	115:5 118:1
forecast 45:17	177:21 178:6	<b>friday</b> 20:11	126:5 135:13
46:1,15 47:3	178:18 181:20	<b>friend</b> 143:13	136:13 156:9
79:7,8 90:7	190:12	<b>front</b> 59:12	157:22 163:20
157:19 169:13	<b>forming</b> 190:9	65:4 141:10	164:6 165:15
180:2	formula 75:12	<b>fulfill</b> 103:19	169:9,21
forecasting	75:16,19	172:1	171:20 176:3,7
46:15,17 53:15	formulas 74:13	<b>full</b> 85:5 121:1	177:6 180:2
73:7 74:8	77:18 114:19	122:19 128:21	182:20 215:3
156:9 177:5	formulation	173:14 204:16	g
forecasts	53:6	fulsome 59:22	<b>g</b> 11:2 175:10
169:11	<b>forth</b> 153:16,19	<b>function</b> 174:3	gain 123:19
foregoing	180:19	fundamental	138:14
217:3 221:4	forward 105:3	39:9 67:15	gaining 40:1
<b>forgive</b> 173:5	115:5 122:3	107:15 116:15	57:16
174:14	156:7,8 160:7	117:9 118:10	gallardo
<b>form</b> 31:6 34:5	183:1	126:10 128:2	106:15,16
45:21 49:11		130:8 179:4	107:5

Veritext Legal Solutions

[game - going] Page 24

<b>game</b> 169:17	georgia 5:6	<b>gives</b> 46:10	<b>going</b> 12:4,11
gamesmanship	germane 16:1	114:22 189:6	13:4,15 14:8
122:7	171:18	<b>go</b> 24:16 34:13	15:1 17:1
<b>garcia</b> 106:15	<b>getting</b> 30:1,5	40:20 42:5	21:14,16,17
106:16 107:5	36:6 41:14	43:2 45:5	22:4,4 23:22
garlock 42:9	47:1 63:18	46:20 48:1,18	29:10,12 30:5
49:14,21 50:11	74:6 126:18	48:19 55:16	30:9,20 31:6
50:15 53:17	154:17 157:15	65:11 69:22	36:20 39:1
54:1 55:7,13	172:18 173:18	70:1 76:9	40:22 41:5,8
58:19 129:12	173:20 178:16	77:11 89:10	42:4,19 49:10
129:13,15	180:3 214:16	92:19 93:13	50:13,13,20
130:14 131:13	<b>give</b> 12:11	97:11 99:6	55:16 57:20
132:6 134:8	16:16 19:14	105:3 106:18	58:17 60:7
137:5,13 158:4	23:19 26:12,17	111:8 114:8	61:6,9 62:6,7
158:6,10,16,21	39:1,17 42:5	119:5 126:3	62:11 63:9,19
159:4,7,13,19	48:15 57:19	128:16 144:8	64:1,7 74:21
159:20 160:4	78:21 79:3	156:13,16	75:2,16,17
160:15,16,20	81:14 86:4	159:3 161:4	76:1 77:21
160:21 195:21	87:5 89:6,14	162:9 166:7,15	80:16 81:10,16
gaskets 134:2	90:3,10 92:10	167:15 171:22	81:17,21 82:14
gateway 7:15	103:6 130:3	172:8 173:1	83:8 84:7,8
<b>gauge</b> 196:22	132:8 141:19	175:19 183:1	86:2,4 87:15
<b>gender</b> 76:11	143:4,5 148:8	184:11,20	87:15,17,17
76:14 105:20	166:4 184:20	196:13 199:2	89:11,22 91:17
106:8 131:16	188:9 202:8	199:13 200:1,6	94:19 95:17
131:18 182:22	206:16 213:3	203:14 209:4	96:11 97:2,6
general 8:20	<b>given</b> 24:12	<b>goal</b> 12:19	97:13 102:17
26:6 28:5	30:3,10 58:13	goes 35:22 36:6	102:18 103:1,4
34:17 48:8	79:15 81:13	59:17 70:1	103:6 104:9
79:6 98:4	102:3 105:4	89:21 125:17	105:1,3 106:10
143:6 209:5	109:17 110:2	126:9 151:18	106:21 107:21
generally 53:17	110:13 189:1	156:17 179:4	110:5 112:9
171:3 209:3	201:17 202:9	186:8 196:1	115:4 117:15
215:18,22	210:12 217:14	203:16 211:11	121:21 122:3
	221:6	211:19	126:7,14,19,21

Veritext Legal Solutions

[going - high] Page 25

			E
126:22 127:6	goodness 71:12	181:11 183:19	happening
127:15 131:9	goodrich 29:7	188:6 194:1	157:9
132:15 133:12	<b>gotten</b> 178:9	199:7,13 200:1	<b>happens</b> 59:3,4
133:14 135:11	government	200:6,9 202:11	59:5 89:2
136:12 137:16	100:11 157:17	202:20 205:12	105:13 106:4
141:22 142:3	granting 52:5	206:20	<b>happy</b> 103:3
142:18,22	<b>great</b> 140:1	guess 24:2 80:1	<b>hard</b> 58:15
143:2,15,20	greater 78:14	144:1	<b>harmful</b> 206:18
144:6 147:19	78:20 82:11	guidance 57:13	<b>head</b> 75:19
152:20 153:3	94:9 197:12	81:14 89:15	143:14
153:10 154:4	greatest 201:22	90:4 92:8,17	<b>hear</b> 54:9 94:22
156:19 157:8	greatly 38:21	143:6 202:8	95:1 102:18
158:19 160:10	108:13	<b>guide</b> 93:17	<b>heard</b> 100:16
162:7 164:20	<b>grier</b> 4:3 8:22	h	hearing 20:18
165:1,4,6	<b>ground</b> 12:12	<b>h</b> 10:9 17:17	22:12,14 73:13
167:6 169:17	<b>group</b> 59:14	hack 100:9	height 111:4
172:18,22	63:21 112:19	hacked 100:4	<b>held</b> 2:2 135:7
175:16,17	112:20 123:5	hacks 98:17	<b>help</b> 26:2 42:10
176:8 182:19	157:12	half 20:9 61:6	47:7 49:8
183:4,7 188:3	grouped 51:4	69:18,19 71:9	163:22 210:10
188:9 195:9	<b>groups</b> 45:18	108:16 113:21	helpful 71:2
196:3 199:15	46:2,4,10 63:6	162:20	<b>helps</b> 46:13
199:17 201:20	63:10,11,12	halfway 103:7	47:9
202:6,7 204:4	105:21 106:1	hand 32:1	<b>henry</b> 1:14 2:1
206:2,21	115:4 119:11	75:13 135:4	9:3 10:3 11:9
207:13 212:13	126:6 133:10	200:7	217:4 218:5
214:4,13	guarantee 91:3	handful 61:12	219:2 220:2,22
<b>good</b> 11:22	<b>guerke</b> 6:4 9:10	61:14 109:16	221:3
22:7 33:21	144:7,8,12,15	127:5	herrington 4:4
37:1 59:19	146:13,15	hang 18:2	<b>high</b> 63:14 94:5
94:3 120:4	149:4 154:7	happen 39:20	146:2,7 161:21
135:7 140:17	160:2 161:10	115:22 123:3	164:4,5 173:13
144:13,14	167:21 168:14	happened	173:15 178:8
173:19 196:17	169:6 174:13	113:14	203:19
207:7,11	174:17,21		

[mgner merade]			1 450 20
<b>higher</b> 57:13	history 45:22	hypothetically	113:18 115:9
69:22 70:15	49:14,17 130:3	198:4	115:14,17,21
83:18 89:3	170:9,11	i	115:22 116:2,5
91:12 125:1	178:20,22	idea 92:9 105:1	117:20 165:5
165:3 181:22	180:3 203:13	114:10	214:12,16
182:8,10	hitrust 35:18	ideally 156:22	implicitly 76:5
184:15	36:2	183:5	important 47:3
<b>highest</b> 104:21	<b>hodges</b> 49:15	identical 50:10	49:4 61:5 71:3
116:13	134:13	139:15 179:20	93:19 105:10
highlighting	<b>hogan</b> 4:13,14	183:14 192:7	120:6 121:3
134:8	9:11 199:20	196:16	129:1 157:7,9
<b>highly</b> 63:13	207:6,8 209:7	identification	importantly
<b>hinge</b> 91:17	210:8 211:7	17:18 51:17	13:10 46:12
hire 138:9,15	213:1,14	101:18	imposing 93:20
hirst 7:5	215:17 216:15	identified	impossibility
historical 31:2	<b>hold</b> 14:8	29:16 185:6	107:17
31:8,11 40:10	home 111:8	identifier	impossible
41:18,21 42:20	<b>hope</b> 18:11	185:12,21	39:18 100:8
43:21 44:5	109:17 210:14	identify 110:8	141:10 204:19
49:18 58:11	hopefully 14:16	identifying	improperly
82:3 84:15	109:22	185:13 194:3,5	101:1
93:17 112:6,14	houff 5:3	ignorance	improve 73:5
112:15,17	hour 20:8,8	118:16	74:7 121:11
117:21,22	162:20	ignorant	improvement
118:7 125:5	hours 18:22	130:19	74:11
128:20 141:15	19:6 20:5	ignored 106:3	improving 47:2
143:3 153:17	195:12	119:6,12	123:20
154:11 155:1,8	huge 118:20	ignores 104:2	inappropriate
155:20 156:2,3	<b>human</b> 23:6	ignoring 115:6	205:8,20
176:22 181:15	94:14	127:9 198:2	inches 111:4,11
181:19	hundreds	<b>illegal</b> 161:15	incidents
historically	41:17,21 60:3	illinois 7:7	156:10
72:10 125:21	142:10	<b>imagine</b> 194:15	include 169:8
155:20	hypothetical	<b>impact</b> 75:3	194:9 197:5
	84:11 109:10	83:21 91:9	

# [included - interest]

Page 27

_	_		C
included	46:10 47:17	95:11 96:8,10	inputs 16:5
150:20 197:2	59:14 105:21	99:21 108:4	54:1 80:13
includes 167:15	119:10 126:6	109:1,4,8,21	81:9 163:14
169:10,11	129:4 133:9,12	112:16 117:13	insinuate 120:3
including 35:21	157:12 176:4	121:8 132:11	inspection
incomplete	177:4 180:1	143:21,22	10:14 51:14
120:19,22	182:21 206:6	146:20 150:2	instance 43:6
inconsistent	inexpensive	155:5 158:14	140:4
96:1 120:16	179:1	160:5,6 171:8	instructions
incorporate	infallible 98:10	171:9,12 172:1	9:16
171:15	98:12	174:4 175:6,10	instructs 13:6
incorrect 112:4	infeasible	176:16 177:22	insufficient
increase 97:7	117:9,17	178:21 179:3	63:7 181:2
increases 124:5	141:19	180:6,10,13	insurance
increasing 97:5	inference	181:13 182:1	23:20 24:8,18
incremental	110:18	183:11 185:3	25:2 28:1,14
96:8,22	inferences	186:12,18	29:9 34:5,10
indemnity	112:6,17	189:10 193:7	insurers 25:4
28:19	146:22	194:4,5,10,13	<b>intend</b> 37:6,9
<b>index</b> 9:2 10:2	<b>inform</b> 108:13	204:1,11,15	139:18 169:14
indicated 217:6	182:19	209:2 213:22	170:8 176:21
indication	information	216:9,12	intended
166:4	10:13 42:5,10	informative	131:20 181:3
individual	42:21 43:10,21	42:19 136:12	intending
135:19 136:10	44:13 45:5	157:18	110:15 164:14
137:8 149:17	46:1 47:5,7	initial 44:10	177:2
individuals	48:19 49:3,6	142:15,16,17	<b>intent</b> 13:21
44:22 159:5	49:16 50:4,7	142:20 143:17	41:7 91:2
industrial	51:13 56:11	initially 84:6	104:6 171:17
59:18 133:8	58:10 62:7	142:6	203:6 205:10
industries 1:3	68:12 70:7,13	injury 1:4	interact 124:6
176:5 218:4	70:20 73:18,19	<b>inner</b> 187:8	interacts 81:1
219:4 220:4	78:11 83:16,21	<b>input</b> 27:16,19	interest 47:21
industry 45:14	84:22 91:10	80:14,20	48:9 76:20
45:18,22 46:2	93:15,18 95:5		106:5 114:18

Veritext Legal Solutions

# [interest - kevin]

119:4,16	involvement	<b>jersey</b> 2:9,10	k
133:13 136:16	152:6	7:17 8:6 21:5	<b>k</b> 4:14
163:13	involves 33:10	51:5	<b>kaplan</b> 8:4 9:9
interested 77:4	iphones 71:13	jkoski 3:21	11:17,21 12:1
217:16	<b>irony</b> 107:10	<b>job</b> 1:22 173:19	15:4 17:4,7,21
interesting	107:18 110:3	<b>jones</b> 2:2 7:3	18:11,13,14
123:1	irreducible	jonesday.com	20:22 21:11
intermediate	123:14,20	7:9,10	22:6,9,19,20
163:11 164:2	124:1,4	<b>jorge</b> 106:15	23:15,17 27:9
interrogatories	<b>irs</b> 124:10,11	<b>joseph</b> 4:3 8:22	29:13 38:10
179:3	<b>issue</b> 14:21	<b>jr</b> 5:4 218:1	50:1 51:6,19
interrogatory	15:1 22:3 32:2	<b>judge</b> 14:11	51:22 52:6,10
178:1	49:3 55:7	49:15 86:1,4,7	52:11 53:10,13
interrupt	58:22 102:9,20	134:13 137:4	54:18 64:13
127:16 143:16	103:12 123:9	137:13	65:7,16 69:8
198:20 202:22	153:22 161:17	judge's 23:4	88:13 95:7
interval 90:9	161:18 163:7	88:15	100:13,18,20
90:12 113:13	164:10 194:19	judgment	101:11,21
113:15 114:17	194:22 205:7	206:3	102:2,15
intervals 75:18	205:15	jumping 21:20	103:10 127:19
75:20 203:21	issued 51:3	<b>june</b> 20:18	127:20 129:7
intimate 119:3	156:15	158:18	130:21 131:7
119:15	issues 132:4	jurisdiction	132:17 138:17
intrinsic 78:12	152:9,14	47:18 79:10,16	139:21 140:16
164:18	160:11	105:9,19 106:9	140:19 143:8
introduce	issuing 194:22	126:7 130:8	144:5 153:3
61:10 123:13	item 57:2 138:6	jurisdictions	162:15
159:16	itemized	48:11 59:5	kearney 6:18
invoke 169:4	131:21	79:17	kearneyb 6:22
involve 24:9	<b>ivory</b> 121:18	justified 109:7	keep 29:12
76:10 185:4	j	justifying	101:13
involved 25:9	<b>j</b> 10:17 101:17	81:13	kept 127:15
94:8 149:20	<b>jcw</b> 1:5	juxtapose 83:8	kevin 6:4
152:3 200:22	jeanna 3:17		144:15 153:3
201:3	-		198:19 205:4

Veritext Legal Solutions 973-410-4040

Page 28

[key - lawyers] Page 29

- •			
<b>key</b> 49:14 81:9	97:21 99:8	209:17 210:1	76:2 91:15
105:20 185:20	101:21 102:15	210:17	111:12 114:16
185:21	102:19 105:2	knowable	157:17 171:1
kguerke 6:8	105:21 106:12	109:15	216:4
<b>kidding</b> 69:10	107:6,7 108:11	knowing 13:21	largely 110:21
kin 217:15	108:22 109:3,4	59:21 85:8	212:11
<b>kind</b> 21:12 25:5	109:15 111:9	123:19	larger 81:6
93:3,6 143:5	111:22,22	knowledge	120:6,10
163:2 164:18	113:15 114:9	129:22 130:3	123:21,22
196:7	114:13 115:4	137:7,9 138:14	164:17 197:16
<b>king</b> 6:5	116:20 117:4,6	138:15 147:1	las 97:22
knew 117:11	117:11 118:14	186:22 187:12	lastly 13:9
130:17 208:18	118:15,19,21	187:16,18	14:15
208:19 209:14	120:3,14,15,17	193:16 208:7	late 25:13
210:17 214:18	121:1 127:10	208:11,12	laughter
214:19	129:18 130:22	212:17,18	100:17 132:14
know 12:10,14	134:9 135:18	213:10	laurie 3:10
13:7 14:18	137:14,22	known 48:22	law 2:2 37:4
18:4,22 21:2,5	141:8,18 142:7	49:6 78:15	47:17 60:21
23:19 24:17	143:1 144:22	79:4 89:16	61:4,5,8,11,12
31:9 34:17	146:1 148:17	<b>knows</b> 107:13	61:15,19,22
35:16 36:19	152:22 153:9	108:8 120:14	62:4,10 63:8
41:12 51:20	154:2,3 165:20	<b>koski</b> 3:17	75:14,14 77:11
54:2 58:6,17	167:5,7 168:1	krepto 3:10	77:12,19 79:9
59:12,15,22	169:12 178:15	l	79:15,16 84:14
60:5,6,8 61:19	180:13 181:14	l 1:18 2:4 4:5	84:17 91:5
61:21 62:14	184:5,13,14,15	217:2,18	105:8,19 106:7
63:9 66:15	184:19,22	labor 31:17	126:7 129:9,16
69:5 75:2 76:1	185:1 187:3,6	lack 117:9	130:7
77:16 78:16	187:7,11	126:10	<b>lawyer</b> 36:21
82:1 85:18,22	188:10,20	lacking 92:6	140:1 205:8
87:6,15,16,18	192:9 194:7	lag 151:16	lawyer's
89:21,22 91:21	195:17 196:20	lap 138:13	205:10
93:12 95:22	196:21 198:12	large 31:16	lawyers 71:13
96:4,5 97:12	199:1 200:13	59:1 75:17	
		37.1 /3.1/	

Veritext Legal Solutions

[lay - looking] Page 30

<b>lay</b> 137:7	liability 46:12	220:5,7,9,11,13	<b>llc</b> 1:8,11 5:2,2
layering 162:5	53:4,22 54:3	220:15,17	7:12 8:9 9:4
layers 99:5	55:2 56:2 57:4	<b>link</b> 99:5,11	10:4 218:4
layperson	68:7 76:11	<b>list</b> 16:16 25:22	219:4 220:4
130:17	79:7 129:2	26:10,16 29:11	<b>llp</b> 3:3 4:4 6:3
<b>lead</b> 94:5	136:6,13 163:9	120:19,22	6:11 7:13 8:3
leading 141:13	164:19 167:10	121:2,3 131:21	8:10
<b>learn</b> 77:14	167:14,17	175:5	<b>logic</b> 113:5
84:10 121:8	168:6,15 169:8	<b>listen</b> 33:12	<b>long</b> 29:11
161:2 166:15	169:9,16 215:3	<b>lists</b> 175:1	144:3
173:17	<b>liberty</b> 152:11	literally 33:10	<b>longer</b> 48:13
learning 117:2	<b>likely</b> 56:14	116:5	114:2 126:8
leave 58:13	81:8 93:18	litigating	156:14 158:15
<b>left</b> 65:22	105:12 123:7	121:16 162:8	look 24:16
184:11	133:20 142:5,8	litigation 8:20	30:22 31:9
legal 21:22	145:19 156:1	25:4 34:21	32:3 44:14
37:3,7 129:2	164:17 166:3,5	119:21 121:6	48:12,13 50:12
164:19 167:10	166:10,20	122:2 123:7	51:20 54:22
167:14,17	167:1,2 173:11	212:5	63:6 67:19
168:6,15 169:7	183:12 193:4	<b>little</b> 15:15	72:17,20 76:12
169:16 188:1	203:18	20:12 34:12	77:22 79:15
218:22	<b>limit</b> 207:14	42:10 49:13	82:17 101:14
<b>legally</b> 161:16	limitation	55:8 69:15	105:18 106:6
level 56:21	43:17	74:22 94:12	116:19 141:22
62:10,12 74:19	<b>limited</b> 40:19	120:4 122:17	157:1 174:18
75:6 82:14	66:3	133:16 149:19	176:21 181:7
85:18 92:3,13	<b>limits</b> 94:22	166:14 197:21	189:4 195:21
104:21 106:12	linchpin 89:8	198:12 199:1	196:14 198:6
129:5 140:11	line 25:6	live 202:5	198:11 209:15
164:4,5 201:22	102:19,19	livelitigation	looked 135:7
<b>levels</b> 45:19	157:17 181:4	1:20 2:14	145:18 153:22
97:11	182:15 205:5	217:21	looking 26:16
liabilities 16:3	205:19 219:5,7	livenote 2:7	30:19 38:1
45:8	219:9,11,13,15	lkrepto 3:14	43:10,16 70:13
	219:17,19,21		71:13 76:5,19

Veritext Legal Solutions

- 6			
78:6 79:12	lowenstein 8:3	179:21 193:10	massachusetts
83:12 94:18	8:5	193:14 200:4	3:6
95:11 105:15	lowenstein.c	206:10,11	<b>match</b> 115:5
109:16 114:14	8:8	211:9 213:18	180:14 185:6
114:15 134:17	<b>lower</b> 69:15,21	214:4	matched 179:9
153:20 156:9	72:13 125:3	<b>makes</b> 30:21	<b>matches</b> 185:17
178:9 188:22	<b>lying</b> 12:9	31:22 34:12	matching 4:12
190:15 192:9	m	38:21 106:19	185:20 188:15
210:6	<b>m</b> 5:10	116:10 120:15	189:1 207:4,8
looks 140:1	machine	121:4	210:15
lose 62:6	217:11	making 60:2	material 27:6
<b>losing</b> 204:14	made 71:5	86:18 113:4	27:15,21 28:4
loss 62:16 99:3	103:21 105:5	124:17 133:6	28:9,17 38:7
99:7,15 107:12	134:7 151:4	<b>males</b> 77:9	95:3 97:7,13
108:1 125:16	158:12 168:17	mallinckrodt	128:14 134:1
125:22	191:9 204:13	25:10	148:11
<b>lost</b> 64:17	206:3 214:7	manner 58:22	materially 62:5
<b>lot</b> 16:10 21:7	mail 205:8	59:22	62:8 83:18
29:9 42:11	main 19:19	<b>manual</b> 31:17	91:12 97:5
54:1 57:20	52:9 76:4	<b>map</b> 191:13	181:22 198:15
59:6 60:4 62:6	125:11	<b>mapped</b> 176:3	<b>math</b> 71:11,17
73:8 81:18	maintain 95:11	mapping	90:8 92:5,14
97:10 114:12	maisano 5:10	185:19 190:2	92:14 113:8,20
116:7 122:7	majority 79:20	<b>march</b> 17:11	174:10 196:7
132:10 137:8	172:18	22:11	mathematical
137:19 140:10	make 16:20	<b>mark</b> 17:1 51:6	60:16 75:19
157:21 172:6	18:3 31:7 41:6	101:11	114:19 143:10
lots 59:18	41:8 45:11	marked 17:18	167:18 168:5,8
121:13 127:10	60:11 65:9	51:16 101:18	212:11 213:22
louisiana 2:2	68:7 77:9 78:1	market 3:11	214:5 215:6
lovely 70:6	78:13,19 86:12	6:13,19	mathematically
<b>low</b> 114:6	99:17 127:6	maryland 5:12	92:2 122:1
116:8 125:12	131:14 134:22	mass 15:21	mathematics
127:12 142:18	146:9,11,21	24:6,9,11,14	168:13 213:6,7
	160:12 179:16	94:8	

# [matter - model] Page 32

		T	
<b>matter</b> 28:6,20	meant 111:20	methodology	<b>minutes</b> 62:19
29:1,7 30:2,3	measuring	122:12,15	65:8,9 94:11
62:4 72:5	195:5	mhirst 7:10	130:22 198:22
134:8 160:15	<b>meat</b> 37:17	<b>michael</b> 5:4 8:4	199:4,9,22
211:21	mechanically	12:1 21:15	miscellaneous
matters 45:15	92:16	94:19 127:18	1:4
63:17 76:14	meet 20:2,5	140:22 218:1	mischaracteri
81:4	meeting 20:11	<b>middle</b> 127:16	106:14
maximum	members 19:9	128:17	misleading
173:3	men 112:10	<b>million</b> 80:18	110:20 111:2
mccarter 7:13	merge 155:8	82:1 87:8,9,17	misrepresent
mccarter.com	184:17,20	87:18,18 140:8	116:4
7:19	merged 184:3	140:8,9 142:7	<b>missed</b> 79:22
mcdaniel 4:13	merit 2:4	142:7,14,19,20	96:20 109:12
<b>mdl</b> 27:1 32:12	mesothelioma	142:21 166:9	172:22
<b>mean</b> 14:1	42:12,14 45:10	166:10	missing 23:7
19:13 20:20	56:1 58:8	millions 33:10	94:14 172:16
29:22 32:18	66:11,14,22	33:12 60:3	173:17,22
36:3 39:9 80:4	67:3 68:19	81:16,19,22	misstate 33:5
80:4 82:6	69:13 70:8,8	82:3 142:6,9,9	misunderstan
92:14 95:22	70:10,13,14	165:10	116:15 118:11
97:15 98:1	71:4,6,8,22	<b>mind</b> 138:2	128:2
101:3 137:2	72:13,16 87:21	208:5 209:14	mitigate 77:5
139:10 146:7	106:7,8,9	mine 14:2 50:9	78:7,8,18
146:13 147:22	133:19 145:17	100:14 107:6	<b>mix</b> 115:2
149:19 151:13	145:21 146:10	minimal 189:2	133:8 206:6
153:10 154:13	147:12 148:4	minimize 46:21	mixes 157:12
163:16 169:14	148:12,16,22	86:12 113:18	mkaplan 8:8
195:11 196:5	150:11,12	122:5 127:11	<b>model</b> 81:9
202:22 207:22	151:4 156:4	<b>minus</b> 80:17,19	83:21 91:8,22
meaning	203:12	80:21,22 87:6	91:22 92:16
139:18	<b>met</b> 12:1	87:7,8,9	157:3 168:5,9
means 14:3	methodologi	142:19,21	168:11 212:11
34:6 81:10	122:13	165:1	213:22 214:5
123:21 181:20			

800-227-8440 973-410-4040

Veritext Legal Solutions

[modeling never]			1 450 33
modeling 15:21	11:9,22 17:17	n	115:18 116:7
215:3	18:1,16 22:2	<b>n</b> 3:1 4:1 5:1	117:12 118:4
<b>models</b> 168:8,9	22:10 38:2	6:1,18 7:1 8:1	118:15 119:10
modified 155:2	52:14 65:17	11:2	119:11 122:3
<b>mogul</b> 40:15	102:4 107:11	name 96:5	123:16 125:7,9
<b>moment</b> 52:20	111:19 119:3	144:15	125:17 133:9
59:11 68:18	128:11 131:8	named 136:17	133:14 149:18
86:1 98:7	144:13 206:21	136:17 159:13	156:19 157:13
152:15,18	207:7 217:4	162:2,2	161:4 175:14
157:16 172:5	218:5 219:2	names 159:12	179:7 181:8,10
180:17	220:2,22 221:3	narrow 133:17	181:14 182:9
monday 1:15	<b>mullin's</b> 17:10	national 28:19	needed 53:14
9:5 10:5 11:6	104:9	nationally	61:15 67:4
<b>money</b> 60:4	multiple 63:11	217:2	91:4 126:1
montana 28:20	99:1 132:2,3	nature 81:3	155:4 193:7
<b>month</b> 206:19	133:20 167:15	175:19 185:11	207:17 209:9
<b>months</b> 121:15	182:11 210:21	196:17 215:15	213:17
morgan 7:5	multiplicative	nearly 183:13	<b>needs</b> 37:19
<b>morning</b> 20:13	81:2	necessarily	47:5 103:19,20
moskow 6:12	multiply 71:18	14:1 119:22	111:19,21
moskowb 6:16	multitude	122:16	120:12,18
<b>motion</b> 18:9	134:5 176:12	necessary	121:1 128:7
20:16 200:11	murray 5:2	33:14 91:7	negotiated
motivated	42:12 43:18	<b>need</b> 14:15 40:9	177:9
83:13 100:9	69:15 135:17	42:1,5 45:2,4	negotiation
<b>mouth</b> 77:17	135:22 136:8	48:1,12,14	53:6 204:3
<b>move</b> 41:3	136:11 147:22	59:1,6,9 61:20	neither 30:8
59:20 60:7	149:10,10	64:20 69:17	149:15 150:15
74:13 131:10	153:13 155:22	77:18,21 78:11	217:15
movement	159:13 175:21	79:9 85:10	nervous 80:12
74:16	191:17 197:5	88:22 91:5	<b>never</b> 59:3 96:6
<b>moving</b> 215:4	murray's	92:10 97:12	99:3,7,14
mulberry 7:16	136:13	103:5 105:14	103:20,21
<b>mullin</b> 1:14 2:1		107:16 112:21	111:20 113:14
9:3 10:3,10		114:18 115:3	116:6,7 136:11
	•	•	

[never - odds] Page 34

137:21 162:2   northeast 5:5   northwest 2:3   2:12 7:17 8:6   8:14,14 21:5   notary 1:21   2:15 221:22   note 205:17,18   109:14 140:10   114:11   observe 91:19   obvious 130:12   136:15 138:4,4   194:22   note 205:17,18   numerical 213:4   note 205:17,18   numerous 26:9   131:19 142:11   note 217:5   notice 217:5   note 217:5   note 20:10   number 10:8,9   10:12,17 17:16   217:19,19   46:8,15,18   nyacr 1:19   217:19,19   46:8,15,18   nondisclosed 115:11   86:5 69:21   41:12   73:12,14 79:4   nondisclosed 115:9   96:5 97:13   nonelectronic 125:1   nondisclosure 115:9   96:5 97:13   nonparties 133:12   148:11 157:22   nonparties 137:12   140:22 141:20   150:17   nonparties 137:12   147:20 148:3   nonparty 12:2   nonparty		T	T	
2:12 7:17 8:6         3:18 4:7         notary 1:21         69:1 87:3         observations           8:14,14 21:5         notary 1:21         109:14 140:10         114:11           51:5 72:6         2:15 221:22         note 205:17,18         numerical         136:15 138:4,4           newark 7:17         218:10         213:4         136:15 138:4,4           newco 28:21         noted 221:9         numerous 26:9         194:22           nfl 111:1         notice 217:5         131:19 142:11         194:22           ninety 108:17         nowember         161:14         14:19 26:13           ninety 108:17         number 10:8,9         131:19 142:11         14:19 26:13           ninety 108:17         number 10:8,9         217:19         129:4 133:12           nods 122:17         51:11 63:15         nycer 1:19         129:4 133:12           nods 122:17         51:11 63:15         0         11:2           nondisclosuce         89:1 92:15         0         0           115:9         96:5 97:13         102:10 137:16         137:16           nonmeectronic         125:1         126:14,15         138:1 139:4           150:17         143:5 145:19         120:13 20:14         20:13 20:14           150:17		northeast 5:5	196:2 206:8	
8:14,14 21:5         notary         1:21         109:14 140:10         114:11         observe         91:19           123:13         note         205:17,18         numerical         136:15 138:4,4           newark         7:17         218:10         213:4         numerical         136:15 138:4,4           newark         7:17         noted         221:9         numerous         26:9         136:15 138:4,4           nine         108:17         notice         217:5         131:19 142:11         obviously         136:15 138:4,4           ninety         108:17         nowember         161:14         14:19 26:13         occupation           ninety         108:17         number         10:8,9         nyacr         1:19         47:17 59:14         47:17 59:14         47:17 59:14         47:17 59:14         47:17 59:14         47:17 59:14         47:17 59:14         47:17 59:14         47:17 59:14         47:17 59:14         47:17 59:14         47:17 59:14         47:17 59:14         47:17 59:14         47:17 59:14         47:17 59:14         47:17 59:14         49:10 66:6         occupation         45:14,18,22         66:20:16:6         63:6 105:21         102:10 137:16         133:7,10         133:7,10         133:7,10         133:7,10         133:19 148:49	, ,	northwest 2:3	numbers 25:21	96:13 172:2
51:5 72:6         2:15 221:22         164:19 213:5         observe 91:19           123:13         note 205:17,18         numerical         136:15 138:4,4           newco 28:21         noted 221:9         numerous 26:9         136:15 138:4,4           nine 108:17         notice 217:5         131:19 142:11         161:14         194:22           ninety 108:17         november         161:14         194:22         obviously           ninety 108:17         number 10:8,9         10:12,17 17:16         217:19         47:17 59:14           nods 122:17         10:12,17 17:16         nyacr 1:19         129:4 133:12           115:19         46:8,15,18         nyrer 1:19         129:4 133:12           non 8:2 11:19         46:8,15,68         nyrer 1:19         129:4 133:12           nondisclosed         80:3 85:22         0         0           115:11         86:5,6 88:2         89:1 92:15         86:4 94:21         49:10 64:8         49:10 64:8         49:10 64:8         49:10 64:8         49:10 137:16         63:6 105:21         19:10 126:6         133:7,10         157:12 177:5         158:22 168:18         181:5 187:21         201:13 202:14         205:3,5 208:21         201:13 202:14         205:3,5 208:21         209:20 211:4         215:12         209:20 21:4 <th>2:12 7:17 8:6</th> <th>3:18 4:7</th> <th>69:1 87:3</th> <th>observations</th>	2:12 7:17 8:6	3:18 4:7	69:1 87:3	observations
123:13         note         205:17,18         numerical         obvious         130:12           newark         7:17         noted         221:9         numerous         26:9         136:15 138:4,4           newco         28:21         noted         221:9         numerous         26:9         194:22         obviously           nine         108:17         november         161:14         14:19 26:13         occupation           ninety         108:17         number         10:8,9         nyacr         1:19         47:17 59:14           nj         1:19,19         46:8,15,18         nyacr         1:19         129:4 133:12           nods         122:17         51:11 63:15         nyacr         1:19         129:4 133:12           nonds         122:17         68:15 69:21         o         47:17 59:14         129:4 133:12           nondisclosed         80:3 85:22         o         o         11:2         object         0         45:14,18,22           nondesclosure         115:9         96:5 97:13         102:16 126:4         148:20 153:4         158:22 168:18         181:5 187:21         159:12 177:5         occupational           nonparties         138:1 139:4         49:10 64:8         88:4 94:	8:14,14 21:5	notary 1:21	109:14 140:10	114:11
newark         7:17         218:10         213:4         136:15 138:4,4           newco         28:21         noted         221:9         numerous         26:9         194:22           nfl         111:1         notice         217:5         131:19 142:11         obviously           ninet         108:17         november         161:14         14:19 26:13           ninety         108:17         number         10:8,9         ny         218:15         occupation           nj         1:19,19         46:8,15,18         nycr         1:19         47:17 59:14         129:4 133:12           nods         122:17         51:11 63:15         217:19         129:4 133:12         176:4 182:21         206:6           non         8:2 11:19         46:8,15,18         nycr         1:19         176:4 182:21         206:6           o         11:2         0         11:2         0         0         0         0         0         0         0         11:2         0         0         11:2         0         0         0         0         0         11:2         0         0         0         11:2         0         0         11:2         0         0         11:2	51:5 72:6	2:15 221:22	164:19 213:5	observe 91:19
newco         28:21         noted         221:9         numerous         26:9         194:22           nfl         111:1         notice         217:5         numerous         26:9         194:22           ninet         108:17         november         161:14         14:19 26:13           ninety         108:17         number         10:8,9         ny         218:15         occupation           nj         1:19,19         46:8,15,18         nycr         1:19         129:4 133:12         176:4 182:21           217:19,19         46:8,15,18         nyrcr         1:19         176:4 182:21         206:6           non         8:2 11:19         68:15 69:21         o         o         0         0           nondisclosed         80:3 85:22         0         0         0         0         0         0           115:11         86:5,6 88:2         89:1 92:15         88:4 94:21         102:10 64:8         63:6 105:21         119:10 126:6         63:6 105:21         133:7,10         157:12 177:5         133:7,10         157:12 177:5         0         157:12 177:5         0         157:12 177:5         0         0         157:12 177:5         0         0         157:12 177:5         0         0 <td>123:13</td> <td><b>note</b> 205:17,18</td> <td>numerical</td> <td><b>obvious</b> 130:12</td>	123:13	<b>note</b> 205:17,18	numerical	<b>obvious</b> 130:12
nfl111:1notice217:5131:19 142:11obviouslynine 108:17november161:1414:19 26:13ninety108:17number10:8,9ny 218:15occupationnj1:19,1910:12,17 17:16217:1947:17 59:14217:19,1946:8,15,18nyrcr1:19129:4 133:12nods122:1751:11 63:15217:19206:6non8:2 11:1968:15 69:21ooccupationnondisclosed80:3 85:22ooccupational115:1186:5,6 88:2oobject13:4nondisclosure89:1 92:1588:4 94:2145:14,18,22115:996:5 97:13102:10 137:1663:6 105:21nonelectronic101:16 126:4148:20 153:4158:22 168:18125:1126:14,15158:22 168:18181:5 187:21157:12 177:5nonmesotheli138:1 139:4181:5 187:21200:20 211:4205:3,5 208:21nonparties146:5 147:16209:20 211:4212:20 213:12137:12147:20 148:3121:20 213:12166:18 21,22nonparty12:2165:3,15193:19 205:18nonrandom166:18,21,22173:3 176:3,7objection160:8159:14,18173:3 176:3,7180:2 184:16objects10:13north1:1 6:5180:2 184:16	newark 7:17	218:10	213:4	136:15 138:4,4
nine         108:17         november         161:14         14:19 26:13           ninety         108:17         number         10:8,9         ny 218:15         occupation           nj         1:19,19         10:12,17 17:16         217:19         129:4 133:12           217:19,19         46:8,15,18         nyrer         1:19         176:4 182:21           nods         122:17         51:11 63:15         217:19         206:6           non         8:2 11:19         68:15 69:21         0         176:4 182:21         206:6           non         8:2 11:19         68:15 69:21         0         11:2         0         1         0         0         0         0         0         0         0         0         0         0         0         0	<b>newco</b> 28:21	<b>noted</b> 221:9	numerous 26:9	194:22
ninety         108:17         number         10:8,9         ny         218:15         occupation           nj         1:19,19         10:12,17 17:16         217:19         129:4 133:12           217:19,19         46:8,15,18         nyrer         1:19         176:4 182:21           nods         122:17         51:11 63:15         nyrer         1:19         176:4 182:21           non         8:2 11:19         68:15 69:21         o         occupation           non         8:2 11:19         68:15 69:21         o           nondisclosed         80:3 85:22         object         13:4         46:2,10 59:16         63:6 105:21           115:11         86:5,6 88:2         88:4 94:21         106:3 13         19:10 126:6         63:6 105:21           115:9         96:5 97:13         101:16 126:4         48:20 153:4         158:22 168:18         159:12 177:5         157:12 177:5         occupations           125:1         126:14,15         138:1 139:4         158:22 168:18         181:5 187:21         128:19 180:1         128:19 180:1           150:17         143:5 145:19         146:5 147:16         20:3,5 208:21         209:20 211:4         20:3,5 208:21         20:20 213:12         occurring         85:5         occurs	<b>nfl</b> 111:1	<b>notice</b> 217:5	131:19 142:11	obviously
nomber         10:8,9         nyacr         1:19         47:17 59:14           nj         1:19,19         10:12,17 17:16         217:19         129:4 133:12           nods         122:17         51:11 63:15         nyrcr         1:19         176:4 182:21           nom         8:2 11:19         68:15 69:21         o         cccupational           41:12         73:12,14 79:4         o         45:14,18,22           nondisclosed         80:3 85:22         object         13:4         45:14,18,22           nondisclosure         89:1 92:15         86:5,6 88:2         88:4 94:21         102:10 137:16         63:6 105:21         119:10 126:6           125:1         126:14,15         126:14,15         158:22 168:18         181:5 187:21         157:12 177:5         occupations           nonmesotheli         138:1 139:4         146:5 147:16         148:20 153:4         128:19 180:1         occurred         116:8           137:12         147:20 148:3         147:20 148:3         129:20 211:4         occurring         85:5           nonparties         165:3,15         166:18,21,22         objection         160:8         193:19 205:18         objection         160:8         99:1,3 92:18         09:1,3 92:18           north <td><b>nine</b> 108:17</td> <td>november</td> <td>161:14</td> <td>14:19 26:13</td>	<b>nine</b> 108:17	november	161:14	14:19 26:13
nj         1:19,19         10:12,17 17:16         217:19         129:4 133:12           nods         122:17         51:11 63:15         nyrcr         1:19         206:6           non         8:2 11:19         68:15 69:21         0         coccupational           41:12         73:12,14 79:4         0         45:14,18,22         46:2,10 59:16         63:6 105:21           nondisclosed         89:1 92:15         96:5 97:13         102:10 137:16         63:6 105:21         119:10 126:6         133:7,10           nonelectronic         101:16 126:4         126:14,15         158:22 168:18         181:5 187:21         157:12 177:5         occupational           nonmesotheli         138:1 139:4         158:22 168:18         181:5 187:21         157:12 177:5         occupations           nonparties         140:22 141:20         143:5 145:19         146:5 147:16         129:20 211:4         205:3,5 208:21         occurred         116:8           158:10         165:3,15         166:18,21,22         objection         160:8         99:1,3 92:18           nonth         1:1 6:5         180:2 184:16         objects         10:13         90:1,3 92:18	<b>ninety</b> 108:17	200:10	<b>ny</b> 218:15	occupation
217:19,19         46:8,15,18         nyrer         1:19         176:4 182:21           nods         122:17         51:11 63:15         0         ccupational           41:12         73:12,14 79:4         0         45:14,18,22         46:2,10 59:16         63:6 105:21           nondisclosed         89:1 92:15         86:5,6 88:2         49:10 64:8         88:4 94:21         19:10 126:6         63:6 105:21           nondelectronic         101:16 126:4         126:14,15         188:1 139:4         158:22 168:18         158:22 168:18         157:12 177:5         occupational           15:9         96:5 97:13         102:10 137:16         148:20 153:4         158:22 168:18         158:22 168:18         181:5 187:21         126:14,15         158:22 168:18         181:5 187:21         201:13 202:14         205:3,5 208:21         occupational         128:19 180:1         occupations         128:19 180:1         occupations         128:19 180:1         occupations         128:19 180:1         occupations         128:19 180:1         occurred         116:8         150:9         occurring         85:5         occurring         85:5         occurs         108:11         116:6         occurs         108:11         116:6         occurs         108:11         116:6         occurs         108:11	108:17	<b>number</b> 10:8,9	<b>nyacr</b> 1:19	47:17 59:14
nods         122:17         51:11 63:15         217:19         206:6           non         8:2 11:19         68:15 69:21         0         41:12         occupational           41:12         73:12,14 79:4         0         45:14,18,22         45:14,18,22           nondisclosed         80:3 85:22         object         13:4         45:14,18,22         46:2,10 59:16         63:6 105:21         119:10 126:6         63:6 105:21         119:10 126:6         63:6 105:21         119:10 126:6         133:7,10         157:12 177:5         occupations           nonelectronic         101:16 126:4         126:14,15         158:22 168:18         181:5 187:21         occupations         128:19 180:1         157:12 177:5         occupations           nonmesotheli         138:1 139:4         158:22 168:18         181:5 187:21         0ccupations         128:19 180:1         occupations           150:17         143:5 145:19         146:5 147:16         148:20 153:4         158:22 168:18         150:9         occurred         116:8           137:12         147:20 148:3         148:11 157:22         209:20 211:4         215:12         occurs         108:11         116:6           nonpublic         158:10         166:18,21,22         173:3 176:3,7         166:18,21,22	<b>nj</b> 1:19,19	10:12,17 17:16	217:19	129:4 133:12
non         8:2 11:19         68:15 69:21         o         occupational           41:12         73:12,14 79:4         45:14,18,22         46:2,10 59:16           nondisclosed         80:3 85:22         object 13:4         46:2,10 59:16           115:11         86:5,6 88:2         49:10 64:8         88:4 94:21           115:9         96:5 97:13         102:10 137:16         133:7,10           15:1         126:14,15         102:10 137:16         133:7,10           15:1         126:14,15         158:22 168:18         158:22 168:18           150:17         140:22 141:20         140:22 141:20         128:19 180:1           137:12         147:20 148:3         120:13 202:14         205:3,5 208:21           209:20 211:4         209:20 211:4         212:20 213:12           209:20 211:4         215:12         209:20 211:4           209:20 213:12         209:20 213:12           209:20 211:4         215:12           209:20 211:4         215:12           209:20 213:12         209:20 213:12           209:20 213:12         209:20 213:12           209:20 213:12         209:20 213:12           209:20 213:12         209:20 213:12           209:20 213:12         209:20 213:12	217:19,19	46:8,15,18	<b>nyrcr</b> 1:19	176:4 182:21
41:12       73:12,14 79:4       6       11:2       45:14,18,22         nondisclosed       80:3 85:22       object       13:4       46:2,10 59:16       63:6 105:21         nondisclosure       89:1 92:15       88:4 94:21       102:10 137:16       133:7,10       133:7,10         nonelectronic       125:1       126:14,15       126:14,15       158:22 168:18       181:5 187:21       157:12 177:5       occupations         nonmesotheli       138:1 139:4       140:22 141:20       143:5 145:19       201:13 202:14       occurred       116:8         150:17       143:5 145:19       146:5 147:16       209:20 211:4       occurring       85:5         nonparties       147:20 148:3       212:20 213:12       occurring       85:5         158:10       165:3,15       166:18,21,22       objection       160:8       99:7,13,20       occurs       108:11         nonrandom       159:14,18       173:3 176:3,7       180:2 184:16       objectors       25:15       objects       10:13       29:1,3 92:18         159:14,18       180:2 184:16       15:13       127:11	<b>nods</b> 122:17	51:11 63:15	217:19	206:6
nondisclosed         80:3 85:22         object         13:4         46:2,10 59:16           115:11         86:5,6 88:2         89:1 92:15         49:10 64:8         49:10 137:16         63:6 105:21         119:10 126:6           115:9         96:5 97:13         101:16 126:4         126:14,15         102:10 137:16         133:7,10         157:12 177:5         occupations           125:1         126:14,15         138:1 139:4         158:22 168:18         181:5 187:21         occupations           150:17         143:5 145:19         205:3,5 208:21         occurred         116:8           137:12         147:20 148:3         209:20 211:4         209:20 211:4         occurring         85:5           nonparties         165:3,15         165:3,15         193:19 205:18         ocean         42:17           nonrandom         166:18,21,22         173:3 176:3,7         objectors         25:15         89:7,13,20           159:14,18         173:3 176:3,7         180:2 184:16         51:13         127:11	<b>non</b> 8:2 11:19	68:15 69:21	0	occupational
nondisclosed         80:3 85:22         object         13:4         46:2,10 59:16         63:6 105:21           nondisclosure         89:1 92:15         88:4 94:21         119:10 126:6         133:7,10           nonelectronic         101:16 126:4         126:14,15         126:14,15         148:20 153:4         157:12 177:5         occupations           nonmesotheli         138:1 139:4         158:22 168:18         181:5 187:21         occurred         116:8           150:17         143:5 145:19         205:3,5 208:21         occurred         116:8           137:12         146:5 147:16         209:20 211:4         209:20 211:4         occurring         85:5           nonparty         12:2         166:18,21,22         objection         160:8         16:6           nonrandom         166:18,21,22         173:3 176:3,7         objectors         25:15         objects         10:13           north         1:1 6:5         180:2 184:16         51:13	41:12	73:12,14 79:4	a 11·2	45:14,18,22
nondisclosure       89:1 92:15       49:10 64:8       63:6 105:21         115:9       96:5 97:13       101:16 126:4       119:10 126:6         125:1       126:14,15       126:14,15       158:22 168:18       133:7,10         nonmesotheli       138:1 139:4       158:22 168:18       181:5 187:21       128:19 180:1         nonparties       140:22 141:20       143:5 145:19       201:13 202:14       128:19 180:1         nonparties       146:5 147:16       209:20 211:4       150:9         nonparty       12:2       161:1 163:11       215:12       215:12         nonpardom       166:18,21,22       173:3 176:3,7       193:19 205:18       00jectors       25:15         159:14,18       173:3 176:3,7       180:2 184:16       51:13       102:10 137:16       133:7,10         157:12 177:5       157:12 177:5       0ccurpations       128:19 180:1       128:19 180:1         150:9       0ccurring       85:5         0ccurs       108:11       116:6         150:9       0ccurring       85:5         0ccurs       108:11       116:6         159:14,18       173:3 176:3,7       180:2 184:16       10:13	nondisclosed	80:3 85:22		46:2,10 59:16
nondisclosure       89:1 92:15       88:4 94:21       119:10 126:6         115:9       96:5 97:13       101:16 126:4       133:7,10         nonelectronic       101:16 126:4       148:20 153:4       157:12 177:5         nonmesotheli       138:1 139:4       158:22 168:18       128:19 180:1         nonparties       140:22 141:20       143:5 145:19       201:13 202:14       205:3,5 208:21         nonparties       146:5 147:16       209:20 211:4       209:20 211:4       209:20 211:4         137:12       148:11 157:22       209:20 211:4       215:12       215:12         nonpublic       161:1 163:11       165:3,15       166:18,21,22       193:19 205:18       0cean 42:17         norrandom       166:18,21,22       173:3 176:3,7       0jectors 25:15       89:7,13,20       90:1,3 92:18         159:14,18       132:11       127:11       126:6       133:7,10       157:12 177:5       157:12 177:5         166:20 70:20       143:5 145:19       201:13 202:14       205:3,5 208:21       209:20 211:4       215:12       215:12       215:12       215:12       215:12       215:12       215:12       215:12       215:12       215:12       215:12       215:12       215:12       215:12       215:12       215:12	115:11	86:5,6 88:2	•	63:6 105:21
115:9         96:5 97:13           nonelectronic         101:16 126:4           125:1         126:14,15           nonmesotheli         138:1 139:4           66:20 70:20         140:22 141:20           150:17         143:5 145:19           nonparties         146:5 147:16           137:12         147:20 148:3           nonparty 12:2         148:11 157:22           nonpublic         165:3,15           159:14,18         166:18,21,22           159:14,18         173:3 176:3,7           north 1:1 6:5         180:2 184:16           102:10 137:16         148:20 153:4           158:22 168:18         181:5 187:21           201:13 202:14         205:3,5 208:21           209:20 211:4         212:20 213:12           215:12         215:12           objection 160:8         193:19 205:18           0bjectors 25:15         0bjectors 25:15           0bjects 10:13         90:1,3 92:18           127:11	nondisclosure	89:1 92:15		119:10 126:6
nonelectronic       101:16 126:4       126:14,15       126:14,15       148:20 153:4       157:12 177:5         nonmesotheli       138:1 139:4       158:22 168:18       128:19 180:1         66:20 70:20       140:22 141:20       143:5 145:19       201:13 202:14       202:13 202:14       205:3,5 208:21       209:20 211:4       209:20 211:4       209:20 211:4       209:20 211:4       209:20 213:12	115:9	96:5 97:13		133:7,10
125:1       126:14,15         nonmesotheli       138:1 139:4         66:20 70:20       140:22 141:20         150:17       143:5 145:19         nonparties       146:5 147:16         137:12       147:20 148:3         nonparty 12:2       148:11 157:22         nonpublic       161:1 163:11         158:10       165:3,15         nonrandom       166:18,21,22         159:14,18       173:3 176:3,7         north 1:1 6:5       180:2 184:16             158:22 168:18         181:5 187:21       occurred         209:20 211:4       209:20 213:12         215:12       occurs 108:11         116:6       ocean 42:17         odds 45:15       89:7,13,20         90:1,3 92:18         159:14       159:13	nonelectronic	101:16 126:4		157:12 177:5
nonmesotheli       138:1 139:4       181:5 187:21       128:19 180:1         66:20 70:20       140:22 141:20       1201:13 202:14	125:1	126:14,15		occupations
66:20 70:20       140:22 141:20         150:17       143:5 145:19         nonparties       146:5 147:16         137:12       147:20 148:3         nonparty 12:2       148:11 157:22         nonpublic       161:1 163:11         158:10       165:3,15         nonrandom       166:18,21,22         159:14,18       173:3 176:3,7         north 1:1 6:5       180:2 184:16            201:13 202:14       205:3,5 208:21         209:20 211:4       209:20 213:12         215:12       00jection 160:8         193:19 205:18       00ds 45:15         89:7,13,20       90:1,3 92:18         151:13       127:11	nonmesotheli	138:1 139:4		128:19 180:1
150:17       143:5 145:19       205:3,5 208:21       150:9         nonparties       146:5 147:16       209:20 211:4       209:20 211:4         137:12       147:20 148:3       212:20 213:12       215:12         nonpublic       161:1 163:11       215:12       215:12         nonrandom       165:3,15       166:18,21,22       215:12       215:12         nonrandom       159:14,18       173:3 176:3,7       205:3,5 208:21       209:20 211:4       209:20 211:4       209:20 211:4       209:20 211:4       209:20 211:4       209:20 211:4       209:20 211:4       209:20 211:4       209:20 211:4       209:20 211:4       209:20 211:4       209:20 211:4       209:20 211:4       209:20 211:4       209:20 211:4       209:20 211:4       209:20 211:4       209:20 211:4       209:20 213:12	66:20 70:20	140:22 141:20		occurred 116:8
nonparties       146:5 147:16       209:20 211:4       occurring 85:5         137:12       147:20 148:3       212:20 213:12       occurs 108:11         nonparty 12:2       148:11 157:22       215:12       occurs 108:11         nonpublic 158:10       165:3,15       objection 160:8       occurs 108:11         159:14,18       166:18,21,22       objection 160:8       89:7,13,20         159:14,18       173:3 176:3,7       objects 10:13       90:1,3 92:18         159:14,18       180:2 184:16       51:13       127:11	150:17	143:5 145:19		150:9
137:12       147:20 148:3         nonparty 12:2       148:11 157:22         nonpublic 158:10       165:3,15         nonrandom 159:14,18       166:18,21,22 173:3 176:3,7 180:2 184:16         north 1:1 6:5       180:2 184:16             212:20 213:12 215:12       occurs 108:11 16:6         215:12       occurs 108:11 16:6         160:8 193:19 205:18 193:19 205:18 193:19 205:18 193:19 205:15 15       odds 45:15 189:7,13,20 190:1,3 92:18 127:11	nonparties	146:5 147:16	,	occurring 85:5
nonparty       12:2       148:11 157:22       215:12       16:6         nonpublic       161:1 163:11       objection       160:8       ocean       42:17         158:10       166:18,21,22       173:3 176:3,7       objectors       25:15       89:7,13,20         north       1:1 6:5       180:2 184:16       51:13       127:11	137:12	147:20 148:3		occurs 108:11
nonpublic       161:1 163:11       objection       160:8       ocean       42:17         158:10       165:3,15       193:19 205:18       odds       45:15         nonrandom       159:14,18       173:3 176:3,7       objectors       25:15       89:7,13,20         north       1:1 6:5       180:2 184:16       51:13       127:11	nonparty 12:2	148:11 157:22		116:6
158:10       165:3,15         nonrandom       166:18,21,22         159:14,18       173:3 176:3,7         north 1:1 6:5       180:2 184:16             193:19 205:18       89:7,13,20         90:1,3 92:18       90:1,3 92:18         127:11	nonpublic	161:1 163:11		ocean 42:17
nonrandom       166:18,21,22       objectors       25:15       89:7,13,20         159:14,18       173:3 176:3,7       objects       10:13       90:1,3 92:18         north       1:1 6:5       51:13       127:11	158:10	165:3,15	•	odds 45:15
159:14,18 north 1:1 6:5  173:3 176:3,7 180:2 184:16  173:3 176:3,7 objects 23.13 objects 10:13 51:13  90:1,3 92:18 127:11	nonrandom	166:18,21,22		89:7,13,20
north 1:1 6:5   180:2 184:16   00 jects 10.13   127:11	159:14,18			90:1,3 92:18
6:13 7:6 72:11   185:1 195:10   31.13	<b>north</b> 1:1 6:5	180:2 184:16		
	6:13 7:6 72:11	185:1 195:10	31.13	

# [offer - originally]

Page 35

- 9			
<b>offer</b> 32:21	54:6,17 55:14	<b>ooo</b> 9:1,6 10:1	123:2 163:13
33:18 37:3,6,7	55:20 57:3	10:6 11:1,3,5,7	164:4 167:7
37:9,11 88:1	60:20 62:17	11:8,13,18,20	188:8,13 190:9
95:17 189:10	63:2 64:14	17:15,20 51:10	191:11,14
offered 15:14	65:7,21 66:9	51:18 54:12,16	opioid 25:18
23:11 26:4,10	66:13,19 67:6	65:12,15	opponent 29:18
26:18 32:5	67:13 68:17	101:15,20	opportunity
33:1,2,5 35:11	70:11 73:20	131:3,6 144:9	102:18
offering 36:9	85:12,22 87:10	144:11 207:2,5	opposed 31:7
187:19 188:1,5	88:14 92:21	<b>open</b> 103:3	85:1 114:7
188:12	94:10 98:13	operation	123:8 157:15
<b>office</b> 107:5	99:16 100:2,14	31:12	159:21 164:1
offices 2:2	103:15 124:19	opining 86:7	175:22
<b>oh</b> 108:11	133:22 134:7	opinion 23:11	opposite 64:12
111:10	135:5,6 136:1	24:14 26:4,13	107:22 111:16
<b>okay</b> 13:9	138:5,18	26:18 32:5,14	113:2
15:15 16:12,15	139:13 140:16	32:17,20 33:1	optimal 202:9
16:18 17:1,22	141:2 143:9	33:2,5,18	optimistic 91:3
18:13,18,22	144:5 168:1	34:19 35:3,12	option 13:8
19:3,7,11,16,22	170:12 190:7	37:4,8,11 38:3	<b>order</b> 52:4,13
20:5,10 21:12	208:9,15 209:8	38:15,18 39:7	52:16,19 79:1
22:21 23:8,9	210:13 211:1	50:11 56:3	106:20 165:10
23:16 24:10,13	215:5,18 216:3	57:5,20,21	196:4,8 197:17
24:18 25:9,17	once 93:12	86:5 95:18	206:17
25:20 26:8	105:16 108:20	102:9 103:17	ordered 174:5
27:2 29:21	188:15 197:20	107:7 137:15	<b>orders</b> 161:15
32:10 33:3,9	198:2	163:15 164:5	202:3
33:21 34:8,12	ones 44:19	187:19 188:2	oregon 1:20
35:2 36:8,18	67:16,17 81:2	188:12,21	2:13 217:20
37:15 38:11,15	84:8 95:12	189:10	organization
39:6 40:5	129:17 146:19	opinions 16:21	99:12
41:16 43:4,9	170:21 193:7	24:12 26:10	organized
43:15 47:4	198:7 204:6,7	30:1 31:20	190:16 199:4
48:17 50:5,22	204:8	32:8 48:15	originally
52:17 53:19		105:13,15	26:22

Veritext Legal Solutions

[orrick - parts] Page 36

	I		
orrick 4:4	p	83:19 85:4,7	165:7
orrick.com	<b>p</b> 3:1,1 4:1,1	91:9,14 92:21	<b>pardon</b> 211:17
4:10	5:1,1 6:1,1 7:1	94:22 95:6	<b>part</b> 21:19
outcome 50:15	7:1 8:1,1 11:2	102:14 103:14	35:19 54:15
114:6,16	<b>p.m.</b> 1:15 2:16	106:16 110:5	55:13 95:13
217:16	11:6 65:14,14	110:21 111:17	102:8 110:1
outcomes 30:13	131:5,5 199:8	112:3 114:1	126:12 156:21
outside 26:4	216:22	115:8 117:5,19	175:10 183:15
34:10 95:14,16	page 9:8 10:8	119:1,6,8,8,9	190:13 191:5
104:16 121:20	25:20,21 27:8	119:19 120:11	191:22 204:3
146:21	28:7,12,19	121:4 122:8	210:1
outweigh 38:21	29:2,8 34:14	123:11 124:9	partial 83:21
38:22	52:1 88:20	124:10 125:15	91:9
overall 115:14	90:6 219:5,7,9	126:13 128:5,5	participated
overarching	219:11,13,15	128:16,17	33:16
106:13	219:17,19,21	129:14 131:12	particular
overgeneralize	220:5,7,9,11,13	132:19 162:13	25:19 47:13
134:3	220:3,7,3,11,13	162:19 164:9	59:15 68:10
overlap 21:7	pages 29:17	165:17 175:1,8	128:16 133:7
44:17,18	221:4	183:9,17 185:2	133:19 138:6
182:14 183:4	paid 47:1,16	185:7 186:9	182:20 210:15
184:1,10,14	61:1,13 63:13	191:15 199:21	particularly
193:4,10	67:17,18,20	207:13,15	79:7 97:7
197:15 198:2	68:1,2 106:7,8	214:13,15,16	122:11 124:19
198:13,14	106:8 118:9,9	214:22 215:4	141:16 152:13
overlapped	125:21 149:8	paragraphs	157:7 192:8
198:5,10	149:11,14,16	38:3 48:21	parties 2:17
overlapping	150:8,15,16	49:2 95:5,8,17	30:2 41:20
183:13	179:13 195:13	113:8 119:17	98:1,4 121:16
overlaps 180:6	paperwork	176:19	137:11 138:8
overlay 215:9	151:18	parameter 81:4	164:11 184:19
oversampling	paragraph	116:20 119:4	200:21 204:1
94:4	38:3,9,13	parameters	partner 106:15
<b>own</b> 96:13	52:18 72:18	119:2,4,15	<b>parts</b> 102:8
184:22	73:2 82:17	133:14 155:2	

Veritext Legal Solutions

[party - ph.d.] Page 37

	I	I	
<b>party</b> 8:2 11:19	people 16:15	95:18 96:18,19	performed
41:12 100:9	33:12 44:2	96:20 100:22	204:22
110:13 137:22	45:9 63:15	101:4 103:18	performing
158:6 217:15	72:15 96:4	104:3,6,10,10	167:10
<b>pass</b> 96:12	97:2,13 98:21	104:14 106:20	<b>period</b> 61:2,13
131:9 172:11	98:22 105:22	107:19 108:17	204:2
172:13,13	118:3,5 126:13	108:17 109:10	perjury 12:22
173:6,7,8,10,11	175:18	109:11,12	217:9 221:8
173:14,17,22	people's 97:1	110:14 113:10	<b>permit</b> 10:14
174:3 206:21	<b>percent</b> 15:9,9	113:11 114:4,4	51:13
passes 39:5	15:10,11 26:22	114:12 126:20	permitted
past 54:22 94:7	31:3 32:11	129:17,20	55:14,18,21
99:19 172:10	35:8 38:4,16	140:4,5 151:6	person 27:18
pattern 63:16	40:6,13,16,18	155:13,14,17	108:21 130:11
149:8	40:21,21,21	165:1 170:10	130:19 206:1
patterns 83:20	41:1,3,5,6,6,14	171:7,8 173:8	personal 1:4
pause 15:3	41:14,15 42:11	173:9,18,21,22	152:6 187:12
174:12,14	42:20 43:2,3,3	174:5,7 179:19	187:15,18
pavlick 7:14	43:12,12,13	180:12,14,21	194:3,5
payment 67:21	44:4,7 56:3,6	180:22 182:13	personally
90:21 150:9,11	56:17 57:5,10	182:14,17	130:1 151:20
151:5	58:3,4,11	184:9,11,14	151:21 152:20
peachtree 5:5	60:13,14 61:1	200:15,18	172:4
peeling 48:5	61:2 62:6 63:3	201:19,19	perspective
penalty 12:22	63:18,20 64:15	percent's 65:1	21:22 178:12
217:9 221:7	64:20 65:2,2,3	percentage	195:11
pending 46:14	65:5 66:3,5	59:20 60:1,4	pertinent 54:14
47:2 117:22	69:15,16,19	64:5 70:15	<b>peter</b> 8:19
135:13 159:8	70:12,12 71:10	72:5,7 113:12	petition 46:17
161:1,3,5	71:15,18,20,21	114:1 155:11	46:19 151:14
163:20 169:20	72:1 76:13,16	164:21 184:10	<b>ph.d.</b> 1:14 2:1
pennsylvania	76:17 77:1,8	<b>perfect</b> 196:22	9:3 10:3,10,18
3:12 6:20	78:3 79:1 80:5	perform 57:9	11:9 17:18
penultimate	80:5,6 81:8,22	89:14	101:18 217:4
29:7	84:4,15,18,21		218:5 219:2

Veritext Legal Solutions

# [ph.d. - precise]

Page 38

-1 1			E
220:2,22 221:3	120:8 122:13	142:4 160:18	positive 90:21
<b>phase</b> 122:7	193:1 217:6	165:20,22	151:5
<b>phi</b> 192:11	<b>places</b> 31:20,21	166:8 178:13	possess 43:11
philadelphia	60:18 104:13	182:4 186:6	44:12 98:4
3:12 6:20	124:6 147:1	189:16 190:4	possesses 96:3
100:19	<b>plaintiff</b> 3:2 4:2	191:4 195:8	possession 7:2
philips 34:15	142:2	203:14 208:10	possibility
phillip 7:14	plaintiff's	208:16 209:13	127:13
phillips 3:4	47:14	209:16 210:4	possible 168:22
phishing 98:18	<b>plaintiffs</b> 1:6	<b>pointed</b> 131:12	<b>post</b> 46:16,19
<b>phone</b> 18:4	49:20 58:20	<b>points</b> 59:20	49:21 93:12
33:11,13	120:2 164:15	60:1,4 113:12	121:10 160:20
143:13	165:5	114:1 181:8	potential
<b>phrase</b> 55:3,9	<b>plan</b> 25:15 53:7	184:10	107:12 112:5
92:3 213:18	54:4,4 62:21	policyholders	115:9 132:3
<b>pick</b> 178:7	66:22 137:5,13	25:1	134:21 162:7
picks 94:22	planning 20:17	<b>poor</b> 13:18	potentially
<b>picture</b> 175:18	<b>play</b> 139:22	populated	13:4 29:17
<b>piece</b> 47:6	197:9	171:13	43:11 50:18
96:22 193:3	please 14:17	population	59:7 100:9
<b>pii</b> 23:7 94:14	139:20	48:7 75:11,16	125:13 160:12
95:9,19 96:3,3	<b>plus</b> 43:20	76:7,10 85:13	182:21 206:2
96:7,7,19,22	44:18 80:17,19	85:18 110:8	ppavlick 7:19
97:1,4,14 98:4	80:21,22 87:6	114:21 115:5	practical
98:5 108:6	87:7,8,9	121:19,20,21	125:16,22
109:16 126:14	142:19,21	133:11 141:15	practice 114:10
172:2 173:4	165:1	150:20 151:2	preceded 22:12
192:11 194:16	<b>point</b> 20:1 26:7	155:12 156:10	precise 30:1
194:21	38:2 62:18	183:13	39:2,17 46:7
pipefitters	85:10 86:17	populations	46:11 57:21
48:10	95:1,16 104:1	136:15 148:10	58:3 60:17
<b>place</b> 3:5 25:14	107:4,11	position 47:1	62:1,8,9 64:21
40:8 63:16,17	109:21 113:3	58:13 194:14	76:1 87:16
74:11 81:7	124:17 125:3	positions 24:5	109:9 116:1
95:9 117:14	125:11 134:8		141:19 143:4

Veritext Legal Solutions

# [precise - produced]

Page 39

-			_
148:8 149:21	prescribed	privilege 14:20	proceeding 1:4
165:13 202:7	32:20	14:21	10:16 32:13
precisely 119:3	present 2:16	<b>pro</b> 30:8	51:16 163:9
precision 15:13	8:18 22:11,14	probabilities	proceedings
16:7 39:18	74:21 163:17	116:8	165:19 221:6
57:15,17 58:1	164:6 165:15	probability	<b>process</b> 16:2,5
58:14 60:1,13	166:2,3,20	89:3,16 91:13	16:17 18:19
62:5 63:17	167:7 204:2	113:17 203:20	30:4 45:9 47:8
74:11,15 75:7	205:1	probably 16:1	47:10 50:21
81:14 85:11	presented	16:9 19:6	67:5 68:11
86:21,22 90:10	165:18,22	22:17 24:4	85:4 86:16
92:3,6,11,13	president 8:20	38:12 46:12	95:9 97:8
94:5 123:16,19	prespecified	55:9,12 57:7	108:15 109:2
123:20 162:14	121:19	61:8 70:3	109:18 115:7
162:16,18	presumably	77:14,16 86:3	121:8 122:5
163:3,11 164:8	109:2	87:7 99:1	130:6,20 146:4
predate 148:4	<b>pretty</b> 36:20	111:8 136:15	148:7 166:16
predecessor	212:9	142:3 163:6	168:16 173:1
148:1	previously	165:10 166:20	177:1 182:2
predicate 170:2	23:11 36:16	171:15 172:21	185:13,15,17
preexisting	73:9 217:6	173:18,21	186:7,13,17
32:12	principal 23:22	197:17 199:22	187:4 191:17
premise 112:3	33:18	208:7	191:19 193:2,6
premises 10:14	principally	problem 14:5	193:17 201:7
51:14	19:18	17:5 53:18	processes 70:22
prepare 18:20	principle 39:10	54:1 63:19	193:1
19:14	<b>printed</b> 101:22	64:9 68:8	processing
prepared 88:1	<b>prior</b> 41:20	106:13 112:5	144:17
202:12 203:22	98:15 137:5	115:19 132:18	produce 10:12
preparing	156:2 159:7,20	problems	51:12 92:15
16:13 19:1,4	162:10 184:12	121:22 123:5,7	97:13 102:17
21:12 201:3	privacy 35:12	<b>procedure</b> 37:8	125:6,12
prepetition	35:15 36:10,13	37:12	148:11 183:6
44:10 55:22	36:16	procedures	produced
		62:21	31:11 42:8,9

Veritext Legal Solutions

# [produced - quantifiable]

Page 40

88:22 104:4,7	<b>proper</b> 111:10	28:4,9,17 38:7	67:2 69:3
161:12 171:14	111:14 121:16	95:3 128:14	72:19 78:5
172:1,21 174:7	properly	144:1	86:8 88:18
183:10 186:18	204:18 206:14	provides 45:21	111:18 136:2
193:6	properties 16:6	207:17	158:20 160:4
produces 94:9	proponent	providing	161:11 182:12
171:7,10	29:18	163:14 166:17	182:13 201:12
producing	proportion	177:14	pursuant 217:5
57:18 83:14	75:11,14 82:20	prudent 40:17	<b>push</b> 113:17
170:7 177:18	90:14 115:11	public 1:21	<b>put</b> 32:3 75:9
186:14	125:20 133:5	2:15 26:21	77:17 80:3
product 8:20	141:14 146:2,7	34:16 35:7,10	97:9,10 104:21
161:19 201:7	146:11	153:11,14,19	105:22 189:7
production	proposed 38:4	154:2,6 158:5	193:1
56:19 88:10	93:4,7 95:18	158:15 189:5	<b>puts</b> 123:11
191:17 193:6	159:2 200:20	221:22	putting 112:1
195:6 197:12	201:10 203:2	publicly 26:7	206:13
products 134:6	203:10	26:14,15	q
212:2 214:17	propounded	<b>pull</b> 171:17	quadruple
nuofoccional	221.7	170.2	quadrupic
professional	221:7	179:3	74.14
2:5	proprietary	pump 1:8,11	74:14
_			quadrupling
2:5	proprietary	<b>pump</b> 1:8,11	<b>quadrupling</b> 138:20
2:5 <b>proffer</b> 15:7	<b>proprietary</b> 99:20	<b>pump</b> 1:8,11 5:2 9:4 10:4	quadrupling 138:20 qualification
2:5 proffer 15:7 proffered 15:6	proprietary 99:20 protect 46:13	<b>pump</b> 1:8,11 5:2 9:4 10:4 154:10 155:21	quadrupling 138:20 qualification 148:8
2:5 <b>proffer</b> 15:7 <b>proffered</b> 15:6 36:16	proprietary 99:20 protect 46:13 protection	<b>pump</b> 1:8,11 5:2 9:4 10:4 154:10 155:21 218:4 219:4	quadrupling 138:20 qualification 148:8 qualifications
2:5 proffer 15:7 proffered 15:6 36:16 progress	proprietary 99:20 protect 46:13 protection 27:11 33:4	<b>pump</b> 1:8,11 5:2 9:4 10:4 154:10 155:21 218:4 219:4 220:4	quadrupling 138:20 qualification 148:8 qualifications 188:11
2:5 proffer 15:7 proffered 15:6 36:16 progress 160:12	proprietary 99:20 protect 46:13 protection 27:11 33:4 protocol	pump 1:8,11 5:2 9:4 10:4 154:10 155:21 218:4 219:4 220:4 pure 121:18	quadrupling 138:20 qualification 148:8 qualifications 188:11 qualified 37:3
2:5 proffer 15:7 proffered 15:6 36:16 progress 160:12 prohibitive	proprietary 99:20 protect 46:13 protection 27:11 33:4 protocol 200:21	pump 1:8,11 5:2 9:4 10:4 154:10 155:21 218:4 219:4 220:4 pure 121:18 196:19,21	quadrupling 138:20 qualification 148:8 qualifications 188:11 qualified 37:3 37:7,11
2:5 <b>proffer</b> 15:7 <b>proffered</b> 15:6 36:16 <b>progress</b> 160:12 <b>prohibitive</b> 33:12	proprietary 99:20 protect 46:13 protection 27:11 33:4 protocol 200:21 protocols 192:9	pump 1:8,11 5:2 9:4 10:4 154:10 155:21 218:4 219:4 220:4 pure 121:18 196:19,21 purpose 32:15	quadrupling 138:20 qualification 148:8 qualifications 188:11 qualified 37:3 37:7,11 qualifier
proffer 15:7 proffered 15:6 36:16 progress 160:12 prohibitive 33:12 projecting	proprietary 99:20 protect 46:13 protection 27:11 33:4 protocol 200:21 protocols 192:9 192:10,10,13	pump 1:8,11 5:2 9:4 10:4 154:10 155:21 218:4 219:4 220:4 pure 121:18 196:19,21 purpose 32:15 55:21 63:1,4 83:4,6 84:5 110:10,11	quadrupling 138:20 qualification 148:8 qualifications 188:11 qualified 37:3 37:7,11 qualifier 103:22
2:5 proffer 15:7 proffered 15:6 36:16 progress 160:12 prohibitive 33:12 projecting 68:15 176:3	proprietary 99:20 protect 46:13 protection 27:11 33:4 protocol 200:21 protocols 192:9 192:10,10,13 193:1,14	pump 1:8,11 5:2 9:4 10:4 154:10 155:21 218:4 219:4 220:4 pure 121:18 196:19,21 purpose 32:15 55:21 63:1,4 83:4,6 84:5	quadrupling 138:20 qualification 148:8 qualifications 188:11 qualified 37:3 37:7,11 qualifier 103:22 quality 73:6
2:5 proffer 15:7 proffered 15:6 36:16 progress 160:12 prohibitive 33:12 projecting 68:15 176:3 projections 78:1 promise 14:7	proprietary 99:20 protect 46:13 protection 27:11 33:4 protocol 200:21 protocols 192:9 192:10,10,13 193:1,14 provide 56:1	pump 1:8,11 5:2 9:4 10:4 154:10 155:21 218:4 219:4 220:4 pure 121:18 196:19,21 purpose 32:15 55:21 63:1,4 83:4,6 84:5 110:10,11	quadrupling 138:20 qualification 148:8 qualifications 188:11 qualified 37:3 37:7,11 qualifier 103:22 quality 73:6 108:15 109:2
2:5 proffer 15:7 proffered 15:6 36:16 progress 160:12 prohibitive 33:12 projecting 68:15 176:3 projections 78:1 promise 14:7 promised	proprietary 99:20 protect 46:13 protection 27:11 33:4 protocol 200:21 protocols 192:9 192:10,10,13 193:1,14 provide 56:1 73:5 92:17	pump 1:8,11 5:2 9:4 10:4 154:10 155:21 218:4 219:4 220:4 pure 121:18 196:19,21 purpose 32:15 55:21 63:1,4 83:4,6 84:5 110:10,11 181:4 204:11 purposes 38:17 40:7 47:11	quadrupling 138:20 qualification 148:8 qualifications 188:11 qualified 37:3 37:7,11 qualifier 103:22 quality 73:6 108:15 109:2 173:1,12,16
2:5 proffer 15:7 proffered 15:6 36:16 progress 160:12 prohibitive 33:12 projecting 68:15 176:3 projections 78:1 promise 14:7	proprietary 99:20 protect 46:13 protection 27:11 33:4 protocol 200:21 protocols 192:9 192:10,10,13 193:1,14 provide 56:1 73:5 92:17 203:11	pump 1:8,11 5:2 9:4 10:4 154:10 155:21 218:4 219:4 220:4 pure 121:18 196:19,21 purpose 32:15 55:21 63:1,4 83:4,6 84:5 110:10,11 181:4 204:11 purposes 38:17	quadrupling 138:20 qualification 148:8 qualifications 188:11 qualified 37:3 37:7,11 qualifier 103:22 quality 73:6 108:15 109:2

# [quantification - really]

Page 41

- 1			
quantification	85:7 86:11	127:21 131:9	215:20,22
213:4	87:2 88:5,9	132:1 140:20	<b>rate</b> 69:19
quantified	91:18 94:12	144:6,21 149:3	109:3 172:13
59:10 84:8	95:1 102:11	149:21 157:5	172:15,19
quantify 39:4	103:3 104:3	157:22 159:17	173:2,13,15
58:2,16 60:16	106:5 108:13	162:10,15	174:1,3
74:6 75:6	110:11 118:22	168:5 171:5,5	rather 206:4,5
78:22 80:2,4	132:16 137:17	174:15 176:18	<b>ratio</b> 112:10
81:21 82:19	139:14,20	178:11 199:21	214:10
90:14 107:11	140:2,7 141:19	200:7 203:17	<b>rc.com</b> 3:8,14
107:21 108:21	143:7,9 146:12	203:19 204:6	reach 112:1
110:4 146:6	146:13,16,17	204:16 207:14	119:17 157:14
206:8	148:21 159:1	216:5 221:7	reaches 107:18
quantifying	162:17 163:1	quickly 46:4	reaching 107:7
107:20 108:1	167:22 168:19	106:10	107:22 157:20
173:2	171:19 181:6	<b>quite</b> 64:11,22	<b>read</b> 54:14
quarters 28:6	186:4,21 188:1	75:21 111:2	106:19 107:8
184:7	201:14 202:15	r	147:15 191:4
<b>quash</b> 200:12	202:16,19	r 3:1,4 4:1 5:1	191:22 205:22
<b>query</b> 186:2,4,6	204:10 205:22	6:1 7:1,5 8:1	212:8 218:9
188:17 192:7,7	208:22 209:21	11:2 217:1	221:4
question 13:3	211:5 212:21	219:1,1 220:1	reading 119:17
13:10,13,16,20	213:13,16,16	220:1	138:5
13:22 14:5,20	213:20 214:8	races 14:14	<b>ready</b> 51:21
15:15 21:21	214:20 215:1,4	ran 113:20	73:1 103:11
23:4 32:1 37:4	215:13	random 93:8	real 2:5,7 116:4
37:5,10 41:7	questioning	94:2 103:17,18	127:4 168:10
44:17 47:21	64:18 205:5,19	200:21 201:4	reality 30:6
48:3,6 49:11	questions 22:8	203:2,11	really 15:8,10
50:9,20 53:9	23:1,2,2 39:2	range 57:11	16:8 21:8 23:1
55:20 57:15	39:12 40:3	77:20 87:11	29:20 30:7
58:19 59:2	47:20 71:2	128:22 143:1,3	34:9,19 39:11
67:15 70:17	76:9 93:2,19	145:19 165:17	42:22 45:17
75:8,10 76:2,6	103:5 104:2,5	166:2,3,5,10,11	46:9,22 48:6
77:10 83:11	104:9 106:11	167:1,2,4	48:21 69:20
•	•	•	

Veritext Legal Solutions

# [really - reinsurance]

Page 42

- •	_		9
77:21 83:13	recall 24:13	195:17 196:4,6	reduction
85:3,4 86:10	35:5 53:11	205:18 217:14	126:20
87:10 91:17	128:8 191:6	recorded	<b>refer</b> 53:17
94:3 102:12	<b>receipt</b> 218:17	217:10	144:22
106:9 109:16	<b>receive</b> 46:9,18	records 34:22	reference
111:1 113:5,12	received 43:19	73:16 75:15	129:11 133:6
114:20 115:3	44:6,20 46:16	108:11,12,12	167:9 189:22
116:9,14 119:9	58:12 64:19	109:1,17 125:1	193:5
124:8 125:22	79:8 164:16	125:2 185:20	referenced
126:18 138:6	receives 184:6	193:5,18 209:4	162:18 192:4
157:9 164:14	receiving 184:9	<b>red</b> 118:20	218:6
172:7,17	<b>recent</b> 157:8	redact 96:13	referencing
194:17 214:13	204:5,8	126:17,17	164:8 165:16
realtime 2:10	recently 157:10	172:2 193:18	referred 85:13
2:11	recess 65:13	redacted 96:14	144:17
reason 47:4	131:4	96:15,19,21	referring 85:16
65:19 157:14	recipient 175:3	108:4 193:8,9	163:13,18
186:21 218:11	recognize	redacting	177:7,9 192:20
219:5,7,9,11,13	17:22 18:15	96:12 193:3	refine 82:10
219:15,17,19	recollection	redaction	refined 33:2
219:21 220:5,7	26:3 28:10	97:11 108:15	reflect 16:21
220:9,11,13,15	35:4 145:14	186:3,7,13,17	refresh 26:2
220:17	reconciliation	187:4 189:3	regard 25:18
reasonable	146:3,4 148:7	193:9 198:5	146:18 154:11
64:2 103:19,20	185:17	<b>redo</b> 193:9	154:13 160:13
104:18 105:6	reconsideration	reduce 23:6	214:3
111:19,21	18:10 20:16	88:11 94:13	regardless 25:7
120:12,18	record 12:1	95:19 124:4	registered 2:4,5
121:1 128:6	54:15 65:11	168:4 198:15	regular 107:5
reasonableness	69:3 72:19	212:13 213:4	regularly
25:16	129:12,13	213:22	130:11
reasons 48:18	130:15 143:21	reduced 155:6	<b>rehash</b> 129:13
94:3	153:11,14,20	168:7 212:16	reinsurance
rebuttal 19:15	154:3 160:16	reducing 124:5	25:3,4
102:17	171:14,15	213:9	

Veritext Legal Solutions

# [related - resolution]

Page 43

related 39:7	93:10,11	rephrase 13:12	represented
53:5 158:1	157:19 203:11	15:16 213:19	84:11,12
160:16 175:11	203:14	<b>report</b> 10:17	129:15,16
175:15 176:15	reliably 39:4	19:15,18,20	request 40:11
190:9	206:8	85:17 101:10	41:4 42:3 44:1
<b>relates</b> 190:20	<b>rely</b> 50:18 76:1	101:17 102:17	44:3 58:7,9
212:17	92:11 156:1,10	104:2,20 105:4	64:19 65:2,5
relation 24:11	189:14 190:1	106:13,19	70:9 86:12
147:17	relying 20:17	107:8 110:2	96:4 108:4
relational	22:1 189:10	119:7,13,17	146:20,21
188:14,17,19	190:8,11,14	131:15 132:8	150:18 175:9
relationship	remaining	132:10 136:20	194:3
128:18	173:4	136:21 137:2	requested
relative 46:13	remember 66:6	188:8,13	41:20 147:18
46:17 62:16	146:5	189:13,20	171:8,9 175:2
74:10,16 75:3	remembering	190:1 206:3	175:5 177:13
88:10 97:14	176:19	reported 1:18	216:13
relatively 25:13	<b>remix</b> 115:4	reporter 1:20	requesting
63:14 122:1	<b>remote</b> 1:19,20	1:20 2:4,5,6,6,7	104:4 155:7
170:7 178:8,22	2:14 97:9	2:7,8,9,10,11	requests 41:19
185:4	217:21	2:12,14,15	42:17 175:10
released 118:9	remotely 217:7	9:15 10:7	191:21
relevant 68:3	221:6	217:3,21,21	required 122:9
68:15 70:22	<b>remove</b> 192:11	reporting	186:18
71:3 85:7	<b>render</b> 204:17	61:21 79:11	requires 83:10
116:11 131:20	rendered	reports 16:19	requiring
135:21 167:20	200:20	33:20 44:14	159:19
176:1 194:17	reorganization	represent 12:2	reread 35:6
195:8	62:22 67:1	41:11,12 43:6	reserving 57:14
reliability 87:1	reorganized	84:15,18	resides 190:12
91:22	212:2	144:16	resolution 30:6
reliable 48:15	repeat 53:9	representative	47:8,10 53:16
55:11 56:1	54:8,10 132:16	4:2 8:22	67:5 70:22
80:5,6,6,8 86:2	repeatedly	119:22 162:6	161:6,9
86:8 92:18	118:16	203:4,7	

Veritext Legal Solutions

# [resolve - roughly]

Page 44

			_
resolve 30:2	retrieving	<b>rich</b> 45:21	181:16 186:5
resolved 14:22	185:3 186:11	<b>richard</b> 189:14	194:5,19 195:3
60:22 151:3	retrocession	189:18,18	195:19 196:12
159:7,11,20	25:5	190:8 191:2	197:3,9 200:16
160:22	return 123:22	rickards 3:17	202:2,5 204:2
resource	124:5 218:13	<b>right</b> 12:18,20	205:2 212:12
124:14,22	218:16	13:7 14:10	216:15,17
resources	revealed 49:16	15:2 18:12	<b>rise</b> 90:4
124:12	56:10 58:21	22:7,13,22	<b>risk</b> 23:6 57:13
respect 30:13	119:12 129:19	23:10 32:14	59:12 78:8,10
55:21 57:3	157:6 158:2	35:14 36:15	78:14,18,20,22
58:1 154:10	revealing 50:3	37:1,4,16,22	80:3 89:19
respective 2:17	50:4	38:1 42:6 49:5	94:13 95:19
<b>respond</b> 196:11	reverses 113:3	52:8,12 53:2	96:7 97:5 98:6
196:15	<b>review</b> 16:20	53:20 57:16	126:14 127:4,8
responding	27:15,21 28:4	65:7,17 68:21	127:9 206:4,5
187:12,20	28:9,17 124:21	69:2 71:9,14	206:13
191:20	171:9,13 172:1	72:12 74:5	riskier 89:20
response 13:3	172:5,6,11	78:7 84:13	<b>risking</b> 204:15
21:4,13 22:5	173:8,9 179:2	88:7 89:6,9	<b>risks</b> 88:10
128:4 183:13	182:5 186:7,17	99:2 100:7	<b>rmr</b> 1:18
186:18	187:4 192:8,11	101:9 111:5,8	217:18
responsive	193:17 195:18	114:20 116:20	<b>road</b> 5:5 15:14
146:17	197:21 198:16	117:12 121:21	robinson 3:3
rest 165:8	218:7	130:21 131:22	romanette
result 90:21	reviewed 19:15	132:7 133:5	163:3
92:3 99:12	31:12 191:1	134:22 146:12	<b>room</b> 17:13,14
resulted 42:13	196:3	149:1,15,16	71:13 121:13
results 156:6	reviewing	150:10 151:8	<b>root</b> 74:13,16
retained 24:20	83:14 174:6	154:10 158:17	168:22
25:1,2,3,13	179:1 190:19	165:9 169:8	roseland 8:6
151:12	193:2	172:16 174:8	<b>rough</b> 195:20
retention	reviews 27:5	174:10 176:19	197:17
151:15	38:6 95:2	177:10 180:15	roughly 145:6
	128:13	180:16 181:4	145:16 147:18

Veritext Legal Solutions

# [roughly - sebo]

Page 45

152:2 197:2,5	74:14,14,18	181:13,15,21	155:19,21
<b>round</b> 22:12	75:17 76:16	182:14 183:5,7	167:20 170:1,3
<b>route</b> 160:12	77:1,2 78:3,4,9	183:8 198:17	200:21
routinely 130:9	78:9,13,20	200:15,18	sandler 8:3
<b>rpr</b> 1:18 217:18	79:1,18 80:4	201:4,10,21	saying 13:5
rsa 1:19 217:19	81:22 83:3,7	202:12 203:2,4	31:3,5 43:1,2
<b>ruled</b> 200:11	84:4 86:19,20	203:9,11,22	48:9 59:8 65:1
<b>rules</b> 12:12	88:22 90:2,19	205:16	72:7 73:21
37:8,12	92:19 93:3,7,9	sampled 75:15	104:15 108:6
<b>ruling</b> 200:13	93:14,16,22	121:21	111:18 114:4
200:16 205:13	94:2 95:18	<b>samples</b> 116:13	116:19 127:1,7
<b>run</b> 59:15	103:17,18	153:21 156:2	138:3 139:10
192:7	104:7,10,10,14	156:10 180:21	186:9
runs 38:12	106:4,10,22,22	181:4	says 94:20,21
<b>russian</b> 100:10	107:19 110:6,9	sampling 23:4	103:16 111:20
S	110:13 111:3	23:6 24:2,5,12	119:1 122:19
s 3:1 4:1 5:1 6:1	112:14,19	24:14 25:7	124:13 125:15
7:1,14 8:1 11:2	114:11 116:12	26:4,11,19	scenario 81:15
sake 40:20	116:19 117:7	27:17 28:1,7	99:18 165:22
salient 50:14	117:12,18	28:11,22 29:3	166:19,22
50:16 163:7	118:2,4,15,15	29:6,8,19 30:4	169:5
sample 15:9,10	120:6,10 121:7	30:8,9,14 31:8	scenarios
15:10 23:12	123:4,22 125:7	31:13 32:6	114:15
27:1,3,4,13	125:9 126:3	33:6,6,15 35:3	schnoll 6:12
31:4,18,21	140:13 141:17	35:4 39:12	<b>scope</b> 32:17
32:9,12,15	143:18 153:17	40:2,4 61:2	67:3 104:17
33:8 34:1 38:4	154:22 156:5	78:12 81:7	195:15
38:16,20 39:10	156:13 159:1	93:1,8 94:13	scor 28:5
39:11 40:6	162:6 163:14	106:17 112:5	screenings
47:22 48:2	170:4,10,16,22	121:7 122:22	127:6
56:3,6,13,17	171:5 174:5,6	122:22 123:14	<b>scrub</b> 95:9
57:5,10 58:4	177:2,8 179:8	123:17,21	<b>sdny</b> 35:9
59:2 60:14	179:14,19,20	124:15 125:17	<b>sebo</b> 1:18 2:4
61:1,2,5 63:3	179:21 180:12	141:12 152:16	217:2,18
63:18 64:5	180:14,14,18	153:1 154:9,16	
		I	

Veritext Legal Solutions

# [second - showed]

Page 46

second 18:2	seeks 150:2	sentences	115:20 176:11
23:5 29:14	seem 130:12	190:15,21	203:13 210:7,9
47:6 55:3	seems 70:15	separate	210:12,15
57:22 94:12	119:16 120:8	134:21 135:9	211:9,11,19
110:5 132:9	139:14	184:4,18 186:8	213:11 214:7
137:10 172:12	seen 52:12,15	separated	214:13 215:9
172:13 173:6	52:16 102:3	39:21	215:15 216:4
173:10,11,14	121:9 137:5	separately	settlements
173:21 174:2	148:7 165:12	61:20 76:12	49:18 55:22
192:16 198:20	168:9 187:17	<b>series</b> 157:14	68:5,6,9
<b>section</b> 203:12	segued 103:7	199:21 200:7	115:13 116:10
security 36:7	<b>select</b> 59:5,5	serve 22:5	170:11 207:18
96:5 99:6	152:9,14	services 8:9	209:10 212:17
see 12:5 21:10	155:10	35:18 98:21	214:3 215:19
32:3 41:10	selected 25:22	serving 183:2	216:1,9,12
52:22 55:17	selection 162:5	session 14:16	several 162:15
73:10,11 81:12	semicolon 55:1	set 40:19 45:21	<b>shaking</b> 143:14
82:22 84:1	55:10	122:19 134:16	<b>share</b> 17:10
88:19 90:5	<b>send</b> 96:6	136:15 177:19	51:7 109:21
106:9 146:20	sense 30:22	210:19	129:2 175:20
157:2,16	31:7 32:1	sets 16:3 23:1	216:4
161:20 172:8	38:21 40:17	181:10	<b>sheet</b> 218:11
172:12,15	82:15 89:19	setting 15:22	221:10
175:12 183:15	116:10 133:4	30:10 122:2	<b>shift</b> 59:18
185:7 196:8	135:15 172:20	153:6	112:13
<b>seeing</b> 157:12	183:4 199:6	settings 134:2	<b>short</b> 12:3
seek 70:20	208:7 213:18	172:6	14:16 22:7
152:10 154:20	<b>sent</b> 218:14	<b>settled</b> 205:11	85:12 86:6
154:21 156:16	sentence 72:22	210:16 214:19	88:2
seeking 34:22	73:2 110:6	214:20	shorthand 2:6
42:18,20,22	115:10 122:18	settlement 1:4	2:8 217:11
52:21 70:7	123:1,11	25:14,16 49:1	<b>show</b> 47:9
107:15 195:1	128:18 129:8	49:7 50:19	50:22 108:7
204:1	207:16 210:6	82:21 83:22	<b>showed</b> 20:15
		90:16 91:10	37:16

Veritext Legal Solutions

# [showing - speculation]

Page 47

•			•
showing 54:4	simplification	115:15 126:14	<b>south</b> 5:11
<b>shows</b> 116:14	168:10	170:7	<b>spahr</b> 6:11
117:9 118:10	simplifies	smaller 78:13	speak 19:7
126:9	168:11	78:19 86:18	107:4
<b>shrink</b> 89:13	single 99:9	114:12	speaks 50:17
90:2 92:19	141:12 142:9	smallest 63:12	specialized
<b>shy</b> 71:9	161:5 166:18	snapshot 157:1	35:15,17 36:2
sic 24:3	168:11 171:10	157:15	36:3
side 23:5,12	<b>sitting</b> 16:17	<b>soc</b> 35:19	<b>specific</b> 30:3,21
120:6 187:9	35:5 78:21	social 96:5	36:9 43:5 79:4
<b>sides</b> 119:21	80:3 101:3,6	solution 116:9	83:11 93:2
<b>sign</b> 218:12	108:5 127:9	solutions	104:1 170:21
signature	145:14 146:5	218:22	185:22 190:11
217:18 221:12	167:7 191:7,8	<b>solved</b> 161:17	215:16
<b>signed</b> 27:18	situation	somebody	specifically
218:19	118:21	89:20 99:4	19:5 50:2
<b>silent</b> 108:19	size 48:3 58:4	138:10 208:10	54:22 129:3
109:4 110:4	59:2 60:14	<b>soon</b> 48:8 76:9	131:19 162:17
silica 29:1	61:5 64:5	76:19 105:13	163:2 164:7
<b>silly</b> 39:19	74:14,15 78:5	<b>sorry</b> 20:19,22	187:3 191:13
silo 184:22	79:21 86:12	53:8 54:7	192:3 194:3
similar 21:3	88:22 90:2,20	146:8 205:17	211:22
51:2 55:7 63:8	92:20 111:3	<b>sort</b> 12:12 22:5	specifics 32:4
159:10 161:18	115:13 116:11	22:12 37:17	172:9 187:6
165:8 172:9	118:15 123:22	62:17 73:12	specified 121:2
173:1 175:8	<b>sized</b> 183:12	94:20 143:9	185:4
183:11 191:20	skews 114:5	<b>sorts</b> 159:16	specify 119:3
202:18	<b>skip</b> 94:10	<b>sotto</b> 51:9	specifying
similarly 47:9	skipped 119:16	102:1	111:22
106:1 183:12	slightly 74:18	<b>sought</b> 148:6	specter 97:8
187:7	<b>slipped</b> 108:18	<b>source</b> 182:8,10	speculating
simple 94:2	slowly 46:6	<b>sources</b> 123:18	196:9
106:6 114:11	<b>small</b> 63:14	124:2 132:4	speculation
161:7 188:16	84:16 111:13	133:2,20	196:10,14,19
	113:13 115:12	134:11,20	196:21
	1	1	

Veritext Legal Solutions

# [spend - submitted]

Page 48

<b>spend</b> 19:3	starting 43:1	173:4	stratified 93:8
79:13 142:1	66:10 139:5	statistician	116:12 200:21
168:7	160:18	70:16 88:21	201:4 203:2,11
<b>spent</b> 19:1	starts 38:9	statisticians	stratify 116:21
121:5,15	<b>state</b> 1:19 2:13	77:21	117:3,5
<b>spoke</b> 19:9 53:3	28:20 106:18	statistics 15:20	stratifying 94:1
131:13	130:10 183:10	16:9 116:22	<b>straw</b> 12:4
<b>spot</b> 50:19	185:3 186:20	<b>status</b> 161:2	streamline
spring 70:6	191:16 208:5	184:21	199:10
square 74:13	209:14 211:22	<b>stays</b> 109:4	<b>street</b> 3:11 4:7
74:16	217:20	110:4	5:11 6:5,13,19
squeeze 203:8	stated 40:7	stem 34:20	7:16
stage 212:22	78:5 134:9	stenographer	strength 32:20
<b>stand</b> 139:17	137:10,15	11:11,14 54:14	135:21
standard	186:14	217:7	<b>strict</b> 183:7
114:10 115:12	statement 86:3	<b>step</b> 85:3 144:6	strike 45:3
115:13 122:10	103:22 104:19	<b>steps</b> 45:8	162:11 213:20
standards 92:8	105:5 185:10	122:5 164:2	strokes 38:14
standpoint	190:11 191:9	167:15 169:7	structure 164:1
208:16	191:11 208:2,3	stick 93:6,11	struggle 88:8
stargatt 6:3	209:8 212:7	153:11	studied 110:9
<b>start</b> 20:13	statement's	<b>stop</b> 14:21	study 128:3,12
29:11 37:2	208:16	29:14,15 50:9	<b>style</b> 58:19
47:19 48:5,8	statements	57:22 199:14	subgroups
49:5 64:16	120:16 191:13	199:16,18	106:2
75:4 76:19	states 1:1	<b>stopped</b> 49:22	subject 150:5
79:14 81:5	106:17 156:4	50:8	162:11
84:13 93:3	<b>stating</b> 120:18	straightforward	subjective
96:14 98:5	statistical 16:6	15:16 122:1,15	168:16
103:14 140:3	64:2 74:13	122:16 185:5	submitted
151:8,17,21	77:18 82:11,12	186:12	16:13 145:7,21
169:3 197:19	89:16 118:22	strange 138:2	147:4,5,8,9,12
197:20 198:1	122:9,21	stratification	148:5,18
started 17:2	statistically	93:20 121:11	176:16,22
44:7	119:22 161:18		189:19 191:2
44:7	119:22 161:18		189:19 191:2

Veritext Legal Solutions

# [subpoena - system]

Page 49

_ ,			
subpoena	subsequent	76:21 77:15	suppression
10:12 51:1,12	151:15	83:3,6 84:5	179:7
150:1,5,7	<b>subset</b> 42:18	88:2,6,14 90:3	<b>sure</b> 14:17
154:20,21	48:13 54:2	92:8,11,17	16:20 17:6
155:3 156:15	76:10 84:14	106:17,22	18:3,11 30:18
172:3 174:18	106:4 134:16	158:20 160:3	36:3 41:6
175:1,3,7	154:15 159:14	169:22 178:10	49:11 53:10
177:13 179:10	159:18 172:15	181:13 201:11	60:12 86:4
187:13,20	173:12 179:15	203:20	97:20 99:17
194:2 196:12	183:8	sufficiently	132:10 134:14
196:16	subsets 48:14	30:1 64:21	146:9,11 149:5
subpoenaed	68:2	86:8 92:6	178:15 190:5
160:6	substance	100:9	190:20 214:11
subpoenas	34:10 221:9	suggest 88:1	214:21
42:21 52:5,21	substantial	suggesting	surprised
70:5 183:14	122:20 182:3	117:16	36:20
186:19 195:18	184:13 185:1	<b>suite</b> 3:11,18	survey 156:5
subpopulation	substantially	5:5,11 7:6	<b>suspect</b> 154:12
48:1,9 76:3,21	90:11 183:11	supervision	suspicious
91:15 105:14	183:12	217:12	121:4
113:21 114:14	substantively	supplement	sutcliffe 4:4
114:17 128:3	122:20 196:16	85:10 91:4,5	<b>swings</b> 89:11
155:11,13,14	suddenly 63:22	160:5	<b>switch</b> 72:4,6
155:15,17	<b>sued</b> 136:16	supplemental	131:9
182:18,19	suffers 111:17	21:13,18	<b>sworn</b> 11:10,16
193:12	suffices 104:11	supporting	217:7 221:13
subpopulations	104:11	190:22	<b>system</b> 41:18
76:20,22 77:3	sufficiency	supports	47:16 50:18
105:19 107:16	23:12 39:7	206:13	62:2 79:9,12
128:11 131:12	sufficient 29:12	<b>suppose</b> 164:22	97:16 98:11
131:16,19	32:15,22 38:4	supposed	99:21 100:6
133:13,15	38:16 40:6	137:14 140:15	101:5 157:10
subscribed	48:4 56:4 57:6	164:12	164:16 177:1
221:13	57:7 63:3,5	suppressing	184:8
	64:6,10 65:1,3	50:4	

Veritext Legal Solutions

# [systems - testimony]

Page 50

systems 2:8	talk 12:17	<b>taper</b> 46:4	207:22 208:9
98:9,14,22	19:11 34:16	targeted 42:18	210:1
t	39:19 52:3	84:21	ten 196:4,6
t 217:1,1 219:1	73:20 74:10	targeting 44:7	<b>tend</b> 170:14,16
220:1	78:2 83:19	task 213:3	tenfold 111:2
tabulated 70:2	85:14 92:22	taylor 6:3	111:13
tabulation	94:11 95:9	<b>tdp</b> 163:21	tennessee 2:13
145:15	99:19 104:16	164:1	tens 81:16,18
tabulations	117:22 128:11	<b>tdps</b> 164:7	81:22 82:3
106:6	129:9 131:16	<b>team</b> 16:17,19	142:6,8 165:10
<b>tainted</b> 49:17	132:2,5,20	18:18 19:10,17	term 55:15,15
talited 49.17 take 14:17,21	153:12 188:14	19:19 102:7	55:17 57:7
40:17 41:2	215:5	technical 98:21	88:7
43:3 51:20	<b>talked</b> 18:18	technicalities	terms 16:5 20:7
58:18 60:22	19:17,18 67:6	21:3,6	26:3 30:14
61:2 62:18	73:8 98:7	technological	41:9 58:14
65:8 66:5	105:7 138:18	35:17	60:16 64:5
74:15,17 77:1	talking 39:13	technologies	71:2 130:1
78:9 89:8	43:4 60:3 66:1	7:12 8:21 32:6	149:22 171:20
96:12 102:9	73:4 74:1	tell 11:11 13:11	176:9 177:4
112:8 124:20	87:22 91:21	14:6,11 34:9	189:3
125:2,3,13	96:21 98:19	36:19 50:12	terrific 14:13
130:22 153:18	99:17 103:2	80:9,11,13,18	testified 11:12
159:21 170:10	111:2,3,12	86:2 88:21	145:6 154:8
174:18 188:17	119:9 128:6	89:10 98:22	173:7 212:10
196:1 198:13	129:3 131:11	103:12 141:11	213:21
190.1 198.13	133:1 144:22	151:10 164:7	testify 188:3
200:4 207:9	182:16 214:22	165:12 169:15	testifying 12:21
215:8	talks 52:20	178:14,15	152:19,21
taken 36:8	55:17 119:19	199:14,16,17	153:6
65:13 131:4	133:4	200:14 217:8	testimony
170:21 217:5	<b>tall</b> 111:11	telling 117:4	21:10 30:12
221:6	tananbaum	tells 80:8	43:9 44:11
takes 188:16	8:20	temporal	54:21 55:5
100.10		150:16 207:21	64:4 69:11

Veritext Legal Solutions

- •			C
80:1,2 83:2	132:20,22	174:20 187:22	thursday 20:11
84:3 87:22	137:2,9 156:9	188:4,13 195:9	<b>tied</b> 39:7
88:17 100:2	169:1,2 170:13	197:14 198:13	<b>till</b> 209:18
106:15 145:12	170:15 195:21	199:11 202:4	time 2:5,7 13:2
217:9,14 218:9	199:3 202:7	203:19 205:7	13:3 14:18
218:17	211:20 212:14	205:19 206:12	19:3 20:12
thank 11:14,17	<b>think</b> 12:3 13:9	209:1,3 212:9	24:13,17 31:17
71:12 127:17	14:5,22 21:4	213:17 214:15	32:19 33:11
200:8 206:22	21:16,22 29:4	thinking	49:1,7 72:2
207:1	33:16,17 34:6	143:16	78:16 80:11
thankfully	34:9 35:6 36:2	thinks 77:15	82:21 89:10
101:6	38:8 40:8 41:2	<b>third</b> 29:4	90:16 97:11
thanks 216:16	41:7 42:1,2	53:17 62:22	101:8 109:5
216:17	44:14 56:17	110:13 197:16	112:8,13
theme 34:18	60:10 64:8,9	197:18,22	116:18 121:5
<b>theory</b> 47:14	64:11 68:17	thirds 28:6	127:22 129:1,6
142:2 164:15	73:16 76:4	29:2	131:1 133:8
164:18 165:5,6	77:13 85:12	thomas 3:18	137:10 141:6
<b>thereof</b> 217:16	87:13 88:7,9	thousand	141:18 142:12
<b>thing</b> 32:19	95:22 98:11	108:11	144:4 150:16
53:3 73:22	100:5 101:2,3	thousands	152:12 156:22
89:17 99:17	101:12 102:21	41:18,21 68:22	157:13,14,16
126:1 139:17	105:1 107:13	109:17,17	160:22 176:10
156:12	108:16,18	181:22	176:11 188:16
<b>things</b> 39:22	110:21 111:14	<b>three</b> 28:6	188:20 191:4
45:20 56:16	127:22 128:4	42:21 53:12,20	192:16,17
74:21 78:18	131:18 134:4	53:21 61:6	194:22 195:10
79:10 86:13	137:20 138:9	74:22 75:1	198:1 206:20
87:19 105:8	140:14,21	80:12 139:7,16	207:10,10
110:16 112:13	142:17 145:5	141:4 150:13	208:10 210:4,7
114:6,13 116:7	145:14 146:2	184:7 214:18	210:9,14
118:19 124:3	151:14 152:11	threefold 80:21	213:10 214:18
125:11,14	153:12 156:16	thrown 92:7	214:20 216:16
127:10 129:5	161:16 165:9	<b>thrust</b> 49:1	217:5 218:18
130:8,10	167:1,2 174:9	52:2	

973-410-4040 800-227-8440

timeframe         topic         19:19         trade         40:2         165:7	
218:8 20:7 23:20 204:17 206:11 <b>tripling</b> 62:	11
timeline 209:16   110:19   trades 128:20   62:13 81:10	)
times 61:6 66:1 topics 152:10 176:5 87:13 138:1	19
74:22 75:1 152:12 <b>traditional</b> 139:3 140:4	1
80:15 85:18 <b>tort</b> 15:22 24:6 59:18 <b>trivial</b> 97:3	
99:1 124:15,15   24:9,15 41:18   <b>trained</b> 15:19   <b>true</b> 49:21 9	94:6
138:18 139:7 44:9 47:16 <b>training</b> 16:10 134:3 141:1	11
139:16 140:22   49:17,18 50:18   35:15,20,22   154:1 216:1	14
141:5 152:8 62:2 79:9,12 36:5 99:2 217:13	
165:21 169:2 94:8 142:1 <b>trane</b> 7:12,12 <b>trust</b> 1:4 6:	10
171:4 157:10 164:16 8:20 8:2 11:19 1	2:2
<b>tip</b> 190:3 168:6 177:1 <b>transcribed</b> 22:3 34:20,	21
<b>tn</b> 1:20 217:21	
today 12:4 15:1 torts 24:12 transcript 14:9 44:19 46:8	
19:4,8 20:1 <b>total</b> 71:9 218:6,19 51:3 53:16	
23:2 78:21 146:10 151:2 <b>transcription</b> 56:10,13 57	7:13
80:3 98:15	2
101:7 102:7 163:20 <b>transferred</b> 1:6 91:6,19 96:	6
138:19 140:9 <b>totality</b> 15:12 <b>transfers</b> 21:6 144:2 148:2	2
145:5 167:8 43:5 46:11 <b>transitioning</b> 154:13 159	:6
191:8 207:10 50:3 61:16 214:14 159:10 160	:20
210:2 75:11 107:8 <b>treat</b> 61:20 178:17 179	:15
today's 12:12   135:19 158:1   trend 204:15   180:12 181	:13
<b>together</b> 63:10   170:5,8 171:11   <b>trends</b> 157:3,16   182:11 183	:5,8
70:6 172:14 176:12 171:20 177:5 185:21 186	:3
told 12:9 177:4 180:3 204:8,9,18 186:13 205	:1
102:16 103:8	:17
111:6 118:4 209:11 210:2,5 <b>tried</b> 42:2 209:9	
took 60:21 66:4 towards 29:22 191:13 trusts 40:15	5
170:18   113:18   <b>trip</b> 87:13   41:19 43:6,	11
tools 118:22   tower 121:18   triple 74:18   44:12,16 64	1:18
top         25:21 82:12         traces         194:8         80:12,13,18         104:4 126:3	16
97:12 215:10 <b>track</b> 101:13 81:8,10,14,17 145:22 147	:5
142:13 147:19 147:10,14	

	5-		$\mathcal{E}$
148:5,19 155:6	131:20,22	<b>type</b> 24:6 35:14	61:7,10 62:12
155:7 160:16	178:19 203:18	36:10 46:15	62:12,13 74:19
161:13 176:13	<b>turned</b> 113:21	47:7 60:1 93:9	75:1 80:10,12
178:21 179:19	turning 78:2	176:2,8 194:10	80:14,15,20
185:15 194:6	178:3	<b>types</b> 45:10	81:1,4,9,10,11
195:22 200:11	turns 58:19	59:6 82:12	81:17,18,19
212:3	59:2,3 61:3	93:18 122:22	82:1,5,12,13,16
<b>truth</b> 11:11,11	86:22	166:14	87:14 90:12
11:12 217:8,8	twenty 183:18	<b>typical</b> 63:10	123:13 138:19
217:9	183:20	63:15 195:22	138:20,21
<b>try</b> 40:5 45:1	<b>two</b> 16:9,11	typically 134:2	139:4 140:3,4
65:8 69:4 84:7	21:8 23:1,1,3	134:4 138:9	140:5,12 141:9
84:22 88:19	28:6,11 29:2	142:1 151:16	142:4,5,14,16
129:13 130:3	34:17,18 39:20	172:10 177:19	142:17,20
141:6 168:22	44:5 79:10,13	210:20	164:22 165:2,7
196:10 199:3	79:15 83:10	u	165:9 166:2,12
199:10 200:3	85:3 87:3	<b>u.s.</b> 7:12 29:1	166:15,21
201:21 207:9	97:11 104:1,2	ultimate 15:13	167:3
<b>trying</b> 29:22	104:5,13	78:14 87:1	unclear 120:4
47:14 53:11	108:12 109:14	161:8 163:3,7	uncommon
54:19 60:9	119:2 123:17	163:10,12,18	121:9
90:18 112:15	135:14,16	165:16	<b>under</b> 12:22
112:16 116:16	136:3,15,16	ultimately	16:3,22 47:13
117:20,21	137:21 138:1	16:20 27:18	56:17 57:2
118:11 120:3	139:6 141:4	80:7 86:2	61:11 104:22
132:19 150:4	145:7,13	92:12 134:12	115:16 116:1
174:14 179:2	148:10,12	135:12 167:7	165:5,5 188:9
199:5,8 203:8	149:6,7,14,16	168:4,7,12	217:9,12 221:7
204:20 205:10	149:20 152:7	171:18 180:11	underlies 16:11
turn 31:14	160:19 162:2	195:13 206:2	underlying
49:21 62:17	164:19 181:4	212:13 213:3,6	16:10 32:12
63:5 67:21	183:3 184:4,8	uncertain	34:22 56:11
72:17 92:21	184:17 190:15	185:18	68:9 125:8
93:21 94:6	190:20,21	uncertainty	144:3 157:16
101:9 105:11		46:21 57:12	164:19 209:4
			I.

# [understand - verus]

Page 54

_	_		<b>C</b>
understand	universal	118:14,17	169:20
12:21 13:2,10	103:22 104:19	120:13,17	valuing 67:15
13:11,14 15:17	universe 26:17	122:9 154:9	variable 117:3
29:17 30:11	43:5 44:4,8,10	163:22 178:6	117:6
33:17 60:9,10	66:2,10 68:20	192:10 218:19	variables 82:7
96:11 118:13	72:9,13 85:2	useful 92:15	117:3
120:13 129:22	105:16 125:20	uses 47:7	variation
134:15 136:5	159:21	104:18 119:11	116:13
139:14,20	unknown 62:13	<b>using</b> 15:9,11	variations
146:16 148:21	91:18 116:18	31:2 32:16	83:20
164:11 185:11	unnecessary	47:11 72:9	varies 47:17
185:15 194:7	88:9	88:14 90:18,22	various 16:3
195:14 205:14	usable 178:3	112:5 126:2,4	98:1 128:19
211:13 213:16	use 18:19 31:3	135:3 140:12	129:9 153:21
215:18,22	31:5,17,20,21	150:22 152:16	156:1
216:3,7	33:15 39:16	153:1 159:18	vast 79:20
understanding	41:9 57:8 69:4	171:4,5 182:11	172:18
13:20 14:2	73:20 76:7	195:6 199:7	verbal 12:15
59:19 68:13	77:22 83:17	usually 77:20	verify 218:9
117:10 126:10	93:16 104:6,10	114:12 169:4	veritext 218:14
211:8	105:1,5,22	<b>utilized</b> 27:4,12	218:22
understood	112:16 117:21	32:9,11 33:6	veritext.com.
13:16 14:9,12	119:21 122:12	34:1	218:15
113:3	124:15,16	V	<b>versa</b> 161:22
undertook	156:8 160:4	v 1:7 9:4 10:4	version 12:12
215:9	161:11 170:5,7	218:4 219:4	154:16 158:5
undisclosed	170:8,9,14,16	220:4	158:10,13,15
113:9	171:11,21	validated 58:20	versus 28:1,20
unfeasible	176:15 177:2	valuation 45:19	28:22 29:1,5
89:15	180:4,6,9	<b>value</b> 63:14	34:14 58:3
<b>unit</b> 135:11	181:3 184:6	94:5 112:15	60:13 73:18
136:1	205:8 208:8	126:7 135:15	176:11
united 1:1	<b>used</b> 18:20 24:4	161:21 163:16	<b>verus</b> 8:2,9
156:4	32:8 38:13	163:17,20	11:19 12:2
	56:18 104:5	164:6 169:18	43:6,10,17

Veritext Legal Solutions

[verus - work] Page 55

44:11,16,20,20	132:12 133:16	146:2,3 172:9	64:11 88:6
97:18 101:4	134:3,15	173:19 185:16	95:2,4 103:1
160:14 209:9	135:18 139:9	weathersby 5:3	128:13,15
<b>vice</b> 8:20	140:17 146:8	week 20:12	132:15 137:18
161:22	146:11 157:2,3	<b>weight</b> 97:10	139:13 141:3
view 29:20	161:2 162:9	welcome	143:20 149:2
37:13,13 85:3	164:13 177:22	205:21	153:10 159:4
85:9 138:7	178:7 179:19	<b>went</b> 86:10	160:10 168:3
166:6 195:8	181:7 200:3	109:18 151:6	168:20 181:7
<b>violate</b> 161:14	201:19 206:11	151:15 180:7	193:21 201:15
<b>virtual</b> 113:16	wanted 18:3	western 1:1	202:16 206:1
<b>voce</b> 51:9 102:1	43:20 131:17	<b>white</b> 8:19	206:21 207:1
<b>volume</b> 31:17	<b>wants</b> 100:11	35:21 96:2,9	209:1,22
volunteer	186:3,14	96:12,16,21	212:22 215:14
110:1	washington	97:17 99:14	216:19 217:6
W	1:19 2:3,12	100:3 109:13	217:10,14
wacker 7:6	3:19 4:8 11:4	126:17 151:11	218:8,10,12,18
<b>waived</b> 184:19	70:7 217:20	152:3,22 158:3	219:2 220:2
walk 102:13	way 13:20 14:6	158:7,9,21	221:1
want 22:22	28:7 29:2 40:5	168:17 171:9	<b>women</b> 112:10
23:3 31:11	45:1 60:10	171:22 174:6	wondering
33:5 41:7 46:9	77:2 78:4	175:14 176:15	199:2
46:21,22 48:6	88:16,19 91:20	177:14	<b>word</b> 64:9
50:12,22 52:13	96:1 120:21	<b>white's</b> 97:16	103:11 169:13
52:18 61:15	121:16 153:22	98:9,14 99:21	208:8
63:6 72:21	162:22 166:7	100:3	wording 21:1
75:13 76:11	168:15 170:18	wilmington	words 77:17
77:6,16,22	184:16 191:6	4:16 6:6,14	88:15
79:6,7 87:20	201:16	<b>wish</b> 79:21	<b>work</b> 16:17,21
89:14 94:11	<b>ways</b> 68:7	<b>witness</b> 9:16,18	23:5,20 29:9
96:9 97:3	105:6 165:19	11:16 21:2	29:22 30:9
99:16 102:13	175:17	27:5,7,14,16,20	35:3 40:12
102:14,15,19	we've 20:15	27:22 28:3,5,8	45:14,22 60:6
102:14,13,19	73:8 99:3,7	28:10,15,16,18	61:21 62:7
126:5 128:12	138:22 139:6	38:6,8 49:13	63:9,22 64:21
120.3 120.12			

Veritext Legal Solutions

[work - zoom] Page 56

65:4 73:7	119:1 120:20	young 6:3
79:11 82:2	120:21 132:8	Z
87:3,14,19	<b>wrote</b> 128:1	<b>zero</b> 39:15 89:9
88:15,18 89:2	129:21 205:9	115:17 137:7
89:4 91:3	<b>wyner</b> 10:18	197:15 210:21
92:16 128:3	21:13 59:9	<b>zoom</b> 3:17 6:12
151:17 155:5	74:12 75:9	7:4,14 8:19,21
165:11 168:21	76:4 77:13	17:9 52:1
170:17 171:1	101:17 121:5	17.9 32.1
188:19 192:14	133:1 157:5	
201:7,8 202:17	189:14,18	
203:17 215:19	190:8	
<b>worked</b> 202:13	<b>wyner's</b> 19:15	
working 26:17	19:20 101:10	
89:8,9 98:1	102:8 132:10	
151:9,13,21	191:2,9	
180:15	X	
workings 187:8	<b>x</b> 1:3,9,12	
<b>world</b> 1:3 9:4		
10:4 17:9 52:1	<b>y</b>	_
99:10 116:4	ycst.com 6:8	
168:10 218:4	yeah 18:12	
219:4 220:4	21:21 22:16	
worth 44:12	27:10 39:6	
57:16	52:6 73:4 77:8	
worthwhile	100:18 132:18	
120:10	136:22 139:8	
<b>write</b> 130:16,19	143:15 145:12	
188:16	year 46:16	
<b>writing</b> 137:6,8	years 46:18	
192:22	59:17 112:11	
<b>written</b> 120:15	yep 28:15 52:7	
184:16	york 2:11,12	
<b>wrong</b> 107:9	8:14,14	
112:12 118:22		