

FILE NAME: Johnson & Johnson (JAJ)

DATE: 2017 Aug 17

DOC#: JAJ018

DOCUMENT DESCRIPTION: Legal - Deposition of Dr. John Hopkins Part 3

SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF LOS ANGELES

TINA HERFORD and DOUGLAS HERFORD,

Plaintiffs

vs

Case No. BC646315

AT&T CORP., a subsidiary of AT&T INC.

and its subsidiary PACIFIC BELL

TELEPHONE COMPANY, et al.,

Defendants.

VIDEO DEPOSITION OF DR. JOHN HOPKINS

Day 3

Thursday, August 17, 2017

AT: 10:03 am

Taken at:

Shook Hardy & Bacon LLP

25 Old Broad Street

London EC2N 1HQ

United Kingdom

Court Reporter:

DEIRDRA JORDAN

Job No. 2657980

Page 747 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 SUPERIOR COURT OF NEW JERSEY LAW DIVISION - MIDDLESEX COUNTY DAVID CHARLES ETHERIDGE and DARLENE PASTORE ETHERIDGE, Plaintiffs, vs Docket No. MID-L-0932-17 AS BRENNTAG NORTH AMERICA, INC. (sued individually and as successor-in-interest to MINERAL PIGMENT SOLUTIONS, INC. and as successor-in-interest to WHITTAKER CLARK & DANIELS, INC.) et al., Defendants.	Page 749 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 SUPERIOR COURT OF NEW JERSEY LAW DIVISION - MIDDLESEX COUNTY IRMA VERDOLOTTI, Plaintiff, vs Docket No. MID-L-5973-16 AS BRENNTAG NORTH AMERICA, INC. (sued individually and as successor-in-interest to MINERAL PIGMENT SOLUTIONS, INC. and as successor-in-interest to WHITTAKER CLARK & DANIELS, INC.) et al., Defendants.
Page 748 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 SUPERIOR COURT OF NEW JERSEY LAW DIVISION - MIDDLESEX COUNTY RONALD MARTIN TEUSCHER and SHANNON TEUSCHER, Plaintiffs, vs Docket No. MID-L-7249-16 AS BRENNTAG NORTH AMERICA, INC. (sued individually and as successor-in-interest to MINERAL PIGMENT SOLUTIONS, INC. and as successor-in-interest to WHITTAKER CLARK & DANIELS, INC.) et al., Defendants.	Page 750 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 APPEARANCES Appearing for the Plaintiffs: SIMON GREENSTONE PANATIER BARTLETT, PC BY: CHRIS PANATIER, ESQ. BY: LEAH C. KAGAN, ESQ. 3232 McKinney Avenue, Suite 610 Dallas, Texas 75204 214.276.7680 cpanatier@srgbllaw.com lkagan@srgbllaw.com Appearing for the Defendant Johnson & Johnson: TUCKER ELLIS LLP BY: SHARLA J. FROST, ESQ. 405 Main Street, Suite 500 Houston, Texas 77002 972.537.4205 sharla.frost@tuckerellis.com Appearing for the Defendant Johnson & Johnson: SHOOK HARDY & BACON LLP BY: KATHLEEN FRAZIER, ESQ. JPMorgan Chase Tower 600 Travis Street, Suite 3400 Houston, Texas 77002-2926 713.227.8008 kfrazier@shb.com Appearing for Whittaker Clark & Daniels: HOAGLAND LONGO MORAN DUNST & DOUKAS LLP BY: MARC S. GAFFREY, ESQ. 40 Paterson Street, PO Box 480 New Brunswick, New Jersey 08903 732.545.4717 mgaffrey@hoaglandlongo.com

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Page 752 1 APPEARANCES...(continued) 2 ORRICK, HERRINGTON & SUTCLIFFE LLP 3 BY: C. ANNE MALIK, ESQ. 4 BY: ALLEGRA NOONAN, ESQ. 5 1152 15th Street, N.W. 6 Washington, DC 20005 7 202.339.8458 8 amalik@orrick.com 9 anoonan@orrick.com 10 (For Johnson & Johnson) 11 12 HARRIS BEACH PLLC 13 BY: MATTHEW QUIRIN, ESQ. 14 100 Wall Street 15 New York, New York 10005 16 212.912.3505 17 mquirin@HarrisBeach.com 18 (For GlaxoSmithKline in Teuscher case) 19 20 21 COSMICH SIMMONS & BROWN 22 BY: LAKEYSHA GREER ISAAC, ESQ. 23 100 Vision Drive, Suite 200 24 Jackson, Mississippi 39211 25 601.863.2100 lakeysha@cs-law.com (For Shulton, Inc., sued individually and as successor to The Shulton Group and/or Shulton, Inc.; The Procter & Gamble Company, sued as successor-in-interest to The Shulton Group and/or Shulton, Inc.; and Wyeth Holdings LLC, f/k/a Wyeth Holdings Corporation, f/k/a American Cyanamid Company, sued individually and as successor-in-interest to The Shulton Group and/or Shulton, Inc.) KING & SPALDING LLP BY: JULIA ROMANO, ESQ. BY: ALEXANDER CALFO, ESQ. 633 West Fifth Street, Suite 1700 Los Angeles, California 90071 213.443.4365 jromano@kslaw.com (For Johnson & Johnson in Herford case)	Page 754 1 (On the record at 10:03 am) 2 VIDEOGRAPHER: We are now on the record. 3 This is the continued deposition of John Hopkins. The 4 date today is August 17, 2017, and the time is 10:03 5 am. 6 EXAMINATION: 7 BY MR PANATIER: 8 Q Thanks, and I will go to the board. 9 All right, sir. So good morning. 10 A Good morning. 11 Q All right. 12 One of the things you brought up yesterday 13 with a few of the results that I had put on our 14 board -- 15 A Mmm hmm. 16 Q -- was that you said you were not sure whether 17 or not those were results for the cosmetic grade or 18 perhaps industrial; do you recall that? 19 A I do recall that, yes. 20 Q Okay. 21 Well, I took that seriously because I want to 22 make sure that we are very clear with the truth as far 23 as what the results were, and I actually looked in some 24 of the documents and I think I have the answer for us; 25 okay?

Page 755 1 A Mmm hmm. 2 Q So this is exhibit 155. 3 (Exhibit 155 marked for identification) 4 And you can see if you turn to the second 5 page, this is from Vernon Zeitz to Roger Miller, and 6 these are the two main guys we see from Windsor 7 Minerals; right? 8 A Yes. 9 Q And that again is the mining outfit that was 10 doing the physical mining of the ore; correct? 11 A Correct. 12 Q Okay. 13 Now, if you go down I've blocked in a 14 section -- I ran out of highlighter, so it's in green? 15 A Yeah. 16 Q And you see here it says: 17 "The samples represented both the industrial 18 materials produced at the Gassetts (GI) and ... Windsor 19 (WI) mill sites and the ores used in the cosmetic 20 production (HC)". 21 Right? 22 A Yes. 23 Q So those appear to be the designations they 24 have for the sources for any sample; right? 25 A They appear to be.	Page 757 1 (this is an industrial sample). 2 And is that -- that's what I've written right 3 here. Does that -- do you agree with that? 4 A Yes. 5 Q Okay. 6 A I agree with what you've written, yes. 7 Q All right. 8 Now, if we turn to the July 1, 1975, samples, 9 and if you turn to the actual results on the following 10 page? 11 A That's Exhibit 79, yes. 12 Q Right. That's from Exhibit 79. They have the 13 same monikers. They have GI, WI and HC; correct? 14 A They have those names, yes. 15 Q Okay. 16 And for Confirmed asbestos visual, there were 17 a total of nine results confirmed asbestos that you and 18 I agreed to yesterday; right? 19 A They are described as low, low, low, low low, 20 low, medium, low, low, yes. 21 Q Right. Confirmed asbestos; right? 22 A That's what it states. 23 Q Okay. 24 And there are, I counted five entries for HC, 25 which would be the cosmetic ore; correct?
Page 756 1 Q Okay. 2 A Yes. 3 Q So I'm going to go ahead and stand up at our 4 board so we can make clear exactly what we're looking 5 at. 6 So the first document I pulled yesterday was 7 from October 10, '74, and I have this up here. 8 (Exhibit 79, previously marked, handed to witness) 9 And this was one sample where they found 10 chrysotile fibers at .006 per cent; right? 11 A Yes. 12 Q Now, that sample was for DGI; right? 13 A That's what it says, yes. 14 Q So we would correspond that, right, to 15 industrial materials at the Gassetts mill; right? 16 A Yes. 17 Q Do you believe that that's a fair way to do 18 that? 19 A With the data we have in front of us, yes. 20 Q Okay. 21 So more likely than not, that's probably an 22 industrial sample; fair? 23 A It probably is, yes. 24 Q Okay. 25 So I'm going to put in parentheses here:	Page 758 1 A If that is the correct designation, that would 2 be correct. 3 Q And that does appear to be the correct 4 designation from Exhibit 155 I've just shown you; 5 correct? 6 A Based on what we've got on Exhibit 155, that 7 would be a designation, yes. 8 Q In fact, he says it's the ores used in the 9 cosmetic production; correct? 10 A That's what he says, yes. 11 Q Okay. 12 So there we have five instances of confirmed 13 asbestos in the cosmetic ore in the fines; right? 14 A That's in the fines, yes. 15 Q Okay. 16 And then for the fines we have then four 17 other results, two for WI and two for GI in the fines, 18 correct, for asbestos? 19 A That is correct, yes. 20 Q Okay. 21 Then if you go to the other column for -- 22 there should be a -- yeah, that page, right, Table 2, 23 that's the sediment; right? 24 A The sediment, yes. 25 Q And in the sediment my count is you have two

Page 759 1 results confirmed asbestos for the cosmetic and you 2 have one for WI, which would be industrial, and two for 3 GI, which would be industrial. 4 So you have two asbestos results in the 5 cosmetic ore and three in the industrial. 6 Is that fair? 7 A That's the interpretation based on the data we 8 have, yes. 9 Q Right, and you agree with that interpretation, 10 based on the data we have; correct? 11 A Based on the data that we have on our desk, 12 that would be the interpretation. 13 Q Okay. All right, sir. 14 Any reason, as you sit here, to disagree with 15 that reading of it? 16 A I don't have any other information to hand 17 other than what we have here. 18 Q Right. Okay. All right. 19 And now if you'll go to the last document 20 there, that's the one that is November 5, 1975? 21 A This is Exhibit number 80. 22 (Exhibit 80, previously marked, handed to witness) 23 Q Okay, and go ahead and turn to the first table; 24 okay? 25 There we have -- you have fibers -- just let	Page 761 1 Q Okay. 2 Based on the information we have from Mr 3 Zeitz as to how they coded it, you would agree with 4 that interpretation; correct? 5 A If that information is correct, the GI and the 6 HC, that would relate to how you've described it. 7 Q All right. 8 And, again, as you sit here now, no reason to 9 disagree with those designations; correct? 10 A I don't have any other information at this 11 stage. 12 Q All right. 13 So you would not disagree with it, as you sit 14 here? 15 A I would not disagree with the data we have on 16 our desk. 17 Q And, I'm sorry, let's go ahead and look in the 18 second column under Sediment; okay? 19 What I found was one result for asbestos in 20 the cosmetic; one result in Windsor industrial talc; 21 and two asbestos findings in the Gassetts industrial 22 talc. 23 Is that what you see? 24 A In the sediment, yes, yes. 25 Q All right. Okay, sir. Thank you.
Page 760 1 me know when you're ready? 2 A Yeah. Just reading it. 3 Q Sure. 4 A So this relates to the fines, okay. 5 Q Well, I think they give us both, and you'll see 6 it there. 7 A Yes. 8 Q The first column is the fines. The first two 9 columns are fines, because they tell us Fines part per 10 million. 11 The second column is under the heading 12 Sediment; right? 13 A Yes. 14 Q And it tells us fibers in parts per million as 15 well, does it not? 16 A It does. 17 Q Okay. 18 And there here's what I counted: I counted 19 that in the fines there were five results for fibers of 20 asbestos for the cosmetic; there were two for Windsor 21 industrial talc; and two for Gassetts industrial talc. 22 Let me know if you get the same count? 23 A Yes, yeah. 24 Q Okay. 25 A Mmm, yeah.	Page 762 1 If you go ahead and hand that over, I did 2 want to ask you about one other thing, but I need to 3 make sure I place it. 4 In the cover letter what he says is: 5 "Table 1 shows the actual fiber counts and 6 the approximate equivalent concentration in parts per 7 million of the amphibole particles which we found in 8 these samples. Some of them seem rather high, one had 9 10 and one had 9 amphiboles. Most of these come in 10 bundles of 1, 2 or 3 fibers with anywhere from 2-5 11 amphiboles in a bundle". 12 Now, if you'll take a peek here, sir, the -- 13 and look in the fibers of asbestos, for the results 14 that he described as "rather high", the one with nine 15 and ten fibers of asbestos, were those in the 16 industrial or were those in the cosmetic? 17 A Well, ten is described as HC. 18 Q So that's cosmetic; right? 19 A According to the particular letter that we had 20 on Exhibit 79. 21 And nine is described as HC, again, according 22 to the definition that we had on the letter of Exhibit 23 79. 24 Q So the two with nine and ten were both cosmetic 25 ore; correct?

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1 A Yeah.

2 I should have said Exhibit 155 --

3 Q Yeah.

4 A -- not 79.

5 Q And they were described as "rather high";

6 right?

7 A That's what the author has written, yes.

8 Q Okay.

9 And then he also says that:

10 "Most of these came in bundles of 1, 2 or 3

11 fibers with anywhere from 2-5 amphiboles in a bundle".

12 Right?

13 A Yes. He's used the word "amphiboles" on the

14 cover letter.

15 Q Right?

16 A But the word "asbestos" in the tabulation.

17 Q Okay.

18 All right. So going back to a question that

19 I asked you yesterday, sir, if Johnson & Johnson had

20 stated that there was confirmed asbestos on a bottle of

21 Johnson's Baby Powder, would any mother buy that?

22 A If it was actually in the powder, that's the

23 question, because this relates to sediment and fines

24 that would -- you would not expect to get in the actual

25 powder.

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1 Q The sediment you do not expect in the powder.

2 The fines do make it into the powder; correct?

3 A The fines could make it into the powder, yes.

4 Q The fines --

5 A Yes.

6 Q -- the fines are what you want in the powder;

7 correct?

8 A Yes. Correct, yes.

9 Q All right.

10 A Yes.

11 Q And so if Johnson & Johnson actually said,

12 "There is confirmed asbestos in this product", on the

13 product, do you expect any mother would buy that?

14 A No, but let me just read this letter, if I may,

15 to the court, because --

16 Q Well, one moment --

17 A Okay.

18 Q -- because I asked the question, and I'll let

19 you say what you want to say.

20 A The answer, no.

21 Q Okay.

22 So the answer to the question is no; correct?

23 A If that were -- if that were the case.

24 Q Okay.

25 Now, hold on. Let me ask you the next

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1 question, which is: with this one in -- this was -- I'm

2 going to get rid of this date here. We talked about

3 something else there ...

4 But from 11.5.75, if the term "rather high"

5 levels of asbestos was on the bottle, would any mother

6 buy it?

7 A No.

8 Q Okay.

9 If it said, "Contains bundles of asbestos

10 fibers", would you expect any mother to buy that

11 product for use on her child?

12 A No.

13 Q And similarly, sir, if the product said,

14 "Confirmed asbestos inside", or, "Contains bundles of

15 asbestos", would any person -- would you expect any

16 person to buy that talc for use on themselves?

17 A No.

18 Q All right.

19 All right, sir. Now, what did you want to

20 read from?

21 A Yes. I just wanted to clarify some of the text

22 from McCrone on Exhibit 80, because we've talked about

23 amphibole in one sentence and asbestos in another.

24 What the analyst appears to state when he

25 talks about one had ten and one had nine amphibole,

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1 what he goes on to state in the next paragraph:

2 "In several occasions we found amphibole

3 particles in the fines which we did not find in the

4 sediment. Since most of these amphibole particles are

5 rather small they would stay suspended ... whereas the

6 larger, blocky, amphiboles or chunks of amphiboles

7 [are] generally are not fibrous and are obscured by the

8 ... talc particles ..."

9 So I guess what I'm saying is to me there's a

10 little confusion as when people are talking about

11 amphiboles in one sentence and asbestos in another.

12 I'm just saying that it is a little confusing

13 to the court. Certainly confusing to me.

14 Q Okay.

15 A It's something we can probably look at.

16 Q McCrone knows what asbestos is; right?

17 A McCrone knows what asbestos is.

18 Q Okay.

19 A Yes.

20 Q And if you have an amphibole in a fibrous form,

21 you have asbestos; correct?

22 A That would be the case.

23 Q All right.

24 A Yes.

25 Q And so you would expect the chunky stuff to

Page 767 1 drop down into the sediment; right? 2 A Yes. 3 Q And then the fines go on into the product; 4 correct? 5 A Correct. 6 Q All right. 7 So if you turn the page, right, in the fines 8 what is the heading of the column there? 9 A Fines parts per million. 10 Q What's the one next to that? 11 A Sorry, fibers of asbestos. 12 Q Fibers of asbestos, and that's what McCrone 13 wrote; correct? 14 A They did. 15 Q All right, sir. You can set that aside. 16 All right. This next one will be Exhibit 17 156. 18 (Exhibit 156 marked for identification) 19 This is just some -- sort of some background 20 information for us. 21 The 000 -- or the not 000, the 00000, the 22 00000 Italian, that was also regarded a little bit 23 later when it was domestically ground as 1615 AGIT; 24 correct? 25 A That's my understanding, yes.	Page 769 1 MR FROST: No 157? 2 MR PANATIER: Oh, yeah, there is a 157. 3 Sorry, this will be 157. Thank you, Sharla. 4 (Exhibit 157 marked for identification) 5 I've already skipped three from yesterday. 6 Q This is a memo from Ashton to -- looks like 12 7 people, December 20, 1979. The subject is Italian Talc 8 for Johnson's baby powder, Initial 9 Shipments/Specifications, and the highlight there 10 says -- well, right before it, it says: 11 "Since writing the specs on a crash basis 12 last week, we now find Cyprus has adopted a new name 13 for the cosmetic talc prepared from Italian rock. The 14 new name is SUPRA. This is exactly the same item 15 previously called talc 1615 AGIT. SUPRA talc will now 16 appear on related paperwork, from Cyprus. Therefore, 17 we should now delete 1615 AGIT from the spec and change 18 it to SUPRA". 19 So Italian 00000, 1615 AGIT and Supra, all 20 the same stuff; right? 21 A Yes. 22 Q Okay. All right, sir. You can set that aside. 23 Here's Exhibit 158. 24 (Exhibit 158 marked for identification) 25 All right. This is a memo from Dr Nashed,
Page 768 1 Q Okay. 2 So if it was ground in Italy, it was the 3 00000; is that right? 4 A Yes. 5 Q And if it was ground in the US, it was 1615 6 AGIT; right? 7 A Correct. 8 Q Same exact material, just one's ground in 9 Italy, one's ground in the US; fair? 10 A It should be the same, yes. 11 Q Okay. All right. 12 MR GAFFREY: Chris, can we identify the 13 document? 14 MR PANATIER: Yeah, sure. This is -- sorry, 15 the document we're looking at is from Dr Russell or RS 16 Russell -- I don't know if he's a doctor -- to Dr 17 Nashed; correct? 18 THE WITNESS: Yes. 19 BY MR PANATIER: 20 Q All right. 21 MR GAFFREY: Date? 22 MR PANATIER: December 3, '71. 23 Q All right, sir. You can set that aside. 24 And then just, as we get a little bit later, 25 this will be Exhibit 158.	Page 770 1 May 11, 1973, and the subject is Talc/Asbestos, Bureau 2 of Mines Meeting -- Pfizer Comments. Memo to file. 3 Sometimes these guys would write a memo to 4 other people and sometimes they would write it to 5 nobody and put it in the file; right? 6 A Yes. 7 Q Okay. 8 All right. So the introductory paragraph 9 says: 10 "Mr Norwood of Pfizer Inc told me over the 11 phone that they are very gratified with the Bureau of 12 Mines meeting. 13 He felt that he had made a good case for 14 analysis of talc by TEM and he mentioned that he was 15 seconded by Dr Langer of Mt. Sinai and Mr Sykes of the 16 Nader group". 17 And that would be Ralph; right? 18 A Yeah, he was the head of the Nader group, yes. 19 Q Right. 20 And Ralph Nader was a consumer advocate; 21 right? 22 A He was, yes. 23 Q Okay. 24 "His general feeling is that 'fibrous talcs 25 will be subjected to the asbestos standards, i.e.,

Page 771 1 Vanderbilt lost". 2 And remember you and I talked about sort of 3 what Vanderbilt was trying to do yesterday; right? 4 A Yes. 5 Q "His main concern is to make sure that fibrous 6 talc definition would not include platy talc. He felt 7 that EM [that's electro microscopy] can be of value in 8 establishing that platy talc is platy and not fibrous. 9 I pointed out to him that TEM is hardly a 10 practical quality control procedure. He said that they 11 have five of these machines at Pfizer and they are used 12 routinely. He doesn't see why FDA or others cannot do 13 the same". 14 Did I read that right? 15 A You read that correctly. 16 Q Now, we know that within the last year -- this 17 is May 11 of '73 -- from our discussions yesterday, 18 that the CTFA has been leery of the use of TEM; 19 correct? 20 A That was an impression given by some 21 correspondence we reviewed yesterday. 22 Q Okay. All right. 23 And Pfizer's telling -- at this meeting, 24 Johnson & Johnson learns that Pfizer has five 25 transmission electron microscopes; right?	Page 773 1 Q This is from Mr Goudie. He says: 2 "Over the past three years, there seems to 3 have been general agreement that Transmission Electron 4 Microscopy is the only absolute proof with electron 5 diffraction for the identification of asbestos in talc. 6 We have elected to use outside laboratories since any 7 results generated in-house were suspect". 8 Do you know what he means by that? 9 A I do. It's a -- it's a common thing I've seen 10 even with many other areas of study of microbiology, 11 animal toxicology, where companies feel that if you're 12 going to talk to others, if it's done by an outside 13 agency, it may carry more weight. 14 It's not something I would subscribe to, 15 though. It's not a comment I would agree with. 16 Q Okay. 17 "In view of the latest findings at Windsor 18 Minerals, it appears wise that we maintain a closer 19 surveillance on both the ore and finished product on an 20 in-house basis. 21 The approximate cost of a TEM plus 22 accessories is \$175,000. I think it is something we 23 perhaps should consider in the near future. Needless 24 to say, it was not forecasted for 1974". 25 So, sir, based on this document, it's very
Page 772 1 A That's what it states. 2 Q At this time, does Johnson & Johnson have any? 3 A '73 ... I -- I don't know. 4 I would think the answer's going to be yes, 5 though. Absolutely. Yes. 6 Q Absolutely? 7 A Yes. 8 Q Okay. 9 A Yes. 10 Q They certainly had the money to buy TEM if they 11 wanted; right? 12 A Yes. 13 Q Okay. 14 They could have bought just as many as Pfizer 15 if they wanted; right? 16 A Yes. 17 Q Okay. You can set that aside. 18 So that was May 11, '73. 19 This is Exhibit 159. 20 (Exhibit 159 marked for identification) 21 This is January 3, '74. So this is eight 22 months later. You see the subject is Purchase of a 23 Transmission Electron Microscope Plus Attachments; 24 right? 25 A Yes.	Page 774 1 clear Johnson & Johnson did not have a TEM at this 2 point; correct? 3 A Correct. They were obviously using, and 4 certainly I've seen a lot of records -- they were 5 obviously using outside agencies to use their TEM. 6 Q Right. 7 A Yes. 8 Q But now they're saying based on apparently some 9 findings at Windsor, they want to go ahead and purchase 10 one; right? 11 A They -- they're based on the fact that it's 12 obviously the way back in 1974 that the industry was 13 moving that people would tend to own their own 14 transmission microscope, yes. 15 Q All right. 16 Do you know if and when they actually bought 17 one? 18 A I don't have that exact record. It implies 19 that it wasn't forecast for '74. 20 Q Right. 21 A The implication is it would be purchased after 22 '74. 23 Q Okay. 24 You can see up at the top there's another 25 highlight and this is another handwriting I'm going to

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1 try to translate for you, and you tell me if it looks
2 right; okay?
3 A Okay.
4 Q "What is cost of each sample sent to McCrone or
5 submitted to McCrone?"
6 Does that look right?
7 A Yes, I think that's about right.
8 Q Right?
9 A Yeah.
10 Q And then the answer is: "Quick scan would be
11 about \$30".
12 It's either 30 or 50?
13 A Yeah, I think it's the 50, but ...
14 Q Okay. All right.
15 So the -- a quick scan by McCrone for any
16 samples, 30 or 50 dollars; fair?
17 A Yeah.
18 Q Okay. All right, sir.
19 This next exhibit will be 160.
20 (Exhibit 160 marked for identification)
21 Now, we're going to drop back into 1973 for
22 this document and recall that during that period of
23 time they are having conversations with Pooley about
24 his concentration method?
25 A Yes.

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1 Q Right?
2 And that was a method to lower the
3 sensitivity to be able to detect chrysotile and
4 tremolite; correct?
5 A That was Dr Pooley's experiments, yes.
6 Q Right.
7 So this is March 30, 1973, from Tom Shelley
8 to Mr HL Warner, and cc'd are it looks like seven other
9 folks, all folks we've seen before; right?
10 A Yes.
11 Q Okay.
12 He says:
13 "Harold, we will want to carefully consider
14 the Pooley patents regarding asbestos in talc".
15 And a patent is where you come up with a
16 technique or an invention or something and then you
17 patent it, meaning no one can hopefully take it from
18 you?
19 A Correct.
20 Q All right. Okay.
21 "It's quite possible that we may wish to keep
22 the whole thing confidential rather than allow it to be
23 published in patent form and thus let the whole world
24 know".
25 Right?

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1 A Yeah, that's what it reads.
2 Q Okay.
3 And what they were discussing there was a way
4 to find asbestos at greater sensitivity in talc;
5 correct?
6 A They were discussing Dr Pooley's patents.
7 Q Right.
8 A Which related to asbestos in talc.
9 It doesn't actually say any more than that,
10 but ...
11 Q Okay.
12 A It's a supposition.
13 Q Okay.
14 Now, are you aware of any other work that
15 Pooley was doing on asbestos in talc other than his
16 concentration method that had been discussed in
17 numerous documents so far?
18 A I'm not aware that he was doing other work.
19 Q Okay.
20 A But, there again, you know I've not been privy
21 to what work he was doing in his laboratories at that
22 time.
23 He has quite a big laboratory. I've visited
24 it and there's a lot of work going on there.
25 Q But, obviously, Johnson & Johnson wouldn't have

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1 any authority over whether or not they may wish to keep
2 the whole thing confidential unless it was something
3 that they'd employed Pooley to do; correct?
4 A That's -- that's a supposition, yes.
5 Q And that's a fair supposition; right?
6 A It's a reasonable one.
7 Q Right. Okay.
8 A As I say, I don't know what work Pooley was
9 doing in addition to this. There could have been other
10 projects that he was doing that J&J was aware of or
11 familiar with.
12 You know, it's -- on those four lines, we
13 don't get a lot of information.
14 Q Regarding asbestos in talc patents, because we
15 know that's the subject?
16 A It is a subject, yes.
17 Q For this memo; right?
18 A For that memo, yeah.
19 Q Where they're saying:
20 "... we may wish to keep the whole thing
21 confidential rather than allow it to be published in
22 patent form and thus let the whole world know".
23 Those were their words; correct?
24 A Those are their words, yes.
25 Q All right. You can set it aside.

Page 779 1 We discussed the Argonaut mine over the last 2 two days. 3 This will be Exhibit 161. 4 (Exhibit 161 marked for identification) 5 And perhaps this will let us decide when it 6 came online or was approved for use. 7 This is from Alan Marks, again cc'ing a 8 number of people. July 16, 1976. 9 The subject is Johnson's Baby Powder -- 10 Support Argonaut Talc -- Alternate Supply Project: 11 "Dr JR Marshall: 12 Processed talc produced from the Argonaut 13 Mine of Windsor Minerals Inc has been shown to be 14 suitable for the production of JOHNSON'S ... Baby 15 Powder. On the basis of the studies shown below, it is 16 recommended that Argonaut talc be approved as an 17 alternate source of talc for JOHNSON'S ... Baby Powder 18 and shall represent a back up source in case of unusual 19 circumstances or need for greater supply". 20 Is that what that says? 21 A It does, indeed. 22 Q So it looks like the earliest approval date we 23 have for use of Argonaut talc would be July 16, 1976? 24 A As an alternate, yes. 25 Q Right.	Page 781 1 This is -- you can see in the top corner -- 2 CTFA method J4-1? 3 A That is the title, yes. 4 Q Fair? 5 A Yes. 6 Q Okay. 7 Now, this is the method that ultimately the 8 CTFA passed. It is the method that they told the FDA 9 they would put together instead of the FDA actually 10 passing a regulation; correct? 11 A Correct. 12 Q All right. 13 And yesterday you told me this had been -- 14 went through tests and was validated by the CTFA as a 15 reliable testing method for asbestiform amphibole 16 minerals in cosmetic talc; right? 17 A Yes. 18 Q Okay. 19 Now, first thing about J4-1, does it test for 20 chrysotile? 21 A It won't specifically separate chrysotile. 22 Q It is not designed to look for chrysotile at 23 all; correct? 24 A Not by that methodology. 25 Q Okay.
Page 780 1 In case there was a mine strike or something 2 like that? 3 A Yeah. 4 Q Okay. 5 Right. We have talked a lot about CTFA J4-1; 6 right? 7 A Yes. 8 Q But we have not yet looked at it. 9 Now, CTFA J4-1 was the method for looking for 10 amphibole or asbestiform amphibole in talc that was 11 passed by the CTFA; right? 12 A That's correct. 13 Q Okay. That will be Exhibit 162. All right. 14 (Exhibit 162 marked for identification) 15 And you could see up above it says issued 16 10-7 -- and looks like 75 on the first page, but look 17 at the second page. I think it's 10-7-76; right? 18 Feel free to look through all the pages if 19 you need to. 20 A Yeah. It's a very bad photocopy, but ... 21 Q We got it from you. 22 A Yeah. Trouble is -- it is '76. 23 Q Okay. 24 A Yes. 25 Q All right.	Page 782 1 There was no CTFA methodology passed to look 2 for chrysotile in talc; correct? 3 A Not at that point, no. 4 Q Not at any point; correct? 5 A No. Not CTFA, no. 6 Q Okay. 7 In fact, it says on the title, Asbestiform 8 Amphibole Minerals in Cosmetic Talc; right? 9 A That's the title, yes. 10 Q There were two parts to the test. The first 11 was x-ray diffraction; right? 12 A Yes. 13 Q And the second was optical microscopy and 14 dispersion staining method; right? 15 A That is the method, yes. 16 Q To be very clear, TEM is not part of the method 17 that was passed by the CTFA; right? 18 A Not on the CTFA method, no. 19 Q Right. 20 Now, under Introduction, it says: 21 "The method which has been adopted for the 22 detection of amphibole minerals in cosmetic talc is the 23 generally accepted method of x-ray diffraction. 24 Methods which appear in the literature for the 25 detection of fibers amphibole, such as, transmission

Page 783 1 electron microscopy with selected area diffraction ... 2 and electron microprobe, ... have also been considered 3 since they are capable of a lower level of detection 4 than by x-ray diffraction". 5 Now, a lower level of detection means they 6 are more sensitive; correct? 7 A It does. 8 Q They can detect things that are there but may 9 not be seen by x-ray diffraction or optical; correct? 10 A Correct. 11 Q Okay. 12 "However, they have not been adopted since 13 they suffer from the drawbacks that the amount of 14 material under examination is quite small (less than a 15 microgram) and the time for analysis, expertise 16 required, and expense of equipment eliminates them as 17 routine methods". 18 Right? 19 A Yes. 20 Q Certainly, if Johnson & Johnson had wanted to, 21 either at this time or before, they could have set a 22 routine TEM testing method in house; correct? 23 A Or subcontracted it to an outside contractor. 24 Q Right, and we've seen some of those results; 25 right?	Page 785 1 Right? 2 A That's what it states. 3 Q And the reasons they give are the time it would 4 take for analysis, the expertise required and the 5 expense; right? 6 A For quality -- for routine quality control 7 analysis. 8 Q Right? 9 A That's what it states, yes. 10 Q All right. 11 Now, if you go to the very last page under 12 References, you can see they actually cite to a paper 13 by Rohl and Langer; right? 14 A They do, yes. 15 Q From 1974? 16 A Yes. 17 Q Okay. 18 Right, sir. You can set that aside. 19 The next exhibit will be 163. 20 (Exhibit 163 marked for identification) 21 Now, the CTFA adopts J4-1 there officially in 22 October of 1976, but here we are in January 20, 1977. 23 This is called a Progress Report to the CTFA Scientific 24 Advisory Committee Concerning the Task Force on Round 25 Robin Testing of Consumer Talcum Products; right?
Page 784 1 A Back from, yes -- 2 Q Okay. 3 A -- even before 1976, yes. 4 Q Okay. 5 You wouldn't call them "routine", though, 6 would you? 7 A Yes. 8 Q In the early '70s? 9 A In the -- certainly a year or two before this. 10 Q Okay. 11 A This is dated '76, but some of those records 12 that in fact you've shown me this morning go back to -- 13 was it '74? 14 Q I think those two we looked at this morning 15 were '75? 16 A '75, yes. 17 Q Okay. 18 A Yeah. 19 Q The next paragraph: 20 "The methodology presented is the most 21 practical available, based on current technology. The 22 use of Transmission Electron Microscopy with Selected 23 Area Electron Diffraction offers greater sensitivity, 24 but is not presented since it is unsuitable for normal 25 quality control application".	Page 786 1 A Yes. 2 Q Okay. 3 You can see the second paragraph there, just 4 so we know: 5 "The Mt. Sinai Laboratory agreed to 6 participate in the CTFA-sponsored Task Force together 7 with FDA and cosmetic talc industry to test 8 1976-manufactured off-the-shelf products representing 9 the largest current market sales volume". 10 And I'll stop there because one of the 11 criticisms that the industry levied on Lewin's samples 12 that he tested in '72 and '73 was they had been 13 manufactured in '70 and in some cases before 1970; 14 right? 15 A That is correct, yes. 16 Q So here they're looking at -- they're doing a 17 round robin test of current production from 1976; 18 right? 19 A They are, yes. 20 Q Okay. 21 "It was further agreed that CTFA Method J4-1 22 (Detection of Asbestiform Amphibole Minerals in 23 Cosmetic Talc) would be employed. The following 24 laboratories are participating in this Task Force, 25 using either in-house analytical facilities or

Page 787 1 consulting service ..." 2 And it lists McCrone, FDA, Mount Sinai and 3 various companies, including Johnson & Johnson; right? 4 A That's what it reads, yes. 5 Q Right. Go to the next page. There should be a 6 highlight there. 7 It says: 8 "The following products were included, in 9 addition to two standard talc samples spiked with 10 asbestiform amphibole minerals for use in verifying 11 instrument ... sensitivity ..." 12 So these seven products they list here are 13 the products, and then they have apparently two other 14 standard samples they spiked; right? 15 A That's right, yes. 16 Q They have Avon Beauty Dust, Ammens Medicated 17 Powder, Vaseline Intensive Care Baby Power, Cashmere 18 Bouquet Body Powder, Mennen Baby Magic Powder, Clouds 19 of Clairol Herbal Essence and Johnson's Baby Powder; 20 right? 21 A They do, yes. 22 Q Okay. 23 It says: 24 "A summary of test results will be compiled 25 as soon as all analytical reports have been received.	Page 789 1 Q Well, he wrote it on Johnson & Johnson 2 letterhead? 3 A Yes, yes, yes. 4 Q Okay. 5 A He was, yes, at the time, yeah. 6 Q And it just says: 7 "Dear Norm: 8 The enclosed tables represent the initial 9 work-up of data received from participating 10 laboratories in the Task Force on round robin testing 11 of consumer talcum products for asbestiform ... 12 [minerals][sic]". 13 And then he talks about what the tables mean. 14 Well, let's go ahead and turn to the tables. 15 You should have Table 1. You should have all three. 16 A Okay. 17 Q Is that one Table 1? 18 A Yes, yes. 19 Q Okay. 20 Now, it has a + sign for samples which failed 21 CTFA Method J4-1 Parts I & II; right? 22 A Yes. 23 Q And that says: amphibole at greater than or 24 equal to .5 per cent; right? 25 A Yes.
Page 788 1 It is hoped that this round robin will produce a 2 consistency of test results among the CTFA member ... 3 [committees][sic], FDA, and the Mt. Sinai Laboratory, 4 and that these current talcum products will be found 5 free of asbestiform amphibole minerals." 6 Right? 7 A That's what it reads, yes. 8 Q So what they're going to do is they're going to 9 send those seven samples to a number of different labs 10 and then test them using J4-1, which has already been 11 adopted; right? 12 A Yes. 13 Q Okay. 14 All right. This next one will be Exhibit 15 164. 16 (Exhibit 164 marked for identification) 17 This is about a month later. Two months 18 later maybe. 19 All right. Do you see this is dated 20 March 31, 1977? 21 A It is, yes. 22 Q It's from John Schelz, the Chairman of the CTFA 23 Task Force, and he's a Johnson & Johnson employee; 24 correct? 25 A Yes, I think he was, yes.	Page 790 1 Q They have, and I believe Mount Sinai didn't 2 participate, so we're going to leave them out, okay, 3 because I think that's what we're going to see in the 4 documents. 5 But they have FDA, Avon, Cheesebrough-Pond's, 6 McCrone, Colgate-Palmolive, Cyprus, Mennen (also using 7 McCrone) and Johnson & Johnson. 8 The only one to find the half per cent spiked 9 amphibole was the FDA; right? 10 A Yes. 11 Q None of the others found it, even though it was 12 there; right? 13 A Yes. 14 Q They all found 3.5 per cent anthophyllite; 15 right? 16 A They did, yes. 17 Q But one, two, three -- six of the seven didn't 18 see the spiked tremolite in the talc at .5 per cent; 19 right? 20 A That is correct, yes. 21 Q Using J4-1? 22 A Yes. 23 Q Okay. 24 Then in the products -- you go below, they've 25 got products 1 through 7, and we saw the list on those

Page 791 1 products on the previous document; right? 2 A Yes. 3 Q These are current production samples from 1976 4 and three of the products, 3, 5 and 7, were failed by 5 either two or three laboratories. 6 A That's what is stated on that table, yes. 7 Q Okay. 8 The -- leave out the FDA for now. Avon, 9 Colgate-Palmolive and Cyprus each failed at least one 10 of the current production products; right? 11 A Yes. 12 Q And yet each of those companies, Avon, 13 Colgate-Palmolive and Cyprus, failed to see .5 per cent 14 of tremolite in the CTFA talc; right? 15 A Those -- those companies did fail to see it, 16 yes. 17 Q Right. 18 Yet they were able to register however much 19 was still present in 3, 5 and 7; true? 20 A Yes. 21 Q Okay. 22 Now, do you know who 3, 5 and 7 were? 23 A I don't. 24 Q Okay. 25 Let's go back to the previous document, and	Page 793 1 A I certainly do not know at this time, no. 2 Q Okay. 3 A This was a blind test. 4 Q Okay. 5 Well, whoever was the seventh product was 6 failed by two companies; right? 7 A It would appear so. 8 Q And whoever was the fifth product, then current 9 production was failed by three labs; right? 10 A That would appear to be the case, yes. 11 Q And whoever was number 3 was also failed by 12 three labs; right? 13 A That would be the case. 14 Q Okay. 15 A Yes. 16 Q Okay. If you go to Table II, it's the third 17 table; okay? 18 So their little legend there says Samples 19 which failed CTFA Method J4-1 Part I only by X-ray 20 Diffraction (amphibole detected at any statistically 21 significant level). 22 So you have literally every product that was 23 tested except for product number 2, J4-1 Part I 24 detected amphibole by x-ray diffraction; correct? 25 A Yes.
Page 792 1 if you go to page 2, he lists out the products. 2 Now, those are not in alphabetical order; 3 right? 4 A They're not. 5 Q He lists out the seven products that are being 6 tested; true? 7 A He does, yes. 8 Q Now, he doesn't number them 1 through 7, does 9 he? 10 A No, no. 11 Q Okay. 12 So we don't know for sure which one's which; 13 right? 14 A We certainly do not. 15 Q But we know the seventh one listed is Johnson's 16 Baby Powder; true? 17 A In that particular letter written three months 18 previously -- 19 Q Okay. 20 A -- it was the seventh. 21 Q Right. 22 A But, as you correctly say, we do not know for 23 sure that that was the case. 24 Q Well, I'm here to ask you, Johnson & Johnson, 25 do you know?	Page 794 1 Q Okay. 2 All right, sir. You can go ahead and set 3 that aside. 4 So we have then current productions from 1976 5 where there's quite a few that, at least according to 6 the industry's own standard, still contain amphibole 7 minerals; correct? 8 A By -- by that analysis, yes. 9 Q Right, and then at least three of them were 10 found to have failed Part I and II of J4-1; correct? 11 A By that analysis, yes. 12 Q Okay. 13 (Reporter clarification) 14 This next one will be Exhibit 165. 15 (Exhibit 165 marked for identification) 16 Right. This is from Jack Schelz, again at 17 Johnson & Johnson, and it looks like he's drafted a 18 form letter to the round robin participants; right? 19 A Yes. 20 Q Okay. 21 The first highlight: 22 "Inter-laboratory comparison of our Task 23 Force data indicates serious inconsistencies in the 24 results; i.e., three ... of the commercial products 25 have each been declared by two or three of the

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1 laboratories to have failed CTFA Method J4-1, Parts I &
 2 II (asbestiform amphibole detected at a level of ...
 3 [greater than or equal to] .5%)".
 4 And that's what you and I just went through?
 5 A We did, yes.
 6 Q Okay.
 7 "The sample code, which is still in my
 8 possession, has been released to no one".
 9 So the only company that had the code is
 10 Johnson & Johnson; right?
 11 A It doesn't say that. There could well be other
 12 companies or CTFA or FDA. They could well have been in
 13 possession of that code.
 14 What it -- what it says is the J&U employee,
 15 he's got a copy of the code, and it's not been released
 16 to anyone.
 17 Q Well, sir, Mr Schelz is the one running the
 18 round robin; correct?
 19 A He is a -- certainly a co-ordinator, yes, on
 20 the CTFA.
 21 Q He's the Chairman of the CTFA Task Force on
 22 round robin testing of consumer talcum products,
 23 Central Analytical Laboratories at J&J; right?
 24 A He's -- yes, he's acting in his role as a CTFA
 25 organizer.

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1 Q Right.
 2 You've not seen any other documents that
 3 anybody but Mr Schelz at Johnson & Johnson was
 4 co-ordinating this round robin; true?
 5 A As an individual, no.
 6 Q Okay. Right.
 7 And, as you sit here today as the company,
 8 you're not aware of any others; correct?
 9 A I'm not aware of other correspondence at that
 10 time which indicates any others.
 11 Q Right.
 12 If -- what Mr Schelz is saying here is: the
 13 sample code for the seven samples:
 14 "... which is still in my possession, has
 15 been released to no one".
 16 Right?
 17 A That is what it states, yes.
 18 Q If everybody else had the code, why would he
 19 feel the need to say that, sir?
 20 A I don't know.
 21 Q Okay.
 22 A I just made the comment that, as it stands,
 23 that that's what it says.
 24 Q Okay.
 25 Well, certainly Mr Schelz at J&J had the code

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1 for which samples were which; right?
 2 A In his role as a CTFA co-ordinator.
 3 Q Okay.
 4 Do you know if those codes were produced in
 5 this litigation?
 6 A I do not.
 7 Q Okay.
 8 "In view of this situation, you are urged to
 9 attend a meeting of this Task Force so that we might
 10 discuss these results and potential sources of
 11 difficulty. It will be necessary for us to deliberate
 12 on a further course of action which might include
 13 special training for the analysts and repeating the
 14 round robin".
 15 So he's saying one problem could be maybe
 16 your analysts were not trained; right?
 17 A That's what he states, yes.
 18 Q Okay.
 19 He's proposing retraining them; right?
 20 A Correct.
 21 Q Okay.
 22 MR GAFFREY: Can we just date that back?
 23 MR PANATIER: Yeah. That's April 21, '77.
 24 MR GAFFREY: Thank you.
 25

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1 BY MR PANATIER:
 2 Q This next document is 166.
 3 (Exhibit 166 marked for identification)
 4 Okay, sir. This is -- again, this is on CTFA
 5 letterhead; right?
 6 A It is, yes.
 7 Q It is the minutes of the CTFA Task Force on
 8 round robin testing of consumer talcum products, of
 9 which Mr Schelz is the head; correct?
 10 A Correct.
 11 Q At this meeting, you have Regina Gallagher from
 12 J&J, George Lee from J&J, and you have folks from
 13 McCrone, as well as numerous other industry and CTFA
 14 people, including two from the FDA; right?
 15 A Correct.
 16 Q Okay.
 17 "Dr Schelz ..."
 18 That's the J&J fellow; right?
 19 A Yes.
 20 Q "... opened the meeting by asking participants
 21 to introduce themselves and then stated the Task Force
 22 objectives as:
 23 1. 'Determine whether or not any 1976
 24 production of major commercial talc products contain
 25 asbestiform amphibole contaminants'".

Page 799 1 Which we already know three of them at least 2 did; correct? 3 A That's -- that's an interpretation, yes. 4 Q But you agree with that -- 5 A Yes, yeah. 6 Q -- based on the documents we've looked at? 7 A By the methods that are used. 8 Q Right, which was J4-1? 9 A Yes. 10 Q Which was their endorsed method? 11 A At that time, yes. 12 Q And it still is? 13 A By CTFA, yes. 14 Q Okay. 15 "Number 2.: 16 ""Test and verify CTFA Method J4-1 for this 17 purpose -- assurance that the method is accurate, 18 reliable and practical"". 19 Right? 20 A Yes. 21 Q It must be those things; correct? 22 A Yes. 23 Q "He then reported, these objectives have not 24 yet been achieved." 25 Right?	Page 801 1 this is an F; right? 2 A Yes. 3 Q Okay. 4 It says down second big paragraph: 5 "Dr Schelz then proposed a round robin 6 partial retest employing a TENTATIVE REVISION of Part 7 II (CTFA Method J4-1) which incorporates suggestions 8 from McCrone and other microscopists ... in which 9 instructions are more clear and precise". 10 So perhaps that was the reason they had this 11 failure of this round robin; right? 12 A It's a possible, yes. 13 Q Okay. All right. 14 Go down to the second to last paragraph: 15 "Dr Schelz proposed that the OSHA Field 16 Memorandum be retained as the working definition of 17 fibrous asbestiform (emphasis placed on 5 length: 1 18 width provision) ..." 19 Now, are you aware that the CTFA J4 was using 20 a definition of asbestos or fibrous asbestiform that 21 occurred in an OSHA field memorandum? 22 A I was not aware at that time, no. 23 Q Now, you see that Mr Schelz is proposing they 24 retain that definition; right? 25 A Yes.
Page 800 1 A That's what he reports. 2 Q Dr Schelz provided the results of the completed 3 first round robin test: 4 "... providing the following table ..." 5 And he has the products there and he's got 6 the spiked samples, right, and those -- that's a 7 summary of what you and I already looked at where, of 8 the seven samples, only one lab detected the CTFA 9 tremolite spiked talc of seven; correct? 10 A That's correct. 11 Q Now, one out of seven, that's what percentage 12 of seven? One seventh? 13 A Fourteen. 14 Q Fourteen per cent? 15 A Give or take. 16 Q Okay. 17 So if you took a test and you got a 18 14 per cent on it, that's -- that's like an F minus; 19 right? 20 A I'm sure. 21 Q I mean, okay, UK has letter grades, right, or 22 do they? 23 A Yes. 24 Q Okay. 25 Whether you're on letter grades or pass/fail,	Page 802 1 Q Do you know whether or not at this time OSHA 2 was still using that definition? 3 A I do not know what OSHA were stating in 1977, 4 no. 5 Q All right. Okay. 6 On the last page: 7 "Dr Schelz suggested that no attempt be made 8 to prevent more than one participant from sending ... 9 [labs][sic] to the same outside testing lab because 10 results could provide insight into that testing 11 laboratory's intra-laboratory's dependability". 12 Right? 13 A Yes. 14 Q So if two people sent their tests to the same 15 lab, and that lab came up with two different results, 16 that would show that that lab might have inconsistent 17 results; right? 18 A That's -- that's theoretically possible. 19 Q Right. 20 A What it states the testing laboratory's 21 inter-laboratory [sic] dependability, which is the 22 purpose of doing this, you would lose that by -- if 23 everyone sent them to the same lab, you wouldn't get 24 that level of divergence in results. 25 Q No, what he says is -- first, he doesn't say

Page 803 1 "inter-laboratory", he says "intra -- laboratory", 2 meaning inside one lab; right? 3 A Yes. 4 Q Meaning, let's say you -- let's say we took the 5 same sample, we divided it in two and we gave it to the 6 same lab, and in one they said positive and in one they 7 said negative, that would suggest the lab has a problem 8 with their consistency; right? 9 A It would, yes. 10 Q Okay. 11 A Yes. 12 Q You can see that aside. 13 So we know in May of '77, seven months after 14 the CTFA has adopted J4, they've done a round robin 15 with seven different labs and one lab got it right; 16 correct? 17 A Yes. 18 Q Okay. 19 Was J4-1 ever actually revised and adopted? 20 A I don't know whether J4-1 was revised. 21 Q Mmm hmm. 22 A But what we do know is that the ability of 23 outside and inside laboratories was certainly raised. 24 The quality of the ability was raised. 25 Q Sure.	Page 805 1 A He proposes that as a -- as a proposal, yes. 2 Q Right. 3 Do you know that it was ever actually 4 revised? 5 A I don't. 6 Q Okay. 7 If it's still in effect today, we know that 8 the one round robin -- are you aware of any other round 9 robins that were done on this? 10 A I'm not aware that any were. 11 Q Okay. 12 A I'm not aware that any were not done. 13 Q Okay. 14 But we know that, based on this test the CTFA 15 did, that the method, as employed by seven different 16 parties, including McCrone, were not finding asbestos 17 that was intentionally added; correct? 18 A At that early stage, that is the -- that is the 19 correct interpretation. 20 Q Right. 21 And by the way, Johnson & Johnson continued 22 to use McCrone after this date; right? 23 A Amongst other companies, yes. 24 Q Okay. 25 This next exhibit is 167.
Page 804 1 But what they -- what Mr Schelz's conclusion 2 was, a Johnson & Johnson employee, was that the method 3 had yet to be shown to be reliable -- his words -- 4 accurate, reliable and practical; right? 5 A Yes. 6 Q Okay. 7 That was his criticism of the method. 8 Now, that is a method that over the last two 9 days you have been talking to me about how it was 10 validated; right? 11 A Yes. 12 Q Okay. 13 A Yes. 14 Q This round robin test certainly would not 15 suggest it was valid at that point; right? 16 A At that point, what the author is suggesting is 17 that the objectives hadn't yet been achieved. 18 He's not actually criticizing the method at 19 this point. He's stating do the people who are doing 20 the testing require additional training in their 21 abilities to use the method. 22 Q Well, he proposes a revision of the method, 23 does he not? 24 A That's -- that's an option, yes. 25 Q Well, that's --	Page 806 1 (Exhibit 167 marked for identification) 2 August 9 -- 29, 1977. This is a status 3 report by George Lee to DD Johnston, and the subject is 4 Defense of Talc Safety; right? 5 A Yes. 6 Q And he's got a summary there, but he says: 7 "A brief status review of the talc safety 8 defense program is presented". 9 Right? 10 A That's the title, yes. 11 Q So Johnson & Johnson actually has a talc safety 12 defense program; right? 13 A Yes. 14 Q Okay. 15 Let me see here. Here's what I wanted to ask 16 you about. 17 I told you that -- I represented to you that 18 Mount Sinai didn't participate in the CTFA round robin. 19 If you'll go to page 2, please, do you see at the top: 20 "The CTFA Round Robin retest of major powder 21 brands is incomplete. Mt. Sinai Laboratory has not 22 co-operated". 23 Do you see that? 24 A That's what it states, yes. 25 Q Okay. All right.

Page 807 1 And then go back to the previous page. 2 So here we have Mr J Wenninger, Associate 3 Director of Cosmetics Technology, FDA. Johnson & 4 Johnson is saying that he expressed his opinion at the 5 NIOSH/OSHA asbestos workshop: 6 "... that CTFA's self-regulating action and 7 the prevailing data lead him to conclude that there are 8 no problems with present cosmetic talcum powders". 9 Right? 10 A That's what he states. 11 Q Okay. 12 Was Mr Wenninger at the CTFA meeting where 13 they talked about J4? 14 A No, he was not, but there were other people 15 from Food and Drug Administration present. 16 Q Yeah, so -- 17 A Two of his colleagues were present. 18 Q Right. 19 There were two people from FDA at the meeting 20 where it was clear that, in its current state, J4 was a 21 failure; right? 22 A Either the method was a failure or the ability 23 of the people using the method needed to be improved. 24 Q Including McCrone? 25 A I don't know whether any of those results -- we	Page 809 1 We don't know -- 2 A With -- with present cosmetic talcum powders. 3 Q Well, and, of course, what we saw when 4 employing J4-1, that at least three presently 5 manufactured talcum powders failed J4-1; right? 6 A By that particular test on that particular 7 round robin at that particular date. That's -- that's 8 the data we have, yes. 9 Q That's right. At that particular time and date 10 and by the particular method, the one adopted by CTFA, 11 they failed; right? 12 A On that particular date, yes. 13 Q Okay. So go ahead and go to the bottom of page 14 2. 15 It says: 16 "Corn starch market test is still underway. 17 Consumer attitude to corn starch is highly favorable, 18 with stated overall preference for starch". 19 Right? 20 A That's what it states. 21 Q Right? 22 A Yeah. 23 Q So at least at this point in 1977, the 24 consumers, at least according to Johnson & Johnson, 25 liked corn starch and preferred it?
Page 808 1 don't know whether McCrone actually was part of those 2 results, do we? 3 Q We certainly do. 4 A Do they -- did they fail to find? Okay. 5 Q In the previous -- and we can go back to that 6 document -- 7 A Sure. 8 Q -- if you'd like to? 9 A No, I'll take your word for it. 10 Q Okay. 11 A Okay. 12 Q McCrone was working on behalf of, I believe, 13 Avon and Mennen -- 14 A Okay. 15 Q -- when they did the round robin? 16 A Okay. 17 Q Okay, and they failed to see the spiked 18 tremolite. 19 So we have two scenarios: either these two 20 FDA guys that were at the meeting didn't report back to 21 Wenninger; or they did and Wenninger, in light of those 22 results, said, "Looks good to me"; right? 23 A Well, that's -- if Dr -- Mr Wenninger from FDA, 24 he expressed an opinion that there were no problems. 25 Q Okay.	Page 810 1 A That's what it states. 2 Q All right? 3 A Yeah. 4 Q All right. You can set that aside. 5 This will be 168. 6 (Exhibit 168 marked for identification) 7 Do you see, sir, that this is a Baby Products 8 Company Specification Change Request for Windsor 66 9 Talc; right? 10 A That's the grade that's used in baby powder. 11 Q That's right? 12 A Yes, yes. 13 Q And the date on this is June 27, '77; right? 14 A Yes. 15 Q And it says: 16 "Reason for change: To include a requirement 17 for the absence of asbestos in Windsor 66 Talc. 18 Right? 19 A Yes. 20 Q The presence or absence of asbestos in talc is 21 something that we've seen Johnson & Johnson addressing 22 since the mid50s with the Battelle studies; correct? 23 A Yes. 24 Q Okay, and the first time they put an actual 25 specification in for their talc that it contained no

Page 811 1 asbestos was 1977? 2 A Well, you showed me a document that says 1977. 3 I've not reviewed earlier ones where that word is used. 4 We do know that, even as far back as the late 5 1940s, the company used the words, "Freedom from 6 acicular needles", which would be a proxy for asbestos. 7 Q Okay. 8 So if we see "acicular needles", we know 9 they're talking about asbestos? 10 A That would -- asbestos would be included in 11 acicular needles. 12 Q Okay. 13 Now -- but here it says: we are changing the 14 specification for Windsor 66 to include -- which means 15 to add -- a requirement of absence of asbestos; right? 16 A That's what it states, yes. 17 Q If it already had a requirement for the absence 18 of asbestos, they wouldn't need to add it; right? 19 A If it already stated that, they would not. 20 Q Okay. 21 So it clearly did not before June of '77; 22 right? 23 A On the word "Windsor 66". 24 What I don't know is whether the general 25 overall wording of Johnson's Baby Powder talc would	Page 813 1 unreliable; correct? 2 A Correct. 3 Q All right. 4 Now, does this say anything, and I might be 5 missing it -- does it say anything about testing by 6 TEM? 7 A This is a factory specification. No, it does 8 not. 9 Q Okay. 10 A No. 11 Q Meaning the factory is required to do J4-1? 12 A No, this is an addendum to a specification. A 13 specification is normally three, four pages minimum. 14 I've not seen the actual specification that 15 preceded this, and to give an honest answer, I'd need 16 to see the actual four page specification that preceded 17 this. 18 Q Well, the actual four page specification for -- 19 that would include things like microbial content, 20 arsenic? 21 A PH. 22 Q Loss on ignition. All that stuff; right? 23 A Yes, yes, yes, as well as asbestos. 24 Q Well, it wouldn't say anything about asbestos, 25 because they're adding it here; right?
Page 812 1 have included that. 2 It relates to Windsor 66 talc. 3 Q How long had they been using Windsor 66 talc by 4 this point? 5 A Since '68. 6 Q Okay. So for about ten years; right? 7 A Yes. 8 Q And this is the first time that a requirement 9 that it be asbestos free is added to the specification; 10 correct? 11 A On the documentation you're showing me, that 12 would appear to be the case. 13 Q And this is your documentation, is it not? 14 A Yes, and what I said was I don't know if there 15 were earlier reports which required that. 16 Q Okay. 17 Now, by the way, so if you look at the second 18 page, it says: 19 "Add the following Description/Properties & 20 Requirements Section: 21 Asbestos (CTFA J4-1) none detected". 22 Right? 23 A Yes. 24 Q This is one month after the meeting where J4, 25 as run by seven different labs, was held to be	Page 814 1 A Well, it appears to be the case, but without 2 actually seeing the proper specification, this says: 3 we'll include a requirement. 4 Q Okay. A requirement for the absence of 5 asbestos? 6 A Correct. 7 Q They would not be adding this addendum if the 8 specification already required an absence of asbestos. 9 That's common sense; right, sir? 10 A On the face of it, it's common sense. 11 Q Okay. 12 A But if we're dealing with this analytically and 13 scientifically, I would expect to see the actual 14 specification that preceded this document. 15 Q Right. 16 Let's go ahead and take a break now, because 17 I'm missing a document. Might as well take it early, 18 if that's okay. 19 MS FROST: Okay. 20 (Off the record at 11:03 am) 21 (On the record at 11:16 am) 22 BY MR PANATIER: 23 Q Sir, our next exhibit will be 169. 24 (Exhibit 169 marked for identification) 25 You know what? I'm going to give you the one

Page 815 1 that's flagged, so you can know what to turn to; okay? 2 I don't have a copy of it. I only made the 3 two. So I'm going to try to remember what it is. 4 That is TM7024; right? 5 A Yes. 6 Q That is Johnson & Johnson testing's method -- 7 that's what TM means; right? 8 A It does. 9 Q For transmission electron microscopy for 10 asbestos in talc; right? 11 A Yes. 12 Q And what is the date on that? 13 A April 11, 1977. 14 Q Right. Now, that's the earliest iteration of 15 TM7024 I could find. 16 Are you, as the company, aware of any earlier 17 version of that testing method? 18 A Not with a Johnson & Johnson letterhead, no. 19 Q Okay. All right. 20 Now, that would be Johnson & Johnson's method 21 for TEM that they authored or put together; right? 22 A I would assume so, yes. I would also assume it 23 related to in house testing, but it's an assumption. 24 Q All right. 25 Take a look at the first flag, and there	Page 817 1 Q That's fine. 2 And do you know what the detection limit is 3 of TM7024? 4 A I don't know at this instant, no. 5 Q Okay. All right, sir. 6 There's one more highlight there. It says: 7 how large is the sample that they're supposed to take? 8 A .1 gram. 9 Q Okay. So one tenth of a gram? 10 A Correct. 11 Q Is what is sonicated, and then they pull a 12 small drop from that; correct? 13 A They do, yes. 14 Q Okay. All right, sir. You can set that aside. 15 Now, I think this helps us answer the 16 question or the proposition you just made, which is -- 17 this is going to be Exhibit 170. Okay. See what that 18 one is. 19 A That doesn't have a number yet. 20 MR PANATIER: Sharla, I'm sorry, what exhibit 21 number was that? 22 MR FROST: That was 169. 23 MR PANATIER: 169. 24 MS FROST: Yes. 25 MR PANATIER: Okay. So 170. Okay.
Page 816 1 should be a highlight, and what does that first 2 highlight say? 3 A It's Analysis Time. 4 First sample: one man hour. 5 Each additional sample: one man hour. 6 Q Do you know how much or how in depth analysis 7 can be for TEM when looking for asbestos in talc in one 8 hour? How much you can actually do? 9 A I don't. 10 Q Okay. 11 If you'll go ahead and -- is there another 12 highlight on that page? I don't think there is. Go to 13 the next page. There should be a highlight on that 14 page. 15 What does that say? 16 A It says: 17 "Ultrasonic dispersion of the talc powder in 18 a carrier liquid is utilized as the sample preparation 19 technique". 20 Q All right. 21 Now, have you looked at this method before 22 today? 23 A I've not read it, certainly not in the recent 24 past. I may have done in the distant past, but it's 25 not immediately familiar to me.	Page 818 1 (Exhibit 170 marked for identification) 2 Here it is right here. 3 So this is a document from 1983 from McCrone 4 where McCrone is writing to Johnson & Johnson and they 5 are returning the results for a sample; correct? 6 A Yes. 7 Q And they say no asbestos was found in the 8 sample, and it is HV66. 9 Now, that is Vermont 66; correct? 10 A I would think that's a reasonable assumption. 11 Q Okay. 12 A Yes. 13 Q It says it was prepared according to test 14 method BPC -- Baby Products Company, right -- 7024; 15 right? 16 A Yes. 17 Q And examined by TEM electron microscopy. 18 So it is the method that Johnson & Johnson 19 was having outside labs employ to test their product; 20 correct? 21 A Correct. 22 Q Okay. 23 McCrone says: 24 "The detection limit of this technique is 25 approximately .1% by weight of asbestos".

Page 819

1 Right?

2 A That's what it states, yes.

3 Q Okay.

4 That's not very low, is it?

5 A If that's correct, correct. I would agree.

6 Q Okay, because we saw before Johnson & Johnson

7 authored this test method or began employing it, we saw

8 that some of McCrone's detection limits went down to

9 .0001; right?

10 A Yes.

11 Q Okay.

12 This is -- this would be, what, a thousand

13 times less detection than what McCrone was doing

14 before?

15 A If they were following that particular test

16 method, yes.

17 Q Okay.

18 It's clear, at least from this paper, that

19 J&J had asked McCrone to follow their test method;

20 right?

21 A They'd asked them to do a test, a test --

22 Q Mmm hmm?

23 A -- using that test method.

24 Q Right.

25 In looking over the document, sir, did you

Page 820

1 look and see how many times McCrone received samples

2 from Johnson & Johnson employing test method 7024?

3 A I did not.

4 Q Okay. All right, sir. You can set that aside.

5 And when it comes to testing, if there's an

6 outside lab, typically, they do whatever the client

7 wants in terms of: we want you to test this much or

8 this often to this detection limit or using these

9 methods; right?

10 A That's -- that's normal.

11 Q Okay.

12 A You'd request a test to a certain protocol.

13 Q Okay.

14 This next one is going to be Exhibit 171.

15 (Exhibit 171 marked for identification)

16 There you go, sir.

17 Now, we just jumped ahead to March of 2012;

18 do you see that?

19 A Yes.

20 Q This is a contract manufacturing audit of a

21 company called RJ Lee?

22 A Yes.

23 Q All right.

24 Now, who's RJ Lee?

25 A It's a company who, amongst other facilities,

Page 821

1 has the ability to test product for quality of talc.

2 Q Okay.

3 And they are someone who I think we

4 established yesterday has been testing for asbestos in

5 talc for Johnson & Johnson for well over a decade,

6 perhaps 15 years or so?

7 A Yes, they're --

8 Q Maybe 20?

9 A -- certainly one of -- one of several

10 companies --

11 Q Okay?

12 A -- that have been used.

13 Q And Johnson & Johnson, as a big company, I

14 guess you guys have regular cost control measures that

15 mean you audit your contractors from time to time;

16 right?

17 A Yes.

18 Q Okay.

19 Now, this audit of RJ Lee is March of 2012,

20 and how often were they audited?

21 A Well, we can hypothesize because it says date

22 of next audit is quarter one, 2014.

23 So, as this report was quarter one 2012, the

24 hypothesis would be two-yearly.

25 Q Okay. Two times yearly?

Page 822

1 A No, every two years.

2 Q Every two years?

3 A Yes.

4 Q So we should have an audit report of RJ Lee, so

5 long as they were a contractor, for every two years;

6 fair?

7 A Not necessarily.

8 Going forward, one would expect to see that,

9 but retrospectively, I couldn't answer that.

10 Q Okay. So going forward from 2012, we should

11 have one for 14 and 16; right?

12 A Well, it does say "tentative" next audit --

13 Q All right.

14 A -- 2014.

15 Q All right.

16 If you want, sir, can you please turn to the

17 page -- it's 5 of the audit, and it says Observation;

18 right?

19 There's a table there?

20 A Yes.

21 Q Observation, observation rating, root

22 cause/corrective action and target or actual completion

23 date; right?

24 A Yes.

25 Q And under number 4 -- well, it says:

Page 823 1 "There was evidence of deficiencies in the 2 document control process". 3 Right? 4 A That's what it states. 5 Q Okay. 6 It says they were missing, under number 2: 7 "Specifications/SOPs/Test Methods were not 8 readily accessible for use at the point where required. 9 More than one analyst was working from notes versus the 10 testing document". 11 Right? You see that? 12 A Yes. 13 Q And under Observation Rating, it says 14 "critical"; right? 15 A Yes. 16 Q Number 4 says: 17 "There was no current [test method] ... 7024 18 for Asbestos at the site. RJ Lee also indicated that 19 the test method was not an optimal method for asbestos 20 testing". 21 Right? 22 A That's what they state, yes. 23 Q So in 2012 the test method has been in effect 24 since at least 1977; right? 25 A That's been a J&J test method.	Page 825 1 correct? 2 A They're saying they're not using it, yes. 3 Q Okay. 4 Let's go to the next page -- no, they're not, 5 no -- 6 A No, they're not. No, I'll grant you that. 7 They're saying there was no method. There 8 was no copy of that method at the site. 9 Q Yeah. They didn't say they weren't using it. 10 A No, it doesn't. It doesn't say they were using 11 it either. 12 Q It just says they didn't have a test -- a copy 13 of it; right? 14 A They didn't have a copy of it. 15 Q And the fact that they noted that they didn't 16 have a copy of it and said that this was critical 17 suggests that they should have had a copy of it because 18 Johnson & Johnson took the time to make a note that 19 they didn't have it? 20 A They did. 21 Q Okay. 22 Next page under Observation Ratings, these 23 are all major -- well, this one's major. 24 For RJ Lee, the second one down, it says: 25 "There is no overall housekeeping process
Page 824 1 Q That's right. TEM 7024? 2 A Yes. 3 Q Right. 4 And here in 2012, RJ Lee tells Johnson & 5 Johnson: 6 "... the test method was not an optimal 7 method for asbestos testing". 8 Correct? 9 A That's what they state. 10 Q Okay. 11 A And one assumes they're using their own test 12 method. 13 Q Well, do you know what they're using? Are you 14 just -- 15 A Unless I've seen a report to say what test 16 method they were using, if they didn't have a copy of 17 the test method, they would -- could well be using 18 their own test method. 19 Q You don't know what they're using? 20 A Not from this document, no. 21 Q Okay. 22 A You'd need to see it on an actual report. 23 Q Either way, they're telling Johnson & Johnson 24 that 7024, which is J&J's method that we saw that they 25 gave to McCrone, is not optimal for asbestos testing;	Page 826 1 that insures cleanliness in the facility and 2 laboratories -- particulate matter observed on balance 3 and in sample chamber of FTIR and XRF". 4 Do you know what those are? 5 A FTIR is a microscope, Fourier Transform 6 Infrared. 7 XRF, sorry, I don't, no. 8 Q Okay. 9 "The laboratory areas were cluttered 10 including the standard solutions that were stored in 11 the XRD laboratory hood." 12 Now, we know what XRD is; right? 13 A Yes. 14 Q Okay. 15 "Procedure CHEM-0009 does not have an 16 indication as to what labware has been cleaned. There 17 needs to be some indication of clean labware versus 18 labware not yet cleaned." 19 Right? 20 A Yes, that's what's stated, yes. 21 Q So these were deficiencies, among others, that 22 were noted by Johnson & Johnson in this specific audit; 23 right? 24 A Yeah, they're typical housekeeping comments, 25 yes.

Page 827 1 Q Right. 2 I mean, housekeeping's pretty important when 3 you're talking about testing substances for asbestos; 4 right? 5 A Yes. 6 Q I mean, we saw this issue in 1971 with Colorado 7 School of Mines; right? 8 A Yes. 9 Q They wrote you and said: all our positive tests 10 on the samples we did for you were invalid because we 11 must have contaminated them all; right? 12 A They -- they did, yes. 13 Q Okay. You can set that aside. 14 Okay. We're going to go back to the '70s. 15 So this is Exhibit 172. 16 (Exhibit 172 marked for identification) 17 This is William C Waggoner, Manager, Medical 18 and Regulatory Affairs at Johnson & Johnson. 19 Did you know him? 20 A No, I never met him. 21 Q Okay. 22 A No. 23 Q And he's writing to Gordon Wurster at United 24 States Pharmacopeial Convention. 25 Now, that's commonly referred to as USP;	Page 829 1 A It's quasi governmental, yes. 2 Q It's not governmental, though? 3 A Correct. 4 Q Right. 5 I mean, you could say I'm a quasi basketball 6 player, but if you ever saw me trying to do a layup, 7 you'd probably say I wasn't. 8 But, anyway, what Johnson & Johnson says here 9 to the USP is: 10 "Thank you for the information on the USP 11 ..." 12 That looks like 19 Talc Monograph. 13 "We understand that the statement, 'Do not 14 inhale', under dispensing information for talc was 15 placed there only as a suggested precaution in case the 16 talc contained asbestos. 17 Current information does not indicate that 18 the warning is needed for talc, and we feel strongly 19 that the statement should be removed". 20 Right? 21 A Yes. 22 Q Okay. 23 So Johnson & Johnson is advocating to USP 24 that a "Do not inhale statement" not be required; 25 correct?
Page 828 1 right? 2 A It is, yes. 3 Q And USP's not a government organization, is it? 4 A No. 5 Q It's a trade organization; correct? 6 A No, no. 7 Q What would you call it? 8 A It's a quasi government organization. 9 It is not -- it's not like CTFA or those kind 10 of organizations where different companies come 11 together. 12 The role of the United States Pharmacopoeia 13 is to set a quality standard for drugs mostly and 14 excipients; drugs, being aspirin, acetaminophen, maybe 15 heart drugs, beta blockers, all those kind of things, 16 and they will create a standard of quality and purity. 17 And, likewise, what are called excipients; 18 so, for example, talc is used in tablet-making. When 19 you take an aspirin, there's usually talc in that 20 product, or could be talc in that product. 21 So they set a standard for the use of an 22 excipient in a pharmaceutical preparation. 23 Q Okay. 24 So in answer to the question, "What is USP?" 25 you said it was a quasi governmental agency?	Page 830 1 A On pharmaceutical talcs, yes. 2 Q Right. 3 A This is products that are sold for the drug 4 industry. 5 Q Well, they certainly didn't have a "Do not 6 inhale" warning on their product yet, did they? 7 A Correct. 8 Q And didn't for another 12, 13 years; correct? 9 A Correct. 10 Q All right. You can set that aside, sir. 11 MR GAFFREY: What was the date of that, 12 Chris? 13 MR PANATIER: Sorry. That's 8.26.77. 14 MR GAFFREY: Thank you. 15 BY MR PANATIER: 16 Q All right, sir. This will be Exhibit 173. 17 (Exhibit 173 marked for identification) 18 All right, sir. This is CTFA again. This is 19 the task force on the round robin testing; right? 20 A Yes. 21 Q Okay. December 6, 1977. 22 It says, and of course there's one guy there 23 from FDA, Clifton Wilson, and Mr Schelz is kind of 24 leading the charge. He's the Chairman here? 25 A He's the chairperson, yes.

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1 Q "Dr Schelz opened the meeting with a detailed
2 discussion of the results of the Round Robin analyses.
3 Dr Schelz recommended the following modifications of
4 method J4-1".
5 For fibrous tremolite to allow .9 to
6 1.5 per cent by weight; right?
7 A That's what it states.
8 Q For massive tremolite, .2 to .5 per cent by
9 weight; right?
10 A Yes.
11 Q And for anthophyllite, to allow 2 to 4 per cent
12 by weight?
13 A That's what it states.
14 Q Right?
15 A That's what they stated in '77, yes.
16 Q Yeah.
17 So here's where I'm confused. You told me
18 that Johnson & Johnson had a zero tolerance policy for
19 asbestos; correct?
20 A For Johnson & Johnson products, yes.
21 Q Right.
22 And here is an employee of Johnson & Johnson
23 and he is heading up the CTFA Task Force for J4-1;
24 right?
25 A Yes.

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1 Q He's the Chairman of that Task Force and he is
2 advocating that the limits -- I guess these would be
3 for the detection limits; right?
4 A That's a guess, yes.
5 Q Right.
6 Either he's advocating for an allowance of
7 this much of each of these materials, or that he would
8 say those should be the detection limits for J4-1;
9 right?
10 A That's not clear, but ...
11 Q It's one of those two things; right?
12 A Yes, yes.
13 Q Okay.
14 And he is advocating an allowance of up to
15 1.5 per cent fibrous tremolite; right?
16 A That's what's stated.
17 Q And he's advocating up to .5 per cent of
18 massive tremolite; right?
19 A Yes.
20 Q And up to 4 per cent anthophyllite; right?
21 A That's what's stated.
22 Q Because we know from the previous testing that
23 has been done that if you have 1.5 per cent of fibrous
24 tremolite or 4 per cent, or even 2 per cent of
25 anthophyllite, that should be detected by J4-1; right?

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1 A It should be, yes.
2 Q Okay.
3 Do you know whether or not the CTFA Task
4 Force ever adopted those detection limits for fibrous
5 tremolite, massive tremolite and anthophyllite?
6 A I don't know the answer to that question.
7 Q That is certainly not an advocacy for zero
8 tolerance for asbestos, is it?
9 A It is not.
10 Q You can set that aside.
11 Okay. This will be Exhibit 174.
12 (Exhibit 174 marked for identification)
13 I'm going to jump into the '90s here. It is
14 two pages, so just try to hold them together.
15 Let me staple those for you, since that's the
16 exhibit. Okay. Here you go.
17 A Thank you.
18 Q Right. So that is January 10, 1994; right?
19 A That's the date, yes.
20 Q And this is a Summary of Raw Material and
21 Finished Product Testing for Baby Powder Talc; right?
22 A Yes.
23 Q So, theoretically, there's a raw material test,
24 and then the finished product should be tested; right?
25 A Yes, yes.

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1 Q This is January of '94, for our context.
2 "As per your request, I have tabulated the
3 testing performed on the raw material and finished
4 product for Baby Powder Talc ..."
5 And he talks about all sorts of different
6 characteristics; right?
7 A Yes.
8 Q Okay.
9 And if you look on the second page, sir, for
10 asbestos, it says CTFA J4-1 frequency, composite of two
11 silos and (B) each silo; right?
12 A Yes.
13 Q And 7024 (TEM) which is the test method you and
14 I have talked about; right?
15 A Yes.
16 Q Quarterly composite of all silos, monthly
17 composite of float feed; right?
18 A Yes.
19 Q Okay.
20 Now, how much material in a month goes
21 through the float feed?
22 A Several tons. I don't know the exact number,
23 but many tons.
24 Q So how would one take a composite of the float
25 feed? Does it go into a holding bin somewhere?

Page 839 1 Q It says for 1A -- that would be the CTFA J4 2 XRD/optical method; right? 3 A Yes. 4 Q "A composite sample is made from every two 5 completed silos ..." 6 Meaning once you fill two silos, you take a 7 composite; right? 8 A Yes. 9 Q "... labeled with silo numbers and production 10 dates and forwarded to J&J Consumer Products for x-ray 11 diffraction. Results are reported to Windsor 12 Minerals". 13 Right? 14 A Yes. 15 Q So Johnson & Johnson is doing the J4 and giving 16 the results to Windsor; right? 17 A Yes. 18 Q Okay. 19 1B, which is for transmission electron 20 microscopy, that's TM7024? 21 A Yes. 22 Q Right? 23 "Quarterly composite samples of above silo 24 samples will be evaluated by TM 7024 by CPI and data 25 reported to Windsor Minerals".	Page 841 1 Let's talk about those. This will be Exhibit 175. 2 (Exhibit 175 marked for identification) 3 There you go, sir? 4 A Thank you. 5 Q Okay. So you've got a two page document there, 6 and the reason I chose two pages is these are slightly 7 different dates, in the mid-90s for the Windsor Mill, 8 but it's a diagram of sort of the layout of all the 9 different equipment and the silos, and all of that. 10 Do you see that? 11 A Yes. 12 Q Okay. 13 Now, one's better than the other. So if you 14 want to look at the front page first, we can look at 15 that one first. 16 But you see over in the top right there are 17 the silos listed there? 18 A Yes. 19 Q Right. 20 And those silos each measure 325 tons; right? 21 A Yes. 22 Q So if you're doing CTFA J4-1 every time you 23 complete two silos and you're taking one composite of 24 two silos; right? 25 A Yes.
Page 840 1 Who is CPI? 2 A Consumer Products Incorporated. 3 Johnson & Johnson. 4 Q So that's Johnson & Johnson again? 5 A Yes. 6 Q Okay. 7 So Johnson & Johnson is either doing an 8 internal evaluation or perhaps they're sending it to 9 somebody else? 10 A Yes. 11 Q Okay. 12 So for J4-1 we have a composite of every two 13 completed silos, and for quarterly TEM we're going to 14 have a composite of all silos; right? Of all the silo 15 samples that have been taken that quarter? 16 A Yes. 17 Q Right? 18 A Yes. 19 Q Okay. 20 How many silos could they fill per quarter? 21 A I don't know. 22 Q All right. 23 A Several. 24 Q Okay. 25 Well, I have some diagrams of these silos.	Page 842 1 Q Then you are taking one sample of a few grams 2 that is representative of 650 tons; right? 3 A Yes, yes. 4 Q Okay. 5 And if you're taking quarterly -- you're 6 taking one tenth of a gram of all those composite grams 7 for however many silos you filled in the quarter; 8 right? 9 A Yes. 10 Q Okay. 11 Now, they've got 12 silos listed there, silo 12 1 through silo 12. 13 A Yes. 14 Q Now that you're looking at this, do you have 15 some appreciation for how many of these 325 ton silos 16 they were able to fill in a -- in a quarter? 17 A Several, certainly. 18 Q All right. 19 A Yeah. 20 Q All right. 21 But what we know is that whenever J&J, and 22 this is their protocol, their testing protocol -- 23 whenever they did J4-1 on two silos, it was one several 24 gram sample from 650 tons of talc; right? 25 A Yes.

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1 Q Okay. You can set those aside, sir.
 2 So those testing specifications we were
 3 looking at, I'll be honest with you, those sort of silo
 4 composite samples and then the quarterly samples, I
 5 didn't find anything earlier than I think the late '80s
 6 or early '90s for that.
 7 I could easily be wrong, because there's so
 8 many documents in the case.
 9 Can you tell me, as the company, when Johnson
 10 & Johnson began doing the J4 on two full silos, and
 11 then quarterly TEM as a routine?
 12 A I don't know the answer to that, but certainly
 13 before the date that was highlighted, 1994.
 14 Q Okay.
 15 A Way before.
 16 Q When way before?
 17 A Well, we know that the company adopted
 18 transmission electron microscopy in the early '70s, as
 19 it was being developed with McCrone, although they
 20 didn't buy their own transmission microscope in house.
 21 So they were certainly doing regular testing
 22 and auditing on batches, and you've put up some
 23 batches --
 24 Q Mmm hmm.
 25 A -- in the last couple of days, 1973, '74, which

Page 844

1 were being evaluated.
 2 So on regular batches, there was a regular
 3 evaluation.
 4 Q And I guess what I'm asking is, yeah, I have --
 5 I was able to find some during different times?
 6 A Yes.
 7 Q To me it appeared that sometimes it was for
 8 part of the year it seemed to be regular, and then
 9 you'd see a gap in time and then it would come back.
 10 But that's just my evaluation of the
 11 documents.
 12 So can you tell me, as you sit here right
 13 now, and let's just say before 1970 did Johnson &
 14 Johnson have a routine test method where their talc was
 15 being tested for asbestos?
 16 A Before 1970, they were using x-ray diffraction.
 17 Q I understand what method was employed if there
 18 was testing.
 19 A Yes.
 20 Q Was there a routine testing method prior to
 21 1970?
 22 A The answer is yes, and I think the evidence for
 23 that is that there was a specification going back to
 24 the late '40s, early '50s which, as we mentioned
 25 earlier this morning, requires under microscopical

Page 845

1 analysis an absence of acicular crystal, which is --
 2 would have picked up asbestos were it present.
 3 Q There's a specification, and actual testing are
 4 two different things; right?
 5 A Yes.
 6 Q In order to meet the specification, the testing
 7 has to occur at some routine period; right?
 8 A Yeah, and the -- you know, going back to that
 9 stage, people talk about testing each batch, which
 10 would have been a manufacturing batch.
 11 Now, I don't know what size the manufacturing
 12 batch was in the late '60s, early '70s, and of course
 13 at that point when you said you didn't find all the
 14 records, the business at that time was the Windsor
 15 Minerals, which is not part of Johnson & Johnson at
 16 this time.
 17 Q Right. It became part of Johnson & Johnson
 18 when?
 19 A 1988. Yes, '88, '89. So that timeframe.
 20 We'll say '89.
 21 Q Okay, but during the -- during the '90s --
 22 A Sorry, hang on. That's when we sold it.
 23 Q Yeah.
 24 A It was no longer part of Johnson & Johnson --
 25 Q In '89?

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1 A -- in '89. That's what I meant to say.
 2 Q Right.
 3 A Yes. So it would not be unreasonable, after
 4 1989, that you don't have all the records.
 5 Q I understand.
 6 What I'm -- now let's get the dates straight.
 7 A Yeah.
 8 Q Windsor Minerals was part of Johnson & Johnson
 9 until 1989?
 10 A Yeah, until -- from 1968, yes.
 11 Q Okay.
 12 A And I meant to say 1968, it was owned by J&J,
 13 but from about '89, it was sold to Cyprus Minerals.
 14 So hence you may not find all of the records
 15 that you may be looking for.
 16 Q Okay.
 17 Did Cyprus, after 1989 when they bought
 18 Windsor Minerals, did they provide routine testing to
 19 Johnson & Johnson?
 20 A After 1989 --
 21 Q Yes?
 22 A -- that was the -- yes, that's my understanding
 23 that they would do the same test process, yes.
 24 Q Now, let's go back to the '60s.
 25 A Yeah.

Page 847 1 Q We're going to do the '60s and the '70s. 2 A Yeah. 3 Q I think we have a clear -- slightly clearer 4 picture for the '80s, but for the '60s you said there 5 was a requirement that you not have needle-like 6 acicular particles; right? 7 A Crystals, yes. Particles, yes. 8 Q Okay. 9 (Reporter clarification) 10 Are you able to direct me, as the company, to 11 a document that would tell me what methods were 12 employed specifically on how much and what the 13 frequency was of that testing? 14 A Okay. The methods, certainly back in the 15 1950s, were optical microscopy. 16 What was -- optical microscopy. You can look 17 under a microscope. Back in the '50s -- '40s and '50s, 18 and that was supposedly done on each batch. 19 What I don't have the information is what was 20 the size of the batch. 21 Q And my question to you -- I appreciate that -- 22 my question to you is: what document do I look at that 23 tells me that? 24 A I understand that somewhere in the data that 25 was provided there is a specification for talc from	Page 849 1 A Okay. 2 Q Right? 3 A Yeah, yeah. 4 Q I may have looked at more. 5 A I think that's probably true. 6 Q Okay. 7 And perhaps I've spent too much time on that, 8 but I did not see routine testing from the late '40s, 9 '50s, or even the '60s. 10 So I'm asking you, as the company, can you 11 tell me, can you tell the jury where the results are? 12 A I don't know the answer to that question. In 13 fact, it could well be that they are in a factory 14 that's -- you know, that was closed. 15 The product was manufactured and filled in 16 North Brunswick at a factory called ESDP, and I think 17 probably elsewhere, maybe Chicago. There were 18 certainly manufacturing operations were going on, and 19 maybe they were in those manufacturing plants. 20 But I don't have them. I've not seen them. 21 Q Okay. 22 A I have spoken to -- we mentioned his name, Mr 23 Bill Ashton. We used to call him "Mr Talc", and Bill 24 told me there was regular checks on the manufactured 25 product on a batch to batch basis.
Page 848 1 1949 onwards, or late '40s onwards. 2 I have seen that. 3 Q Right. 4 Then so at one point you have said it was 5 optical, and at another point you said it was XRD in 6 the '60s? 7 A That would be later. 8 In the 1940s, it was optical. 9 Q Okay. Then it moved -- 10 A And some point later when x-ray diffraction 11 became an established test method, and I don't have the 12 date when XRD was introduced, XRD was added to the mix, 13 yes. 14 Q And if there was regular testing in the '40s -- 15 late '40s? 16 A Yeah. 17 Q '50s and '60s, where is it? 18 A Do you mean the results? 19 Q The results? 20 A I don't know. 21 I've not -- you know, I've not -- I've seen 22 the same documents that you have. In fact, you've seen 23 more than I have. 24 Q Well, no, I've -- I've had them, the same exact 25 documents available to me that you have.	Page 850 1 Q Yeah. 2 Sometimes -- 3 A That's verbal. 4 Q Sure, and I appreciate that. 5 Sometimes I've seen references to 6 "macroscopic analysis"; right? 7 A Under a microscope. 8 Q No. I'm using the word macroscopic? 9 A That's fine. 10 Q Which literally means I looked at it with my 11 eyeballs; right? 12 A Yes. Okay. 13 Q Okay? 14 Now, in some ways that's a way in a very kind 15 of crude way to say, "Well, that rock looks good, that 16 rock does not look good"; right? 17 A Yes. 18 Q Okay. 19 And sometimes you could say, "Well, I could 20 tell that rock's going to have those needle-like 21 particles in it for sure. I'll get rid of that"; 22 right? 23 A Yes. 24 Q But we don't actually have the results to sit 25 here and go over, do we?

Page 851 1 A No, no. 2 Q Now, in the '70s, okay, we have seen some 3 testing. 4 Do you know -- can you testify that Johnson & 5 Johnson, in what they have provided in this case, has 6 given us all of the testing to the extent it was 7 periodic, that was done in the early '70s? 8 A I can testify that everything that you have or 9 have been given is everything that was available. 10 There is no more documentation. There is -- none has 11 been retained or redacted. 12 Q Okay. 13 And you said that certainly the regular 14 testing that is discussed in these 1990s documents 15 happened earlier than the 1990s, and I believe you. 16 A Yes. 17 Q But for the -- let's say from 1977 to 1970, 18 okay, so that seven years or so? 19 A Yes. 20 Q We have seen some testing and we have seen that 21 some testing was done, but what was the protocol at 22 that time, and do we have a document that says that? 23 A If we don't have a document, either in this 24 room or in your files, it's certainly not in my files. 25 I don't have any additional documentation.	Page 853 1 It's a question that one would need to put to 2 people who were involved in the manufacturing. 3 Q Okay. The next document is going to be 176. 4 (Exhibit 176 marked for identification) 5 So this is a document -- it's a PowerPoint 6 put together by the FDA and given by John Gasper, a 7 chemist at the Office of Cosmetics and Colors, 8 December 15, 2009; right? 9 A Yes. 10 Q And Johnson & Johnson attended this meeting; 11 correct? 12 A 2009. Yeah. I don't know. 13 I certainly didn't, but it's quite possible. 14 Q Okay. 15 A I'm sure it's possible that someone from 16 Johnson & Johnson attended. 17 Q And I'll represent to you that there are 18 numerous follow up emails within Johnson & Johnson 19 regarding this; okay? 20 A Yes. I'll accept that, yes. 21 Q Okay. 22 So let's just look at some of the things the 23 FDA says here. 24 So if you go to -- the pages are not 25 numbered, because it's a PowerPoint, but if you go to
Page 852 1 Q As you sit here today, can you say, "I am 2 aware, I have reviewed a document that tells me what 3 the frequency and testing policy was that would tell us 4 how often and on how much was tested in the '70 to '77 5 time period"? 6 A I've not reviewed that document. If it 7 existed, you would have a copy. 8 What I can say is, having spoken to Mr Bill 9 Ashton, who was an employee from approximately 1950 10 to -- he was still as a consultant well into the 2000s, 11 he told me verbally that, and I recognize that's 12 hearsay -- that, verbally, it was -- that analysis -- 13 sorry, that microscopic examination was done on a 14 regular batch basis. 15 But I don't have the definition of a batch. 16 Q Okay. 17 Right. When Johnson & Johnson sold Windsor 18 Minerals to Cyprus in '89 -- 19 A Yes. 20 Q -- did Johnson & Johnson give all the sort of 21 documents that went along with the running of that 22 operation to Cyprus? 23 A I can't answer yes, I can't answer no because, 24 again, that was a manufacturing operation and I've not 25 been involved in that manufacturing operation.	Page 854 1 there's a page called Talc Questions and it's -- the 2 first question is: Is cosmetic talc safe? 3 Right? 4 A Yes, yes. 5 Q And so Mr Gasper from the FDA puts out some 6 hypothetical questions: 7 "Is cosmetic talc safe? 8 What is the actual composition of talc used 9 in cosmetics? 10 Is asbestos present? 11 Specifically, at what level? 12 Does this level present a significant health 13 risk?" 14 Right? 15 A Yes. 16 Q So here in '09, the FDA is asking these sort of 17 hypothetical questions about cosmetic talc and 18 mentioning asbestos; right? 19 A Yes. 20 Q Okay. 21 Go ahead and turn two more pages. This one 22 is entitled: 23 "Why Doesn't FDA Have This Information?" 24 Right? 25 A Yes.

Page 855 1 Q So the FDA has asked this question. It's at 2 the top of their PowerPoint slide: 3 "Why Doesn't FDA Have This Information?" 4 Bullet point one: 5 "Cosmetics not subject to pre-market approval 6 as industry does not routinely submit data". 7 Now, that's a true statement; correct? 8 A Yes. There's no requirement for premarket 9 approval for cosmetics. 10 Q Okay: 11 "Ambiguity in Specifications 12 -- different ones exist. 13 -- which ones are followed? 14 -- are they being followed?" 15 These are some other questions the FDA has; 16 right? 17 A That's correct. 18 Q Okay. 19 The next one, he talks about different 20 analytical methodology. We don't have to go over that. 21 But his next page is: 22 "How can FDA obtain this information?" 23 Right? 24 A Yes. 25 Q That's all it says on that page; right?	Page 857 1 Right? Okay. 2 So here's my question, which is: to this 3 date, industry is not required in any way to give the 4 FDA anything; right? 5 A There's no -- Congress has never required the 6 cosmetic industry to provide that information to FDA. 7 And, of course, the same applies pretty well 8 around the world. You can -- you don't need premarket 9 approval pretty well anywhere in the world for 10 cosmetics. 11 Q Right. 12 Now, the closest we saw to them getting there 13 was the FDA's proposed regulation in '73, which the 14 CTFA convinced them not to go forward on, on the 15 promise of self-regulation; correct? 16 A Yes. 17 Q Okay. 18 This will be Exhibit 177. 19 (Exhibit 177 marked for identification) 20 And this here is a -- you can see it's got 21 the Johnson & Johnson Bates stamp on it; right? 22 A It does. 23 Q And this is a record of FDA talc submissions, 24 and these are communications between Johnson & Johnson 25 and the FDA; right?
Page 856 1 Now, if you turn to two more pages: 2 "Industry Can Volunteer Information". 3 Right? 4 A Yes. 5 Q And certainly we've seen communications between 6 Johnson & Johnson and the FDA way back in the '70s over 7 and over and over again; right? 8 A Yes. 9 Q Where they're -- 10 A Yeah. 11 Q -- providing some data and they're advocating 12 certain positions; right? 13 A Yeah. The FDA and Johnson & Johnson, and 14 indeed other cosmetic companies, regularly would meet 15 with FDA if FDA had a question. 16 Q And we know that the FDA in mid-March of 1976 17 asked the CTFA if it would provide results of the 18 company's periodic monitoring for asbestos; right? 19 A Yes. 20 Q And ultimately the CTFA voted against doing 21 that; correct? 22 A Apparently, yes. 23 Q Okay. 24 And then that's all that's there. His last 25 slide is "Questions?"	Page 858 1 A Yes. 2 Q And I actually did go through and count these 3 up. It goes from -- this is from July of '71 to 4 October of '79. 5 A Yeah. 6 Q Right? If you look on the last page? 7 A Yeah. 8 Q And you don't have to go count them up, but I 9 counted about a hundred communications between Johnson 10 & Johnson and the FDA. 11 Does that look too far off base to you? 12 A No, it looks like there was a very good 13 dialogue between Johnson & Johnson and FDA. 14 Q Aha, and most of these are Johnson & Johnson to 15 the FDA; right? 16 A Yes. 17 Q The great majority? 18 A Yes. 19 Q It's sort of a one-sided conversation; right? 20 A Well, what we don't have here are any requests 21 from FDA. 22 But certainly J&J, I would read this has 23 taken a responsible position to provide FDA with 24 whatever information they may need. 25 Q Well, is it -- that's an interesting point.

Page 859 1 You just said that it is a record of Johnson 2 & Johnson providing the FDA with whatever they may 3 need; right? 4 A Yes. 5 Q Truly, it's a record of Johnson & Johnson 6 providing the FDA with what Johnson & Johnson wanted to 7 provide the FDA with; right? 8 A Well, that's an interpretation. 9 When I read what is presented here, it's a 10 pretty comprehensive set of documentation covering all 11 aspects of talc safety, discussions with FDA, 12 discussions with CTFA, a lot of information, including 13 confidential telephone conversations. 14 There's quite a lot of information there that 15 is saying that the company is keeping FDA in the 16 picture. 17 Q They're providing to them what they feel should 18 be provided to the FDA; right? 19 A Yeah, and I think if you go back to some of the 20 very early meetings between Johnson & Johnson, CTFA and 21 FDA, there was an outcome of those that we will keep 22 you informed. 23 I'm pretty sure I remember those words are 24 part of that initial 1972, '71 conversations -- 25 Q Right.	Page 861 1 A If that's -- yeah. 2 Q And to be fair, people have said that to me and 3 I understand they don't mean it either; okay? 4 I'm going to use the chart real quick. 5 So let's talk about the communications with 6 the FDA; all right? 7 The Battelle studies showing tremolite in the 8 floats from the '50s and the '60s, can you testify 9 whether those were provided to the FDA, sir? 10 A Well, whatever's on this list was provided to 11 FDA. If a -- if you're highlighting a study that's not 12 on here, then it was not. 13 Q Right. 14 I think I'm doing that. But, like I have 15 been doing this whole time, I want to make sure I'm not 16 misrepresenting it. 17 A Okay. 18 Q Okay. 19 So I'm giving you a chance to say, "No, 20 Chris, I know that that was provided, and may not even 21 be on that list, but I know it was provided". 22 A Okay. 23 Q Okay? 24 So the Battelle studies in the '50s and the 25 '60s where they're doing the flotation and they're
Page 860 1 A -- that we'll keep a dialogue. We'll keep the 2 door open and keep you -- keep you involved. 3 Q Telling someone you'll keep them informed and 4 keeping them informed are two different things; right? 5 A Theoretically, hypothetically, yes. 6 Q Right. 7 A But I would argue that whatever documentation 8 is provided to FDA is reasonable. 9 Q I mean, I'll be honest. You know, I run into 10 people from time to time that I kind of know, and I 11 say, "Hey, let's go get dinner some time", and both of 12 us know it's not going to happen; right? 13 A Gee, that's terrible. 14 Q I know, but -- 15 A Do you really say that? 16 Q Well, I think sort of, maybe it's an American 17 thing where sort of both sides sort of understand 18 that's a nice way to end the conversation, and then it 19 never happens. 20 But saying you're going to do something and 21 doing it are two different things; correct? 22 A Well, you've just told me, yeah. 23 Q Well, but I'm correct; right? 24 A You are correct. 25 Q Okay.	Page 862 1 finding tremolite in just about every one of them, can 2 you say those were actually communicated to the FDA? 3 A I don't know the answer. 4 Q Okay. 5 A Let's hypothetically say no if it's not listed. 6 Q All right. 7 A But -- because this list begins from '71 -- 8 Q That's right? 9 A -- we don't really know. 10 Q It begins in '71, but I'm not holding out the 11 possibility that they could have sent something from 12 earlier; right? 13 A Absolutely. 14 Q So that's why I'm giving you the opportunity to 15 tell me, "No, Chris, they did tell the FDA about that". 16 Okay? 17 So we go through the '60s and then we get to 18 1971. The -- let's see here ... 19 The Colorado School of Mines memo where, on 20 5.14.71, internal memo where Johnson & Johnson says: 21 those non-talc particles are tremolite. 22 Did that internal memo get sent to the FDA 23 from 5.14.71? 24 A According to this, the answer would be no. 25 Q Okay.

Page 863 1 Let's see here ... Let's look at some of 2 these other tests here. 3 7.29.71, I think is that a date that's 4 actually on there, 7.29.71? 5 A No. 6 Q No? Okay. 7 A 7.21. 8 Q Okay. 9 A 7.23. 10 Q Sure. 11 7.29.71, Johnson & Johnson Baby Powder ore 12 has trace fibrous tremolite actinolite. 13 No record that was sent; right? 14 A I don't see that. 15 Q Okay. 16 Is 9.3.71 there, sir? 17 A No. 18 Q Okay. 19 That one was .001 per cent chrysotile in 20 medicated powder. 21 Now, if you recall, this here was a 22 McCrone -- McCrone study; correct? 23 A Yes. 24 Q And by the way, their detection limit, they 25 were able to find .001 per cent chrysotile; right?	Page 865 1 A Yes. 2 Q Johnson & Johnson didn't have to give them 3 that; right? 4 Let's look at what we talked about earlier 5 this morning. 6 Here, how about this, argonaut, because we 7 know Argonaut came online in the late '70s. 8 4.24.74, finding chrysotile and fibrous 9 tremolite in the Argonaut deposit. Was that provided 10 to the FDA? 11 A I don't see that, no. 12 Q Okay. 13 And then what about this one, 7.8.74, 14 chrysotile asbestos in five production runs, tremolite 15 in one sample. 16 7.8.74. Was that provided to the FDA? 17 A I don't see that, no. 18 Q Okay. 19 I'm not going to ask you about this one down 20 here, because that one was probably industrial; okay? 21 A Yes. 22 Q Although it was the result of asbestos in talc; 23 correct? 24 A Industrial talc. 25 Q Yeah.
Page 864 1 A They were. 2 Q The detection limit set up by Johnson & Johnson 3 for electron microscopy got down to .1 per cent. So a 4 hundred times less detection limit than McCrone was 5 doing in '71; right? 6 A At that time, yes. 7 Q Okay. 8 All right. 10.27.72. Is that on there? 9 A No. 10 Q Okay. 11 Now, I'm going to tell you that I think there 12 is a record that the 10.27.72 memo -- this was the one 13 that was revised, remember, where they took out the 14 percentages? 15 A Yeah. 16 Q I think the revised version went to the FDA. 17 Okay? I'm just going to represent to you that, but the 18 original did not. 19 Do you see any notation that the original 20 memo went to the FDA? 21 A No, I don't, no. 22 Q Okay. All right. 23 And, of course, the -- let's go to the 24 sampling. We know the FDA got this, right, because 25 they did it, the FDA analysis; right?	Page 866 1 Okay, but let's talk about these findings of 2 asbestos. 7.1.75, confirmed asbestos, and 11.5.75. 3 Can you see if those were communicated to the 4 FDA? 5 A They're not on this list. 6 Q All right. 7 A Yeah. 8 Q Now, look, that's just one list that I found in 9 the document; okay? 10 Can you -- can you identify for us and the 11 jury how many positive samples, such as these that we 12 have up here -- how many that came up for finding 13 either the mineral tremolite, anthophyllite, actinolite 14 or asbestos, or a fibrous version of the mineral? How 15 many were actually communicated to the FDA? 16 A I don't know the answer to that. 17 Q Okay. 18 A There are quite a few letters here, quite a few 19 articles here which would indicate that there were that 20 correspondence with FDA. 21 Q There was correspondence with the FDA, but can 22 you actually testify that Johnson & Johnson told the 23 FDA that it had positive results for asbestos minerals 24 and asbestos? 25 A Well, I mean, I just picked one here.

Page 867 1 Q Mmm hmm. 2 A I've not seen this document before, but it's 3 3.30.73, submission to FDA, scans on Johnson & Johnson 4 medicated powder. 5 I don't know what that scan was. There are 6 various letters, talc and asbestos, telephone 7 conversation with the FDA, talc and asbestos. 8 There's quite a lot of dialogue with FDA on 9 the topic of talc and asbestos. 10 Q We've established that. 11 A Yeah. 12 Q And my question was how much of that dialogue 13 was Johnson & Johnson telling the FDA, "Hey, by the 14 way, we are finding asbestos minerals and we are 15 finding asbestos or fibrous asbestos"? 16 How much? 17 A You know, I really don't have the answer to 18 that question. 19 Q All right. 20 You can set that aside, sir. 21 All right. This will be 178. 22 (Exhibit 178 marked for identification) 23 There you go, sir. 24 Okay. This is Material Specification Luzenac 25 America, Windsor Grade 66.	Page 869 1 Did you not tell me yesterday that the Hamm 2 mine was an industrial mine yesterday? 3 A I thought it was, but, again, I'm not 100 per 4 cent certain. 5 As I said a little while ago, on those 6 manufacturing factory operations, it's not -- it's not 7 my field of expertise. 8 Q Okay. 9 All right, sir. You can set that aside. 10 This will be Exhibit 179. 11 (Exhibit 179 marked for identification) 12 This is a PowerPoint from Johnson & Johnson 13 by Timothy McCarthy. Who's he? 14 A He's Director of Toxicology in the Consumer 15 Products Company. 16 Q Okay. How long has he been there? 17 A When was this dated? 18 Q We think, because this is a PowerPoint provided 19 to us -- we think this is in the 2010s about? 20 A That would figure. 21 Q Okay. 22 A Yeah, he wasn't there when I left in end of 23 '98. 24 Q All right. 25 If you'll turn to the third to last page --
Page 868 1 So this is from '97. You can see that on the 2 second page; right? 3 A Yes. 4 Q Okay. 5 (Reporter clarification) 6 9.23.97. 7 If you go to Acceptance, it's on page -- at 8 the bottom it says 144 on the Bates. It's page 4 of 10 9 at the top. 10 A Yes. 11 Q Right? 12 And I just wanted to -- I think this document 13 helps us establish what mines, at least at this time, 14 were being used. 15 It says: 16 "The following mine properties in Vermont are 17 qualified and approved to provide ore for processing 18 into Grade 66 talc: Hammondsville Mine, Argonaut Mine, 19 Rainbow Mine, Hamm Mine (Windham)". 20 correct? 21 A Yes. 22 Q Were any of those mines also industrial talc 23 mines? 24 A I don't know. 25 Q Okay.	Page 870 1 I'm sorry, fourth to last page. 2 A It begins -- what's the heading? 3 Q Well, actually, I want you to go to the fifth 4 to last page. It says Raw Ore Sampling? 5 A Yeah. 6 Q The pages aren't numbered, I'm sorry. 7 A They're not numbered, no. 8 Q Okay. 9 It says Raw Ore Sampling. Then it says: 10 "RJ Lee detected the presence of chrysotile 11 fibers (NMT 6.5 ppm) in certain raw ore samples by 12 Transmission Electron Microscopy". 13 Right? 14 A Yes. 15 Q And it says: 16 "No asbestos fibers were detected in Johnson 17 & Johnson talc product samples. 18 No asbestos fibers were detected using ... 19 XRD ... or Polarised Light Microscopy ..." under the 20 pharmacopeia compendia; right? 21 A Yes. 22 Q That's USP; right? 23 A It is, yes. 24 Q Okay. 25 We probably don't need to talk about USP, but

Page 875 1 9.3 fibers per cc; right? 2 A Yeah. 3 Q And for baby diapering, it would be .16 to .18 4 fibers per cc; right? 5 A Yes. 6 Q And then they -- again, we saw this from the 7 '70s, they relate it to the workplace exposure limits; 8 right? 9 A They do, yes. 10 Q Okay, and they say it would be lower, a lot 11 lower than the workplace exposure limits; right? 12 A Yeah, yeah. 13 Q Okay. 14 Now, as far as you know, the OSHA permissible 15 exposure limits do not govern consumer products used in 16 the home; right? 17 A No, no. 18 Q Okay. 19 But they're just doing this as an exercise? 20 A They're doing this as -- 21 Q Yeah. 22 A -- you know, this is what scientists do. They 23 play little games. 24 Q Yeah. 25 A And let's take some numbers. We'll pull them	Page 877 1 And cc is a cubic centimeter; right? 2 A Correct, yes. 3 Q And baby diapering, .16 to .18 fibers per cc; 4 right? 5 A Yes. 6 Q All right, sir. You can go ahead and set that 7 aside. 8 Were you doing many PowerPoints when you were 9 at Johnson & Johnson? Were they big then? 10 A I think you, when you're doing a PowerPoint, 11 it's important to keep it down to no more than ten 12 slides. Otherwise, people lose the will to live. 13 Q Yeah, that's true. 14 Who is Joan Casal -- 15 A Casalvieri. She's -- I believe she was Head of 16 Toxicology in the late '90s. 17 Q All right. 18 A Certainly, early 2000s. Head of Toxicology. 19 (Reporter clarification) 20 C-A-S-A-L-I -- 21 Q V. 22 A I-V-I-E-R-A. 23 Q I. 24 A I. 25 Q Close. Your pronunciation is better than the
Page 876 1 out here, put them together. 2 Q Yeah. 3 A Let's see what might happen. 4 It's a "what if" exercise, and this is very 5 much a "what if" exercise. 6 Q Sure. Sure. 7 A Yeah. 8 Q But this is a game they've played before, 9 because they played this little game, as you say, in 10 the 1970s where they calculated how much asbestos a 11 baby could be exposed to and then suggested a safe 12 level to the FDA. 13 Do you remember that? 14 A That was -- yes, I do recollect that dialogue, 15 yes. 16 Q And this would be some 25, maybe thirty years 17 after that. 18 A Yeah. 19 Q They've sort of done the similar calculus 20 again; right? 21 A Yeah. Someone's obviously said, "Let's look at 22 this again", yeah. 23 Q Okay, and they've decided that during a dusting 24 event, you would have these levels: for an adult, 4.5 25 to 9.3 fibers per cc.	Page 878 1 spelling. 2 A Yes. 3 Q Casalvieri. 4 A Vieri, yes. 5 Q Okay. All right. 6 This is Exhibit 180. 7 (Exhibit 180 marked for identification) 8 A Thank you. 9 Q All right. So this is an email at the top 10 between she and Steve Mann and Robert Predale; right? 11 A Yes. 12 Q And she just writes this email: 13 "Let's discuss a response. This should be 14 carefully explained. We would like to avoid e-mails 15 referring to talc as a potential carcinogen". 16 Right? 17 A That's what it states. 18 Q Now, there's a pretty big fight going on right 19 now on whether talc -- set aside whether there's 20 asbestos in it -- whether talc itself is a carcinogen 21 for something like ovarian cancer; right? 22 A I'm aware that that has been a topic in the 23 last few years, yes. 24 Q Have you not been deposed in any of those 25 cases?

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1 A I have indeed, yes.

2 Q Okay.

3 And that fight regarding talc as a cause of

4 ovarian cancer is something that, on a regulatory

5 level, has been cropping up since the early '90s;

6 right?

7 A Yes.

8 Q And at every turn when someone like NTP, which

9 is the National Toxicology Program, has proposed

10 listing talc -- just talc, without asbestiform fibers,

11 as they put it -- as a carcinogen, Johnson & Johnson

12 and the industry has opposed that extremely, extremely

13 hard; right?

14 A Correct.

15 Q Okay.

16 Because they does not believe it to be a

17 carcinogen?

18 A Absolutely.

19 Q Okay.

20 The allegation, of course, is that women who

21 use talc and powder themselves, so called "perineal

22 application"; right?

23 A Yes.

24 Q May result in the translocation of talc fibers,

25 because you can have fibrous talc; right?

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1 A You can have fibrous talc, yes.

2 Q Reaching the fallopian tubes and the ovaries

3 and causing ovarian cancer?

4 That's the allegation; right?

5 A It's a hypothesis, yes.

6 Q That's what Johnson & Johnson's position is:

7 it's a hypothesis; right.

8 A Based on animal test data, yes.

9 Q And they have -- any time the NTP has proposed

10 it, J&J and the trade organizations have vigorously

11 opposed it; correct?

12 A Not just the trade associations, but several

13 academics, people who've got expertise in this topic,

14 yes.

15 Q Many, if not all, of those being consultants to

16 the industry and the trade organizations; correct?

17 A Not necessarily, no.

18 But, you know, I'm not going to get into that

19 dialogue because that's not what we're here to talk

20 about. At least that's what I understand.

21 Q Well, I mean --

22 A It's an ongoing dialogue.

23 Q Ovarian cancer is a fatal cancer; right?

24 A No, no. There's quite a high success rate

25 nowadays with treatment. But it is a cancer.

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1 Q Does it kill people?

2 A It can kill people.

3 Q Okay.

4 A But there's a high success rate of treatment.

5 Q Let's hope so.

6 Is mesothelioma a fatal cancer?

7 A Generally, yes.

8 Q Okay, and mesothelioma is caused by asbestos;

9 correct?

10 A There is debate about that.

11 There are parts of the world where people get

12 mesothelioma who've never been exposed to asbestos.

13 There are hypotheses around certain other

14 viral -- certain viral conditions related to

15 mesothelioma.

16 There's a lot of hypotheses in the medical

17 literature on non-asbestos mesothelioma.

18 Q I'm not asking you about hypotheses; right?

19 I'm asking you about what is Johnson & Johnson's

20 opinion? Can asbestos cause mesothelioma?

21 A Yes.

22 Q Okay.

23 And what other known causes of

24 mesothelioma -- not hypotheses, but what other known

25 causes outside of asbestos does Johnson & Johnson

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1 acknowledge as a cause of mesothelioma?

2 A Well, as I said, the current medical literature

3 is under debate, under dialogue, under discussion, and

4 quite a few leading scientists have proposed

5 non-asbestos causes for mesothelioma, particularly in

6 areas where there's never been any exposure to

7 asbestos.

8 There are certain parts of the world where

9 there's never been exposure to asbestos, and people are

10 saying, "Why is that?"

11 So, again --

12 Q And what is the proposed cause in those areas?

13 A There are several viruses that are being

14 proposed. That's the key one.

15 Q So outside of -- asbestos is an established

16 cause of mesothelioma?

17 A It is, yes.

18 Q Okay.

19 A Yes.

20 Q Outside of that and a hypothesis that there may

21 be some viruses in some areas?

22 A Yes.

23 Q Anything else that is -- that Johnson & Johnson

24 would say is a cause of mesothelioma?

25 A I'm not going to speculate.

Page 883 1 Q Okay. 2 A Beyond that, it's speculation. 3 Q Okay. All right, sir. 4 This will be Exhibit 181. 5 (Exhibit 181 marked for identification) 6 All right. This is the CTFA specification 7 for talc; correct, sir? 8 A It's got the CTFA letterhead, yes. 9 Q Okay. 10 And we've talked about this generally, that 11 the specifications for talc, whether they're a CTFA 12 spec or a company spec, they usually list different 13 things here, like color, odor -- 14 A Yes. 15 Q -- identification, luster -- 16 A Yes. 17 Q -- led? 18 A Yeah. 19 Q -- asbestos; right? 20 A Yes. 21 Q They also list arsenic; correct? 22 A Yes. 23 Q And the CTFA specification allows 3 parts per 24 million of arsenic; right? 25 A It does, yes.	Page 885 1 would expect to start seeing cancers. 2 A Okay. When you get a cancer from an outside 3 environmental agent, it's not just about a level. It's 4 about the duration, the amount of exposure over a 5 lifetime, half a lifetime. 6 It's a bit like the issue of a cigarette. If 7 you take one draw on a cigarette, you're not going to 8 get lung cancer. If you smoke 40 a day all your life, 9 the probability goes through the roof. 10 So it's not a case of how much. It's how 11 much over time. 12 But certainly what I commented on, arsenic is 13 a -- it's in the environment. It's in our food. We 14 all eat it every day at lower levels. 15 Q Okay, yeah, but I appreciate all of that. I 16 understand that that's how -- that's how it builds up 17 in our body, and all of that. 18 But at what level does it become a -- does it 19 actually increase the risk for cancer? 20 A I've not -- I've not seen -- you'd need to look 21 at what animal studies are. You know, it's a normal 22 thing to say you dose rats for their lifetime at 23 various dose levels. 24 It's way, way more than 3 parts per million. 25 Q It is a carcinogen?
Page 884 1 Q What is Johnson & Johnson's specification for 2 the allowance of arsenic? 3 A I -- I don't have that in front of me. 4 Q Okay. 5 A I couldn't answer that question. 6 Q Okay. 7 A But, just as a toxicologist, not necessarily as 8 a Johnson & Johnson deposed individual, 3 parts per 9 million is a typical background level that you would 10 find in most foods. 11 Certainly, rice grown in most parts of the 12 world contains way, way more than 3 parts per million 13 of arsenic. 14 Q Okay. 15 A It's a natural -- it's in the ground, plants 16 take it up in their roots, you eat it, we all eat it. 17 It's around. 18 Q Okay. 19 At some level, do you know the level at which 20 point arsenic is implicated as a carcinogen, because it 21 is a carcinogen; correct? 22 A At high levels, it is recognized as a 23 carcinogen. 24 Q And how high does it have to be before you 25 would say: well, it's carcinogenic at that level? We	Page 886 1 A Yes, at way, way more than three parts per 2 million. 3 Q All right. 4 Let's take a break. 5 MS FRAZIER: Actually, lunch is here. 6 MR PANATIER: That works, yeah. 7 (Off the record at 12:26 pm) 8 (On the record at 1:19 pm) 9 BY MR PANATIER: 10 Q All right, sir. This will be Exhibit 182. 11 (Exhibit 182 marked for identification) 12 I've never been in triple digit exhibits 13 before. You probably haven't either. 14 A No. 15 Q All right, sir. This is May 3, 1972. 16 This is a memo from Shelley to Fuller. It 17 says: 18 "In our review meeting with Professor Pooley, 19 he indicated that the MRC in England was going ahead 20 with their study using government funds; i.e., they do 21 not seem to want money from us. This would mean we 22 would not be able to play any role in guiding their 23 work, etc., as we had previously thought. Their 24 approach will be more toward the industrial talc ore 25 rather than the uses of baby powder.

Page 887 1 This is unfortunate as we had expected 2 otherwise". 3 And he says: we should carry out a different 4 study. Right? 5 A Yes. 6 Q Now, one of the things that you and I talked 7 about on the first day of this deposition was about 8 what would be proper versus improper influence in a 9 scientific study; right? 10 A Yes. 11 Q Okay. 12 And here what Johnson & Johnson is saying is 13 that the MRC -- do you know what that is? 14 A It stands for the Medical Research Council. 15 Q Okay. 16 A It's a government body. 17 Q All right. 18 What they're saying here is MRC didn't want 19 their money; right? 20 A Yeah. They had plenty of their own. 21 Q And: 22 "This would mean we would not be able to play 23 a role in guiding their work as we had previously 24 thought". 25 Right?	Page 889 1 A He was the Research Director for Johnson & 2 Johnson UK. 3 Q All right. 4 This is the letter back to New Brunswick to 5 TH Shelley; right? 6 A Correct. 7 Q Okay. 8 Just introductory, it's dated June 2, 1972. 9 He says: 10 "Firstly, I was very heartened by the 11 progress that is being made throughout the company on 12 this Talc Project. I feel that we have now got the 13 situation pretty firmly under control and are in a very 14 strong position to establish the purity of our Baby 15 Powder worldwide". 16 Right? 17 A Yes. 18 Q And he says: 19 "The current picture in England is as follows 20 ..." 21 And he details the University of Wales, the 22 Atomic Energy Research Establishment in Harwell, and 23 then he gets down to the Allen Clark Research Center; 24 right? 25 A Yes.
Page 888 1 A That's what it states, yes. 2 Q They had hoped to be able to play a role in 3 guiding it, and if they aren't giving them any money, 4 they're not going to be able to do that; correct? 5 A Yeah. What it says is that: 6 "Their approach will be toward[s] industrial 7 talc work rather than ... uses of baby powder". 8 So it looks as though they were not 9 interested in baby. The Medical Research Council were 10 interested in industrial talc. 11 Q Okay. 12 They said that was unfortunate; right? 13 A Well, I guess they were hoping to get some work 14 done on baby powder. 15 Q Okay. 16 A And they were -- you know, the MRC were doing 17 it on industrial talc. 18 Q Right. 19 You can set that aside. Let's look at 20 another one. This will be Exhibit 183. 21 (Exhibit 183 marked for identification) 22 All right, sir. If you look at who authored 23 this, this is WR Dean. 24 We've seen his name, but I don't think I've 25 asked you who he was. Who was he?	Page 890 1 Q Okay. 2 And he says: 3 "We have sent to them samples of muscovite 4 and chlorite and are waiting for a sample of 5 anthophyllite from Fred Pooley for them to surface 6 decorate with platinum. We anticipate that they will 7 show yet again that the surface decoration pattern is a 8 random one and cannot be used to characterise a mineral 9 species. When this work is completed we will certainly 10 encourage them to publish. Most reputable journals are 11 not particularly anxious to publish 'negative' findings 12 and therefore we may have to turn this paper around a 13 little in order to get it published in a good journal 14 (as opposed to the 'Journal of Obstetrics & Gynaecology 15 of the British Commonwealth!!)". 16 Did I read that right? 17 A Yes. 18 Q Okay. 19 So, first of all, there's a research center 20 that's doing some work that would be a "negative 21 study", meaning in science when you talk about a study 22 proving something is related or is not related, if you 23 show something is not related, that's called a 24 "negative study"; right? Generally speaking? 25 A Yes. It's usually considered to be of low

Page 891 1 interest. 2 Q Right. 3 A If you don't find a problem, there's nothing 4 there. It's negative, yeah. 5 Q Right. 6 So Johnson & Johnson here is saying: we 7 expect a negative finding; it won't have much interest 8 from journals; so we should turn it around; right? 9 A Yeah. 10 Q But they're not the ones writing the paper. 11 Somebody else is? 12 A Well, yeah. 13 Q Right? 14 A I don't know who the author would be. 15 Q Well, it's somebody at the Allen Clark Research 16 Center; right? 17 A Well, that's what it says, although I'm going 18 to be honest, I've never heard of the Allen Clark 19 Research Center. 20 I presume it's a contract facility. 21 Q Whoever it is, they would be the people doing 22 the work, not Johnson & Johnson? 23 A They would be doing the work, yes. 24 Q And Johnson & Johnson is talking about having 25 to turn around whatever the result is so it would be	Page 893 1 A About the protocol, yes. 2 Q Yeah -- well, they don't say "protocol". 3 A Okay, the program. 4 Q Right. 5 A Yeah. 6 Q "BIBRA have now changed their approach on this 7 and are proposing to look at the effect of carbon 8 particles in rabbit vaginas." 9 Right? 10 A Yes. 11 Q So they're not even -- well, let's continue, 12 just so we can be clear: 13 "They are proposing to examine the migration 14 of carbon particles, but by what technique I do not 15 know. Again, however, reason appears to have prevailed 16 and the mad rush into experiments with talc checked. 17 It is believed that the reason they have chosen carbon 18 particles is because they have some knowledge of the 19 carcinogenicity potential of this material". 20 Right? 21 A Yes. Carbon particles have been used by 22 several researchers in vaginal transfer research simply 23 because they're -- they're easy to identify. 24 They've been used in several studies to look 25 at talc migration as a proxy for talc migration.
Page 892 1 publishable; right? 2 A Yeah. Yeah. 3 Q Okay. Turn the page, please. 4 They get to the British Industrial Biological 5 Research Association: 6 "You may recall that BIBRA were proposing to 7 embark on a program on the effect of talc in monkeys. 8 Dr Fuller, Dr Hildick-Smith and I spoke to Dr Grasso at 9 BIBRA, who would have been carrying out this work, and 10 pointed out to him our grave misgivings about the 11 various aspects of the proposed programme". 12 So there's a researcher who's going -- who 13 was planning to do this work at the British Industrial 14 Biological Research Association. 15 Three guys, or two guys with J&J -- no, three 16 guys, Fuller, Hildick-Smith and Dean -- meet with a guy 17 to dissuade him from doing it; correct? 18 A Well, that's not necessarily -- they say they 19 have grave misgivings about the aspects of the proposed 20 program. 21 I don't know what the program was. 22 Q Well, let's read the next paragraph. 23 A But they've obviously got misgivings. 24 Q Sure. They have misgivings about the program; 25 right?	Page 894 1 So there are certainly studies out there in 2 the literature where carbon, which is easy to identify 3 under a microscope, has been used as a proxy for any -- 4 any other material. 5 Q Sure, and I wasn't asking you why they used 6 carbon. 7 A Yeah, yeah. 8 Q I think you know what my concern is. 9 Johnson & Johnson went to this researcher. 10 They told him about their serious misgivings about his 11 work where he was going to experiment on the effect of 12 talc on monkeys, and they changed to carbon instead of 13 talc; right? 14 A Yeah, and, you know, as I've said before, the 15 use of carbon particles in vaginal transfer experiments 16 is long established for the simple reason that carbon 17 particles are easy to identify under a microscope. 18 They're a proxy for other particles of a 19 similar size. 20 Q You've -- you've said that. 21 A It's a well established -- it's a well 22 established protocol. 23 Q Yeah, you've said that. So I'm going to ask 24 you the question again, because I'm not asking you 25 about carbon particles.

Page 895 1 The British Industrial Biological Research 2 Association was going to do an experiment on talc. 3 Johnson & Johnson -- three guys from Johnson & Johnson 4 met with the guy who was going to do the experiment and 5 expressed their grave misgivings about various aspects 6 of the program and then they ended up changing their 7 approach, not dealing with talc at all; correct? 8 A That is -- that is the outcome, yes. 9 Q And the way they characterize it is: 10 "Again, however, reason appears to have 11 prevailed and the mad rush into experiments with talc 12 checked". 13 Is that what they wrote? 14 A That's what they wrote. 15 Q Okay. 16 Now we can go down to the Medical Research 17 Council, the MRC, which we addressed earlier; right? 18 A Yes. 19 Q Okay. 20 They say: 21 "We understand that the MRC has not yet 22 commenced its active programme, but is currently 23 testing its dusting apparatus. Fred Pooley has not yet 24 applied to Zach Cartwright (probably the principal talc 25 distributor in the UK) for the 'cosmetic' grade of talc	Page 897 1 Q You did. 2 A I did. 3 Q Okay. 4 A I actually meant Val Chisone. 5 Q You meant Italy; right? 6 A I meant Italy, yes. 7 Q This is from Ashton to Hildick-Smith, May 8, 8 1973. It's called Italian Talc Safety, Case Histories 9 of Talc Workers, and it's got the Italian there. It's 10 the Talc Society and Graphite from Val Chisone; right? 11 A Yes. 12 Q In Pinerolo, Italy, which is where Johnson & 13 Johnson was getting its talc when it got it from Italy; 14 right? 15 A Correct. 16 Q Okay. 17 "Attached is a report I told you I was going 18 to obtain from Mr -- Dr Stefano of Monaco. The report 19 documents the non-existence of any carcinogenic factor 20 related to long term exposure to ... talc. You will 21 note that Stefano's comprehensive review of the 22 situation can produce up to 2,000 case histories backed 23 up by 9 Italian medical ... [associations] in addition 24 to his own opinion. 25 It seems to me that the Italian records give
Page 896 1 to be used in the MRC studies. When he does, we have 2 agreed with Mr Miller, Managing Director of Zach 3 Cartwright Ltd., that he will be supplied with Italian 4 00000 talc and that we will be given samples of the 5 same material as that supplied to Fred Pooley". 6 Now, do you know whether or not ahead of this 7 proposed research Johnson & Johnson precleared about 8 a thousand cans of baby powder for use in testing? 9 A I do not know. 10 Q Okay. 11 A I do not know the answer to that. 12 Q Did you not see any of those documents in your 13 review? 14 A I did not, no. 15 Q Okay. 16 Are you familiar with a researcher named Dr 17 Rubino? 18 A Yes. 19 Q Okay. Who's he? 20 A He's a researcher who's done work in the talc 21 mines in Vermont. 22 Q Okay. 23 This will be Exhibit 184. 24 (Exhibit 184 marked for identification) 25 A Sorry, did I say Vermont?	Page 898 1 us the opportunity to fortify a position on talc safety 2 that no one else in this country (e.g. Selikoff) can 3 produce". 4 Now, they have -- they bring up Selikoff a 5 good deal; right? 6 A Yes. 7 Q Okay, and he was listed as one of those, 8 whatever, adverse or unfavorable people in that one 9 memo we saw yesterday; right? 10 A Correct. 11 Q Okay. 12 "As I mentioned earlier, Dr Stefano controls 13 Italian talc exports out of Italy. The report is the 14 property of Mr Ferry who controls Italian talc imports 15 into the USA". 16 Who's Mr Ferry? 17 A I've seen the name, but I can't remember what 18 his role is. 19 Q All right. We may see some more -- 20 A Yeah, sure. 21 Q -- of who he is. Okay? 22 So they're -- right now, they're mulling over 23 doing a potential study of the Italian miners; right? 24 A Yes, yes. 25 Q Okay, and it looks like they're going to have

Page 899 1 to work through this Dr Stefano; right? 2 A Yes. He appears to own the records, yeah. 3 Q All right. 4 This will be Exhibit 185. 5 (Exhibit 185 marked for identification) 6 We'll get back to Rabino and Stefano in a 7 minute, but this one is next chronologically; okay? 8 So this is from Hildick-Smith to John Dean, 9 and he says: 10 "Dear Bob: 11 I was pleased to have the opportunity to talk 12 to you recently concerning the symposium on talc that 13 Dr Wagner appears to be interested in holding in the 14 Spring of 1974. 15 As I had indicated to you, we are all very 16 anxious to have such a symposium held in the hope that 17 the data presented there will be such that there will 18 be diminished interest in [the] health hazards of 19 talc". 20 So they've stated their goal; right? 21 A Yes. 22 Q Okay. They want -- they want there to be a 23 diminished interest in the health hazards of talc; 24 true? 25 A Yes.	Page 901 1 BY MR PANATIER: 2 Q It's not unusual to organize symposiums. 3 A Yes. 4 Q But they've stated what the goal of the 5 symposium is before they even know who the speakers 6 are, before they even know what will be presented; 7 correct? 8 A Well, what they're saying is they hope that the 9 data that's presented, i.e., data which shows the 10 product doesn't have a problem, will diminish any 11 interest in health hazards. 12 In other words, I guess they're saying: we've 13 got plenty of good data. Let's talk about it. 14 Q Well, they -- they have a specific outcome in 15 mind for the symposium; correct? 16 A Correct. 17 Q All right. You can set that aside. 18 This will be Exhibit 186. 19 (Exhibit 186 marked for identification) 20 All right. This is an article published in 21 The Compass: Sigma Gamma Epsilon, January 1972; 22 correct? 23 A Yes. 24 Q And those are William Ashton's initials up 25 there at the top and handwritten; right?
Page 900 1 Q Okay. 2 "In an attempt to make such a symposium 3 significant, we believe that there are a number of 4 investigators in this country who have significant data 5 in humans who could make valuable contributions in such 6 a symposium. I am sure that we would be able to 7 finance the transport of investigators in this country 8 for the symposium, and this aspect may be of some 9 interest to Chris Wagner". 10 They're basically saying J&J will fly people 11 to England; right? 12 A Yeah. 13 Q Okay. 14 "I am attaching a list of possible speakers 15 and an indication of the data that they could present". 16 So he apparently sent a list of that; right? 17 A Apparently, yes. 18 Q Okay. So they are playing a role in 19 orchestrating a symposium; right? 20 A Yes. 21 Q Okay. 22 A That's -- that's not unusual. 23 MR GAFFREY: Do you have a date on that? 24 MR PANATIER: Yeah, that date is 7.23.73. 25 MR GAFFREY: Thank you.	Page 902 1 A Yes. 2 Q Okay. 3 The title is Asbestosform Impurities in 4 Commercial Talcum Powder, published '72 by David W 5 Snider, Dan E Pfeiffer and Joseph J Mancuso, and the 6 abstract says: 7 "Eighteen commercial talcum powders were 8 examined by X-ray diffraction and the petrographic 9 microscope to determine the amount and type of 10 asbestosform mineral impurities which were fibrous 11 serpentine, tremolite, actinolite, and anthophyllite 12 ... which varied in amount from 4 per cent to 13 46 per cent". 14 Did I read that right? 15 A You did. 16 Q Okay. 17 They write down below at the other highlight: 18 "According to Selikoff, Churg and Hammond 19 (1964), asbestos is a proven carcinogen responsible for 20 both pulmonary and gastro-intestinal cancer". 21 That's something that was certainly published 22 that Johnson & Johnson doesn't disagree with; right? 23 A Correct. 24 Q "Eighteen samples of commercial talcum powders, 25 used as baby powders, shave talcum powders, and spray

Page 903 1 talcum powders, in a wide price range were examined. 2 Labels on the commercial containers did not indicate 3 either the presence or the percentage of impurities of 4 the commercial powders". 5 And then it's a fairly short article, but you 6 can see they have a Table I on the first page for a 7 qualitative mineral analysis by XRD; right? 8 A They do, yes. 9 Q And, out of the 18, I think you've got nine 10 that contain tremolite or actinolite; right? 11 A Yes. 12 Q You have six that contain anthophyllite? 13 A Yes. 14 Q And all but five contain serpentine; correct? 15 A Yes. 16 Q Now, serpentine is a bit of a broader category. 17 You and I have talked about it. It includes 18 chrysotile, but it doesn't necessarily mean chrysotile? 19 A That is very correct, yes. 20 Q Okay. 21 A Yes. 22 Q All right. If you go to the last page, please, 23 sir, they then break down in Table II by microscope the 24 volume per cent of asbestiform minerals in each of the 25 samples; right?	Page 905 1 Bill Ashton to Dr DR Petterson, June 18, 2 1973; right? 3 A Yes. 4 Q Okay. It says: 5 "You recall the uncomfortable aspects of a 6 recent article by Bowling Green University on 7 'Asbestosform Impurities in Commercial Talcum Powders' 8 ..." 9 And that's what he's -- he's referring the 10 article we just looked at; right? 11 A Yes. 12 Q And he calls it "the uncomfortable aspects"; 13 right? 14 A Yes. 15 Q "As you decided, we instructed the Colorado 16 School to take appropriate steps to advise Bowling 17 Green where and how they had erred". 18 Right? 19 A Yes. 20 Q Now, we talked about Johnson & Johnson's 21 relationship with Colorado School of Mines yesterday at 22 length, did we not? 23 A We did, yes. 24 Q We had Colorado School of Mines after a meeting 25 coming back to Johnson & Johnson and saying: oh, we
Page 904 1 A Yes. 2 Q Okay. 3 All right, sir. Are you familiar with this 4 paper? 5 A I don't think I have seen this one, no. It's a 6 fairly obscure journal, isn't it? It's -- what is it? 7 Q It's called The Compass? 8 A Compass, yeah. Sigma Gamma Epsilon. 9 Yeah. No, I'm not familiar with that. 10 Q It's an earth sciences journal. I looked it 11 up. It's still -- still around. 12 A Still going? 13 Q Yeah. 14 A Okay. 15 Q So, anyway, this was published there in '72; 16 right? 17 A Yes. 18 Q Okay. 19 So you can -- I would set it aside. We may 20 reference it; okay? 21 Now, I bet you can guess Johnson & Johnson 22 became aware of this paper? 23 A You're telling me? 24 Q Okay. This will be Exhibit 187. 25 (Exhibit 187 marked for identification)	Page 906 1 contaminated all the stuff we said was positive for 2 asbestiform minerals. 3 Right? 4 A They did, yes. 5 Q We had Bill Ashton giving assignments to the 6 Colorado School of Mines; right? 7 A Yeah. 8 Q And here Mr Ashton says: 9 "As you decided, we instructed the Colorado 10 School to take appropriate steps to advise Bowling 11 Green where and how they had erred". 12 Right? 13 A That's what it says. 14 Q Before anyone even talked to the people who 15 authored that paper, they -- Johnson & Johnson 16 instructed the Colorado School of Mines to go tell them 17 how they had gone wrong; right? 18 A Yes. 19 Q Okay. 20 "You will be pleased to hear that the 21 Colorado men were very successful in accomplishing the 22 delicate task of getting Bowling Green to admit they 23 overlooked many scientific errors in their entire 24 study". 25 Did I read that right?

Page 907 1 A You did. 2 Q So Johnson & Johnson sticks to the Colorado 3 School on Bowling Green with regard to this paper 4 pretty much; right? 5 A Yeah, I mean, my read of that is that they 6 contacted Colorado School of Mines and said: what do 7 you think about this, and would you go and talk to the 8 authors? 9 Q Okay. 10 A And obviously the outcome of that was that 11 Bowling Green admitted that they'd overlooked the 12 scientific errors in their study. 13 Q Well, let's see what that exchange actually 14 was. 15 This will be Exhibit 188. 16 (Exhibit 188 marked for identification) 17 This is the memo, of course, because there's 18 always a memo. This is June 8, 1973, and this is from 19 Caneer, who is at the Colorado School of Mines; right? 20 A Yeah, yes. 21 Q To Bill Ashton; right? 22 A Yes. 23 Q Okay. 24 It references at the top: 25 "A paper entitled Asbestosform Impurities in	Page 909 1 Two were graduate students: 2 "J Mancuso is on the Geology Department staff 3 and acted as [an] advisor for the research and the 4 paper". 5 Now, have you heard of Mancuso? 6 A I've seen the name, yes. 7 Q Right. 8 Mancuso is a pretty well respected 9 individual, is he not? 10 A He is, yes. 11 Q Okay. 12 "Snider is presently with the Michigan 13 Geological Survey in Mt. Pleasant, Michigan, and 14 Pfeiffer is a geologist for Texaco in Midland, Texas. 15 We discussed the paper with Mancuso in Bowling Green 16 and held telephone conversations with Snider and 17 Pfeiffer. We made it clear to these people that the 18 data presented in their paper could lead to very 19 serious charges against the products. They readily 20 agreed that their data could easily have errors, and if 21 so it would save them much possible embarrassment at a 22 later date by correcting their errors now". 23 Okay? So the Colorado School of Mines 24 people, at the behest of J&J, tell the authors that 25 their paper could lead to very serious charges against
Page 908 1 Commercial Talcum Powders", published in the January 2 1972 issue of The Compass of Sigma Gamma Epsilon ... 3 stated that 18 commercial talcum powders examined 4 contained from 4% to 46% asbestiform minerals". 5 And he goes on to describe more about it; 6 right? 7 A Yes, yeah. 8 Q Yeah. 9 At the bottom he says: 10 "The people involved in the investigation 11 were WT Caneer and ... Jerry Krause of the Research 12 Institute and Dr Maynard Slaughter of the Colorado 13 School of Mines". 14 So Johnson & Johnson instructs these guys to 15 go talk to the Bowling Green researchers; right? 16 A Yes. 17 Q And Colorado School of Mines sends three people 18 to Bowling Green; right? 19 A Yes. 20 Q All right. 21 So first let's go to -- go to page 4, please, 22 Discussions with the Authors: 23 "Of the three authors, two were [written by] 24 graduate students (Snider and Pfeiffer) at the time the 25 paper was written".	Page 910 1 the products; right? 2 A Yes. 3 Q Okay. 4 Now, we know that in 1991 Alice Blount 5 published a peer reviewed paper that found a whole 6 bunch of asbestos in Johnson & Johnson; correct? 7 A She -- she claimed to have done. 8 Q Okay? 9 A Yes. 10 Q And if you look at the very next page, there's 11 a table. Sample number 2 is who? 12 A Sample number 2 is stated as J&J Baby Powder. 13 Q Right. That's Johnson & Johnson Baby Powder; 14 right? 15 A It is, yes. 16 Q And it says the quoted per cent of asbestiform 17 minerals is how much? 18 A It states 8. 19 Q 8 per cent. Okay. 20 So staying on that page, on number 7: 21 "They admitted they probably made many errors 22 in conducting the project and seem[ed] anxious to 23 rectify them before there is a possible accounting with 24 the FDA or some other agency". 25 So, basically, it was -- it was stated in

Page 911 1 some way to these guys that there would be serious 2 charges based on their paper and that there could be a 3 possible accounting with the FDA or some other agency; 4 right? 5 A Yes, although it doesn't state as to whom would 6 be accounting with the FDA. 7 The FDA could well be challenging the Bowling 8 Green group as to the validity of their results. 9 Q I think that's very much what is being implied 10 here; right? 11 A Yeah. 12 Q Is that the Colorado School of Mines tells 13 them, "Hey, the FDA is going to come challenge you". 14 Right? 15 A Yes. 16 Q Okay. 17 And then if you turn the page to the last 18 bit, it says: 19 "They apparently will not stand behind the 20 data presented in the paper if they are pressed to do 21 so. I also believe that they will retract the data 22 after we present them our data and after they have had 23 time to do some checking on their own". 24 Right? 25 A Yes.	Page 913 1 minerals in their source ore and their talc; correct? 2 A We've -- we've -- you've shown results which 3 indicated that. 4 Q Right. 5 They also had microscopic results showing 6 asbestiform minerals in their talc; correct? 7 A Well, you've shown results that indicated that. 8 Q Right. 9 I mean, we could just throw one out there: 10 the McCrone study having to do with 108T and 109T; 11 right? Remember that one? 12 A Yes, but that McCrone study, to my 13 recollection, was later rereviewed with a different set 14 of results. 15 Q Right. 16 Well, the results where they simply pulled 17 the percentages out; right? 18 A Okay. 19 Q You remember that; right? 20 A I remember that, yes. 21 Q Okay. 22 Up to this point, since the '50s, they've 23 been finding tremolite, which is an asbestos mineral, 24 in the source talc for Italian and Vermont; correct? 25 A It -- it is a possible asbestos material, but
Page 912 1 Q Now, so Johnson & Johnson sends Colorado School 2 of Mines to basically go, and I'm going to use the word 3 "intimidate"; okay? 4 A Well, you can use the word. 5 Q These people. I'm going to use it and ask if 6 you agree with it? 7 A Yeah. 8 Q Okay? 9 A I don't agree with it, but you can use the 10 word. 11 Q All right. So you don't agree with it? 12 A No. 13 Q They say that serious charges might be brought 14 against them; right? 15 A It states that. 16 Q And that there could be an accounting with the 17 FDA or some other agency; right? 18 A Well, that's what it says in the letter. 19 Q Okay. 20 Now, they were using XRD and microscopic 21 techniques to look for asbestiform minerals in consumer 22 talcs, including J&J; right? 23 A That's what it states, yes. 24 Q As of this date, June 8, 1973, Johnson & 25 Johnson already had XRD results showing asbestiform	Page 914 1 the majority of tremolite that exists is in the 2 non-asbestosform. 3 Q I understand. You've said that as a general 4 point. 5 A Yes. 6 Q But we have -- we have a board full of results 7 through 1973, sir, and does Mr Caneer for the Colorado 8 School of Mines mention anywhere here that: by the way, 9 we may not agree with your percentages, but Johnson & 10 Johnson actually has some results that are consistent 11 with what you said in your paper? 12 Did they do that? 13 A Not in this letter it doesn't say that, no. 14 But what they do say is that the Bowling 15 Green group spent an inadequate amount of time and have 16 admitted to making errors relative to the 17 identification and amount of asbestiform minerals. 18 They will not stand behind the data presented. 19 Q Was the -- well, they said once Colorado School 20 of Mines showed them some of their stuff; right? 21 A It doesn't say showed them some of their stuff. 22 You know, when scientists sit down together 23 and talk about things, they usually do so on a pretty 24 one-to-one guy basis. It's not a case of going in 25 there, you know, hitting them with a club hammer.

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1 It's a case of let's talk about this. What
2 did you do? How did you do it? Oh, you used two
3 graduate students. Let's look at what you did and how
4 you did it.
5 That would be my interpretation of what went
6 on.
7 Q Okay.
8 A I'm not suggesting they went in and beat them
9 up.
10 Q Well, that's your interpretation in light of
11 the fact that they told them very serious charges
12 against the products could be levied, and that -- and
13 that there could be a possible accounting with the FDA
14 or some other agency.
15 That's your read of it?
16 A Yeah.
17 Q Okay.
18 A But that doesn't mean it's done in an
19 aggressive way.
20 Q Okay.
21 A It could be done as a one-off line.
22 You know, the FDA might be interested. Would
23 you stand in front of the FDA and present your results?
24 Q But my question to you was: did Colorado School
25 of Mines guys, who went and dealt with the -- with Dr

Page 916

1 Mancuso -- did they mention in their report that they
2 told Bowling Green, "Hey, we've actually had results
3 that are consistent with what you reported"?
4 A That's not reported in this letter.
5 Q Okay.
6 A No.
7 Q Right. Okay.
8 That was Krause, Caneer and who from Colorado
9 School of Mines?
10 I think it's the author, whoever the author
11 is?
12 A Maynard Slaughter.
13 Q Okay. Right. Okay. So three guys; right?
14 A Yeah.
15 Q And Krause was one of them; right?
16 A Yes.
17 Q All right. This will be Exhibit 189.
18 (Exhibit 189 marked for identification)
19 There you go, sir.
20 Confidential, Talc -- UK Work Status, 1.6.73.
21 It's by IW Sloan, it's to a number of people,
22 but the ones we know and are familiar with are Dr
23 Nashed, Hildick-Smith, Shelley, Fuller and Dean; right?
24 A Yes.
25 Q As well as some others; true?

Page 917

1 A Yes.
2 Q Okay.
3 Go ahead and turn the -- turn the page to the
4 Introduction:
5 "This report summarises the current status of
6 work being carried out on talc in the UK as far as is
7 known. The report has been split into three sections:
8 [Section] a) Bodies known to J&J and with
9 whom J&J have contact but no direct influence.
10 b) Individuals who are undertaking discrete
11 studies".
12 And:
13 c) Bodies undertaking work sponsored by
14 J&J".
15 Right?
16 A Yes.
17 Q Okay.
18 It says here under the highlight:
19 "The number of groups examining talc is
20 disturbing as it still appears to be an essentially
21 uncoordinated exercise".
22 So this is the second document we've looked
23 at this morning about Johnson & Johnson being disturbed
24 by research on talc; right?
25 A Well, they're disturbed because it's

Page 918

1 essentially uncoordinated.
2 Q Well, they would like to have some control over
3 it; right?
4 A I think what they're saying is there's some --
5 there's probably a need to have some coordination.
6 Q Okay. That's your read of it?
7 A Yeah.
8 Q Okay.
9 A They use that word.
10 Q Sure.
11 It doesn't mean coordinated through them.
12 That's how I read it.
13 Would you agree?
14 A Could well be -- could be coordinated through
15 Dr Pooley.
16 Q Okay.
17 A I mean, the key thing in science is it's
18 expensive and it's a misuse of resources if two people
19 are doing an identical program.
20 Q All right. Well, we'll see how they really put
21 it.
22 Go ahead and go to the page at the bottom
23 Bates 5087. Okay?
24 You can see there's section 1.1.6.,
25 Examination of all "Talc" Imported to the UK.

Page 919 1 Do you see that? 2 A Yes. 3 Q Okay. 4 And if you go down towards the bottom, second 5 paragraph, it says: 6 "Dr Pooley is currently using a new 7 concentration technique for amphiboles ..." 8 Which we're familiar with; right? 9 A Correct. 10 Q "... which he has developed to re-evaluate all 11 these samples. Italian 00000 grade, the first examined 12 with the new technique was amphibole free". 13 And then in handwriting it says: 14 "Actinolite in Vermont -- very little bit -- 15 pick up by concentrating". 16 Right? 17 A That's what it states. 18 Q So they're saying there is actinolite in 19 Vermont; right? 20 A Well, somebody's written that, yes. 21 Q Okay. 22 Please turn to the page, at the bottom it's 23 5095. 24 Actually, go back a page because then we'll 25 know what we're talking about. It's section 5., the	Page 921 1 Q Okay. 2 And they're talking about something called 3 Plessey Ltd Research, and there's an individual named 4 Mr GV Smith; right? 5 A Yes. 6 Q And this is the Allen Clark Research 7 Laboratory. We did see that earlier; right? 8 A Okay. 9 Q Okay? 10 A I didn't know that. 11 Q Okay. 12 Background: 13 "Mr Henderson ([the] Tenovus Research 14 Institute) in his original paper on Talc and Carcinoma 15 of the Ovary and Cervix based his identification of the 16 particles which he claims to have found on the 'typical 17 surface decoration pattern'. In preparation -- [in] 18 preparing replicas for examination under the electron 19 microscope the particle is shadowed with platinum 20 deposited under vacuum. Mr Henderson claimed that this 21 pattern was specific to talc and anthophyllite only". 22 So they're talking about the Tenovus 23 research, which we talked about I think two days ago? 24 A Yes. 25 Q Which was some work that was being done on
Page 920 1 Toilet Preparations Federation. 2 Right? 3 A Yes. 4 Q Who is the Toilet Preparations Federation? 5 A It's the equivalent of CTFA. 6 Q Right. You told me that yesterday. 7 A Yes. 8 Q Go ahead and turn the page. 9 Under Implications, it says: 10 "Work would be undertaken by the Industry as 11 a whole, represented by the TPF. This undoubtedly 12 withdraws Johnson & Johnson further from the limelight 13 and this is certainly desirable. With our knowledge, 14 consultant back up and resources, we shall be able to 15 materially influence any work undertaken". 16 Did I read that right? 17 A You did. 18 Q Okay. 19 Let's go to the next page. Actually, the 20 next one is 5099, or 5098, I'm sorry. 21 This is section c) from the front page, which 22 was Bodies undertaking work sponsored by J&J? 23 A Okay. 24 Q Right. Do you see that? 25 A Yes.	Page 922 1 ovaries to see if there was talc and/or asbestos in 2 them; right? 3 A Talc. From my recollection, the report was 4 just talc, but ... 5 Q Langer, in '71 or '72, said he had looked at 6 those samples and saw talc and chrysotile. 7 Do you remember that memo? That was from our 8 first day? 9 A Yes, I remember the memo. 10 Q Okay. 11 A Yes. 12 Q Okay. All right. All right. Go to the next 13 page. 14 So implications of this work funded by 15 Johnson & Johnson; right? 16 "This work discredits even further 17 Mr Henderson's paper in that the very basis of 18 Henderson's identification of ... particles has been 19 disproved. The particles seen by Henderson can 20 therefore be said only to contain Magnesium and 21 Silicon, i.e., a magnesium silicate". 22 And thusly not talc; correct? 23 A Yes. 24 Q Okay. 25 So they're talking about discrediting

Page 923 1 another -- another researcher; right? 2 A Well, they use the word "discredit". 3 Q Yeah. 4 A But what they're saying is that his results 5 were not confirmed and not at that point valid. 6 Q By their sponsored work; right? 7 A By the laboratory that was doing the work, 8 yeah. 9 Q They sponsored work, which they then used in 10 aim to discredit Mr Henderson's work; correct? 11 A They -- they sponsored work which -- the aim of 12 which, as with so much in research, is to seek the 13 truth, to get to the bottom of things and find the 14 truth. 15 What they found was a result which clearly 16 disproved the work that Henderson, who -- you know, he 17 was a specialist in a certain area, particularly 18 histology, but by using scanning microscopy with 19 platinum shadowing, that is very sophisticated. 20 Plessey Laboratories was an electronics 21 company who got a great deal of expertise in 22 manufacturing new instruments, leading edge 23 instruments. So they would have expertise that other 24 people would not have. They wouldn't even be 25 commercial necessarily at that point.	Page 925 1 A Yes. 2 Q -- do you know whether or not that was -- paper 3 was ever withdrawn? 4 A Well, in science you don't withdraw a paper. 5 You send a -- usually a letter to the editor. 6 Q Okay. 7 A And I've seen many of those, as a small, you 8 know, three paragraphs, two paragraphs. 9 That's not unusual. 10 Q Have you ever seen that for that paper? 11 A I've not, but there again, I hadn't actually 12 seen the original. 13 Q Until today? 14 A Until, yes, as I recollect, I don't recollect 15 seeing it until today. 16 Q Okay. 17 By the way, Dr Langer and Dr Rolle in 1976, 18 they authored a paper about asbestos in consumer 19 talcums; correct? 20 A They did, yes. 21 Q Right. 22 Basically, following very similar protocol, 23 they pulled I think 19 or 20 off the shelves -- 24 A Yeah, yeah. 25 Q -- and did analysis of those and they found
Page 924 1 (Reporter clarification) 2 They would not necessarily be commercialized 3 at that point. If the Plessey Research Labs were doing 4 sophisticated work and that work disproved the work 5 that Henderson had done, that was aim -- as we aim to 6 seek the truth. 7 We're moving towards to learn more about it. 8 Q All right. 9 So I appreciate all you have to offer on the 10 scientific process, but my question was: this was 11 research funded by J&J; right? 12 A Correct. 13 Q And the result is, in their own words, they can 14 discredit -- they can discredit further Mr Henderson's 15 paper; right? 16 A Yeah. 17 Q That's what they say? 18 A Yeah, I mean, the results -- the work -- 19 discredit Mr Henderson's paper. 20 Q Yeah. Okay. 21 A Yeah. 22 Q You can set that aside. 23 Now, let me ask you, the Colorado School of 24 Mines paper, or not the Colorado School of Mines paper, 25 the Bowling Green paper we talked about earlier --	Page 926 1 asbestos in a lot of them; right? 2 A They claimed to, yes. 3 Q Okay. 4 A But I also seem to recollect that Dr Langer 5 wrote a letter to New York Times saying that there'd 6 been some errors. 7 Q I think you're thinking about '71, which we 8 already talked about, where Mount Sinai found between 5 9 and 25 per cent in some consumer talcums? 10 A Yeah. 11 Q Is that what you're thinking about? 12 A It could be. 13 Q Okay. 14 A But what I'm saying is there are -- there are 15 mechanisms for correcting the record. 16 Q If you're going to officially correct a 17 scientific study, you write the journal where it was 18 published? 19 A You would normally do that, yes. 20 Q Okay. All right. 21 Here's Exhibit 190. 22 (Exhibit 190 marked for identification) 23 This is from 1973. You can see that at the 24 top; right? 25 A Yes.

Page 927 1 Q It's typed up by Ashton? 2 A Yes. 3 Q Right, and it's Happenings of the week of 4 October 8, FDA Lewin Report: 5 "BABY POWDER clean; S[hower] to S[hower] 6 question mark; M[edicated] P[owder] trace tremolite. 7 Notice about report in pink sheet. Situation expected 8 to hit press during next 5 days". 9 So they're monitoring what they know is 10 coming on Lewin; right? 11 A Yes. 12 Q Shower to shower, we know that ultimately Lewin 13 said there was asbestos in it and McCrone did; right? 14 A Yes. Lewin did say that, yes. 15 Q And so did McCrone; correct? 16 A Yes. 17 Q Medicated Powder we know had that additive that 18 they were finding chrysotile in; correct? 19 A Medicated Powder had sodium sesqui citrate that 20 could be confused with chrysotile. 21 Q Well, okay, we might go back and look at them. 22 I think we've already talked about it, but there was an 23 additive to the Medicated Powder, which was called ... 24 A Was that the boric acid, or the sodium sesqui 25 citrate?	Page 929 1 What does -- what does that mean? 2 A I don't know. I wouldn't even dream to guess. 3 Q Okay. 4 "Italian broker thinks wide coverage of Lewin 5 splash coincident with Rabino visit could make Rabino 6 scary". 7 What does that mean? 8 A Again, it's just speculative comment. 9 It's not something that -- I don't know what 10 the Italian talc broker was thinking or what his 11 opinion is. It's -- it's not something that I can 12 honestly comment on. 13 Q Okay. 14 Johns Manville, down at the bottom: 15 "ASBESTOS in our talcs. 16 Lemar thinks his people now cooled off due to 17 possible misinterpretation of trace minerals. I have 18 authorized Colorado to help JM out of their pitfalls". 19 Right? 20 A Yeah. 21 Q Okay, and we talked about that yesterday? 22 A We did indeed, yes. 23 Q Right. 24 And JM started to get into something that J&J 25 wasn't too keen on; right?
Page 928 1 Q No, it was neither. It was -- it was from 2 Johns Manville. It was called [something] sell. 3 I'll find it. We'll come back to that. 4 Italian Talc Matters: 5 "RUBINO visit postponed to coming week". 6 So they're talking about visiting Rubino; 7 right? 8 A Yes. 9 Q So he's the guy that ultimately publishes a 10 paper on the Italian miners; right? 11 A Yes. 12 Q "Hildick-S[mith] now aware of moving with 13 dispatch since possibility JM ..." 14 That's Johns Manville? 15 A It could be. 16 Q Okay. 17 A It's a guess. 18 Q "... JM could move into the situation if we 19 dilly dally". 20 Right? That means we kind of -- 21 A Delay. 22 Q Delay. Right. 23 "... Hildick not keen on idea to use Dr 24 Stefano as a professional filter on study ... maybe he 25 is right".	Page 930 1 A Yeah, JM were looking at a totally different 2 talc, which is not a cosmetic talc. 3 Q Well, they were looking at using the 4 concentration method that had a higher level of 5 sensitivity; right? 6 A Yes. 7 Q Okay. You can set that aside. 8 This will be -- are we 206? No. 9 A That was 190. 10 Q Here it is. I got it, sorry. 191. 11 (Exhibit 191 marked for identification) 12 MR GAFFREY: Excuse me, 198 that went before, 13 what was the date of that? 14 MR PANATIER: Which one? 15 MR GAFFREY: 198 -- I'm sorry, 189, the 16 United Kingdom Work Status Report? 17 THE WITNESS: It says 1.6.73, but in British 18 English, that's 1 June, '73. 19 MR GAFFREY: Okay. Thank you. 20 BY MR PANATIER: 21 Q All right. Here you go, sir. This is 191. 22 Here you go. 23 Okay, sir, this is by Petterson. 24 A Yes. 25 Q October 26, 1973. Subject, Epidemiological

Page 931 1 Study of Workers in Italian Talc Mines: 2 "Pete, I have read your note of October 18th. 3 There is no question but ... we should go forward and 4 as rapidly as possible. 5 My questions are on minor items: 6 1. I think it important that we originate 7 this study and therefore control the work". 8 Did I read that right? 9 A Well, that was his opinion, so you -- and 10 that's what you read. 11 Q Right? 12 A Yes. 13 Q "Having the MRC group involved would be an 14 error at this point". 15 Right? 16 A Yes. 17 Q So they're saying: we should sponsor the talc 18 study of the miners and control the work; right? 19 A Well, I don't see the word "sponsor". I don't 20 see the word -- yeah, I don't see the word "sponsor", 21 yeah. 22 Q We'll get there. 23 A Yeah. 24 Q But they're saying: we should originate the 25 study and therefore control the work; right?	Page 933 1 Q And here we have, on October 26, 1973: 2 "I think it important that we originate this 3 study and therefore control the work". 4 That would be an example, using your own 5 words, of undue influence; correct? 6 A Well, if we were to take it literally, yes. 7 But the word "control" here can have many 8 different meanings. It could also mean coordinate or 9 have a relationship with. 10 Quite frankly, I don't think you could ever 11 control the Italians. 12 Q All right. Okay. 13 So "control" can have lots of different 14 meanings is your answer? 15 A Yes. 16 Q Okay. You can set that aside, sir. 17 Keep hold of your transcript, there. 18 Okay. Next will be -- this will be Exhibit 19 192. 20 (Exhibit 192 marked for identification) 21 There you go. December 12, 1973. This is 22 from Hildick-Smith to Petterson, and the subject is 23 again the Epidemiological Study of Italian Talc Mine: 24 "On the 26th of November, 1973, a meeting was 25 held with Professor Rubino, Director, Institute of
Page 932 1 A That's what is stated. 2 Q Now, on Monday, I asked you some questions 3 about what might be undue influence in scientific 4 research. Do you recall that? 5 A Yes. 6 Q Okay. 7 And this is from that transcript. This is 8 page 108 through 111 of that transcript. 9 If you look there, I asked you this question: 10 "Undue influence would be what?" 11 And you said: 12 "Undue influence would be visitations to the 13 laboratory, looking at the results and saying, 'Do you 14 really mean this?'" 15 Now, we saw Colorado School of Mines do that 16 with Snider and Mancuso; right? 17 A Well, they did visit that particular group. 18 Q All right. 19 A Yes. 20 Q And I said: 21 "Trying to control it?" 22 And you said: 23 "Trying to control it, yeah". 24 Right? 25 A Yes.	Page 934 1 Industrial Medicine, University of Turin to discuss the 2 epidemiological study he is willing to conduct on the 3 miners of a talc mine from which J&J in England 4 obtained their talc for commercial distribution". 5 Right? 6 A Yes. 7 Q So now they're going to Italy to meet with 8 Rubino; right? 9 A Yes. 10 Q Before the study is even started; right? 11 A Yes. 12 Q Okay. 13 Then go to the last paragraph: 14 "Professor Rubino intends to have reviewed 15 all the records of employees in the mining company 16 books in the next month and aims to have all the data 17 on the cause of death of the miners by July, 1974. He 18 will submit a protocol for the study along with its 19 cost (estimated) and time of completion. The protocol 20 for the study will be reviewed by epidemiological 21 experts in this country to insure the procurement of 22 optimum data". 23 Did I read that right? 24 A You did. 25 Q So this researcher is going to submit his

Page 935 1 protocol to Johnson & Johnson first; right? 2 A Yes. 3 Q And then Johnson & Johnson is going to have it 4 reviewed by other experts in the US -- well actually -- 5 A Epidemiological experts. 6 Q Right. 7 He said in this country and Gavin 8 Hildick-Smith at this time was where? In the US or was 9 he in Great Britain? 10 A He was in the US, yeah. 11 Q In the US? 12 A Yeah. 13 Q Okay? 14 A Yes, yeah. 15 And, you know, that's not unusual. 16 Q Well, I haven't asked you a question yet. 17 A Okay. 18 Q Okay? 19 I'm only asking you what they're going to do, 20 which is, one, they have now met with Rubino; right? 21 A Yes. 22 Q Two, they are talking about paying for it; 23 right? He's going to give them the cost? 24 A Yes. 25 Q Right?	Page 937 1 Now, they're having another meeting with him; 2 right? 3 A Yes. 4 Q And they're having a meeting with Stefano -- 5 and they're having a meeting with Stefano, who we know 6 controls all the talc exports of the Italian talc to 7 the US; correct? 8 A Yes. 9 Q Okay. Let's pause and get the phone guys back 10 on. 11 (Off the record at 2:09 pm) 12 (On the record at 2:11 pm) 13 BY MR PANATIER: 14 Q So this is now another meeting where Johnson & 15 Johnson is meeting with Rubino and Stefano; right? 16 A Yes. 17 Q And Stefano -- well, he's a doctor. He, 18 apparently, according to the previous memo, controls 19 the exports of the Italian talc to the US; right? 20 A Yes. 21 Q Okay. 22 "Dr Stefano is not an employee of the mine 23 but acts as a medical consultant to Mrs Villa who is 24 the owner of the mine, and he visits the company head 25 quarters once a month to act as a consultant. It was
Page 936 1 They -- he is going to provide them with the 2 protocol for it; right? 3 A Yes. 4 Q They're going to have it reviewed by 5 epidemiological experts that they take it to; right? 6 A Yes. 7 Q To ensure the procurement of optimum data; 8 right? 9 A Yes. 10 Q And somebody underlined "optimum"; right? 11 A Yes. 12 Q Okay. 13 Right, sir. You can set that aside. 14 This will be Exhibit 193. 15 (Exhibit 193 marked for identification) 16 Now, this is February 14, '74. The subject 17 is the Italian study; right? 18 A Yes. 19 Q Okay: 20 "On Saturday, February 9, 1974, a meeting was 21 held with Professor ... Rubino, Director, Institute of 22 Industrial Medicines, University of Turin, and ... 23 Umberto Stefano to review the status of the 24 epidemiological study being conducted by Professor 25 Rubino on the miners at the talc mine in Pinorolo".	Page 938 1 he who interested Professor Rubino in the conduct of an 2 epidemiological study". 3 Did I read that right? 4 A You did. 5 Q Okay. 6 Go ahead and go to the second page: 7 "Dr Stefano is fully acquainted with the work 8 of Professor Rubino and will be acting as a monitor of 9 it and keep us informed of the progress". 10 Did I read that right? 11 A Yeah. 12 Q So the guy who controls the Italian exports is 13 going to serve as a monitor for the researcher; right? 14 A Yes, although we haven't defined "monitor". 15 Q Well, we haven't defined "monitor", but what he 16 says is he's going to be basically be monitoring Rubino 17 and then keep Johnson & Johnson informed of the 18 progress of the study; right? 19 A Yes. 20 Q Okay. You can set that aside. 21 Does Rubino sound super-independent right 22 now, as a researcher? 23 A I don't see why not. 24 If Stefano is, as you use the word, 25 "monitor", the word "monitor" can mean many different

Page 939 1 things. 2 It could equally mean someone who just 3 coordinates and keeps in touch and keeps an eye on 4 things. It can have many different meanings. 5 Q All right. 6 May 14, 1974. This is Exhibit 194. 7 (Exhibit 194 marked for identification) 8 A Yeah. 9 Q Ashton to Hildick-Smith, again having to do 10 with the Italian study; right? 11 A Yes. 12 Q "Dr Stefano has just advised us through Chas 13 Mathieu & Co that Professor Rubino is in need of 14 immediate money to continue the studies which you have 15 in progress". 16 So it's very clear the money is coming from 17 Johnson & Johnson; right? 18 A It was obviously -- they're involved in 19 sponsoring. 20 Q Right. 21 A Whether it's full or part payment. 22 Q Okay. 23 A Yeah. 24 Q "Neither Dr Stefano or Rubino is clear on 25 whether or not a payment has been in transit since your	Page 941 1 originally requested for him to explore. Accordingly, 2 I plan to make immediate arrangements for \$1,500 to be 3 credited to one of Stefano's accounts here in the 4 States through his friends at Chas Mathieu & Co as a 5 partial honorarium for his services in the entire 6 matter". 7 Right? 8 A Yes. 9 Q So they're going to pay Stefano, too; right? 10 A He's obviously medically qualified and 11 obviously has an input into the conduct of the study. 12 Q He does. Is he listed as an author on the 13 study? 14 A I don't know. I can't remember. 15 But he certainly was obviously involved. His 16 medical expert is being involved. 17 Q Okay. We'll get to the study itself. 18 All right. You can set that aside, sir. 19 By the way, on Tuesday I asked you, and this 20 is on the next page there of your transcript, but I 21 asked you: 22 "Would Johnson & Johnson ever fund scientific 23 research so that they could control it?" 24 And your answer was: 25 "I hope not. I'm not aware that that has
Page 940 1 last visit there with them a few weeks ago. If not, 2 then a payment should proceed without delay and I 3 gather another \$12,500 is in order". 4 That's in '74 dollars. I mean, that's real 5 money; right? 6 A Yeah, although, let's be real, it is quite 7 expensive to pay secretarial and monitoring assistants 8 to look at 1,600 records, go through them in detail, 9 read them, summarize them. 10 There's -- there's quite a lot of work 11 involved. 12 Q No one is talking about how much work there is. 13 A Yeah. 14 Q I was just asking you whether or not that was a 15 good deal of money? 16 A It sounds -- it's a good deal of money, but -- 17 Q Okay. 18 A -- it's a good deal of work. 19 Q Okay. No one is disputing how much work there 20 is. 21 Next highlight: 22 "Since Rubino has approached Stefano on this 23 money matter, it becomes essential that Dr Stefano be 24 awarded a partial honorarium for his current medical 25 surveillance and the background range findings I	Page 942 1 ever occurred". 2 Now, Johnson & Johnson, in their own words, 3 said they wanted to originate the Rubino study so they 4 could control it; correct? 5 A Well, that's what's written in a letter. 6 Q Right. 7 A Whether it means control the outcome or just 8 coordinate the conduct to ensure that you've got the 9 best data that was available. 10 Q Okay. 11 We need to take a quick break so we can prep 12 this one out. 13 (Off the record at 2:16 pm) 14 (On the record at 2:24 pm) 15 BY MR PANATIER: 16 Q All right, sir. If you'll look at your 17 testimony from two days ago on page -- looks like it's 18 109, line 10 up at the top: 19 "And what about sending a letter to the 20 researcher saying, 'Here's the results we would like'?" 21 And you said: 22 "That would be unprofessional". 23 And I said: 24 "Okay. 25 It would be improper to exert influence on

Page 943 1 the direction of the scientific study; correct?" 2 You said: 3 "Yes". 4 "It would be improper to exert influence on a 5 scientific study to try and shape the results; 6 correct?" 7 Your answer was: 8 "Yes". 9 Right? 10 A Yes. 11 Q Okay. 12 This is Exhibit 195. 13 (Exhibit 195 marked for identification) 14 This is a letter from Gavin Hildick-Smith of 15 Johnson & Johnson to Professor Rubino, June 26, 1974; 16 right? 17 A Yes. 18 Q "Dear Professor Rubino: 19 I was pleased to be able to talk to you and 20 learn that you will be submitting to me in the next few 21 weeks the raw data that you have obtained in reviewing 22 approximately 75% of the mine workers and millers whose 23 cause of death you are studying". 24 So, first of all, Johnson & Johnson is -- 25 before the study is done or even written, they're	Page 945 1 rural control group". 2 So they've stated the result they want? 3 A No, what they've stated is that: we know you're 4 going to present to a scientific meeting, and when you 5 do present to a scientific meeting, and I've certainly 6 done a few of those, you get a very limited time slot. 7 It could be 10, 15 minutes at most. 8 So I think what they're saying is that in 9 your 10, 15 minute time slot, this is the -- this is 10 the kind of data that's going to be most important. 11 They could well have -- I'm pretty sure they 12 did -- they looked at quantity of dust exposure over 13 time, various other things that would no doubt come out 14 of the study. 15 But they're saying in the ten, 15 minute time 16 slot, this is the kind of thing that would be most 17 interesting. 18 They're giving a little bit of opinion as to 19 where the scientific meeting would get the most 20 benefit. 21 Q Sir, they're not saying: here's what we think 22 is most interesting. 23 They said: 24 "... we would be most interested in having 25 ..."
Page 944 1 looking at the raw data; right? 2 A Yes. 3 Q Okay. 4 Then the next highlight: 5 "The data that I think we would [most] be ... 6 interested in having presented at that meeting ..." 7 Because he's talking about when you have the 8 data you're going to present it; right? 9 A Correct. 10 Q "... would relate to the cause of death of the 11 miners and millers which would show that the incidence 12 of cancer in these subjects is no different from that 13 of the Italian population or the rural control group. 14 We would like to have these data formally presented and 15 also have the data published in a suitable journal". 16 Right? 17 A Yes. 18 Q So before the data has even been completely 19 gathered, before the paper is written, before the 20 person even publishes it, Johnson & Johnson says: 21 "... I think we would be most interested in 22 having presented at that meeting would relate to the 23 cause of death of the miners and millers which would 24 show that the incidence of cancer in these subjects is 25 no different from that of the Italian population or the	Page 946 1 So what they want presented; right? 2 A Yes. 3 Q Okay. 4 And they state the result; correct? 5 "... at ... [the] meeting would relate to the 6 cause of death of the miners and millers ..." 7 Now, if you stopped there, right -- "we want 8 data presented on the cause of death of the miners and 9 millers" -- it doesn't tell the researcher what the 10 conclusion about the cause of death is; correct? 11 Answer that question first. 12 A This letter not does. 13 Q Okay. 14 "... which would show that the incidence of 15 cancer in these subjects is no different from that of 16 the Italian population or the rural control group". 17 The data hasn't even been processed yet; 18 correct, sir? 19 A That we don't know. There may have been verbal 20 communication that indicated that the outcome was going 21 to be exactly as you've described. 22 Q Well, sir, he said up top, that he has -- he 23 said: 24 "I was pleased to be able to talk to you and 25 learn that you will be submitting to me in the next few

Page 947 1 weeks the raw data that you have obtained in reviewing 2 approximately 75% of the mine workers and millers whose 3 cause of death you are studying". 4 A Yes. 5 Q So they haven't even finished reviewing the raw 6 data; correct? 7 A No, what he's saying is that: I spoke to you, 8 either on the phone or whatever, and you've told me 9 you've done 75 per cent of the data. 10 It could well be that that 75 per cent showed 11 what they were looking for was, i.e., there's no 12 relationship between incidence of cancer in -- in the 13 exposed miners, and that it was no different from rural 14 control groups. 15 Q If they already knew what the result was, which 16 is a hypothesis you're putting out there, based on them 17 looking at only 75 per cent of the data, they still 18 felt the need to say what they wanted the conclusion to 19 be; right? 20 Even though, under your hypothesis, perhaps 21 they already knew it; right? 22 A Yeah. I mean, they don't actually use the word 23 "conclusion". 24 What you're saying is: in your ten minute 25 time slot, this is the kind of thing to focus on.	Page 949 1 the cause of death ..." 2 Q Wait. No, no, no. Start over, because that's 3 not what it says. They don't say what is most 4 interesting. 5 They say -- they say: 6 "The data that I think we would be most 7 interested in having presented ..." 8 Right? 9 A That is what's read, yes. 10 Q "... at that meeting would relate to the cause 11 of death of the miners and millers which would show 12 that the incidence of cancer in these subjects is no 13 different from that of the Italian population or the 14 rural control group". 15 First question: did I read that right? 16 A You read that correctly. 17 Q So we're on the same page as to what it says; 18 right? 19 A We are indeed, yes. 20 Q Now, if a study shows that a working 21 population's incidence of cancer is no different than a 22 control group with no exposure to whatever the subject 23 dust or agent is, then you get to say: there's no 24 increased incidence of cancer in the exposed 25 population; correct?
Page 948 1 Q Does this -- where -- I have a red marker. 2 Can you please circle, and I might have 3 missed it, where it says: you have a ten minute time 4 slot, and so just talk about this issue? 5 A No, I can't circulate [sic] a ten minute time 6 slot. 7 What I did say is that I personally have 8 presented at symposia and very often you have a ten or 9 15 minutes time slot. 10 So I was hypothesizing that if you do have a 11 ten or 15 minute time slot, focus on some of the key 12 points. 13 It's a hypothesis. I was postulating. 14 Q Okay. 15 Sir, it doesn't say that, and it doesn't say: 16 just focus on some of the key points. 17 They state the conclusion that they desire; 18 that the data would show the incidence of cancer in 19 these subjects is no different from that of the Italian 20 population or rural control group. 21 That is the conclusion; correct? 22 A They don't use the word "conclusion". 23 The sentence actually reads: 24 "The data that I think ... would be the most 25 ... [interesting] in having presented would relate to	Page 950 1 A Correct, yes. 2 Q Okay. All right. You can set that aside. 3 That was a letter from Johnson & Johnson to 4 Rubino; correct? 5 A Yes. 6 Q Okay. 7 Is Johnson & Johnson credited as an author on 8 that paper? 9 A No. 10 Q This will be Exhibit 196. 11 (Exhibit 196 marked for identification) 12 All right. You can see this is a letter from 13 Mr Ferry. We've seen reference to him; right? 14 A Yes. 15 Q He's the fellow who controls the imports of the 16 Italian talc; right? 17 A Yes. 18 Q And it's to Bill Ashton at Johnson & Johnson; 19 right? 20 A Yes. 21 Q It says: 22 "Dear Bill ..." 23 And this is August 28, '74: 24 "Dear Bill: 25 I am happy to report that I have recently

Page 951 1 heard from Dr Stefano that the epidemiological study 2 being conducted by Professor Rubino at Turin, Italy is 3 now in the final stages of preparations. All 4 indications are that the report will be an excellent 5 one and be most helpful in proving our contention of 6 the lack of hazard in the manufacturing use of talc". 7 Did I read that right? 8 A You did. 9 Q So he's -- he's been given indications by 10 either Rubino or Stefano as to what the conclusions 11 are; right? 12 A Yes. 13 Q Okay. 14 Now, he says that: 15 "I believe that the time has now come when we 16 should begin to review in depth what plans Johnson and 17 Johnson has in the release of this information to the 18 scientific world. In connection with this, I think 19 that it is most important to coordinate the release of 20 any information of the study with the people in Italy. 21 We must know firsthand what use, if any, Professor 22 Rubino, the Italian health officials, and our mining 23 interests in Italy plan for this report on their end". 24 So they're talking about how do we coordinate 25 the release of this paper; correct?	Page 953 1 and Graphite in] Val Chesone, would be most in order at 2 that time and would be most appreciated by them". 3 Did I read that right? 4 A You did. 5 Q Now, if you look at the handwriting, I'm going 6 to do some more handwriting translation for us; okay? 7 You tell me if you -- if you agree with the 8 highlighted part? 9 "J&J will orchestrate Professor Rubino's 10 reporting and presentations"? 11 A Yeah. 12 Q Okay? 13 A I think that's what it may say, yeah. 14 Q So Johnson & Johnson is going to orchestrate 15 the actual researcher, his presentations and his 16 reporting; correct? 17 A Yeah. 18 Q Okay. 19 A And, you know, again, you're dealing with a 20 gentleman who is Italian. If you want to get him to 21 give a presentation at a symposium in the United 22 States, you're going to offer the guy a little bit of 23 help. 24 It's not unusual there. 25 Q Okay.
Page 952 1 A Yes. 2 Q Okay. Next highlight. 3 Okay -- well, I'm going to read the whole 4 paragraph: 5 "In connection with the above, I have already 6 requested that Dr Stefano make arrangements for me to 7 visit Prof Rubino and the people at the mine site in 8 Italy. Because of the dual nature of our instituting 9 and following these Italian studies ..." 10 "Instituting" means they started them; right? 11 A They were involved in instituting them, yes. 12 Q Okay. 13 A Yes. 14 Q "... I believe that it would be most essential 15 for you to accompany me on such -- on any such visit. 16 During that visit it will be possible for us to outline 17 an overall program with the Italians to coordinate the 18 release of any information to the scientific community 19 and the world in general. In order to achieve maximum 20 impact with this study, I believe that you are in a 21 better position than any to oversee the overall program 22 based on the decisions made by your company as to the 23 use of this report and in this way adequately control 24 the situation. I believe also that a personal word of 25 gratitude to our principals, ... [the Society for Talc	Page 954 1 A Organizing -- they use the word "organize", I 2 think. 3 Q Yeah. 4 A "Orchestrate" means organize. So ... 5 Q All right. Well, let's -- 6 A I don't -- I don't see anything nefarious or 7 suspicious or malevolent in that in any way. 8 Q Well, I don't expect that you do. 9 This is Exhibit 197. 10 (Exhibit 197 marked for identification) 11 Here you go. 12 So this is October 30, 1974. It's by Ashton 13 to Hildick-Smith regarding another visit to Turin; 14 right? 15 A Yes. 16 Q Another meeting with Rubino; right? 17 A Yes. 18 Q And this is October 7 meeting: 19 "Rubino gave his talk before the 37th 20 Congress of the Italian Society of Occupational 21 Diseases". 22 So we're not even talking about him coming to 23 the States at this point to give a presentation. He's 24 doing it in his own backyard; right? 25 A He's getting a -- yes, he's getting a dry run

Page 955 1 in his own backyard. 2 Q Okay. 3 A Yes. 4 Q The highlight: 5 "He carried out your instructions and kept 6 his talk in terms of talc broadly without identifying 7 us or Val Chisone in any way whatever". 8 Right? 9 A Yes. 10 Q So they gave Rubino, the researcher, the 11 scientist, instructions to leave them and Val Chisone 12 out of it; right? 13 A Yeah. 14 Q And he did? 15 A Yes. 16 Q Okay. Go to the next page. 17 The Publication of the Preceding Talk: 18 "Rubino asked me to transport the Italian 19 version to you so we all can have the opportunity to 20 comment on it or adjust it for publication in Italy 21 under the proceedings of Rubino's Society ..." 22 So Rubino is actually giving it to Johnson & 23 Johnson so they can adjust it for publication in Italy; 24 right? 25 A It would have been -- the original was written	Page 957 1 only to high grade cosmetic talc and avoid paragenetic 2 mineral matters". 3 Now Johnson & Johnson is editing the paper 4 for substance; correct? 5 A It looks like they're trying to clarify issues. 6 Q They are editing the paper for substance; 7 correct? 8 A Well, they are clarifying it. 9 Q They are saying that the first page has to be 10 carefully revised and they're telling them why; right? 11 A Yes, they're making a clarification, certainly. 12 Q And they're not listed as a coauthor; right? 13 A No. 14 Q Okay. 15 Mineralogical Aspects of Rubino's Talc 16 Article: 17 "As it turned out, he asked me to talk about 18 the mineral make-up of the rocks in the mining 19 operation whence it became clear that miners are 20 exposed to an entirely different mineralogical suite 21 than are millers. 22 More specifically, the miners are continually 23 drifting and drilling through the host rock to get at 24 the talc which is then stoped out. Thus miners are 25 exposed to host rock ... which contains large amounts
Page 956 1 in Italian. It said transport the Italian version, so 2 that it can be published. 3 Generally, you would publish -- most 4 scientific reports are published in English language. 5 Q Let's read that real carefully: 6 "... the opportunity to comment on it or 7 adjust it for publication in Italy ..." 8 A Yes. 9 Q Right? 10 So they're giving -- Rubino is giving it to 11 Johnson & Johnson for publication in Italy to adjust 12 it; right? 13 A Or to translate it. 14 You still publish in the English language, 15 even in Italy. 16 Q So he's proposing to give it to the sponsor of 17 the study; right? 18 A For translation. 19 Q Okay. 20 "I have some mineralogical comments which I 21 told to Stefano. The first page of the article has to 22 be carefully revised. The mention of two genetic 23 sources of talc and the phrase which indicates that 24 talc of dolomitic origin has fibrous mineral content 25 must be deleted. It is important that Rubino refer	Page 958 1 of muscovite (mica) and quartz (silica)". 2 And you and I talked briefly about that, 3 which is the miners aren't really burrowing through 4 talc; right? 5 A Well, until they get to the talc. 6 Q Right. 7 A When they get to the talc, they're into the 8 talc. 9 Q Right. 10 A But they could be cutting through non-talc rock 11 to get there. 12 Q Right. 13 A And that's called -- they used the word "stoped 14 out". In other words, it's clearing. 15 Q Right. 16 "Your idea to transmit ..." 17 Well, I need to read this for context: 18 "The millers never are exposed to those rock 19 dusts or that mineral balance since millers only mill 20 talc, not host rocks. Rubino now needs a written 21 reference communication on the mineral make-up of the 22 host rocks and talc ore. The geological report from 23 Cardiff (on file at FDA here) is a useable reference 24 for that and I gave you the appropriate pages yesterday 25 for transmittal to Rubino. Your idea to transmit it as

Page 959 1 a personal communication from you as opposed to other 2 ways is an excellent idea. 3 In addition to the above it is advisable that 4 Rubino have more than one reference which cites host 5 rock mineralization and absence from chrysotile". 6 So, again, now they are saying: we need to 7 give him more references for lack of chrysotile; right? 8 A Yes. 9 Q Lastly -- 10 A And he goes on to say where he obtained that 11 reference. 12 Q Yeah. 13 A From the Geological Library in Milan. 14 Q Yeah. Right. 15 Johnson & Johnson is playing an active role 16 in editing Rubino's paper and in providing him 17 assistance in getting additional references; right? 18 A Yes. 19 Q Okay. 20 Lastly: 21 "It is apparent that he is interested in 22 trace metal contents of dust clouds but I did not want 23 to get into that can of worms on the visit". 24 Did I read that right? 25 A You did.	Page 961 1 independent researcher? 2 A Yes. 3 Q Okay. 4 Let's look at the next sentence: 5 "The manuscript, in my opinion, is written in 6 a form and style that is unacceptable for the Journal 7 of Occupational Medicine. I have in mind to send the 8 manuscript when edited for factual accuracy to a 9 science writer who will hold it in confidence ..." 10 Meaning don't tell anybody; right? 11 A Well, don't publish it, yeah. 12 Q Not publish it as his own. He's saying "hold 13 it in confidence"; right? 14 A Yeah. 15 Q Don't tell anybody is what that means, isn't 16 it, sir? 17 A It means hold it in confidence. 18 Q Right: 19 "... and rewrite for the Journal of 20 Occupational Medicine". 21 A Yes, and, again, let me -- let me give an -- 22 Q Well, I'm asking you whether -- first of all, 23 I'm asking you whether that's what it says? 24 A That's what it says. 25 Q Johnson & Johnson is talking about taking
Page 960 1 Q Okay. You can set that aside. 2 This next one will be 198. 3 (Exhibit 198 marked for identification) 4 This is by Gavin Hildick-Smith, March 31, 5 '75, Talc -- Rubino Transcript, to Mr Lee: 6 "Attached are a letter and manuscript 7 received from Professor Rubino. 8 The manuscript is intended for publication in 9 the Journal of Occupational Medicine. The manuscript 10 should be scrutinized by our statisticians and reviewed 11 for factual accuracy". 12 Johnson & Johnson is still playing an active 13 role, a very active role, in editing this paper before 14 it's published; correct? 15 A They're playing a role which is -- it's not 16 unusual to say: look, we've got experts in statistics 17 in house. You, Dr Rubino, Professor Rubino, may not 18 have written a report of this type before and magnitude 19 before. We'll help you out. 20 I don't see anything malicious in that. It's 21 just saying: we'll help you out with the statistics. 22 Q Is it Johnson & Johnson's -- 23 A We're experts. 24 Q Sorry -- is it Johnson & Johnson's opinion that 25 Professor Rubino was still doing this study as an	Page 962 1 Rubino's paper and having it rewritten by someone who 2 will keep it quiet so it be submitted to the Journal of 3 Occupational Medicine; correct? 4 A In the form that the Journal of Occupation 5 Medicine required. 6 Every journal has what's called a "house 7 style", the way you set out a report. Typically, in 8 scientific journals, you describe the results, the 9 methods that you use, the statistics. Everything is 10 done in a certain order, and every journal will have a 11 different house style. 12 It was obvious from my reading of that that 13 the initial version of the manuscript would not have 14 met the house style of the Journal of Occupational 15 Medicine. 16 So by -- by sending it to an expert editor, 17 they would meet the requirements of the journal. 18 Otherwise, the journal would not publish. 19 Q Nothing wrong with it at all, and that's why we 20 want it kept in confidence; right? 21 A Well, you just -- you don't circulate stuff 22 that's never been published. 23 Q Exhibit 199. 24 (Exhibit 199 marked for identification) 25 Up to this point -- let's just be very

Page 963 1 clear -- up to this point, Johnson & Johnson has paid 2 for the Rubino study, at least in part; correct? 3 A They've made a financial contribution. 4 Q They have, in their own words, originated the 5 study; right? 6 A Yes. 7 Q So they can "control" it; right? 8 A Well, we haven't defined the word "control". 9 Q I'm using their words. 10 A Using the word, right. 11 Q So they can control it; right? 12 A They've used that word, yes. 13 Q They have met with Rubino at least two times 14 before its publication; correct? 15 A Yeah. Nothing unusual in that. 16 Q Again, I didn't ask you whether there was 17 anything unusual about it. 18 I'm asking you what they actually did. 19 So they met with him at least two times; 20 right? 21 A Yes. 22 Q They wrote him a letter wherein they talked 23 about what they would like him to talk about at a 24 conference; correct? 25 A They did.	Page 965 1 Who's Waggoner? 2 A I recollect I think he was a senior scientist 3 at Johnson & Johnson -- 4 Q Okay. 5 A -- Baby Products Company. 6 Q And this is one of those letters to the file; 7 right? 8 A Yeah. 9 Q It goes right in the file cabinet? 10 A It does. 11 Q Okay. 12 A It's a record of a meeting. 13 Q All right. 14 But it does look like, however, some people 15 pulled it from the file, because you can see a few 16 initials up top, as well as a received stamp; right? 17 A Yes. 18 Q So it's not like this one did just go straight 19 into the file; right? 20 MR GAFFREY: What's the date on that? 21 MR PANATIER: This one is December 20, 1974. 22 Q And this one regards a meeting with the FDA on 23 November 6, '74; right? 24 A Yes. 25 Q Okay.
Page 964 1 Q Right, as well as what expected the results to 2 show, that being no more incidence of cancer between 3 the miners and the millers and the general population; 4 correct? 5 A Yes, and we assume that, based on telephone 6 conversations, they probably already had that 7 information. 8 Q They have told him that they want him to revise 9 the entire first page; correct? 10 A Yes, if there were factual misunderstandings, 11 especially from the Italian translation. 12 Q Well, they want him to remove references to 13 fibrous dolomite; correct? 14 A Yes. 15 Q They want him to include references about lack 16 of chrysotile; right? 17 A Yes. 18 Q They're going to have it rewritten on the down 19 low by somebody to put it in the form for publication 20 in the Journal of Occupational Medicine; correct? 21 A Yes. 22 Q Okay. 23 So this is Exhibit 199 that you're looking 24 at. If you go to -- this is a paper -- not a paper, 25 it's a letter -- from William C Waggoner.	Page 966 1 Let's just go to the second to last page. 2 It's the page at the bottom is 294. 3 This is what Mr Waggoner says, or Mr 4 Waggoner: 5 "Dr Schaffner ..." 6 He's FDA; right? 7 A Yes. 8 Q "... then offered that although Johnson & 9 Johnson has supplied the FDA with a great deal of data, 10 the question of talc won't go away and more data will 11 be needed on several fronts. Further that any data 12 would be welcomed, but there is a question whether or 13 not data of a negative nature will satisfy 14 consumerists". 15 What is a consumerist? 16 A That's bad grammar. I think it would mean 17 consumer. 18 Q Okay. 19 "Dr Shapiro questioned whether or not the 20 Rubino study could be related to the dusting of a child 21 with talc. Dr Schaffner then added that any data would 22 be overshadowed by the fact that consumers aren't in 23 mines, and consumerists are concerned with home-use. 24 He agreed that the data may be very useful, but it 25 really is difficult to relate to a home-use situation".

Page 967 1 Did I read that right? 2 A You read what his opinion was, yes. 3 Q And that was from the guy at the FDA; right? 4 A Yes. 5 Q Okay. 6 You can set that aside. 7 Exhibit 200. 8 (Exhibit 200 marked for identification) 9 A Made it. 10 Q There's no fireworks or confetti going off; 11 right? 12 Right. This is from Lee to Mullen, May 29, 13 '75: 14 "[Dear] Mr ... Mullen: 15 Relative to our project spending meeting of 16 May 19th, we would like to identify the following, as 17 elements of the above, whose cost should be shared 18 between J&J International and ourselves in the current 19 year because of accruing benefits ..." 20 Meaning these studies they're referencing may 21 be benefiting both J&J International as well as J&J US? 22 A Yes. 23 Q All right. Okay. 24 And then it lists these different studies, 25 and 1. is:	Page 969 1 Q Okay. 2 A Yes. 3 Q Total 165,000; right? 4 A Yes. 5 Q Okay. 6 So that tells us -- that gives us at least an 7 installment for this period that they were paying to 8 Rubino, 30,000? 9 A Yes. 10 Q Okay. All right. You can set that aside, sir. 11 This will be 201. 12 (Exhibit 201 marked for identification) 13 November 19, 1975. This is from Ashton to 14 Lee. 15 Ashton says: 16 "I had a meeting with Dr Rubino during my 17 recent visit to Val Chisone to get some first hand 18 impressions on his talc activities". 19 So Ashton went to Italy and met with Rubino 20 again; right? 21 A Yeah. 22 Q "I arranged the meeting in the presence of Mr G 23 Villa ..." 24 We know he's with the mining family; right? 25 A He's the son.
Page 968 1 "Effort ..." 2 Well, this isn't a study. This is a task: 3 "Effort re[garding] Asbestos Identification 4 Methodology Talc Safety Studies Generation & Rebuttal 5 Coordination". 6 Right? 7 A Yes. 8 Q \$40,000 for that? 9 A Yeah. 10 Q Battelle Inhalation Studies. 11 Those were the hamster studies; right? 12 A They would be, yes. '75. Yes. 13 Q Yeah. 14 A Yeah. 15 Q \$52,000; right? 16 A Yes. 17 Q Italian Talc Millers Pulmonary Morbidity Study, 18 \$30,000; right? 19 A Yes, yes. 20 Q Talc Safety Papers Presentation, \$20,000; 21 right? 22 A Yes. 23 Q Cardiff Consultant Agreement, \$13,000. 24 That's Pooley; right? 25 A It would be, yes.	Page 970 1 Q Right. 2 A Yes. 3 Q "... Mr D Ferry of Chas Mathieu, USA and our 4 joint friend Dr Stefano, so there would be no doubt 5 that Mr Villa would be up to the minute on the 6 information and any differences of opinions". 7 Skip down: 8 "Rubino has now received official acceptance 9 from the Journal of Occupational Medicine USA on his 10 manuscript covering the entire mortality study as 11 delivered at the San Francisco meeting this past 12 April". 13 So now it's been accepted; right? 14 A It has, yes. 15 Q Go to the next page. 16 "Ferry advised the group that he sees no 17 benefit or need for the proposed pulmonary study as far 18 as the world talc market is concerned. He is 19 apprehensive on any study which can produce results 20 less than clear cut and told Villa he was opposed to 21 the study". 22 So apparently Rubino is proposing to do a -- 23 what's called a "morbidity study"; correct? 24 A Yes. 25 Q "Morbidity" means -- "mortality" means death;

Page 971 1 "morbidity" means illness; right? 2 A Yes. 3 Q Okay. 4 And Ferry from Chas Mathieu, who is the 5 importer, is saying he's not too enthusiastic about it; 6 right? 7 A He's the business guy and he didn't see any 8 value in his particular use. 9 Q Okay. Well, here's what Ashton says: 10 "I advised the group that my company was not 11 prepared to finance such a study and that our opinion 12 was that the available cohort of millers was too small 13 for sound statistical significance. I also indicated 14 the study could extend over several years and might 15 raise more unknowns than are presently discernible". 16 That's what Ashton says; right? 17 A That's what he says. 18 Q So he's not in favor if it either? 19 A Not at that stage, no. 20 Q Dr Stefano: 21 "Stefano was of the opinion that the study 22 should be run and that it would prove to be a positive 23 factor in the defense of talc". 24 So he is suggesting he already knows what the 25 results will be; correct?	Page 973 1 negatives". 2 So that's what the mine owner's son says; 3 right? 4 A Yes. 5 Q Okay. You can set that aside, sir. 6 A Lots of different opinions. 7 Q Exhibit 202. 8 (Exhibit 202 marked for identification) 9 All right. This is Rubino's published study; 10 right? 11 A Yes. 12 Q In the Journal of Occupation Medicine? 13 A Yes. 14 Q It lists four authors: Rubino, Scansetti, 15 Piolatto and Romano; right? 16 A Yes. 17 Q Johnson & Johnson is not listed as an author; 18 right? 19 A No. 20 Q Neither is Stefano? 21 A No. 22 Q Bill Ashton, Gavin Hildick-Lee [sic] Don 23 Ferry -- none of those are authors here; right? 24 A They're not authors, no. 25 Q Even though we know that they were involved in
Page 972 1 A Yeah. 2 Q Okay. 3 A He's confident about his product. 4 Q Yeah. 5 "He seemed to think that J&J desired the 6 study and that it would be a natural follow-up from the 7 mortality study. He indicated the study has a bearing 8 on a suit against Val Chesone and they may need the 9 results of ... a study for their own purposes". 10 Right? 11 A Yes. 12 Q So they may want the study to defend against a 13 lawsuit; right? 14 A Yeah. 15 Q Rubino: 16 "Rubino thinks the study should be run". 17 That's all it says for him; right? 18 A Yes. 19 Q Okay. 20 Mr Villa. Skip down: 21 "Villa is opposed to opening up anything on 22 talc which might unearth indefinite findings which can 23 be misinterpreted as negative. His overall view is 24 that he wants the positive aspects on any future talc 25 studies emphasized and undiluted with potential	Page 974 1 the generation of this study; correct? 2 A They were involved in -- as an advisory role in 3 various points, yes. 4 Q And an editorial role; right? 5 A Only in the sense of: can we check your 6 statistics? Can we help you with your statistics? Can 7 we ensure that the -- there's no misunderstanding in 8 technical terms? Which we discussed earlier. 9 Q Yeah. 10 A Yeah. 11 Q And a -- and a meeting with you lot role; 12 right? 13 A Yes, we met, yeah. 14 Q And a please delete certain references role? 15 A I didn't see the delete the references, but ... 16 Q Delete the reference to fibrous dolomite. Add 17 references to lack of chrysotile; right? 18 A Yes. 19 Q Okay. 20 Now, if you look at the end, usually this is 21 where you see acknowledgments for support or conflicts 22 of interest; right? 23 A Certainly, by American and British authors you 24 would, yes. 25 Q Okay.

Page 975 1 There is none; right? 2 A Yes. 3 Q Okay. 4 Then if you see at the very last paragraph, 5 it says, just as an aside: 6 "The small amount of free silica in mills 7 operations is due, as above mentioned, to the actual 8 incomplete screening of talc inclusions. The same 9 explanation could be given for the very small number of 10 fibers in air, caused by possible microinclusions of 11 rock containing little amount of tremolite". 12 Right? 13 A Yes. 14 Q Rubino actually explains the presence of fibers 15 in air based on tremolite; right? 16 A That was his explanation. 17 Q Okay. You can set that aside, sir. 18 This will be Exhibit 203. 19 (Exhibit 203 marked for identification) 20 From Gavin Hildick-Smith at J&J to Professor 21 Rubino, another letter; right? 22 A Yes. 23 Q Is it still Johnson & Johnson's opinion that 24 this guy was an independent researcher? 25 A Well, yes. Why not?	Page 977 1 talk to you about the Selevan manuscript and the 2 Selikoff meeting". 3 So -- 4 Q Oh, maybe you misunderstood my question. 5 My point is Hildick-Smith from Johnson & 6 Johnson is complaining about the -- whether or not 7 someone else's work is a first-order scientific 8 document? 9 A Yes. 10 Q And he's complaining about it to a guy, Rubino, 11 whose paper Johnson & Johnson had rewritten so it could 12 be published; right? 13 A Yeah, but don't forget that paper would have 14 been peer reviewed before the Journal of Occupational 15 Medicine would have published it. They would have sent 16 it out to their own reviewers. 17 What Hildick-Smith is saying here is that the 18 Selevan manuscript at the Selikoff meeting may not be a 19 first-order because it's not been reviewed as peer 20 reviewed. 21 Q Let's be clear, the Rubino paper was peer 22 reviewed by Johnson & Johnson before it was peer 23 reviewed by anybody else; right? 24 A The word "peer reviewed" in -- has two 25 different meanings there.
Page 976 1 Q Okay. Why not? Okay. 2 November 3, 1977, and they're on a first name 3 basis now: 4 "Dear Giovanni ..." 5 Right? 6 "I was pleased to have the opportunity to 7 talk to you about the Selevan manuscript and the 8 Selikoff meeting. As I indicated to you, in my 9 opinion, the Selikoff meeting is designed to show how 10 dangerous all dusts are and prompt government to 11 introduce new regulations. Unfortunately, therefore, 12 the meeting will be very biased, and the quality of the 13 scientific information presented may be less than the 14 best. The results of the meeting will be published in 15 the proceedings, but the data will not be refereed and 16 as such will not be a first-order scientific document". 17 So they're saying that to Rubino; right? 18 A Yes. 19 Q They're literally saying -- he's literally 20 saying that to a guy whose paper he had to rewrite so 21 it could get into a journal; right? 22 A Well, I don't think it actually says that. 23 I'm reading the first line, and maybe you can 24 correct me: 25 "I was pleased to have the opportunity to	Page 978 1 One, a review by Johnson & Johnson: can we 2 help you with your statistics? Can we help you with 3 the way you present the data so that it matches the 4 house style of the Journal of Occupational Medicine? 5 That is not the same as a peer review. 6 A peer review is when the final manuscript is 7 put together and it is sent out by the Journal of 8 Occupational Medicine, or another journal, to three, 9 four, different people to review that paper and say: 10 would you go through this, check the statistics? How 11 is the data presented? 12 That's peer review. 13 Q Sure, sure. I was using it more in the 14 vernacular. 15 A Yes. 16 Q Johnson & Johnson edited and revised Rubino's 17 work before it was ever peer reviewed; correct? 18 A They made editorial comment and they made 19 assistance with some of the statistics. 20 Q Okay. You say "assistance". They asked him to 21 delete certain things; right? 22 A Or rephrase it. 23 Q Okay. 24 Well, I guess it's technically rephrasing if 25 you delete something. You're rephrasing the overall;

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1 correct?

2 A But that could well be part of the overall

3 review of the way it's presented when it's translated

4 from the Italian to the English version.

5 I mean, we're talking hypothetically.

6 Q Well, no, no, it's not hypothetical if they

7 said, "Get rid of fibrous dolomite and add more

8 references for lack of chrysotile".

9 That's not hypothetical. That happened;

10 right?

11 A Yeah.

12 Q Okay.

13 A And I guess what I'm saying is that fibrous

14 dolomite is not applicable because there was no fibrous

15 dolomite in -- in the talc.

16 It was a case of yes, they were going through

17 the mine. They may well have come across fibrous

18 dolomite, but if you're focusing on the talc, you focus

19 on the talc.

20 Q The scientist put fibrous dolomite in his paper

21 and the company said, "Get rid of it"; right?

22 A Because it probably wasn't applicable to the

23 product.

24 Q He says:

25 "As it would be nice to have a presentation

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1 at Selikoff's meeting and a paper in his proceedings

2 which refers to good scientific research on talc, I am

3 taking the liberty of enclosing a discussion section

4 which I have written which perhaps you could include in

5 your paper with appropriate editing by you".

6 Right?

7 A Yes.

8 Q So Johnson & Johnson is giving a discussion

9 section to Rubino to include in his presentation that

10 they wrote?

11 A Yes.

12 Q Okay. You can set that aside.

13 This will be Exhibit 204.

14 (Exhibit 204 marked for identification)

15 This is November 3, 1977. It is the same day

16 as the previous letter; right?

17 A Yes.

18 Q And, in fact, it is the same author. It's

19 Gavin Hildick-Smith?

20 A Yes.

21 Q Right.

22 So he's told Rubino what he would like at

23 this meeting, and said: I included a thing I wrote for

24 you to include; right?

25 A Yes.

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1 Q Now he's writing Stefano, and he says:

2 "Dear Umberto:

3 I was very pleased to have the opportunity to

4 talk to you recently about the preparation of Professor

5 Rubino's manuscript for the December 4 meeting in

6 Washington".

7 So that's our context; right?

8 A Yes, yes.

9 Q Going down:

10 "It is therefore most important that

11 Professor Rubino's paper, as the first one on

12 non-asbestos talc, submits the data he has already

13 obtained and that additional data be included in his

14 paper to which we can refer at the meeting and which in

15 the published proceedings will show that cosmetic grade

16 talc is neither a carcinogen nor harmful when used by

17 consumers or mined under modern conditions.

18 I have taken the liberty of including a

19 discussion and conclusion for Professor Rubino's

20 paper".

21 Right?

22 A Yes.

23 Q Johnson & Johnson is authoring the discussion

24 and conclusion for Professor Rubino to present at the

25 meeting; right?

Page 982

1 A They presented a discussion conclusion to a

2 gentleman who does not have English as his first

3 language.

4 I do recollect that he had basic English, and

5 here's some information as to where you want to present

6 it.

7 A bit like we talked about having a house

8 style. You -- you may need to say that this is the

9 kind of information that one would use in a conclusion

10 or a final discussion.

11 So yes, they're offering that information.

12 Q Sir, he's not offering a translation. He wrote

13 the discussion and conclusion and is asking him to

14 include it; correct?

15 A That is correct, yes.

16 Q Okay.

17 A In the English language.

18 Q And, in fact -- he doesn't say he has an

19 Italian version that he's working from, does he?

20 A But he would have, because he's Italian.

21 His original work is in Italian.

22 Q The bottom line is that Rubino didn't author a

23 discussion or conclusion at all. Johnson & Johnson did

24 for him to state and read to this group; correct?

25 A They did, yes.

Page 983 1 Q Okay. 2 Up at the top it says: 3 "Bill ..." 4 And this is cc William Ashton. 5 "Bill -- Gavin Hildick-Smith informed me that 6 Stefano is writing the English manuscript for Rubino's 7 SOEH paper". 8 That's Society of Occupational and 9 Environmental Health; right? 10 A Yes. 11 Q "Stefano is to approach Rubino on the addition. 12 We all appreciate the delicacy of this approach." 13 That's what we says; right? 14 A Yes. You don't want to tread on the guy's 15 toes. 16 Q Especially when you're writing entire sections 17 of stuff for him to present; right? 18 A Well, the final sentences, yes. 19 Q Okay. This will be Exhibit 205. 20 (Exhibit 205 marked for identification) 21 All right. This is from Gavin Hildick-Smith 22 again to G Lee, Talc Study -- Professor Rubino, 23 January 5, 1978: 24 "Attached is a copy of a letter addressed to 25 Mr W Ashton ..."	Page 985 1 This will be Exhibit 206. 2 (Exhibit 206 marked for identification) 3 A Yes. 4 Q This one's got a few packets of paper; okay? 5 This is from Gavin Hildick-Smith to Stefano, 6 and he says -- this is March 20, 1978, and you can see, 7 actually, at the top in handwriting it says. 8 "Rubino. Italian Mine Morbidity Study". 9 A It does say that, yes. 10 Q Okay. 11 I've gotten pretty good at learning these 12 guys' handwriting, haven't I? 13 A Yeah. Good for you. 14 Q Right. Yeah. 15 "Dear Umberto: 16 Many thanks for your letter of March 3 in 17 which you kindly inform me that Rubino will probably be 18 doing a morbidity study in talc miners in Italy. 19 I think the study will be most interesting and I hope 20 that you will be kind enough to keep me informed of it 21 and the results obtained". 22 Right? 23 A That's what it says. 24 Q Okay. 25 If you look at the very next page, it's a
Page 984 1 That's Bill Ashton. 2 "... which was placed in an envelope 3 addressed to me. The letter suggests that Professor 4 Rubino is proposing a study on morbidity of millers in 5 the Italian mine and that 'Donald' is involved with the 6 study. 7 Professor Rubino is, of course, free to do 8 any studies he wishes, but I think it is important that 9 those interested in identifying the morbidity of talc 10 mine employees should be kept appraised of any proposed 11 studies so that we don't encounter any unnecessary 12 'surprises'". 13 Right? 14 A Yeah. 15 Q Okay. 16 So it looks like Rubino is going to go 17 forward with his morbidity study; right? 18 A Sure. 19 Q This is the study that J&J and Don Ferry at 20 Chas Mathieu were against; correct? 21 A Yeah, they didn't want to pay for it, yes. 22 Q It wasn't just they didn't want to pay for it. 23 They didn't think it could benefit them; correct? 24 A Correct. 25 Q Okay. You can set that aside.	Page 986 1 confidential memo on University of Turino letterhead; 2 right? 3 A Yes. 4 Q And it says under 1: 5 "Present status of the problem. It has been 6 inferred by some articles Kleinfeld, Selevan, Boundy, 7 in the last years the possible carcinogenic role of 8 talc. All through these conclusions ..." 9 I think he means: 10 "... Although these conclusions were partly 11 criticised during the Washington SOEH meeting, it seems 12 necessary to publish data which underlines the 13 non-carcinogenicity of non-asbestiform talc". 14 Right? 15 A Yes. 16 Q So this is the actual protocol; right? 17 You can look over it. 18 A Okay. 19 Q Okay? 20 And this is -- so this is the protocol for 21 the study; true? 22 A Yeah, it's a list of what they -- the kind of 23 things they need to think about. 24 Q And so before they even do the study, before 25 the start even starts, they say it seems necessary to

Page 987 1 publish data which underlined the non-carcinogenicity 2 of non-asbestiform talc; right? 3 A Yes. 4 Q Okay. Right. If you will turn to -- it's the 5 big chunk of your paper there. There you go. 6 And there it is: 7 Mortality and Morbidity Among Talc Miners and 8 Millers in Italy, and it's by all the same authors from 9 the first paper, except for they've gotten rid of 10 Romano and added Gay; correct? 11 A Yeah. 12 Q And you can see this says "prepublication 13 copy"? 14 A Yes. 15 Q Right? 16 If you will, please, sir, first of all, it 17 appears that somehow Johnson & Johnson got a 18 prepublication copy; right? 19 A Yeah. 20 Q Okay. 21 If you go to the page the Bates number that 22 says 9089, please. 23 Okay? Do you see there's a -- 24 A Table. 25 Q Is that 9089?	Page 989 1 population? 2 A Yes. 3 Q That's kind of a surprising result, isn't it? 4 A No, it isn't. 5 Q Okay. 6 A I'll explain why, but I don't want to interrupt 7 your flow. 8 Q That's fine. 9 And for millers, they expected 1.2 and they 10 got zero; right? 11 A Yes. 12 Q Okay. 13 Now, part of that could be the "healthy 14 worker effect"; right? 15 A Yes. 16 Q Okay. Is that what you were going to tell me? 17 A I was, yes. 18 Q Okay. 19 So now let's look at cancers of the larynx, 20 esophagus and stomach; okay? 21 A Yes. 22 Q For the miners, they have increased cancer of 23 the larynx; right? 24 A They do. 25 Q Expect 3.3, get 5; right?
Page 988 1 A No, sorry. Two pages turned at once. 2 Q It's all right. We'll get to that one. 3 I think it's the next -- yeah, you got it. 4 Okay. 5 Now, remember from the -- from the protocol 6 it said: 7 "It seems necessary to publish data which 8 underlined the non-carcinogenicity of non-asbestiform 9 talc". 10 So now we're looking at the table for the 11 results; right? 12 A Yes. 13 Q And under Miners you have: 14 "All malignant neoplasms". 15 Right? You have a category for that? 16 A Yes. 17 Q Right? 18 "Malignant neoplasm" is science talk for 19 cancer? 20 A It is. 21 Q Right. 22 It has lung, bronchus, trachea, and it says 23 for miners you have 8 observed and 17 expected. 24 So apparently these guys had half the rate of 25 lung, bronchus and trachea cancer as the general	Page 990 1 A Yes. 2 Q For the esophagus, they expect 2.8 and they get 3 6. It's more than doubled; right? 4 A Yes. 5 Q For stomach, they expect 21.7, they get 26; 6 right? 7 A Yes. 8 Q Okay. 9 For the millers, for esophageal cancer, they 10 expect 1, they get 4? 11 A Yes. 12 Q And for the stomach, it's about equal. They 13 expect 7.9, they get 7? 14 A Yes. 15 Q And then other sites for the millers, they 16 expect 16.1, they get 24; right? 17 A Yes. 18 Q Okay. 19 So there are, at least for larynx in the 20 miners, esophageal cancer in the miners, stomach cancer 21 in the miners, esophageal cancer in the millers and 22 other sites, you have increased cancer? 23 A You do. 24 Q Right. 25 So that would be -- looks like five different

Page 991 1 areas where you have increased cancer among the 2 workers, as opposed to the general population; right? 3 A Yes. 4 Q Okay. 5 All right, sir, and I think the next page -- 6 I think it just restates the data by years worked? 7 A It does, yes. 8 Q Okay. All right. 9 So we have five increased areas of cancer; 10 true? 11 A Yeah. 12 Q So the hypothesis of it seems necessary to 13 publish data which underline the non-carcinogenicity of 14 non-asbestiform talc, well, they didn't seem to see any 15 more lung cancer; right? 16 A Correct. 17 Q But they did see five different categories of 18 cancer that were increased; true? 19 A They did, and of course if we read the full 20 paper, they gave an explanation that, from my records, 21 from my memory, 46 per cent of the employees were 22 smokers. 23 Q Sure. 24 A And when you do a statistical or an 25 epidemiological study, you should coordinate your	Page 993 1 (Exhibit 207 marked for identification) 2 And so this is the paper that came out in 3 '79, Mortality and Morbidity among Talc Miners and 4 Millers in Italy; right? 5 A Yes. 6 Q And this is the published paper, is it not? 7 A Yes. 8 Q Okay. 9 If you will, sir, please turn to page -- on 10 the side it's marked 359. 11 A Yes. 12 Q Okay? See the table there? 13 A Yeah. 14 Q There's categories of causes of death; right? 15 A Yes. 16 Q All causes, lung cancer, non-malignant 17 respiratory disease, pneumoconiosis, and tuberculosis 18 associated with pneumoconiosis and tuberculosis; right? 19 A Yes. 20 Q Where is the category for esophageal cancer? 21 A Well, it looks like it's been placed under all 22 causes. 23 Q Does it say that? 24 A No, this is a simplified version of that, I 25 think.
Page 992 1 control group for smokers and non-smokers. 2 And so those are confounding factors. 3 Q Yes. 4 A So in this particular case, you could not 5 exclude the fact that 46 per cent of those miners and 6 millers were smokers. 7 Q Yes. 8 A It makes it difficult to interpret. 9 Q Sure. 10 A But that was the -- that was one of the 11 conclusions that came out of that study. 12 Q Okay. Well, two things on that. 13 First of all, when you have results, you do 14 try to posit scientific explanations for them; right? 15 A Yes. 16 Q Interestingly, though, no increased lung 17 cancer. All those smokers, no increased lung cancer; 18 right? 19 A Yes. 20 Q Okay. You can set that aside, sir. 21 So that was the prepublication version; 22 right, sir? 23 A Yes. 24 Q Okay. 25 This is Exhibit 207.	Page 994 1 Q I'd say it's simplified all right, because 2 esophageal cancer doesn't appear, does it? 3 A It's not listed, no. It's a simplified 4 version. 5 Q Neither does stomach cancer, which was 6 increased; true? 7 A Well, it's listed under all causes? 8 Q Well, it's not listed. There's a place for 9 "all causes"; right? 10 A This is a simplified version which lists as all 11 causes, yes. 12 Q Right. 13 There's no line there for increased larynx 14 cancer; right? 15 A Correct. 16 Q Or other sites cancer; right? 17 A Yeah. 18 Q So what we have is we know in the 19 prepublication version there are five categories of 20 cancer that are increased among the millers and miners; 21 right? 22 A Correct. 23 Q Five categories, and yet in the paper there's 24 no evidence that those individuals had increased 25 cancer; correct?

Page 995 1 That there were those five different 2 categories of increased cancer? 3 A That's not separated out, no. It's been 4 combined. 5 Q It's not. 6 So it says "all causes", and we see for "all 7 causes", in each category of exposure years, you do 8 have far more observed than expected; right? 9 A Yes. 10 Q But remember the goal of the paper was to show 11 no increased cancer; right? 12 A Well, yes. 13 Q Right? 14 So if you just dropped them under all causes 15 and you don't include the fact that many of those were 16 cancers, there's no way to know; right? 17 A Yes. 18 Q Let's take -- 19 A It's been -- it's been simplified. 20 Q Okay. 21 It's omitted stomach cancer, laryngeal 22 cancer, esophageal cancer and other site cancer; right? 23 A It's put them -- because they were smaller 24 numbers, they've been combined together under a 25 heading, "All causes".	Page 997 1 A This one? 2 Q Is that it? 3 A Yeah. 4 Q So we know that in the prepublication version 5 there were five different categories of cancer that 6 were elevated; correct? 7 A There were five different categories that were 8 listed, yes. 9 Q That were elevated. The cancers were elevated 10 over background? 11 A Let me have a look ... 12 Q Sure. 13 A Yeah, although we don't have statistics as to 14 whether that's a statistically significant difference. 15 Q Well, they're listed just like the other 16 cancers; right? 17 A They're listed numerically, but there's no 18 evidence that that was a -- what scientists call a 19 "statistically significant difference". 20 Q Okay. I understand. 21 We have more cancers in five categories in 22 the miners and millers than we do the general 23 population; correct? 24 A Yes. 25 Q Okay. Thank you, sir.
Page 996 1 Q They were all increased cancers? 2 A Yes. 3 Q Right? 4 A Yes. 5 Q Let's take a quick break. 6 (Off the record at 3:14 pm) 7 (On the record at 3:27 pm) 8 MR PANATIER: A bit of housekeeping before I 9 forget. 10 Q Sir, have you read any depositions taken in the 11 Teuscher case? 12 A No. 13 Q Have you read any depositions taken in the 14 Verdolotti case? 15 A No. 16 Q Have you read any depositions taken in the 17 Herford case? 18 A No. 19 Q Have you read any depositions taken in the 20 Etheridge case? 21 A No. 22 Q All right, sir. 23 I'm going to back to the Mortality and 24 Morbidity paper, the second Rubino paper. 25 You should have it.	Page 998 1 Now let's look at, in the actual paper that 2 is published, which you've looked at, we know that none 3 of those five cancers are mentioned; right? 4 A Correct. 5 Q And you said that they were included in the 6 "all causes"? 7 A Well, I would -- yeah, I was presuming that was 8 the case. All causes. 9 Q You hoped they wouldn't simply make the numbers 10 disappear? 11 A Yes. 12 Q Right? 13 A Yes. 14 Q Okay. 15 Nevertheless, if they're all just roped into 16 the "all causes", then we don't know the -- anyone 17 reading this won't know that there were increased 18 cancers in the miners and millers in five categories; 19 correct? 20 A Yes, although, because we've said before, I 21 don't know see any evidence there that those 22 differences were statistically significant. 23 Q Well, sir, let's look at page 1 of the report; 24 right? 25 A Yeah.

Page 999 1 Q You have lung cancer; right? 2 A Yes. 3 Q Right? 4 You don't have a statistical significance -- 5 significant increase in lung cancer, do you? 6 A No. 7 Q But they report it? 8 A Correct. 9 Q Okay. 10 So whether or not those were statistically 11 significant, the other five categories, they should 12 have been reported; correct? 13 A Well -- well, it seems to me that what this 14 paper is focusing on is pulmonary issues, lung issues. 15 Q Well, let's see if -- let's see what it says. 16 Look at the last page of the paper, please. 17 What they say in the middle paragraph there 18 under their conclusions is: 19 "In conclusion, our findings show that no 20 relationship has been found between Italian talc 21 exposure and cancer, whereas pneumoconiosis may be 22 observed". 23 Is that what they say? 24 A That's what they say, yes. 25 Q Okay.	Page 1001 1 A Yes. 2 Q If you have 1, that means that's equal with 3 background -- 4 A Yeah. 5 Q -- right? 6 A Yeah, yeah. 7 Q So tell me what the SMR is for each of those 8 cancers. 9 So for larynx cancer in the miners, what's 10 the SMR? 11 A The SMR is 152. 12 Q That's elevated, is it not? 13 A But that was on a population of 5 observed and 14 3 exposed. 15 Q That's fine, sir, but they -- 16 A Expected. I beg your pardon. 17 Q Yeah, I hear what you're saying. 18 A Yeah. 19 Q But there's a statistically increased amount of 20 larynx cancer; correct? 21 A Well, that's not statistically significant. 22 The -- when you do statistics, you use a 23 probability, and there's a little -- a single asterisk 24 where the probability is less than .05 and a lesser one 25 where the probability is less than .01, and that --
Page 1000 1 And we know, based on the prepublication 2 version, that five categories of cancer were elevated; 3 right? 4 A Yes. 5 Q Okay. 6 A Although statistically -- 7 Q You can set it aside. 8 A -- they were not significant. 9 Q Yet they reported lung cancer; right? 10 A They did. 11 Q Okay. Let me take a peek at that. You can set 12 that aside, sir. 13 Okay. Sir, you know what an SMR is; right? 14 A Yes. Standard mean -- 15 Q Standard mortality ratio. 16 A Yes. 17 Q Right? 18 A Mortality ratio. 19 Q And a standard mortality ratio over 2 -- over 20 200 is statistically significant for an increased risk; 21 right? 22 A Yes. 23 Q Okay. 24 So take a peek here. Well, actually, sorry. 25 Anything over 1 --	Page 1002 1 that is not the case for the one you just spoke of, the 2 esophagus. 3 Q Sorry, let me grab my copy, which I thought I 4 had. Sorry, let me take a peek at it to make sure 5 we're talking about the right thing. 6 Actually, okay, if the P value is less than 7 .05, you have a 95 per cent confidence interval; right? 8 A Yes. 9 Q Most epidemiological work is done to a 10 95 per cent confidence interval; right? 11 A Yes, yes. 12 Q Sometimes you can get the P value to 13 99 per cent; right? 14 A Yes. 15 Q Or the confidence interval to 99 per cent; 16 true? 17 A Yes, yes. 18 Q Okay. 19 So for -- let's just look at -- for other 20 sites, okay, take a peek at other sites. Right there; 21 right? 22 They have a statistically increased risk for 23 cancer, do they not, at a P value of .05; right? 24 A They do, yes. 25 Q That's to a 95 per cent confidence interval;

Page 1003 1 right? 2 A Yes. 3 Q The miners have a statistically increased rate 4 of esophageal cancer of -- actually, it's of 4 -- 4 5 fold, or 400 as expressed in SMR, and that's 6 statistically significant, too, is it not? 7 A It is on those numbers, yes. 8 Q To a 95 per cent confidence interval; correct? 9 A It is on those numbers, yes. 10 Q Aha. 11 Now, the other ones don't have the little 12 asterisks by them, do they? 13 A They do not. 14 Q But neither does lung cancer? 15 A No. 16 Q Right? 17 But they reported lung cancer? 18 A They did. They were focusing on the lungs. 19 Q Yeah, but they reported a statistically 20 insignificant result for lung cancer, yet they had 21 statistically significant results for esophageal cancer 22 and for other causes; correct? 23 A They did -- 24 Q Okay. 25 A -- but you cannot -- although you can do a	Page 1005 1 draft, were in some way not significant, of no 2 scientific value? 3 A Yeah. What we're seeing here is -- let's look 4 at miners. Lung cancer. They observed 2 people and 5 they expected 3.9. 6 Q Yeah, so you've got -- you've got 2 people? 7 A Yeah. 8 Q Yeah, and they saw in -- they saw in larynx 9 cancer 5 cancers, expected 3.3; in esophageal, 6 10 cancers, expected 2.8; stomach, expected 21.7, saw 26; 11 esophageal for millers, saw 4, expected 1; for other 12 sites, saw 24, expected 16.1. 13 You had far more cancer incidence in these 14 other sites than lung cancer and they weren't reported; 15 right? 16 A Yes, because -- 17 Q In fact, we know that several of them were to a 18 P value of 95 per cent, or to a confidence interval of 19 95 per cent; right? 20 A Yes. 21 Q Okay. 22 Now -- 23 A But when you do a P value using a statistician 24 or a statistical analysis, you also need to look at the 25 biological plausibility, and if you don't get round
Page 1004 1 statistical analysis and get a result, if you have 2 numbers like observed 4, expected 1, or observed 6, 3 expected 2.8, those will not give you what's called 4 "biological significance". 5 A mathematician will say: yeah, P .05 -- 6 COURT REPORTER: Will say what, sorry? 7 THE WITNESS: A mathematician would tell you, 8 or a statistician would say you get a P equals or is 9 less than .05. 10 But that in this particular case would be of 11 questionable biological value because the numbers are 12 so small that attaining biological significance is just 13 not possible. 14 Certainly in the main paper, as I recollect, 15 they did state that there is a significant compounding 16 effect because so many of these guys were -- were 17 smokers. 18 BY MR PANATIER: 19 Q Sir, the lung cancer that was actually reported 20 in the paper -- you got the actual paper in front of 21 you -- was observed 8, expected 17.2, observed 4, 22 expected 6.1. 23 And you're telling me that numbers that are 24 even greater than that for these other cancers that are 25 in the prepublication edition, or the prepublication	Page 1006 1 your confounding factors, like cigarette smoking, if 2 you don't deal with size of population, it makes it 3 very difficult to come to a definitive conclusion. 4 Q There were 5 extra cancers in the 5 prepublication version that showed increased over 6 expected; they were not in the publication version; 7 correct? 8 A If we're talking about larynx? 9 Q No, listen to my question. I'm just asking you 10 a really simple question this time; okay? 11 There were 5 cancers -- 5 total categories. 12 A Five categories, yes. 13 Q Okay, that showed increased cancer over the 14 expected that were in the prepublication version and 15 were omitted from the publication version; correct? 16 A Correct. 17 Q All right, sir. You can set that all aside, 18 please. 19 Okay. So this will be Exhibit 208. 20 (Exhibit 208 marked for identification) 21 And, Sharla, I'm going to let you look at it 22 just because I don't have another copy. 23 MR FROST: Okay. 24 MR PANATIER: Okay. 25 MR GAFFREY: Is it 209?

Page 1007 1 MR PANATIER: 208. 2 Q Here you go, sir. 3 That document is dated 4.5.77; correct? 4 A That's the date, yes. 5 Q Okay, and that is the test method -- is it 6 7019? 7 A Yes. 8 Q And that's for DTA for finding chrysotile; 9 right? 10 A It's titled Detection of Serpentine Minerals in 11 Windsor 66 Talc by DTA. 12 Q Right. 13 So it looks like for a time Johnson & Johnson 14 had set up a testing method to do DTA-style testing for 15 chrysotile; right? 16 A Yes. 17 Q What is the detection limit for -- in its -- 18 what is it called? 19 A Differential Thermal Analysis. 20 Q What's the detection limit on that? 21 A Well, on page 2 it states: 22 "Approximately 0.5% w/w of serpentine mineral 23 may be detected by DTA". 24 Q Okay. 25 So .5, it's what we had for XRD as well;	Page 1009 1 Bob Roll called my attention to the enclosed 2 brochure from DuPont extolling the use of their DTA for 3 detecting asbestos impurities in talc". 4 So DuPont apparently has a DTA device that 5 they say: hey, we can find asbestos impurities in this; 6 right? 7 A Well, that's what DuPont was saying, yes. 8 Q Right. 9 And, of course, Johnson & Johnson has a 10 testing method to attempt to do just that; right? 11 A That is apparently the case, yes. 12 Q Okay. 13 "You will note that they are suggesting its 14 use for detection of chrysotile asbestos". 15 Now, that's what you guys had a test method 16 for; right? 17 A Yeah. Yes, yes. 18 Q "In view of your supreme skill in rapping 19 knuckles, I thought that you might want to write one of 20 your masterful letters chastising DuPont for 21 perpetuating a myth as far as cosmetic talcs are 22 concerned". 23 Right? 24 A Yes. 25 Q So Johnson & Johnson is writing to the CTFA
Page 1008 1 right? 2 A Yes. 3 Q Okay. 4 So at some point Johnson & Johnson thought 5 that they could use DTA to look for chrysotile at a 6 level of .5 per cent; right? 7 A Yes. 8 Q Okay. You can set that aside. 9 So we've talked about -- I've asked you 10 whether or not Johnson & Johnson ever tried to 11 interfere with scientists, discredit them or anything 12 like that, and so that's kind of what we've been 13 talking about here. 14 This is going to be Exhibit 209. 15 (Exhibit 209 marked for identification) 16 So this is dated November 22, 1977. It is 17 seven months after the document I just showed you; 18 right? 19 A Yes. 20 Q This is from George Lee to Norm Estrin, who's 21 the head of the CTFA; right? 22 A Yes. 23 Q And the subject is Dupont Instrument Products 24 Division Literature on DTA Unit: 25 "Norm:	Page 1010 1 telling them to go chastise DuPont for advertising a 2 DTA machine that they say could find asbestos 3 impurities; right? 4 A Yes. 5 Q And that's exactly what Johnson & Johnson was 6 doing internally, was looking with DTA for chrysotile 7 impurities; correct? 8 A There is a test method, Johnson & Johnson. 9 That's what they were doing. 10 Q Okay. 11 A Of course, the second attachment that you gave 12 to me as part of 209 -- 13 Q Mmm hmm? 14 A -- says that, as you can see from the attached 15 literature, DuPont is using as a selling point the DTA 16 unit for the detection of asbestos in cosmetic body 17 talc. 18 Q Right? 19 A So I think what he's saying is that they 20 shouldn't be doing that. 21 Q Why? Johnson & Johnson was doing it. 22 It's because DuPont was advertising the fact 23 that they had a machine that was going to look for 24 asbestos in talc. 25 So Johnson & Johnson wrote to the CTFA and

Page 1011

1 said: hey, chastise these guys for perpetuating a myth
 2 about asbestos in talc; correct?
 3 A Yes.
 4 Q Which Johnson & Johnson was studying itself
 5 internally?
 6 A Yes, and "studying" is the right word.
 7 At that stage, it was probably being the
 8 initial evaluation. There was no evidence that it was
 9 actually a fully approved something you would do on
 10 every batch.
 11 But certainly initial evaluation, as I
 12 recollect, in '77.
 13 Q Are you -- are you -- is it Johnson & Johnson's
 14 testimony that Johnson & Johnson at no time actually
 15 used that test method on batches of talc to look for
 16 chrysotile?
 17 A No, it is not, no.
 18 Q Okay. All right.
 19 This will be Exhibit 210.
 20 (Exhibit 210 marked for identification)
 21 There you go, sir.
 22 This is Bill Ashton, 1984, and he writes to
 23 JP Grange as Luzenac. I think we saw another
 24 correspondence to Luzenac maybe yesterday.
 25 Luzenac is one of the names in line with

Page 1012

1 Cyprus, Rio Tinto, Imerys; right?
 2 A Correct. Yes, yes.
 3 Q Okay.
 4 Subject is Talc Asbestos, L Paoletti et al.
 5 That's a paper.
 6 "Attached is a copy of a paper which is very
 7 important to the talc industry in your territory. It
 8 alleges that a substantial number of talcs contain
 9 fibers and/or asbestos. It is published by a reputable
 10 organization in Rome. It has just appeared in this
 11 month's issue of Regulatory Toxicology and Pharmacology
 12 here in the States".
 13 He asks do you have any information on what
 14 prompted this, et cetera; right?
 15 A Yes.
 16 Q Okay.
 17 So that's just for framework. You can see
 18 that Ashton is concerned about this new paper; right?
 19 A Yes.
 20 Q Okay. You can set that aside.
 21 (Briefly off the record)
 22 (Exhibit 211 marked for identification)
 23 Okay. Ashton. Okay. Again, October 23,
 24 1984. The subject is just Airborne Dust Activities; do
 25 you see that?

Page 1013

1 A Yes.
 2 Q Okay.
 3 Go to the second page:
 4 "I spoke with some of the ASTM and ISO
 5 officials ..."
 6 Sorry, I'll wait for you.
 7 A Thank you.
 8 Q "... about the uncomfortable business aspects
 9 of the recent Paoletti article hoping they might have
 10 some ideas on how to compromise it".
 11 Right?
 12 A That's what it says.
 13 Q We know that Ashton has written to Luzenac
 14 about the Paoletti article and he says that it's
 15 published by a reputable organization in Rome; right?
 16 A Yes.
 17 Q And then one month later -- less than a month
 18 later, Ashton is saying he's trying to talk to ASTM and
 19 ISO officials about how to compromise the Paoletti
 20 article; right?
 21 A Yeah.
 22 Q That is the second time we have seen Johnson &
 23 Johnson individuals talk about compromising people who
 24 take roles that are adverse to their business; correct?
 25 A Yeah.

Page 1014

1 Q Okay. You can set that aside, sir.
 2 One last little area and my stack will grow
 3 no more, I promise.
 4 This will be 212.
 5 (Exhibit 212 marked for identification)
 6 There you go, sir.
 7 Okay. In your review of your documents, did
 8 you see this document? It's partially in English,
 9 partially in Italian. It's from the Society of Talc
 10 and Graphite in Val Chisone?
 11 A No, I've not seen this.
 12 Q All right.
 13 A This particular.
 14 Q Go to the page, at the bottom it's 349. It's
 15 9349.
 16 MR FROST: Is this number 212?
 17 MR PANATIER: Yes.
 18 THE WITNESS: Okay.
 19 BY MR PANATIER:
 20 Q Okay. See there's a little section:
 21 "Impurities Present in Talc
 22 The harmful elements according to
 23 pharmacopoeia and cosmetics ...
 24 General Remarks
 25 [The] Survey of the Elements Considered

Page 1015 1 Harmful by the Pharmacopoeias and on which Information 2 is Given also in Cosmetological Standards". 3 And then if you go down there's another 4 section, Use of Talcs in Pinerolo in Pharmaceutic 5 Cosmetic Sector; right? 6 A Yes. 7 Q Okay. 8 Then if you turn the page, it's got the title 9 of this. I think that's probably the English 10 translation, Practical Guide to the Recognition of 11 Impurities in Talc. 12 Do you see that? 13 A Yes. 14 Q Okay. Right, sir. 15 Now please turn to 9368, or I'm sorry, 9367. 16 Okay. It says Use of Talcs of Pinorolo in 17 Pharmaceutic and Cosmetic Sector; right? 18 A It does, yes. 19 Q Okay, and then the very next page says: 20 "Talc impurities may be classified as 21 follows: 22 Very hard silicates, as chrysotiles and 23 tremolites, of amphibolitic derivation, namely with 24 strict asbestos content". 25 Right?	Page 1017 1 and they're -- they mention chrysotile and tremolite; 2 right? 3 A They mention that, yes, but there are other 4 hard silicates. 5 Q I understand. 6 And they're talking about those hard 7 silicates being present in the Pinorolo talc; correct? 8 A Well, what they're saying here is that talc 9 impurities are classified as including hard silicates, 10 and then on the second page it has to be considered 11 because they're extremely low hard silicate content. 12 Q Yeah, but they're saying the -- it says: 13 "The talc of Pinorolo, for cosmetic use, 14 that's mined from the deposits of the Val Chisone and 15 Germanasca valleys in the north western Alps, has to be 16 considered as a product of very high quality because: 17 The hard silicate contents are extremely low 18 (only traces) ..." 19 So they're saying there are traces of these 20 hard silicates -- 21 A That's what's written in this translation. 22 Q -- in their talc for cosmetic use; correct? 23 A That's what's written in this translation, yes. 24 Q All right. 25 That's Exhibit 2013 [sic].
Page 1016 1 A Yes. 2 Q One of the impurities. That's the first one 3 they list; right? 4 A Yes. 5 Q Then go ahead and go to the next page and 6 there's another highlight there: 7 "The talc of Pinorolo for cosmetic use, 8 that's mined from the deposits of the Chisone and 9 Germanasca valleys in the north western Alps, has to be 10 considered as a product of very high quality because: 11 The hard silicate contents are extremely low 12 (only traces) ..." 13 Right? 14 A Yes. 15 Q And you know from the previous page that they 16 refer to hard silicates as chrysotiles and tremolites; 17 right? 18 A Yes, although hard silicates also would include 19 quartz. Would certainly include quartz. 20 Q Quartz is a silicate? 21 A Yes. Oh, sorry, no. I'll retract that. Yes. 22 Q Okay. 23 A There are other silicates other than chrysotile 24 and tremolite. 25 Q The term they're using here is "hard silicate"	Page 1018 1 (Exhibit 213 marked for identification) 2 So, of course, Johnson & Johnson gets wind of 3 this. 4 This is written by Bill Ashton, September 24, 5 1974, Confidential; right? 6 A Yes. 7 Q "Mr G Lee 8 Attached is a copy of a damaging editorial 9 reference which states that Italian talc contains 10 traces of hard silicates. It defines chrysotile 11 asbestos as a hard silicate. Obviously, the inference 12 is that Italian talc contains traces of chrysotile." 13 Did I read that right? 14 A That's -- that's what is written. 15 Q Okay. You can set that aside. 16 So Ashton is aware of it at this point? 17 A Yes. 18 Q And he's Mr Talc, as you've said? 19 A Yes. 20 Q Next will be Exhibit 2014 [sic]. 21 (Exhibit 214 marked for identification) 22 Okay. Personal and Confidential. This is 23 written by Ashton; okay? 24 A Yes. 25 Q Background:

Page 1019 1 "The SVC publication ..." 2 That's Society of Val Chisone; right? 3 A Yes, yes. 4 Q "... publication was the brainchild of Mr 5 Gianfranco Villa son of the owner of the Val Chisone 6 talc operations." 7 So the son wrote that booklet; right? 8 A Yes, yes. 9 Q "Villa has been preparing the booklet for two 10 years and had his heart set upon the idea that it would 11 raise his personal reputation and talc and business to 12 new heights. He had been following the talc/asbestos 13 controversy but only from disconnected pieces which 14 came to him through his agent in England or from J&J 15 staff. He figured that he has the best talc in the 16 world and other talcs had a lot of asbestos in them so 17 he would capitalize on the matter by putting out his 18 booklet which would force others to assay his talc, 19 find [that] his was better, and thereby put him in a 20 position to hold the top place in the high grade 21 market. 22 Villa decided to release the English version 23 about three months ago. He instructed his British 24 agent Cartwright to publicize it. At that time he 25 visited Bob Dean in England ..."	Page 1021 1 was going to visit Gianfranco in Italy and bring me 2 along for technical backup." 3 So the son of the mine owner writes this 4 publication that you and I have looked at; right? 5 A Yes. 6 Q He wants it distributed. Word gets back to 7 Ashton and Ferry in the US, and they go to Italy to 8 deal with it; right? 9 A Yes. 10 Q Page 2: 11 "Thus it was necessary for us to prepare for 12 a cold reception when visiting the Italian principals 13 and tread with caution on all fronts". 14 Under the heading Deliberations with 15 Gianfranco Villa and Staff, down three quarters of the 16 way: 17 "Villa then stopped talc talk and ordered 18 lunch sent in during which time all of us argued for 19 about an hour evaluating the merits of several bottles 20 of different local wines which appeared out of 21 nowhere". 22 Now, I understand that's how it goes in 23 Italy. 24 A It's very Italian. 25 Q Right. So --
Page 1020 1 Now, Bob Dean is with Johnson & Johnson; 2 right? 3 A Correct. 4 Q "... with one of his Italian technicians. He 5 had hoped for commendation but came away frustrated and 6 mad. He had the impression in England that he was 7 being told to withdraw the booklet and reprimand 8 whoever put it together. He did not apparently 9 disclose that he himself had conceived the idea and had 10 taken two years to put the booklet together. 11 He has been aware of our epidemiological work 12 by virtue of the fact that he gives the permission to 13 have the records examined for former employee service. 14 My impression is that he always thought the study had 15 the objective of proving his talc the safest in the 16 world (which we find right) but it never occurred to 17 him that the study ... [would] unearth some surprises." 18 Right. Let's go to the bottom of that page; 19 okay? 20 A Yes. 21 Q "Similarly, he tried to get Ferry ..." 22 This is Don Ferry at Chas Mathieu; correct? 23 A Correct. 24 Q "... to push the release here in ... [the US] 25 but Ferry did nothing other than send word back that he	Page 1022 1 A Believe me, it's very Italian. 2 Q You're hanging out, lunch comes, the wine 3 comes; okay? 4 A Yes, yes. 5 Q "Villa then resumed talc talk by saying that it 6 is not always possible to translate Italian into 7 technical English. He explained that in Italian a 8 trace of something (such as chrysotile) actually means 9 none at all could be found." 10 Right? 11 A Yes. 12 Q Okay. 13 "In Italian, ... trace means none at all, but 14 it always comes out wrong in English." 15 Okay? 16 A Yes. 17 Q So that's what he says? 18 A It is, and I speak several languages -- some 19 not very well -- but many European languages have 20 much -- very limited number of words. 21 Greek, for example, has got so few words it's 22 almost impossible to get an accurate trace. 23 Q If we get to the Greek talc, we'll talk about 24 Greek; okay. 25 A Okay. I'm just using that as an example.

Page 1023 1 Q Yeah. 2 A I can see where he's coming from. 3 Q Yeah. 4 "I suggested that a committee be formed which 5 would compromise Mr Ferry, a top mineralogist from 6 either Milan, Bologna or Rome, perhaps a scientist from 7 the Colorado School of Mines or the Montana School of 8 Mines and that I would represent J&J on the committee 9 to help out. I proposed that ... committee be 10 organized to carry out the work but that it be under 11 the guidance of an Italian business executive to 12 attack -- to act as International President of the 13 Committee ..." 14 So Johnson & Johnson and Ferry sort of say, 15 "Let's form a whole committee to address this 16 situation"; right? 17 A Yes. 18 Q Okay. 19 A Yes. 20 Q "... I proposed that it would be most effective 21 if Gianfranco Villa would be President of ... [the] 22 Committee to assure maximum benefit to cosmetic talcs 23 the world over. Gianfranco Villa agreed." 24 Decisions Reached: 25 "Having obtained Mr Villa's agreement that	Page 1025 1 their recent publication will have on the world talc 2 market. The publication of the English version is 3 entitled 'Practical Guide To The Recognition Of 4 Impurities In Talc'". 5 Do you see that? 6 A Yes. 7 Q Then it says: 8 "I have assembled the attached technical 9 support for our deliberations with the Val Chisone 10 staff. I have arranged it in an order which should 11 carry the most weight as we proceed from one discussion 12 point to the next. The sensitivity and confidentiality 13 of ... information are readily apparent. 14 The documents are ..." 15 The second one is: 16 "A statement of the mineralogical absence of 17 chrysotile asbestos in the talc mine". 18 Right? 19 A Yes. 20 Q Okay. 21 So they brought that with them when they 22 went; right? 23 A Yes. 24 Q So they brought authorities they could show to 25 Mr Villa that says there's no chrysotile here; fair?
Page 1024 1 his booklet needed a rewrite the following decisions 2 resulted. 3 He will stop the distribution on his booklet 4 in England and to any English speaking countries. 5 Mr Ferry will not release any copies in the 6 USA and [Mr] Villa now understands why he delayed till 7 now. 8 It is up to Mr Ferry and me to carry through 9 with how we will revise, rewrite or rearrange the SVC 10 publication for maximum benefit to all concerned". 11 This is the second time at least we've seen 12 Johnson & Johnson rewriting someone's paper for them; 13 right? 14 A Yes. It's -- again, it's an Italian paper. 15 He's -- he's offering help with the translation. 16 Q Okay. 17 (Briefly off the record) 18 This will be Exhibit 215. 19 (Exhibit 215 marked for identification) 20 This is from Ashton to Don Ferry; right? 21 October 14, 1974: 22 "Dear Don, 23 Our objective in our upcoming visit to the 24 Val Chisone -- to Val Chisone -- to the staff of Val 25 Chisone is to forestall the upsetting impact which	Page 1026 1 A Yes. 2 Q Okay. You can set that aside. 3 This will be 216. 4 (Exhibit 216 marked for identification) 5 This is from Bob Dean to Ashton: 6 "Dear Bill ..." 7 November 26, '74. So this is all happening 8 in a pretty tight window; right? 9 A Yeah. 10 Q Okay. 11 "Dear Bill, 12 Thank you for your telex of the 20th 13 November, indicating that Gianfranco has had second 14 thoughts about the publication in the English version 15 of his booklet. 16 You did a first class job on your visit and I 17 am sure that, after suitable amendment and slight 18 re-writing, the booklet can be much more helpful in 19 establishing the true safety record of the Val Chisone 20 talc. 21 Attached for your interest is additional 22 confirmation that we have received via Zach Cartwright 23 that Val Chisone have withdrawn their booklet. 24 Thanks again for keeping me in the picture 25 ..."

Page 1027 1 Bob Dean; right? 2 A Yes. 3 Q So Johnson & Johnson went to Val Chisone, they 4 had a meeting with Val Chisone, they drank a lot of 5 wine. At the end of the meeting, Gianfranco agreed to 6 withdraw the booklet and to allow Johnson & Johnson to 7 revise/rewrite it; correct? 8 A Yes. 9 Q Okay. 10 A A slight rewrite, it says here, yeah. 11 Q Well, he says: 12 "... after suitable amendment and slight 13 re-writing ..." 14 Right? 15 A Yes, yeah. 16 Q The part they were concerned about was where it 17 talked about chrysotile; right? 18 A Yes. 19 Q Okay. You can set that aside. 20 Now, this is technically at the end of my 21 documents, but you said something about how you agreed 22 with Mr Gianfranco that, in Italian, because you speak 23 several languages, "trace" means none; right? 24 A Put it the other way around. 25 If Mr Gianfranco says "none", he may well	Page 1029 1 A -- what Mr Villa thought "trace" means. 2 Q Right. 3 So this is from -- you can see at the top, 4 TALCOSVC? 5 A Yes. 6 Q Society of Val Chisone; right? 7 A Yes. 8 Q And -- 9 Whoever is on the phone, go ahead and mute 10 your phone, please. 11 And it says now -- this may be a European way 12 of listing dates, I'm not sure, but up at the top it 13 says 8.17, and then down under "DA VALCHISONE A 14 CARTWRIGHT", it says -- I think that means "Telex" -- 15 A Yes. 16 Q 1400/74? 17 A Yeah. 18 Q What I can put together from this is this is 19 some time in 1974, but ... 20 A Yeah. 21 Q Okay? 22 A Could be. 23 Q All right. 24 Here's what it says: 25 "Re[garding] our visit to Portsmouth,
Page 1028 1 have used the word "trace" as a mistranslation and 2 that's what Mr Gianfranco states. 3 Q Right. 4 A Franco Villa states. 5 Q You told me, from your knowledge of languages, 6 that that is what you believed happened; right? 7 A I do, yes. 8 Q Okay. 9 So I actually have a document that speaks to 10 that, but it's in there. So we have to take a break 11 for me to get that document. 12 Let's just run off real fast. 13 (Off the record at 3:59 pm) 14 (On the record at 4:03 pm) 15 BY MR PANATIER: 16 Q Sir, have you read any depositions in the Lanzo 17 case? 18 A No. 19 Q Okay. 20 This will be Exhibit 217. 21 (Exhibit 217 marked for identification) 22 We were talking about what "trace" means; 23 right? 24 A Yes, well -- 25 Q Okay.	Page 1030 1 requested by Johnson yesterday and today we have had 2 the visit of Mr William H Ashton, Director of the 3 Research Division of Johnson and Johnson USA. 4 We have discussed the contents of tremolite 5 in our talc. In our booklet we speak of 'traces'. By 6 this word we mean 'a few parts on a million' whilst the 7 Americans by this word mean a percentage till 8 2 per cent. You see the discussion is about the 9 meaning of the word 'traces'". 10 Right? 11 A Yes. 12 Q So this Italian clarifies exactly what we've 13 been talking about; right? 14 A Yes. Now he's talking about tremolite. 15 Q Right, but -- but it says what they mean by 16 "traces". 17 They don't mean zero, do they? 18 A Well, this individual, Mr Ruddier Ldno, he's 19 saying that it means a few parts per million. 20 Q Okay. 21 A few parts per million is not zero? 22 A Correct. 23 Q And in fact we've seen lots of references, to 24 when you're talking about something with trillions upon 25 trillions of individual particles, a few parts per

Page 1031 1 million can mean hundreds of millions or billions in 2 that small container; right? 3 A It may do. 4 Q Okay. 5 All right, sir. You can set that aside, 6 please. 7 And then this is the other one that we didn't 8 have printed before. This is 218. 9 (Exhibit 218 marked for identification) 10 Going back to the Colorado School of Mines, 11 lastly. 12 We're kind of talking about how they've been 13 used by Johnson & Johnson to go and -- I don't know -- 14 deal with other researchers; right? 15 A Well, that's your word. 16 I would -- I would argue that one of the 17 roles of Colorado School of Mines is to provide expert 18 opinion. 19 Q Okay. 20 Well, here's one of their experts opinions 21 perhaps that we can explore. They're talking about the 22 Rolle paper. This is June 4, 1976; right? 23 A Yes. 24 Q And I asked you, I said Rolle and Langer 25 published a paper in '76 about what they found in	Page 1033 1 A He's obviously got very strong feelings about 2 what he describes as the quality of the work as being 3 erroneous and intentionally misleading. 4 Q Okay. 5 A That's his opinion. 6 Q Yeah. 7 And so did Johnson & Johnson instruct the 8 Colorado men at this point, as they did in 1971, to go 9 and work with the -- Rohl and Langer at Mount Sinai to 10 work through the issues, as they did with the Bowling 11 Green paper? 12 A I don't believe they did that, no. 13 Q Okay. 14 Is the Rohl and Langer paper still published? 15 A There is a -- there is a Rohl and Langer paper 16 published. 17 Q Okay? 18 A I don't know if it's the exact same title, but 19 I do recollect there is a Rohl and Langer paper 20 published in '76. 21 Q Did -- did Art Langer or Rohl or Selikoff or 22 any of the authors there ever write to the journal 23 where it was published and say: we were wrong and we're 24 sorry? 25 A I don't know if they ever wrote to the journal,
Page 1032 1 consumer talcum powders; right? 2 A They did, yes. 3 Q Okay. 4 So he's writing to -- Jerry Krause from 5 Colorado School of Mines is writing to William Ashton; 6 right? 7 A Yes. 8 Q And he says: 9 "Enclosed are my comments on the paper by 10 Rohl, [and] Langer ..." 11 Right? 12 "I could have gone on almost indefinitely 13 commenting on errors in the paper but felt that to do 14 so would have been a waste. 15 I do feel that I have destroyed the 16 analytical basis of the paper, and I think that the 17 conclusions the authors have drawn are invalid. It is 18 my opinion ... the paper is not worthy of publication. 19 I feel even stronger: to me the paper is erroneous and 20 intentionally misleading and should be banned from 21 publication if possible." 22 Do you know if it was ever banned, sir? 23 A I'm sure it was not. 24 Q Does Mr Krause seem like an objective scientist 25 at this point?	Page 1034 1 no. 2 Q Okay. All right. 3 To your knowledge, the paper has never been 4 withdrawn; correct? 5 A That's, to my knowledge, correct. 6 Q Okay. 7 Is the Colorado School of Mines still a 8 consultant to Johnson & Johnson? 9 A I don't know the answer to that. 10 Q All right. 11 A I don't know. 12 Q And, lastly, with regard to the -- to any of 13 the -- any of the periodic testing that Johnson & 14 Johnson did at any time, okay, I think you said that 15 you believed there was periodic testing starting in 16 '49; right? 17 A Yes. 18 Q And it would have been by batch? 19 A Yes. 20 Q And would that have carried through, let's take 21 it up to '70 -- would that have carried through through 22 '70? 23 A If the talc was being imported from Italy up 24 until '68 the -- my records, from my memory, is that it 25 was coming in in hundred pound sacks.

Page 1035 1 And there was a sampling process whereby a 2 certain number of sacks were selected, and maybe one in 3 five, and they were evaluated. 4 Q Okay. 5 A So, to answer your question, there was a -- 6 there was a process in place to evaluate batches. 7 Q Okay, and I guess what I'm asking is: did that 8 occur from the late '40s through 1970? 9 A That is the -- that is the belief that I have, 10 yes. 11 Q Right. 12 As you sit here today, you are unaware of the 13 whereabouts of those test results; correct? 14 A That is correct, yes. 15 Q Do you have any reason or explanation why we 16 don't have those? 17 A I don't. I can hypothesize and say that maybe 18 they were with the importer. 19 Is it Chas Mathieu? Yeah. 20 Q Okay? 21 A They may well have kept the records, but I 22 don't know. 23 Q All right. 24 A I mean, if we're going back to, you know, 25 1950s, '60s, yeah, I've not necessarily -- I've not	Page 1037 1 Q Okay. 2 A Yeah, I can't be sure as to where the records 3 went from a separate that was sold -- 4 Q Sorry to interrupt you. 5 (Reporter clarification) 6 A That was sold. The company was sold later. 7 Q Okay. 8 And to the extent that any -- any lots of 9 talc were tested and there was a positive XRD for 10 amphibole minerals at any time, was that lot placed on 11 hold before it was used? 12 A The way the testing would have been done was it 13 would not have been -- it would not have been filled. 14 Q So if a lot was positive just by XRD, it would 15 have been rejected? 16 A That -- that is my belief. 17 Q Okay. 18 A Okay. 19 Q And by XRD, you're just detecting the mineral 20 presence; correct? 21 A Correct, yes. 22 Q But that was grounds at J&J for rejection; is 23 that true? 24 A That is the specification. 25 Q Now, I asked you, and we have not sat down and
Page 1036 1 seen those records, not for batch testing. 2 But, as I said earlier, my understanding, 3 speaking to Mr Ashton, is that it was a regular 4 occurrence. 5 Q Right. 6 And then did that stay a regular occurrence 7 through the mid-'70s, through 1975? 8 A That is my impression, yes. 9 Q Okay. 10 Now, have you personally laid eyes on any of 11 those test results from regular batch testing, as 12 you've described it to me? 13 A No, I have not, no. 14 Q All right. 15 A But, again, I wouldn't necessarily have asked 16 to see those -- those figures. 17 Q If Johnson & Johnson had those, would you have 18 expected those to have been produced in that giant dump 19 of paper that we got? 20 A It depends where they were. 21 If they were with Johnson & Johnson or with 22 the mine in Vermont, if we're talking post-1968, they 23 may not have been in the possession of Johnson & 24 Johnson, because the Vermont mine was essentially run 25 as a separate company.	Page 1038 1 counted the number of talc -- total talc particles in a 2 bottle of -- 8 ounce bottle of Johnson's Baby Powder, 3 have we? 4 A No. 5 Q But I think yesterday I asked you, we're 6 talking easily into the trillions, probably numbers we 7 don't know the name for, septillions, octillions; 8 right? 9 A Possibly, yes. 10 Q Okay. 11 But if we're talking about -- I got my 12 calculator out, because I just wanted to sort of get an 13 idea of what we were talking about here. 14 If we just have something that's 1 15 trillion -- okay, the number 1 trillion. We have 1 16 trillion particles, and .0 -- well, 1 trillion, let me 17 get it back -- .0001 per cent of that is chrysotile, we 18 could figure out how many of those particles would be 19 asbestos; right? 20 A You can do the math, yes. 21 Q Okay. 22 And if I wanted to know what .001 per cent 23 was, I would just multiply a trillion times .001; 24 right? 25 A Well, per cent is per hundred, so you've got to

Page 1039 1 put another 0 in -- two 0s in. 2 Q So if it's .00001; right? 3 A Yes. 4 Q Okay. 5 I'm just picking a super-low number out of -- 6 out of my head. 7 A Okay. 8 Q So let's multiply it times -- just to see what 9 it comes out at, .00001 per cent; okay? 10 Well, that's not per cent. That's one 11 10,000th; right? 12 A Yes. 13 Q We get 10 million; right? 14 A Yes. 15 Q So even if -- even if there were only 1 16 trillion particles in a container and it was .00001 17 chrysotile, we would still have ten million fibers of 18 chrysotile; right? 19 A By your maths, yes. 20 Q And that -- that was a calculator. You don't 21 disagree with that math, do you? 22 A I don't agree with the math, no -- disagree 23 with the math, no. 24 Q Okay. All right. 25 And then I kind of threw out, you know, a	Page 1041 1 All right. Thank you, Daniel. 2 Then, Sharla, you want to memorialize our 3 agreement? 4 MS FROST: Yes. 5 We have reached agreement with Plaintiffs' 6 counsel Mr Panatier and his partner Ms Kagan that in 7 connection with the documents used in the deposition 8 that Johnson & Johnson will agree to stipulate to the 9 authenticity of those documents which have a Johnson & 10 Johnson Bates number on them. 11 As to business records, Johnson & Johnson 12 will agree to stipulate to the business records 13 position of documents that have a Johnson & Johnson 14 Bates stamp number on them with the exception of the 15 emails, for which we will have a separate meet and 16 confer. 17 MR PANATIER: That's all correct, and just to 18 be very clear on the business records stipulation, what 19 Johnson & Johnson is agreeing to is that they do meet 20 the business records exception for hearsay. 21 MR FROST: That is correct. 22 MR PANATIER: Okay. That's all agreeable. 23 Was there anything else? 24 MR FROST: There is. 25 The parties agree to relieve the court
Page 1040 1 trillion particles, but as a scientist can you give us 2 a ballpark of how many particles of -- total particles 3 of talc you think are in one bottle of 8 ounce 4 Johnson's Baby Powder? 5 A That could take quite some time. 6 You'd need to work out how many particles 7 were in a gram or a tenth of a gram, and then work up 8 the numbers. 9 It's not something I could do, you know, 10 right now. 11 Q Sure. 12 But it's always been Johnson & Johnson's 13 policy that the total number of fibers of asbestos in 14 Johnson's baby powder be 0.0; correct? 15 A Yes. 16 MR PANATIER: Okay. Let's go off the record 17 and we'll talk about our stipulations together. 18 (Off the record at 4:15 pm) 19 (On the record at 4:24 pm) 20 MR LATERRA: We're not going to have any 21 questions at this time. Again, this is Dan LaTerra for 22 Stephen and Kendra Lanzo from Levy Konigsberg. 23 MR PANATIER: Okay. 24 For the Lanzo case. That was Levy 25 Konigsberg.	Page 1042 1 reporter of her statutory duty to maintain the original 2 copy of the transcript in connection with the 3 California cases, and Plaintiffs' counsel have agreed 4 to maintain the original. To the extent that the 5 original is ever lost, the parties will agree to use a 6 copy, so long as it is a complete copy. 7 The parties also agree that, for purposes of 8 motion practice, that a rough draft copy of the 9 transcript may be used until there is a receipt of the 10 finalized certified copy of the transcript. 11 MR PANATIER: And, furthermore, Johnson & 12 Johnson extended our agreed time today. In exchange 13 for that, I agreed that in our four cases, the SGPB 14 cases, I would not ask to further depose the corporate 15 representative any further in those cases. 16 The only contingency would be that if Johnson 17 & Johnson produces any further documents in any of 18 those cases, we would meet and confer about a limited 19 further deposition, and the circumstances of how that 20 deposition would take place would be part of that meet 21 and confer. 22 MR FROST: That is correct. That is our 23 agreement. 24 We also agreed amongst the parties that the 25 stipulation between Johnson & Johnson and Plaintiff

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1 counsel to postpone the making and lodging of any
2 objections would extend to all the Defendants present,
3 so that no party has waived any objections to any part
4 of the questioning or to any of the documents by virtue
5 of having not lodged the objection at the time in the
6 deposition.
7 MR PANATIER: That's agreeable.
8 MR GAFFREY: Thank you.
9 MR FROST: Finally, Plaintiffs' counsel will
10 mark the flip-chart that he has been preparing as part
11 of the deposition as an exhibit and will take
12 photographs of the flip-chart pages which will be
13 provided to the court reporter to include as part of
14 the transcript.
15 That chart in its entirety will be identified
16 as Exhibit number 219.
17 MR PANATIER: Mmm hmm. Yeah.
18 I think that's everything. We're off the
19 record.
20 (Whereupon the deposition was adjourned at 4:28 pm)
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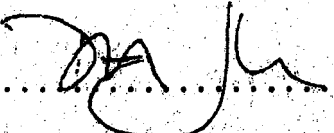
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 CERTIFICATE OF DEPONENT I, JOHN HOPKINS, hereby certify that I have read the foregoing pages, numbered 1 through 297, of my deposition of testimony taken in these proceedings on Thursday, August 17, 2017, and, with the exception of the changes listed on the next page and/or corrections, if any, find them to be a true and accurate transcription thereof. Signed: Name: JOHN HOPKINS Date:	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 ERRATA SHEET Priority-One Court Reporting/Veritext 718-983-1234 ASSIGNMENT NO. P1-2657980 CASE NAME: Herford, Verdolotti, Teuscher & Etheridge v. Asbestos/Johnson & Johnson DATE OF DEPOSITION: 8/17/2017 WITNESS NAME: Dr. John Hopkins Vol 3 <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>PAGE/LINE(S)</th> <th>CHANGE</th> <th>REASON</th> </tr> </thead> <tbody> <tr><td>6</td><td></td><td></td></tr> <tr><td>7</td><td></td><td></td></tr> <tr><td>8</td><td></td><td></td></tr> <tr><td>9</td><td></td><td></td></tr> <tr><td>10</td><td></td><td></td></tr> <tr><td>11</td><td></td><td></td></tr> <tr><td>12</td><td></td><td></td></tr> <tr><td>13</td><td></td><td></td></tr> <tr><td>14</td><td></td><td></td></tr> <tr><td>15</td><td></td><td></td></tr> <tr><td>16</td><td></td><td></td></tr> <tr><td>17</td><td></td><td></td></tr> <tr><td>18</td><td></td><td></td></tr> <tr><td>19</td><td></td><td></td></tr> <tr><td>20</td><td></td><td></td></tr> </tbody> </table> Dr. John Hopkins Vol 3 (Notary not required in California) SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____, 2017. _____ NOTARY PUBLIC MY COMMISSION EXPIRES _____	PAGE/LINE(S)	CHANGE	REASON	6			7			8			9			10			11			12			13			14			15			16			17			18			19			20		
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CERTIFICATE OF COURT REPORTER

I, DEIRDRA JORDAN, an Accredited Court Reporter,
hereby certify that the testimony of the witness, JOHN
HOPKINS, in the foregoing transcript taken on
Thursday, August 17, 2017, was recorded by me in
machine shorthand and was thereafter transcribed by
me; and that the foregoing transcript is a true and
accurate verbatim record of the said testimony.

I further certify that I am not a relative, employee,
counsel or financially involved with any of the
parties to the within cause, nor am I an employee or
relative of any counsel for the parties, nor am I in
any way interested in the outcome of the within cause.

Signed: .....
Name: DEIRDRA JORDAN
Date: August 29, 2017.....

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