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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 2

Wednesday, August 16, 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. 2657979

Page 380 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 382 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 381 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 383 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

Page 384 1 APPEARANCES...(continued) 2 Attending via telephone: 3 LEVY KONIGSBERG LLP 4 BY: MOSHE MAIMON, ESQ. 5 BY: DANIEL LATERRA, ESQ. 6 800 Third Avenue, 11th Floor 7 New York, NY 10022 8 212.605.6200 9 mmaimon@levylaw.com 10 dlaterra@levylaw.com 11 (For Plaintiffs in the Lanzo matter) 12 13 RAWLE & HENDERSON LLP 14 BY: WILLIAM T. POLASKI, ESQ. 15 Henry W. Oliver Building 16 535 Smithfield Street, Suite 1000 17 Pittsburgh, Pennsylvania 15222 18 412-281-5000 19 william.polaski@rawle.com 20 (For Cyprus Amax Minerals Company and 21 Imerys Talc America in NJ cases) 22 23 HAWKINS PARNELL THACKSTON & YOUNG LLP 24 BY: OLIVER BUNDY, ESQ. 25 455 S. Figueroa, Suite 3200 Los Angeles, California 90071-1651 213.486.8043 obundy@hptylaw.com (For Elizabeth Arden Inc., Revlon Inc., Bristol-Myers Squibb Company and Yves Saint Laurent America, Inc. in Herford case) FOLEY & MANSFIELD BY: M. AMADEA GROSECLOSE, ESQ. 300 South Grand Avenue, Suite 2800 Los Angeles, California 90071 213.283.2100 mgroseclose@foleymansfield.com (For Unilever United States, Inc. and Conopco, Inc. in Herford case)	Page 386 1 APPEARANCES...(continued) 2 Attending via telephone: 3 MONTGOMERY McCRACKEN WALKER & RHOADS, LLP 4 BY: RONALD E. HURST, ESQ. 5 123 South Broad Street 6 Philadelphia, Pennsylvania 19109 7 215.772.7242 8 rhurst@mmwr.com 9 (For Brenntag Specialties in Teuscher case) 10 11 FOLEY & MANSFIELD 12 BY: SEANA AZAD, ESQ. 13 300 Lakeside Drive, Suite 1900 14 Oakland, California 94612 15 510.590.9511 16 sazaad@foleymansfield.com 17 (For specially appearing Whittaker Clark 18 & Daniels Inc in Herford case) 19 20 DRINKER BIDDLE & REATH LLP 21 BY: JACK N. FROST, ESQ. 22 600 Campus Drive 23 Florham Park, New Jersey 07932-1047 24 973.549.7338 25 jack.frost@dbf.com (For Johnson & Johnson in all but Herford) DENTONS US LLP BY: ERIN CARPENTER, ESQ. 601 S. Figueroa Street, Suite 2500 Los Angeles, California 90017-5704 213.243.6112 erin.carpenter@dentons.com (For Imerys Talc America, Inc. and Cyprus Amax Minerals Company) ALSO PRESENT TELEPHONICALLY: KAZAN McCLAIN SATTERLEY & GREENWOOD JOSEPH D. SATTERLEY, ESQ. DR. DAVID S. EGILMAN VIDEOGRAPHER: LINDA FLEET
Page 385 1 APPEARANCES...(continued) 2 Attending via telephone: 3 ORRICK, HERRINGTON & SUTCLIFFE LLP 4 BY: PETER BICKS, ESQ. 5 BY: ANNE MALIK, ESQ. 6 1152 15th Street, N.W. 7 Washington, DC 20005 8 202.339.8458 9 pbicks@orrick.com 10 amalik@orrick.com 11 (For Johnson & Johnson) 12 13 HARRIS BEACH PLLC 14 BY: MATTHEW QUIRIN, ESQ. 15 100 Wall Street 16 New York, NY 10005 17 212.912.3505 18 mquirin@HarrisBeach.com 19 (For GlaxoSmithKline in Teuscher case) 20 21 COSMICH SIMMONS & BROWN, PLLC 22 BY: LAKEYSHA GREER ISAAC, ESQ. 23 BY: LUCY SAVORGNAN, ESQ. 24 100 Vision Drive, Suite 200 25 Jackson, Mississippi 39211 601.863.2100 lakeysha@cs-law.com lsavorgnan@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. 633 West Fifth Street, Suite 1700 Los Angeles, California 90071 213.443.4365 jromano@kslaw.com (For Johnson & Johnson in Herford case)	Page 387 1 (On the record at 10:03 am) 2 VIDEOGRAPHER: We are on the record. This is 3 the continued deposition of John Hopkins. 4 The date today is August 16 and the time is 5 10:03. 6 EXAMINATION: 7 BY MR PANATIER: 8 Q Okay. Good morning, sir. 9 A Good morning. 10 Q All right. 11 So yesterday where we left off Johnson & 12 Johnson was sending samples of their talc to Fred 13 Pooley so he could work on a procedure to try to remove 14 the tremolite. 15 Do you recall that? 16 A You did show me those papers, yes. 17 Q Okay. All right. 18 Other than broad intellectual or scientific 19 curiosity and whether or not they could remove 20 tremolite, can you think of any other reason why they 21 would want to be removing the tremolite from their 22 talc? 23 A I don't know. It was obviously a research 24 project that someone decided they would like to look 25 at, but I -- you know, I couldn't comment beyond that

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1 on something that happened 40-odd years ago.

2 Q It is possible that they wanted the tremolite

3 removed because they perceived it to be dangerous?

4 A It is possible.

5 But, again, I cannot speak for someone's

6 thought processes from 40-odd years ago.

7 Q All right. This is Exhibit 67.

8 (Exhibit 67 marked for identification)

9 Now, as context, sir, before we started today

10 I had you just review Dr Lewin's report to the FDA

11 about the 195 samples that he had tested in the early

12 '70s and '72; do you recall that?

13 A You did show me a publication by Dr Lewin dated

14 1972 reviewing talc samples.

15 Q Okay.

16 One of those samples was sample 84. That was

17 Johnson & Johnson Shower to Shower; correct?

18 A That was, yes.

19 Q Okay.

20 What I've handed you now is, you can see this

21 is a FDA publication. You can see under Description of

22 the Work, it says:

23 "The 200 commercial cosmetic talc samples

24 evaluated by Dr Lewin will be tested for asbestos by

25 refractory optical microscopy".

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1 Do you see that on the first page?

2 A Yes, that's what it says.

3 Q And if you turn to, let's see, the first

4 flag -- there should be a flag on there ...

5 A Yes.

6 Q You can see -- and I'm sorry, actually, go back

7 one page for some context. There you go.

8 You can see at the bottom it's dated 1.3.74;

9 right?

10 A Yes.

11 Q And Project -- Program Manager's signature is

12 Heinz Eiermann, who we know to be with the Division of

13 Cosmetics in the FDA; correct?

14 A Correct, yes.

15 Q All right.

16 And then at the top the project title is

17 Asbestos and Other Contaminants in Talc; right?

18 A Yes.

19 Q Okay.

20 If you turn the page, you can see I've

21 highlighted there that, and you can see at the top:

22 "Examination of talc samples by optical

23 microscopy according to the method published in the

24 Federal Register ... is proceeding. As of 12/21/73,

25 samples (Lewin's identification) ..."

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1 So we're clear those are Lewin's numbers, and

2 he lists off the numbers:

3 "... 29, 58, 60, 84, 87, 131, 133, 134, 135,

4 136, 137 and 138 were analyzed for mineral content.

5 All contained large quantities of talc, small amounts

6 of carbonates, and minor amounts of hematite, quartz

7 and diatomaceous earth. Sample #84 contained 107

8 fibers of tremolite/actinolite per mg".

9 Did I read that right?

10 A You read that correctly, yes.

11 Q Okay.

12 So let's do a little basic math, you and I.

13 Let me go ahead and go up to the ...

14 All right. So he says as of, so we'll put

15 that date, 12.21.73.

16 This is the FDA and they find in Johnson &

17 Johnson Shower to Shower -- they find 107 fibers of

18 tremolite per milligram.

19 Is that correct?

20 A That is Dr Lewin's summary, yes.

21 Q That's not Dr Lewin's summary. This is the

22 FDA's re-examination of Lewin's samples.

23 Do you understand that?

24 A Okay. That's not clear from here.

25 Q Okay.

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1 A So who actually did the examination?

2 Q Okay.

3 You can see here on the previous page at the

4 bottom, Project Manager's signature; right?

5 A Yeah.

6 Q And that's John Stuart, but here Ronald Yates

7 signed it; correct?

8 A Okay, yeah.

9 Q Okay?

10 A Yeah.

11 Q And if you turn to the page that is flagged:

12 "Examination of talc samples by optical

13 microscopy according to the Federal Register ... is

14 proceeding".

15 A Yeah.

16 Q This is in 1973 and '74; correct?

17 A Correct, yes.

18 Q Lewin has already done his testing.

19 You're aware of that; correct?

20 A Yeah, sure.

21 Q Okay, and they're using Lewin's identification

22 numbers; right?

23 A Oh, got you. Okay.

24 Q So they're evaluating Lewin's report; right?

25 A Okay.

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1 Q And Lewin's samples.
 2 And what the FDA finds is 107 fibers of
 3 tremolite per milligram; right?
 4 A That's what it says.
 5 Q Okay.
 6 Now, how many milligrams are there in a gram?
 7 A A thousand.
 8 Q One thousand. So if we want to know how many
 9 fibers the FDA found per gram of Johnson & Johnson's
 10 Shower to Shower, we just multiply 107 by a thousand;
 11 right?
 12 A Mmm hmm, yes.
 13 Q And that would give us 107,000 tremolite fibers
 14 per gram; correct?
 15 A Well, it says tremolite/actinolite.
 16 Q Okay. Tremolite/actinolite. That's fair, and
 17 I'll write "/actinolite" per gram.
 18 Okay. So you can set that aside.
 19 The next Exhibit will be Exhibit 68.
 20 (Exhibit 68 marked for identification)
 21 Let me take that one back, I'm sorry, because
 22 I divided these into two. Let me give you a new one.
 23 It's the full copy.
 24 All right. Here you go, sir. Sorry.
 25 A Thank you.

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1 Q All right.
 2 So this one if you turn -- you actually have
 3 to turn to the last page to see what this is, where you
 4 see the Johnson & Johnson, and I'm sorry, turn to the
 5 page at the bottom marked 8248.
 6 A It stops at 44.
 7 Q It might be -- go a little bit closer to the
 8 front.
 9 A Okay, yes.
 10 Q Got it? Okay.
 11 So you can see this is dated November 19,
 12 1973; right?
 13 A Yes.
 14 Q And its subject is Pooley's Response to the
 15 Proposed FDA Optical Method for Detection of Asbestos
 16 in Talc; right?
 17 A That's the title, yes.
 18 Q Okay.
 19 Now we can go to the page, if you will,
 20 marked 8235.
 21 A Okay.
 22 Q All right.
 23 That's the one that at the top says 1-2;
 24 right?
 25 A Yes.

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1 Q Okay.
 2 So this is Pooley's report.
 3 Now, was this one of the documents that you
 4 reviewed in your review of the Johnson & Johnson
 5 documents?
 6 A I've not seen this particular one, no.
 7 Q All right. Okay.
 8 A It's the first time I've seen it.
 9 Q All right.
 10 So second sentence:
 11 "The x-ray spectra for Vermont and Italian
 12 powder are shown in Figs 1 and 2. The x-ray spectra
 13 for chlorites from Vermont and the Italian mine are
 14 shown in Figs. 3 and 4, while the spectra for the
 15 tremolite found in the Italian mine and the actinolite
 16 found in the Vermont mine are shown by Figs. 5 and 6".
 17 Right?
 18 A Yes, that's what it says.
 19 Q Right.
 20 So this is Pooley. Now, he's been your
 21 consultant for a few years by now; right?
 22 A Yeah, certainly two years.
 23 Q Okay.
 24 So this one is September -- I just want to
 25 make sure I have the right date. We had November 19,

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1 1973.
 2 But I think if you turn to the page marked
 3 8244, go ahead and do that so we get our dates right.
 4 This specific part of the report looks like
 5 September 12, '73, doesn't it?
 6 A It does, yes.
 7 Q Okay. So I'm going to put both those dates
 8 because he's supplied both of these, but we'll just put
 9 them both here for completeness.
 10 And he says he did x-ray spectra. Now,
 11 that's XRD; right?
 12 A Yes.
 13 Q That's looking for the mineral; right?
 14 A Yeah.
 15 Q Okay.
 16 So Pooley, XRD, he reports tremolite in the
 17 Italian mine; right?
 18 A Yes.
 19 Q And he reports actinolite in the Vermont mine;
 20 right?
 21 Is that correct?
 22 A Yeah, I haven't actually read this report, so
 23 it will take a while to confirm that.
 24 Q Now, you've had access to these documents
 25 for --

Page 396 1 A Yeah, I've not seen this particular one. 2 Q Right. 3 If there's something else you need to review, 4 feel free to -- if we need to go off the record to do 5 so, then just let us know. 6 MS FROST: Yeah, why don't we do that? Go 7 off for a few minutes. 8 THE WITNESS: One minute, yeah. Just give me 9 30 seconds, yeah. 10 MR PANATIER: That's fine. 11 (Off the record at 10:13 am) 12 (On the record at 10:15 am) 13 BY MR PANATIER: 14 Q So you can set that aside. 15 What is a reagent? 16 A Reagent is a -- it's a term used by a scientist 17 that is a chemical or a substance which is mixed with 18 another substance to form a reaction. 19 BY MR PANATIER: 20 Q Okay. All right. 21 So that's -- this document is -- that's 22 Exhibit 69. 23 (Exhibit 69 marked for identification) 24 And this one is entitled -- it says 25 CONFIDENTIAL in big, block letters, and it says New	Page 398 1 "A reduction in the total acid soluble 2 materials was attributable to the new reagent systems. 3 The magnitude of the reduction was 23% for n-butanol 4 and 28 per cent for n-butanol-citric acid ..." 5 Right? 6 A Yes. 7 Q Now n-butanol and n-butanol citric acid are the 8 reagents they're talking about? 9 A They are, yes. 10 Q Okay. 11 Now, let's go to number 4. 12 A Okay. 13 Q Number 4 said: 14 "Chrysotile fiber suppression was indicated 15 while using ... n-butanol citric acid system". 16 Right? 17 A That's what it says. 18 Q Okay. 19 So we can get our bearings here, you can see 20 the date under Introduction and it says: 21 "The plant trial was conducted ... January 22 29, 1974". 23 Correct? 24 A Correct, yes. 25 Q This is a system -- we'll just call it
Page 397 1 Reagent Systems -- Plant Trial at Windsor Minerals Inc; 2 correct? 3 A Yes. 4 Q All right. 5 And if we go to the introduction right 6 inside, here's what it says: 7 "Windsor Minerals ..." 8 Now, that's the company that Johnson & 9 Johnson owned to process the Vermont talc; correct? 10 A Correct, yes. 11 Q All right. 12 "Windsor Minerals has been actively engaged 13 in a froth flotation research program for the past year 14 and a half. This program has developed two flotation 15 reagent systems which offer substantial advantages to 16 the Windsor flotation process from an economic, purity 17 and potential health hazard point of view". 18 Did I read that right? 19 A You did, yes. 20 Q Okay. 21 If you go down to Conclusions, do you see 22 that? 23 A Yes. 24 Q All right. They have several very scientific 25 sounding conclusions. First one is:	Page 399 1 chrysotile fiber suppression, because that's what they 2 call it. 3 And what does "suppression" mean? 4 A Reduction. Could even be removal. 5 Q Okay. 6 So Windsor Minerals, part of Johnson & 7 Johnson, is studying a way to decrease or remove 8 chrysotile; correct? 9 A Correct. 10 Q You don't have to decrease or remove something 11 if it's not present; correct? 12 A I think it's easy to take this out of context. 13 This was -- this whole flotation experiment 14 was a way of ensuring that the talc used was the purest 15 available. Whether or not chrysotile was there is -- 16 it was just one example. 17 In fact, I remember having read this report 18 earlier. To do this experiment, they -- I'm pretty 19 sure they had to deliberately add 1 or 2 per cent of 20 talc -- to the talc of chrysotile. 21 But whether it was there originally is not 22 clear from this. 23 Q Okay. 24 A It was an experiment to see what might happen 25 if you did X, Y or Z.

Page 400 1 Q Okay. 2 And I'll ask you about that, but for what 3 reason would they want to study the suppression of 4 chrysotile if they never had an issue with chrysotile 5 in the mine? 6 A Again, it was just part of an experiment. 7 Scientists do these sort of experiments all 8 the time. Let's try this, let's try that. It doesn't 9 mean there was chrysotile present. It could well be a 10 case of: what if it were present, would this remove it? 11 Scientists often work on what are called 12 hypotheses. It's a basic tenet of science. You come 13 up with a hypothesis: what if it were present; would 14 this remove it? 15 It's the kind of experiment that would be 16 done. I can see why it was done. 17 Q Okay. 18 Well, let's see what they say about it; okay? 19 A Sure. 20 Q If you turn to the page marked 5 at the bottom, 21 halfway down it says: 22 "Asbestiform analyses were performed by 23 Walter C McCrone Associates ..." 24 We've talked about Walter McCrone Associates; 25 right?	Page 402 1 Q Johnson & Johnson is saying there is a need to 2 keep the levels of these contaminants extremely low and 3 out of the finished product; correct? 4 A That is what it says. 5 Q And these contaminants is included chrysotile 6 asbestos; right? They say that? 7 A They say that, yes. 8 Q Okay. 9 "The use of these systems is strongly urged 10 by this writer, to provide the protection against what 11 are currently considered to be materials presenting a 12 severe health hazard and are potentially present in all 13 talc ores in use at this time". 14 Did I read that right? 15 A You did. 16 Q Okay. 17 Again, they're referring to chrysotile as 18 well as other minerals; correct? 19 A And that's in their reading of chrysotile in 20 May, 1974, yes. 21 Q Okay, and chrysotile is asbestos? 22 A It is. 23 Q Okay. 24 "In closing, based on Windsor's knowledge of 25 the physical chemistry of talc, and upon the results of
Page 401 1 A Correct. 2 Q It's a consultant for Johnson & Johnson during 3 this time; correct? 4 A Correct. 5 Q "... by means of transmission electron 6 microscopy and electron diffraction techniques. Their 7 report is found in attachment 'A'. An abstract of 8 their findings is given in Table 15. Quantitative 9 treatment of these results is questionable due to the 10 extremely low chrysotile levels present, however 11 depression of chrysotile through the use of citric acid 12 in combination with n-butanol is indicated". 13 So what they're saying is we can keep 14 chrysotile levels further down if we add in citric acid 15 with n-butanol; right? 16 A That's what it says in the report. 17 Q Go down to summary and Remarks below: 18 "The use of citric acid in the depression of 19 chrysotile asbestos and other mineral species has been 20 developed at Windsor Minerals in response to the 21 potential need for a means to exclude extremely low 22 levels of these contaminants from the finished product 23 of the beneficiation process". 24 Did I read that right? 25 A You read that correctly, yes.	Page 403 1 all work performed to date, it is our strong belief 2 that the use of these new reagent systems will not 3 alter the salient consumer properties of the raw 4 material supplied or the finished baby powder sold 5 under the Johnson and Johnson name". 6 In other words, it's not going to hurt the 7 properties that the consumers like; right? 8 A Correct. 9 Q Okay. 10 But it can serve to lower some of these 11 minerals, including chrysotile asbestos? 12 A If they were present in the first place, yes. 13 Q Well, the writer here, and this is Vernon 14 Zeitz, and he was the manager at Windsor Minerals; 15 right? 16 A He was the factory manager, yes. 17 Q Okay. 18 He says that: 19 "The use of these systems is strongly urged 20 to provide against what are currently considered to be 21 materials presenting a severe health hazard and are 22 potentially present in all talc ores in use at this 23 time". 24 Right? 25 A He's saying they are potentially present, yes.

Page 404 1 Q Well, let's look at their results here. 2 So if you turn, please, sir, to 5025 at the 3 bottom, do you see that? 4 A I do, yes. 5 Q Amphibole Content of Reagent Trial Process 6 Samples; right? 7 A Yes. 8 Q And you can see the ore has 3,000 parts per 9 million of amphibole; right? 10 A Yes. 11 Q And then the product has 100 to 200 parts per 12 million amphibole; right? 13 A Yes. 14 Q That's for A. That's the Ultrawet DS. That's 15 their typical flotation; right? 16 A Yes. 17 Q Then B is the n-butanol, and for B they have 18 3,000 parts per million for amphibole to start, and in 19 the product after the float, 100 to 200 amphibole parts 20 per million; correct? 21 A Yes. 22 Q And then C is n-butanol plus citric acid, and 23 that is 3,000 to start and 100 to 200 parts per million 24 in the product; right? 25 A Of amphibole.	Page 406 1 A Correct. 2 Q And then for the n-butanol citric acid, they 3 say "chrysotile in ore and chrysotile in product"; 4 right? 5 A That's what it says. 6 Q They count eight fibers in the ore and one 7 fiber in the product; right? 8 A That's what it says. 9 Q Suggesting that the citric acid butanol reagent 10 reduces chrysotile if used; true? 11 A It's what it would imply, yes. 12 Q So let's go on to -- let's see ... 13 Can I see your Exhibit real fast, just to 14 make sure we're looking at the same thing? 15 Yes, okay. 16 So there's an attachment B, and it says 17 Asbestiform Depression Through the Use of New Flotation 18 Reagent Systems; right? 19 A Yes. 20 Q Okay. 21 A Separate report. 22 Q Okay. 23 Now, this is what I think you might be 24 talking about when you say sometimes they'll spike a 25 sample to then check what happens with whatever they
Page 405 1 Q Right. 2 So what this is showing is that the reagents 3 do tend to reduce if they're used the amount of 4 amphibole from the ore to the product; right? 5 A They do, yes. 6 Q Okay. 7 So turn, please, if you will, to 5031. 8 Have you found that? 9 A Yes. 10 Q Okay. 11 It says Asbestiform Fiber Counts by Walter C 12 McCrone Associates, and it has designations and, again, 13 you have Ultrawet, butanol and n-butanol with citric 14 acid; correct? 15 A Correct. 16 Q Okay. 17 Under Fiber identification, so we're not 18 talking about particles; it says Fiber identification; 19 right? 20 A It does. 21 Q For U, which is the Ultrawet, product, they 22 find -- they say "probably chrysotile"; correct? 23 A Correct. 24 Q For the ore for A, they say "probably 25 chrysotile"; right?	Page 407 1 spiked it with; right? 2 A Yes. 3 Q So sometimes to experiment you might spike a 4 sample with anthophyllite, chrysotile, tremolite; 5 right? 6 A Yes. 7 Q And then see what happens throughout the 8 flotation? 9 A Yes. 10 Q Okay. So let's see what they say here. 11 Under Introduction, they say: 12 "A study was performed at Windsor Minerals to 13 quantify the effectiveness of two new flotation reagent 14 systems in the depression of asbestiform minerals in 15 the flotation process". 16 Okay? 17 A Yeah. 18 Q Now, you and I have already established 19 asbestiform means asbestos; correct? 20 A No. 21 Q Okay. I thought we'd established that. 22 If you have tremolite, anthophyllite or 23 actinolite and it is asbestiform, it's asbestos? 24 A Not -- not necessarily, no. No. That's not my 25 understanding of it. It's not my understanding.

Page 408 1 Q Okay. 2 Asbestiform means it is the form of asbestos; 3 right? 4 A If it's defined by the geologist as asbestos, 5 it would be asbestos, yes. 6 Q All right. 7 We talked about how Johnson & Johnson defined 8 asbestos yesterday; right? 9 A Yes. 10 Q The fibrous forms -- 11 A Okay. 12 Q -- of the different minerals. 13 A Yes. 14 Q Right? 15 A Yes. 16 Q At 3:1 aspect ratio with parallel sides? 17 A That was in the 1995. 18 Q Right. The aspect ratio? 19 A Yes, yes. 20 Q And that aspect ratio was never shorter than 21 that. We established that; correct? 22 A Yes. 23 Q And then in the 1970s they defined asbestos as 24 the fibrous forms of the different minerals; right? 25 A Yes.	Page 410 1 does occur as a rare mineral in the Hammondsville ore; 2 correct? 3 A It may well occur in the mine, but not 4 necessarily in the talc part of the mine. That's not 5 clear from here. 6 It says that Hammondsville ore body, not 7 necessarily the whole talc mine. 8 Q Okay. So -- 9 A The mine is a big operation. 10 Q Well, they don't say talc mine. They say the 11 ore body? 12 A Yes. 13 Q Ore body is the subset of the mine; correct? 14 A It could be, but it could also be where the 15 miners avoid those non-talc areas. 16 Q Other than talc ore, what other ores was 17 Johnson & Johnson mining out of Vermont? 18 A They were not mining other ores, but that 19 phraseology, "the Hammondsville ore body", could 20 actually include areas around the talc ore that could 21 be associated. 22 Q Okay. 23 A So I'm trying to separate those two out. 24 Q Well, let's just use the words they use. 25 A Okay.
Page 409 1 Q Okay. 2 So under Conclusions: 3 "A combination of n-butyl alcohol as a 4 frother along with citric acid as a depressive agent 5 proved to be 20 times as effective as Ultrawet DS 6 suppressing asbestiforms in the final product". 7 Right? 8 A Yes. 9 Q Okay. 10 Now, go under experimental. 11 It says: 12 "Ground ore from the Hammondsville mine was 13 'doped' ..." 14 Which means spiked; right? 15 A Yes. 16 Q They added? 17 A They deliberately added, yes. 18 Q "... 1.0% by weight of the fibrous form of 19 anthophyllite which occurs as a rare mineral in the 20 Hammondsville ore body". 21 Did I read that right? 22 A You did, yes. 23 Q Okay. 24 So they doped the sample for purposes of 25 these tests with fibrous anthophyllite, which they say	Page 411 1 Q They say in the ore body -- 2 A Yes. 3 Q -- fibrous anthophyllite does occur as a rare 4 mineral; correct? 5 A That's what it states. 6 Q Okay. 7 A Yeah. 8 Q So this is still 1974. 9 Fibrous -- I'm just going to abbreviate 10 anthophyllite ANTH -- occurs as a rare mineral in the 11 Hammondsville ore body. 12 That's accurate. That is what they say; 13 right? 14 A That's what the author is stating, yes. 15 Q All right. 16 Go ahead and go to the last page, please, 17 sir. It's the one that at the bottom is marked number 18 5. 19 Okay. 20 "Although the data was accumulated for the 21 specific mineral species fibrous anthophyllite, the 22 same results can be predicted for other fibrous 23 amphibole minerals and chrysotile asbestos found in 24 association with the Hammondsville ore body whose 25 surfaces expose a substantial concentration of

Page 412

1 magnesium and hydroxyl groups as reactive sites".

2 Did I read that right?

3 A You did, yes.

4 Q So here again they're saying the chrysotile

5 asbestos is also found in association with the

6 Hammondsville ore body; correct?

7 A They used the word "association", yes.

8 Q Okay.

9 I'm just going to use a different color

10 because that's a lot of red.

11 Okay. So I just wrote chrysotile is found in

12 association with the Hammondsville ore body, and that's

13 accurate according to what he wrote; right?

14 A That's what he wrote, yes.

15 Q Okay.

16 Hammondsville was the mine where Johnson &

17 Johnson was getting its talc for baby powder, Shower to

18 Shower and medicated powder at this time; right?

19 A Correct.

20 Q In fact, for use in the US, all of its talc was

21 coming from Vermont at this time; right?

22 A In '74, yes.

23 Q And Hammondsville is Vermont; right?

24 A It is, yes.

25 Q Okay.

Page 413

1 Next, this will be exhibit 70.

2 (Exhibit 70 marked for identification)

3 This is from Walter McCrone to Dr Rolle at

4 J&J; right?

5 A Yeah, that's what it reads.

6 Q Okay, and they analyzed looks like three

7 different samples; correct?

8 A Yes.

9 Q And it says:

10 "We have analysed -- we have completed the

11 analysis of your samples S5-888 ..." and then a couple

12 of others.

13 But the results are:

14 "We found chrysotile only in sample S5-888,

15 [and] T-280 and tremolite in neither of the samples".

16 Right?

17 A That's what it reads, yes.

18 Q So they found chrysotile in one and they say

19 on -- the amount present is at less than

20 .0005 per cent; right?

21 A Yes.

22 Q Now, that tells you that they are looking with

23 an electron microscope; correct?

24 A At least, yes.

25 Q Okay, because you couldn't determine those

Page 414

1 types of percentages with a light microscope, could

2 you?

3 A No, no.

4 Q And you certainly couldn't do it with XRD?

5 A No.

6 Q XRD -- this is, what, a thousand times at least

7 or ten thousand times more powerful than XRD?

8 A It is, yes.

9 Q Right.

10 XRD, we talked generally, is good to about

11 half a per cent?

12 A Yeah.

13 Q This is looking far lower than that, isn't it?

14 A It is indeed, yes.

15 Q Okay.

16 So I'm just going to write sample S5-888.

17 Now, chrysotile, again, if they find that,

18 that's asbestos; right?

19 A If they find that, that would be asbestos, yes.

20 Q Okay.

21 The next Exhibit will be 71.

22 (Exhibit 71 marked for identification)

23 MS FRAZIER: That greater than should be a

24 less than.

25 MR PANATIER: Oh, yeah.

Page 415

1 If you guys see any other errors, please

2 point them out. I appreciate that.

3 Okay. 71.

4 Q All right, sir. This is a memo from

5 February 28, 1974, and the subject is a Meeting

6 Concerning N-Butanol-Citric acid Flotation Agent, which

7 we have talked about from that chrysotile suppression

8 document; right?

9 A Yes.

10 Q Okay.

11 And it says:

12 "A meeting was called by Research,

13 February 22, to discuss with Mr Miller of Windsor

14 Minerals his proposal for evaluating Vermont talc,

15 treated with the n-butanol citric acid system. Messrs

16 Callum and Dettre were unable to attend and

17 consequently Messrs Marks, Semple and Lee met with

18 Mr Miller".

19 Now, Marks, Semple and Lee, those are all J&J

20 people; right?

21 A Correct.

22 Q Okay.

23 Technically, Mr Miller is, too; right?

24 A Yes.

25 Q Okay.

Page 416 1 "Mr Roger Miller presented both the technical 2 and economic rationales for the n-butanol-citric acid 3 approach highlighting the neutrality of the resulting 4 talc and the greater degree of chrysotile separation". 5 Right, so again he's advocating the use of 6 this because of the ability to remove chrysotile; 7 correct? 8 A That's what he is writing -- 9 Q Okay. 10 A -- in '74, yes. 11 Q Sure. 12 Skip down to the next highlight: 13 "It was stressed that if Marketing were to 14 feel the necessity for product tests, this must be 15 initiated immediately". 16 Now, at Johnson & Johnson was whether or not 17 products were tested dictated by marketing? 18 A Marketing sell a product, and if the consumer 19 found the product not to her liking, then marketing 20 would have a problem. 21 So it's not unusual if you've got a small 22 change in a product to have it evaluated with 23 consumers. 24 Q Okay. 25 Now, based on the test we saw, it was the	Page 418 1 have done 45 years ago. 2 Q And, you know, I don't want you to do that. I 3 want you to answer as Johnson & Johnson as a matter of 4 company policy. 5 As a matter of policy, if there were ever a 6 dangerous agent such as asbestos present in a raw 7 material such as talc and Johnson & Johnson had a way 8 to get rid of it or substantially reduce it, that would 9 be something Johnson & Johnson would do? 10 A That would be good policy, yes. 11 Q Okay. All right. 12 Here's Exhibit 72. 13 (Exhibit 72 marked for identification) 14 All right. April 4, 1974. Notes on a Visit 15 to the Denver Area, and this is -- looks like it is 16 authored by Bill Ashton; right? 17 A Yes. 18 Q It looks like he -- what he copies Mr Lee on 19 the front? 20 A Yes. 21 Q Okay. 22 So he says March 25 he met with the Colorado 23 School of Mines Research Institute with J Krause, and 24 that's Jerome Krause; right? 25 A Yes, I think so.
Page 417 1 n-butanol plus citric acid which had the highest 2 reduction of chrysotile; correct? 3 A Correct. 4 Q All right. 5 "It was the consensus of the meeting that 6 because of the economic savings, the additional product 7 benefits and the improved processing assurance, this 8 development should be pushed towards a successful 9 completion as quickly as possible". 10 So it looks like as of this memo they are 11 going to adopt the citric acid n-butanol flotation 12 agent; right? 13 A That's -- that's an impression, yes. 14 Q Well, do you agree with that? 15 A That's an impression, yes. 16 Q All right. You can set that aside. 17 This will be 72. 18 (Exhibit 72 marked for identification) 19 And by the way, if Johnson & Johnson had 20 asbestos in the ore that was going into the flotation 21 and they had a way to reduce it, of course Johnson & 22 Johnson would advocate doing that; right? 23 A Hypothetically, yes. 24 Q Okay. 25 A Again, I can't speak for what someone might	Page 419 1 Q And Dr T Mowatt, or Mowatt. 2 What he writes is: 3 "Inspected and authorized assembly of high 4 pressure assembly and following experiments. 5 1. Establish destruction of tremolite in 6 presence of Vermont talc". 7 So this is -- we've seen it with Pooley where 8 they've sent samples to Pooley to ask him to study the 9 removal of tremolite; right? 10 A Yes. 11 Q And this is Ashton saying they were doing an 12 experiment to destroy tremolite in Vermont talc; right? 13 A That looks like an experiment, yes. 14 Q Again, if it's not there, you don't have to 15 destroy it; right? 16 A That's hypothetical. These R&D guys often do 17 experiments -- 18 Q Well, they don't -- 19 A -- just to -- just to, you know, for 20 hypothetical reasons. 21 So I wouldn't want to comment on what their 22 thought processes were in 1974. 23 Q So we -- 24 A But they were doing an experiment. 25 Q And I'm sorry to talk over you. Sorry.

Page 420 1 We're not going to speculate. We're just 2 going to look at what they wrote then. 3 A Yeah. 4 Q So number 1: 5 "Establish destruction of tremolite in 6 presence of Vermont talc". 7 Now, they're not saying Vermont talc we are 8 spiking for some reason; right? 9 A No, they're saying: 10 "Establish destruction in [the] presence of 11 Vermont talc". 12 Q Okay. 13 A An experiment. 14 Q Number 2: 15 "Establish destruction of chrysotile in 16 presence of Vermont talc". 17 Right? 18 A Again, that's again an experiment, yes. 19 Q "Presence" means something is there; right? 20 A Yes. 21 Q Okay. 22 A Yes. 23 Q Number 3: 24 "Determine whether or not fibrous structure 25 is retained or destroyed in above".	Page 422 1 Q Okay. 2 And here we have Draft I, you could see; 3 right? And then on the back you have a draft statement 4 prepared for use at stockholders annual meeting on 5 April 9, 1974; right? 6 A Yeah. 7 Q Okay. 8 So it looks like we have Draft I, which is 9 the two page document on the front, and then we have 10 what looks like the final statement. It says it's not 11 yet released; right? 12 A That's what it says. 13 Q Okay. So that just gives us an idea of the 14 timing. This is around April 9 of '74. 15 And in the draft it says Asbestos in Talc, 16 and it says: 17 "The talc used to make Johnson & Johnson 18 powders is free of hazardous asbestos fibers". 19 Now, are there a type of asbestos fibers that 20 are not hazardous, according to Johnson & Johnson? 21 A I'm not aware of that. 22 Q Okay. 23 Now, there's a handwriting there; right? 24 A Yes. 25 Q Okay.
Page 421 1 Right? 2 A That was an experiment, yes. 3 Q So they're studying whether or not the fibrous 4 structure of tremolite and chrysotile in Vermont talc 5 is destroyed by this experiment; right? 6 A That's what they're studying, yes. 7 Q Okay. 8 Then he says: 9 "The above to be run on low key up to point 10 where we can file patent protection". 11 Right? 12 A Yes. 13 Q Low keep means keep it on the down low, so to 14 speak? 15 A Yes. 16 Q Okay. Next page. 17 You know what? We don't even have to get 18 into that. 19 All right. You can set that aside, sir. 20 This next one will be Exhibit 73. 21 (Exhibit 73 marked for identification) 22 Okay. So Johnson & Johnson routinely put out 23 PR statements with regard to all its products, not just 24 talc; right? 25 A Yes.	Page 423 1 Now, I'm going to try and translate that for 2 you. 3 A Thank you. 4 Q Okay, and you tell me if you disagree with 5 this. 6 Here's the handwriting: 7 "Does our tremolite fill into the definition 8 of small particles by Stanton and Wagner reports?" 9 Does it look like I read that right? 10 A Yeah. I think that's right. I think that's 11 what it reads. 12 Q Okay. 13 A Someone's scribbled that with a pencil. 14 Q You whoever is editing this, you can see this 15 person has made other edits; right? 16 A Yeah. 17 Q So this person actually refers to tremolite as 18 "our tremolite"; right? 19 A Yeah, although I don't know who the author is, 20 but yeah. 21 Q Okay. 22 And I'm sure in looking through these 23 documents, you've seen that Bill Ashton, Nashed, Gavin 24 Hildick-Smith, George Lee and others routinely are 25 editing statements like this; right?

Page 424

1 A Yeah, it's normal in any organization --

2 Q Right.

3 A -- to share your first thoughts with your

4 colleagues.

5 Q Okay.

6 And here he's asking about:

7 "Does our tremolite fill into the definition

8 of small particles by Stanton and Wagner reports".

9 Right?

10 A Yeah.

11 Q Okay. You can set that aside.

12 Now, do you know what Stanton report he's

13 referring to?

14 A I don't, no.

15 Q Does Johnson & Johnson know what the Stanton

16 hypothesis is?

17 A I don't know what the Stanton hypothesis is,

18 no.

19 Q Okay.

20 A Or was.

21 Q Right. Next Exhibit. This will be 74.

22 (Exhibit 74 marked for identification)

23 Here you are, sir. Another report to Windsor

24 from McCrone; right?

25 A Yeah.

Page 425

1 Q This is entitled Examination of Talc Samples,

2 the Argonaut Ore Body; right?

3 A Yes.

4 Q Okay.

5 So these are talc samples from Argonaut;

6 correct?

7 A Correct, yes.

8 Q Now, Argonaut was one of the other mines that

9 ultimately Johnson & Johnson pulled talc from; correct?

10 A They did, yes.

11 MR GAFFREY: Can we get a date on that?

12 MR PANATIER: Yeah, I'm sorry. The date is

13 April 24, '74. Okay?

14 Q You could see from the Summary inside:

15 "An intensive examination has been made by

16 x-ray diffraction and electron microscopy of 38 core

17 samples taken from a new ore body which Windsor

18 Minerals ... are contemplating exploiting".

19 Right?

20 A Yeah.

21 Q So we know that, as of '74, Argonaut isn't yet

22 live in terms of they're not mining it yet for purposes

23 of the products; right.

24 A Correct.

25 Q Okay.

Page 426

1 Go ahead and turn, if you will, please, sir,

2 to the page marked 2670.

3 There should be a highlight there. Do you

4 see that?

5 A I do, yes.

6 Q Okay.

7 Now, this is April 24, '74, and they looked

8 at 38 samples and they find asbestos in two; correct?

9 At a certain detection limit; right?

10 A Yeah.

11 Q So they have a detection limit of .0005 per

12 cent and at that detection limit they find chrysotile

13 at .007 and .001; is that correct?

14 A Correct. That's what they've written, yes.

15 Q And they found tremolite at .0001; right?

16 A Yes.

17 Q Okay.

18 And that's fibrous tremolite; correct?

19 A That's what they write, yes.

20 Q So chrysotile is asbestos. So they found

21 asbestos in the talc samples from the Argonaut ore

22 body; correct?

23 A That's what they've written, they found

24 chrysotile, yes.

25 Q Okay.

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1 And what they say at the end of that

2 paragraph is they say that:

3 "The levels of chrysotile observed in the two

4 high samples is only an order of magnitude above this

5 and would presumably be reduced considerably by your

6 beneficiating process".

7 Right?

8 A Yeah, that's what they've written, yes.

9 Q Now, Johnson & Johnson acknowledges that their

10 flotation, their beneficiation processes were never

11 able to remove all asbestiform or asbestos to the

12 extent it was present; correct?

13 A Correct.

14 Q All right. Sir, you can see that aside.

15 Just for clarification up here, I'm going to

16 write that this is Argonaut talc samples. Argonaut.

17 This next Exhibit will be 75.

18 (Exhibit 75 marked for identification)

19 There you go, sir.

20 July 8, 1974, McCrone to Johnson & Johnson;

21 correct?

22 A Yes.

23 Q All right.

24 And what they say here is:

25 "We have analyzed 21 samples of talc to

Page 428 1 determine the content of asbestiform materials in those 2 samples". 3 Right? 4 A Yes. 5 Q "Of the 21 samples we analyzed, 17 were 6 production run samples and 4 were other type samples." 7 Correct? 8 A Yes. 9 Q "In this latter group of 4, one sample ... 10 contained 2 small chrysotile fibers while the other 3 11 samples did not show any asbestiform fibers whatever". 12 Right? 13 A Correct. 14 Q Now, go to the last page and we can look at the 15 production samples versus these other four samples that 16 were sent. 17 Production -- this is what the mine is 18 producing; correct? 19 A Yes. 20 Q Okay. 21 A Although I'm not sure that are we talking about 22 the industrial mine or the -- there's nothing here 23 which separates out the industrial mine from the 24 cosmetic mine. 25 Q Well, the industrial mine was which one?	Page 430 1 So in the production run samples -- this is 2 dated July 8, '74 -- they find in one, two, three, four 3 five -- they find asbestos in five production run 4 samples, do they not? 5 A That's what they have reported, yes. 6 Q Chrysotile asbestos; right? 7 A That's what they reported. 8 Q And they find tremolite in one; correct? 9 A Correct. 10 Q Right, sir, you can set that aside. 11 This next exhibit will be 76. 12 (Exhibit 76 marked for identification) 13 A Thank you. 14 Q Is that two copies? Can you hand one to 15 Sharla, please? 16 A It is two copies, yeah. 17 Q Sorry. All right. 18 This is a document called Historical Review. 19 Do you see that? 20 A Yes. 21 Q All right. 22 And you can look just on the first part, 23 they're talking about the Tenovus studies. After that, 24 they're talking about Dr Selikoff and Mount Sinai. 25 After that, they're talking about Dr Kleinfeld's study
Page 429 1 A Well, I think it was the Ham mine, but I'm just 2 calling it the industrial mine. 3 What I'm saying here is that it doesn't 4 actually say which mine this came from. 5 Q Let me ask you a question: where did Robert 6 Rolle work? 7 A At Johnson & Johnson. 8 Q Aha, and in what company? 9 A The -- what's now the consumer company, the 10 Baby Products Company. 11 Q Robert Rolle worked in the Baby Products 12 Company; correct? 13 A Yes. 14 Q And the Baby Products Company never used 15 industrial talc, did it? 16 A Correct. 17 Q And this is a letter from McCrone to Robert 18 Rolle, who worked in the Baby Products Company; true? 19 A It is true, yes. 20 Q Okay. 21 And this letter to the guy who worked in the 22 Baby Products Company is -- addresses 17 production run 23 samples to this man; right? 24 A Yes. 25 Q Okay.	Page 431 1 from New York. 2 Do you see that? 3 A Yeah. 4 Q Okay. 5 Then they're talking about their relationship 6 with the FDA; right? 7 A Yes. 8 Q Okay. 9 Let's just go -- we're not going to go 10 through all of this stuff. Let me skip ahead. 11 Right. Let's just go to the very end. Go to 12 the second last page. Okay. 13 Do you see at the top of page 18 it says Talc 14 Strategy? 15 A It does, yes. 16 Q Okay. 17 Talc strategy: 18 "Cornstarch appears to be the number one 19 answer to any alternatives to talcum powder". 20 Right? 21 Does it say that? 22 A That's what it says, yes. 23 Q "We presently have a cornstarch formula 24 packaged and it is planned that a test market will 25 ensue on the formula during the first quarter of 1975".

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1 And the reason I bring that up is because you
 2 and I were talking about when cornstarch really went on
 3 as an alternative to talc from Johnson & Johnson?
 4 A Okay. Yeah.
 5 Q And it looks like they're talking about testing
 6 it in '75; right?
 7 A Yeah, that's correct.
 8 Q And you yourself have said it was available for
 9 use as early as the early 1900s; correct?
 10 A By other companies, yes.
 11 Q Yeah.
 12 A Yes, yes.
 13 Q You guys weren't?
 14 A Yes, it was available.
 15 Q And then turn to the last page:
 16 "Johnson & Johnson has already instituted a
 17 new flotation agent (butanol) at Windsor Mines to
 18 further insure complete removal of 'asbestos'
 19 [materials] [sic] ..."
 20 A Close quotes.
 21 Q Right?
 22 A Yes.
 23 Q Or asbestos minerals, I'm sorry.
 24 A Yeah.
 25 Q Now, there were two different flotation methods

Page 433

1 that they were looking at?
 2 One was just n-butanol and one was n-butanol
 3 plus citric acid, and it was the latter that showed the
 4 better reduction of asbestos minerals; right?
 5 A In that one experiment, yes.
 6 Q Yeah.
 7 It appears here they're just using butanol,
 8 unless they are saying butanol and that's to be taken
 9 to mean butanol plus citric acid; right?
 10 A Yes, yeah. I don't know what the author is
 11 saying, but yeah.
 12 Q But their statement here is they did it
 13 specifically to ensure complete removal of asbestos
 14 minerals; right?
 15 A With "asbestos" in quotes. Closed quotes.
 16 Q Yeah.
 17 Now, there was no way they could completely
 18 remove it because even the experiments we saw didn't
 19 show complete removal; right?
 20 A Correct.
 21 Q Okay. All right. So we can set that aside.
 22 This will be 77.
 23 (Exhibit 77 marked for identification)
 24 Right, sir, we have -- this is Mr Shimps at
 25 Walter McCrone to Mr Zeitz. Is it Zeitz?

Page 434

1 A Vernon Zeitz.
 2 Q Vernon Zeitz at Windsor?
 3 A Yes.
 4 Q Okay.
 5 And he says:
 6 "Dear Mr Zeitz:
 7 I have completed the analysis of your eleven
 8 latest samples ..."
 9 And he gives the identification of all the
 10 samples; right?
 11 A Yeah.
 12 Q And he says:
 13 "Only one sample was found to contain fibrous
 14 asbestiform material -- D-G [sic] 7/15 to 7/29.
 15 Chrysotile fibers were found to be present at an
 16 estimated level (good approximately to an order of
 17 magnitude) of .006%".
 18 Right?
 19 A That's what it says, yes.
 20 Q Now, when he says "good approximately to an
 21 order of magnitude", he means -- he could be off by a
 22 factor of ten lower or ten higher; right?
 23 A Well, that's speculation. I wouldn't want to
 24 speculate as to how accurate plus or minus ten, that
 25 technique was in '74. But ...

Page 435

1 Q Well, that's what he's telling you.
 2 A He's saying an order of magnitude
 3 .006 per cent, and the little squiggle usually means
 4 approximately.
 5 Q Right.
 6 So let's get this straight. An order of
 7 magnitude means ten times; right?
 8 A No, no. An order of magnitude could be five
 9 times, two times. It doesn't actually state.
 10 And I'm not going to speculate what the
 11 author was meant by an "order of magnitude of
 12 approximately .006 per cent".
 13 Q In science talk, are you saying that when
 14 someone says "order of magnitude", they could mean any
 15 magnitude?
 16 A They could. Yeah, yeah.
 17 Q All right.
 18 A I wouldn't want to put a figure of ten times or
 19 20 times. It would be speculative.
 20 Q Okay.
 21 A I'm not going to speculate.
 22 But what it says, an order of magnitude of
 23 approximately -- that little squiggle -- .006 per cent.
 24 Q So in one sample, McCrone finds chrysotile
 25 fibers at approximately -- squiggle line?

Page 436 1 A Yes. 2 Q .006 per cent; right? 3 A That's what they've written, yes. 4 Q And these -- you can see the way these are 5 dated. These are two week samples, are they not? 6 A Yes. 7 Q So we'll put bi-weekly samples. Is that 8 accurate? 9 A Yeah. 10 Q Now, the arrangement between Johnson & Johnson 11 and its mining company, Windsor Minerals, was that 12 Windsor Minerals at some point would take over the 13 testing of the ore, the regular testing; right? 14 A That's my understanding. 15 Q And that they would supply the reports, such as 16 we have here, to Johnson & Johnson? 17 A Correct. 18 Q Okay. 19 So Johnson & Johnson could be apprized of 20 what was going on; right? 21 A Yes. 22 Q Okay. 23 That's of course why when Johnson & Johnson 24 gave us documents in the case, we have the reports? 25 A Yes.	Page 438 1 That's also described as a "fiber bundle", is 2 it not? 3 A It's what it writes, yes. 4 Q Okay. Sir, you can set that aside. 5 This will be 79. 6 (Exhibit 79 marked for identification) 7 A Thank you. 8 Q This is another communication from McCrone to 9 Mr Zeitz at Windsor Minerals, July 1, 1975; correct? 10 A Yes. 11 Q Okay. 12 And it says here that they examined two 13 different groups of samples using electron microscopy 14 and selected area electron diffraction to determine the 15 extent of amphiboles or serpentine contamination in 16 these two groups of samples: 17 "The first group consisted of 29 talc samples 18 which were taken from your ore body. The second group 19 consisted of 7 samples which were sent to us 20 subsequently to be analyzed separately. The general 21 conclusion that we came to in this study is that these 22 samples do show some amphiboles but at an extremely low 23 level. We did not find any chrysotile (serpentine 24 asbestos) in any of the samples". 25 Okay?
Page 437 1 Q Because Johnson & Johnson had them; correct? 2 A Correct. 3 Q Okay. 4 This next Exhibit is 78. 5 (Exhibit 78 marked for identification) 6 There you go, sir. 7 A Thank you. 8 Q This is the same report we just looked at, but 9 the reason I'm giving it to you again is this separate 10 document provided to us by Johnson & Johnson has an 11 attachment to it, and can you see on the attachment 12 each of the samples is actually described in some 13 detail; right? 14 A Yeah. 15 Q And for the one that was positive for 16 chrysotile that we discussed, it was the sample D-GI? 17 A I, yes. 18 Q Can you see the description on the second page? 19 It says the fibers were -- the fibers that 20 were found, the chrysotile fibers: 21 "The fibers were mainly in 'chunks' of 22 material showing anywhere from two to ten fibers". 23 Is that right? 24 A Yes. 25 Q Okay.	Page 439 1 Then they provide a key to evaluating them, 2 and that's in the second paragraph: 3 "In examining the samples, we kept a running 4 tabulation of the asbestos which we could positively 5 identify". 6 Okay? So they're talking about the 7 identification of asbestos; correct, sir? 8 A That's what they write, yes. 9 Q "... the total fiber content in the organic 10 material present in each sample. These are listed 11 qualitatively as zero for none ... low for 1 to 3 12 fibers found, medium for about 4 to 8 fibers, high and 13 very high". 14 Right? 15 "In no case did the asbestos content exceed 16 medium". 17 All right? 18 A Yes. 19 Q Okay. 20 So let's turn the page to these samples, and 21 here this is July 1, '75. 22 Again, this is -- do you see where it says 23 under Table 1 Description of sample content of fines? 24 A Yes. 25 Q Okay.

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1 Then it says this: confirmed asbestos; right?

2 A Yes.

3 Q Visual?

4 A Yeah.

5 Q So we can agree, sir, they are telling you that

6 in some cases they have confirmed asbestos; correct?

7 A They did.

8 Q Okay.

9 There is nine results where they confirmed

10 asbestos; correct?

11 A They did.

12 Q Does Johnson & Johnson take issue with their

13 confirmed results here?

14 A The results are as reported.

15 Q And then if you turn to Table 2, they talk

16 about Description of the sample content sediment, and

17 they have another one, two, three, four, five asbestos

18 confirmations; right?

19 A They do, yes.

20 Q Okay.

21 Right. You can set that aside, sir.

22 A Just one point I would make.

23 Q Mmm hmm?

24 A Is that nowhere does it say that those talc

25 samples were the talcs that was used in baby powder or

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1 Shower to Shower.

2 Q So, as part of the arrangement between Windsor

3 Minerals, they were to provide these results to Johnson

4 & Johnson; correct?

5 A They were to provide results, yes.

6 Q Aha, and at any time during -- first of all,

7 did Johnson & Johnson utilize any of its industrial

8 mines for consumer talc?

9 A No.

10 Q Okay.

11 How often did Johnson & Johnson have its

12 industrial talc sent off to McCrone?

13 A The responsibility was for that to be done by

14 Mr Zeitz at the Windsor Minerals.

15 Q Mmm hmm.

16 A So that's to whom the letter is written.

17 Q Well --

18 A So the question I raise is that, without going

19 through those individually, we've not defined whether

20 they were industrial talc or whether it was the baby

21 powder talc, because it did not come to Johnson &

22 Johnson. The letter was written to the mine.

23 Q As part of the agreement between Windsor and

24 Johnson & Johnson, we already established that Windsor

25 had to provide the results of its testing to Johnson &

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1 Johnson; correct?

2 A For baby, yes.

3 Q For baby; right?

4 A Yes, yes.

5 Q These documents came from Johnson & Johnson;

6 correct?

7 A They did, yes, although they're written to

8 Windsor Minerals.

9 Q Right, but Johnson & Johnson had these in their

10 records?

11 A They had them in their records, yes.

12 Q Okay.

13 My question, though, is how often was Windsor

14 testing the industrial talc for asbestos, because they

15 knew there was asbestos in it; right?

16 A I -- you know, I'm here to talk about the baby

17 product side.

18 Q Mmm hmm.

19 A I don't know what was going on with the

20 industrial side in '74.

21 Q Well, you're offering --

22 A My understanding is that it was done bi-weekly.

23 Q You're offering as a potential explanation for

24 all these asbestos results that maybe it was the

25 industrial mine that was being tested; right?

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1 A It's a possibility.

2 Q You don't have any evidence that's the case,

3 though.

4 A At this instant, I don't.

5 Q Okay.

6 A But, you know, we may come to that.

7 Q Yeah, and we'll see.

8 A Yeah.

9 Q But my question is the industrial talc, Johnson

10 & Johnson acknowledges there was asbestos in the

11 industrial talc; correct?

12 A There could have been.

13 Q Okay.

14 If they know it's there, they don't need to

15 test it; right?

16 A Well, they did test it. It was tested by the

17 mine, and that's the report to the mine.

18 Q You said -- well, first of all, you don't know

19 that that's an industrial talc report?

20 A At this stage without going through the

21 records, yeah.

22 Q And you said you believed it was bi-weekly.

23 Now, we know that the Hammondsville mine and

24 later the Argonaut mine were tested bi-weekly; correct?

25 A That is correct, yes.

Page 444 1 Q Do you actually know that the industrial talc 2 was tested bi-weekly? 3 A I don't know that no, no. 4 Q Okay. All right. 5 This will be 80. 6 (Exhibit 80 marked for identification) 7 All right, sir, this is from November 5, 8 1975; correct? 9 A Correct, yes. 10 Q Okay. 11 This is 20 years after Dr Emmett Brown 12 invented time travel in Back To The Future. 13 It was November 5, 1955. Just a little pop 14 culture. 15 A No, I don't remember that. 16 Q All right. Okay. 17 So November 5, 1975. This is again McCrone 18 to Windsor Minerals; right? 19 A Correct, yes. 20 Q And here if you turn to the table, they find 21 "fibers of asbestos in ..." 22 I show 13 samples. Is that about right? 23 A Yeah, I count 12, but ... 24 Q Okay. I'll put 12. 25 A I'm not worried.	Page 446 1 A Thank you. 2 Q Right, sir. This is October 20, 1975. Again, 3 it's from McCrone to Roger Miller; right? 4 A At the Vermont mine, yes, yes. 5 Q Right. Okay. 6 It says: 7 "We have examined three samples of talc UN 8 which you recently sent to us to determine their fiber 9 content". 10 Right? 11 A Yeah. 12 Q "These samples were identified as follows: 13 chips from ... [4 20 lb] [sic] pieces, 'Stun sample A', 14 and 'Stun sample A cleaner concentrate'". 15 Do you know what "stun" means? 16 A I do not, no. 17 Q Okay. 18 Well, let's go down to the third paragraph: 19 "None of the methods of examination showed 20 any evidence of asbestiform minerals present in any of 21 the three samples. Both light microscopy and 22 transmission electron microscopy indicated that the 23 unbeneficiated talc was somewhat more fibrous than the 24 Hammondsville talc to which we are accustomed". 25 Right?
Page 445 1 Q I'll put a squiggly line. 2 A I'm happy with that. 3 Q Okay. Squiggly line. 12 samples. 4 A Yeah. 5 Q Okay. 6 The reason I counted 13 is because sample 7 P-GI, it doesn't say anything for fibers of asbestos, 8 but it does say four amphibole fibers under number of 9 fibers; do you see that? 10 A Yes. 11 Q Okay. We'll leave it at about 12. 12 MS FROST: We are at about a hour. 13 Do you need a -- 14 MR PANATIER: Do you want a break? 15 THE WITNESS: Five minutes. 16 MR PANATIER: Okay. Sure. We'll do it in 17 five minutes. 18 Is that 81? 19 MS FROST: It is. 20 MR PANATIER: Okay. That was 81? 21 MS FROST: No. This one. 22 MR PANATIER: Okay. This will be 81. Got 23 you. 24 (Exhibit 81 marked for identification) 25 Q There you go, sir.	Page 447 1 A Yes. 2 Q Okay. 3 "It should be remembered, however, that we 4 normally examine Hammondsville talc after beneficiation 5 which would remove much of the talc which would be 6 described as fibrous on the 3:1 axial ratio criterion". 7 So they're talking about the flotation, 8 right, as reducing some of that stuff; right? 9 A Yes. 10 Q "Many of these 'fibers' were plates which were 11 rolled. We estimate that the talc itself is 12 approximately 60-70% per cent platy". 13 And that just means the plates of talc; 14 right? 15 A Correct, yes. That's what you're looking for. 16 Q Sure. 17 "By transmission electron microscopy we did 18 see several fibers which were approximately 30 -- 19 300-600 Å in diameter. These appeared to be of 20 bacterial origin or were perhaps a contaminant of clay 21 mineral such as attapulgite. No diffraction pattern 22 could be obtained from these fibers but they were 23 definitely not chrysotile. 24 Some other fibers present in the 25 unbeneficiated sample appeared to us to be somewhat

Page 448 1 fibrous antigorite and our electron diffraction 2 patterns would tend to support this". 3 Now, antigorite is the sort of massive form 4 of chrysotile; right? 5 A That's my understanding, yes. 6 Q Okay. 7 Before we take our break, let's look at the 8 next document, because it has to do with that. 9 This will be 81. 82. Okay. Got it now. On 10 board. 11 (Exhibit 82 marked for identification) 12 There you go. 13 A Thank you. 14 Q You know what, here. Let me fix that. Okay. 15 This is Analysis of FDA Talc Samples for 16 Amphibole and Serpentine Minerals done by Regina 17 Gallagher. 18 Now, she's a J&J person; right? 19 A She was a -- yeah, she was in the quality lab, 20 yeah. 21 Q All right. December 24, 1975; right? 22 A Yes. 23 Q Okay. 24 Go ahead and turn to the next page and this 25 says Position I, Optical microscope method is	Page 450 1 Now, go up one, it says: 2 "Dr John Stuart of [the] FDA reveals ..." 3 Right? 4 A Yes. 5 Q "... that no cosmetic talc (so far) fails the 6 DTA test". 7 Now, DTA is what? 8 A I think that means the differential thermal 9 analysis. 10 Q Differential thermal analysis. 11 Now, this was a test that Johnson & Johnson, 12 as well as some of the other companies, were proposing 13 to test for chrysotile; right? 14 A It's part of a program of which DTA would be 15 one test, yes. 16 Q That was never adopted by the CTFA; correct? 17 A Correct, yes. 18 Q It was never adopted by the USP or anybody? 19 A Correct, yes. 20 Q But it was adopted by J&J; right? 21 A As part of several other tests, yes. 22 Q Right, and we'll get to those. 23 But John Stuart here shows -- he's with the 24 FDA; right? 25 A Yes.
Page 449 1 unacceptable. 2 Now, you're aware that the FDA had proposed 3 an optical microscopy standard for asbestos in talc; 4 correct? 5 A Correct. 6 Q And Johnson & Johnson was very critical of that 7 method; true? 8 A Yes. 9 Q As was the whole talc industry; right? 10 A Yes. 11 Q And so this appears to be -- it says Position 12 I -- one of Johnson & Johnson's positions; is that 13 right? 14 A Yes. 15 Q Okay. 16 Go down to number 5. See where it says: 17 "If talc contains detectable levels of 18 antigorite it probably contains some chrysotile". 19 Right? 20 A That's what it says, yes. 21 Q Okay. 22 So we just saw a result from McCrone for 23 antigorite; right? 24 A We did, yes. 25 Q Okay.	Page 451 1 Q And, just for clarification, the first document 2 we talked about today was John Stuart who was doing the 3 testing. 4 Do you recall that? 5 A I do, yes. 6 Q All right. Sir, you can set that aside. 7 Let's take a break. 8 (Off the record at 11:16 am) 9 (On the record at 11:27 am) 10 BY MR PANATIER: 11 Q All right, sir. Now, we established yesterday 12 that Johnson & Johnson had a zero tolerance policy for 13 asbestos in its talcs; correct? 14 A Yes. 15 Q And that means zero, none? None allowed? 16 A Zero. 17 Q Okay. 18 All right, here's 83. 19 (Exhibit 83 marked for identification) 20 Sir, can you see this document is dated 21 October 17, 1980? 22 A Yes. 23 Q Those are William Ashton's initials up on the 24 top there, WHA; correct? 25 A Yes.

Page 452 1 Q If you turn to the end, we'll see who wrote it. 2 It's RS Russell; correct? 3 A Yes. 4 Q All right. 5 So let's go to the front. This is Johnson & 6 Johnson's procedure for identification and 7 quantification of amphibole particles in J&J talcs 8 using optical mineralogical microscopy; correct? 9 A Yes. 10 Q It says: 11 "The Talc Lab currently relies on three 12 techniques to examine talc for freedom from asbestos 13 minerals". 14 Now, this is 1980. It says number 1: 15 "Optical Mineralogical Microscopy for 16 particles >5 microns". 17 Right? 18 A Yes. 19 Q "CTFA Method J4-1 (x-ray)". 20 Right? 21 A Yes. 22 Q And: 23 "SEM + Dispersive X-ray Analysis (EDAX) for 24 particles < 5 microns". 25 Right?	Page 454 1 A Correct. 2 Q All right. 3 Then go to Interpretation of Results, okay, 4 and do you see that it says if you see less than three 5 amphibole particles, then your result is none present; 6 right? 7 A Yes. 8 Q So you could see two amphibole particles and 9 still report none present; true? 10 A Yes. 11 Q If you see three to 27 amphibole particles, 12 meaning .01 to .1 per cent by weight, that is listed as 13 trace acceptable; correct? 14 A That's what it states, yes. 15 Q So under Johnson & Johnson's procedure here, if 16 you have .01 to .1 per cent amphibole particles, that 17 trace amount is acceptable by Johnson & Johnson; 18 correct? 19 A That's what it states. 20 Q Okay. 21 If you have greater than 27 amphibole 22 particles, meaning greater than .1 per cent presence by 23 weight, it says: 24 "Controversial minerals present -- not 25 recommended".
Page 453 1 A Yes. 2 Q SEM is scanning electron microscopy; right? 3 A It is, yes. 4 Q Okay. 5 It says that: 6 "The optical mineralogical method, described 7 below, is a fast and reliable indicator of talc safety 8 and serves as our first line of defense". 9 Right? 10 A Mmm hmm, yes. 11 Q Under General Comments, it says: 12 "In almost all cases the amphibole observed 13 is specifically tremolite, or actinolite if iron is 14 present". 15 Did I read that right? 16 A You did. 17 Q So pretty much they -- if they see anything, 18 they expect to see tremolite or actinolite; right? 19 A That's what's -- that's the implication, yes. 20 Q Okay. 21 Then it has the procedure. It tells you how 22 you prepare the sample; right? 23 A Yes. 24 Q And then it says in detail how you go about 25 analyzing the sample; correct?	Page 455 1 Right? 2 A That's what it states. 3 Q So at trace amounts, it's acceptable. But it's 4 controversial at .1 per cent -- greater than 5 .1 per cent; right? 6 A Correct. 7 Q Then if you see greater than or equal to 135 8 amphibole particles, that gives you .5 per cent by 9 weight presence; right? 10 A Yes. 11 Q And that is where it's detectable by J4-1; 12 right? 13 A By x-ray diffraction, yes. 14 Q That's right, and it says "mandatory 15 rejection"? 16 A Yes. 17 Q So mandatory rejection only comes in once you 18 get to .5 per cent by weight; right? 19 A Of amphiboles. 20 Q Of amphiboles. 21 Below that, there is -- J&J does not 22 minatorily reject the talc; correct? 23 A Let's turn that on its head. 24 If you do the J4-1 test methodology by x-ray 25 diffraction, that's the first step.

Page 456 1 You then go on and test for the other 2 materials by -- sorry, the same materials -- by those 3 other test methods, electron microscopy, optical 4 microscopy. 5 Q Yeah, I hear you, but what this says is the 6 first point at which this is detectable, the levels 7 would be detectable by J4, is half a per cent, like you 8 and I talked about; right? 9 A Yes, yes. 10 Q If it's detectable at .5 per cent, it has to be 11 minatorily rejected; right? 12 A Yes. 13 Q But if by optical, which is what this is 14 talking about, amphiboles are present at less than 15 .5 per cent, okay, it's not mandatory rejection; right? 16 A Correct. 17 Q Okay. Now, let's go to the next paragraph. 18 It says: 19 "The table refers to amphiboles which have 20 crystallized in the non-fibrous form as described in 21 this report. The amphiboles may also occur in a 22 fibrous form. The presence of even trace amounts of 23 fibrous amphiboles would be grounds to recommend 24 against the talc sample for safety reasons". 25 Right?	Page 458 1 Q Right. 2 And then the language they use in 1 below 3 doesn't say mandatory rejection. It just says, 4 "recommend against"; right? 5 A That's what it says. 6 Q All right. You can set that aside, sir. 7 By the way, so for the industrial talc versus 8 the "cosmetic talc", which mill was handling the 9 industrial talc? 10 A It was a separate mill from the cosmetic talc. 11 The two never met. 12 Q Was it the Gassettes Mill, or Gassettes? 13 A That sounds familiar, but I'm not going to be 14 100 per cent sure on that. 15 Q We can look at -- we can look at some stuff on 16 that later. 17 But the Gassettes Mill, or whichever mill was 18 handling the industrial, was a dry beneficiation 19 process; correct? 20 A I'm not familiar with it. That's an industrial 21 operation. We were not -- I was not familiar with 22 that. 23 Q We certainly know that the Windsor mill, which 24 was handling everything for the baby powder products 25 and the cosmetic products, was a wet beneficiation
Page 457 1 A That's what it states. 2 Q So any presence of fibrous amphiboles, meaning 3 fibers; right? 4 A Yes. 5 Q Would be grounds to reject it for safety 6 reasons; right? 7 A Correct. 8 Q Okay. 9 Because the presence of fibers of amphiboles 10 could be harmful to somebody; correct? 11 A Correct. 12 Q Now, does it say it has to be mandatorily 13 rejected there, or whether it's just not recommended? 14 A It says: 15 "... would be ground to recommend against ... 16 talc sample ..." 17 Q But not: shall be rejected; right? 18 A Well, it's the phraseology, but it says: 19 "[It] would be grounds to recommend against 20 the talc sample ..." 21 Q Well, we know above if you find amphiboles at 22 greater than .1 per cent and less than .5 per cent, it 23 says not recommended, but if it's over .5 per cent, it 24 says mandatory rejection; right? 25 A Yeah.	Page 459 1 process? 2 A We do, yes. 3 Q Okay. 4 This next exhibit will be 84. 5 (Exhibit 84 marked for identification) 6 Right, sir, can you see this is a report to 7 Windsor Minerals from McCrone again? 8 A Yes. 9 Q August 22, 1985; right? 10 A Yeah. 11 Q Okay. 12 And there they have -- the samples are WMI 13 and then a number; right? 14 A Yes. 15 Q Okay. 16 If you go to the second page, it says: 17 "Chrysotile asbestos was detected only in the 18 samples labeled WMI 85-28 and ... 85-30". 19 Right? 20 A That's what it reads, yes. 21 Q If it's Windsor Minerals, it's the talc that's 22 being used for consumers; correct? 23 A No, no, that's -- I wouldn't concur with that. 24 Windsor Minerals was also -- ran the mine for 25 industrial applications.

Page 460 1 Q Okay. 2 So are you saying, so here we've got 3 chrysotile asbestos, according to McCrone; right? 4 A Yes. 5 Q In two samples; right? 6 A Yes. 7 Q This document's in possession of Johnson & 8 Johnson; right? 9 A Yes. 10 Q Okay, and you're saying that you don't know, it 11 might be industrial? 12 A Without having the key, those two codes, WMI 13 85-28 and WMI 85-30, what they say is that there's no 14 evidence here that this was the talc used in baby 15 powder. 16 Q Okay. 17 Do you know when Eastern Magnesia was running 18 the industrial mine and when they weren't? 19 A I don't, no. No. 20 Q Okay. 21 You can set that aside. 22 So did you tell me as a matter of fact that 23 you believed Vernon Zeitz was running the industrial 24 site, or do you know that? 25 A My understanding, having read the	Page 462 1 and no fibrous forms were observed". 2 Acicular means needle-like; correct? 3 A It does, yes. 4 Q Okay. 5 If you go to the second page, sir, they have 6 a series of results here. Actually, I'm going to turn 7 the page, and we'll do this on the next page. 8 First of all, they look at Windsor Talc; 9 right? 10 A Yeah. 11 Q And they look at float feed; right? 12 A Yeah. 13 Q In the float they find amphiboles in one, two, 14 three, four, five samples; right? 15 A Yes. 16 Q And what it says is that -- and that's per 17 slide; right? 18 A Yes. 19 Q And if you want to know particles by million, 20 you have to multiply by five to get the parts per 21 million; right? 22 A If you were looking at 200,000 -- 23 Q Mmm hmm? 24 A -- particles, you would, yeah. 25 Q Well, it says at 200,000 particles per slide.
Page 461 1 correspondence, is that Vernon Zeitz was involved in 2 both the industrial side and the consumer side. 3 Q Okay? 4 A That's my understanding. 5 Q Okay, so just by -- 6 A Reading correspondence. 7 Q -- seeing his name, you don't know. 8 A -- on both -- on both sets of correspondence. 9 (Reporter requested one speaker at a time) 10 Q All right. 11 This next one will be Exhibit 85. 12 (Exhibit 85 marked for identification) 13 Sir, this is a Johnson & Johnson memo; right? 14 A Yes. 15 Q January 30, 1987; correct? 16 A Yes. 17 Q I'll go write it on the board up here. 18 I'm going to fix my microphone, which 19 dragging on the floor. 20 All right. So this states: 21 "The accompanying table summarizes 22 the amphibole mineral content of various talc samples 23 submitted to date for microscopical evaluation. The 24 counts per slide were obtained by the dispersion 25 staining method on acid-washed samples. Few acicular	Page 463 1 A Yes. 2 Q So that is what they were looking at? 3 A Yes, yes, yeah. 4 Q So if you want to know parts per million, you 5 multiply the results by five; right? 6 A Yes. 7 Q So in the float feed they find two particles, 8 zero particles and 12 particles; right? 9 A Correct. 10 Q And those are amphiboles; right? 11 A Correct. 12 Q Now, when you're looking at a slide, that's an 13 optical technique, not XRD; correct? 14 A Correct, yes. 15 Q And then in -- they have test stock, initial 16 test stock, second test stock, float feed and filter 17 cake; right? 18 A Yes. 19 Q Okay. 20 So we're going to do test stock 1, test stock 21 2, float and filter cake. 22 Now, what is filter cake? 23 A I think that's the final product. 24 Q All right. 25 So what they find there is they find zero in

Page 464 1 test stock 1, nine in second test stock, 70 in the 2 float feed and three in the filter cake of amphiboles; 3 right? 4 A Yes. 5 Q Okay. 6 Then they actually test the baby powder 7 itself, do they not? 8 A They do, yes. 9 Q And there they find ten amphiboles; right? 10 A They do, yes. Yeah. 11 Q And if we wanted to know what that was per 12 million, that would be 50 particles per million 13 particles; right? 14 A Yes. 15 Q Okay. 16 In a -- in a standard container of Johnson's 17 Baby Powder, first of all, about what is the average 18 weight of a -- 19 A Eight ounces. 20 Q Eight ounces. Okay. 21 In eight ounces of baby powder, there are 22 tens, maybe hundreds of trillions of particles; 23 correct? 24 A Yes. 25 Q Right.	Page 466 1 A It's written to Baby Products Company. 2 Q To Johnson & Johnson Baby Products Company? 3 A Yeah, yeah. 4 Q They were not involved in industrial talc, were 5 they? 6 A No, no. 7 Q So this is the cosmetic/baby powder talc? 8 A It's a reasonable supposition, yes. 9 Q It is the case, absent some extraneous evidence 10 you and I -- neither you nor I am aware of; correct? 11 A Correct. 12 Q Okay. 13 So this is a test -- it looks like it's a 14 test of 20 or 25 different samples taken throughout the 15 processing or throughout the process of the 16 beneficiation of talc; right? 17 A Yes. 18 Q Okay. 19 And here they have amphiboles per slide. 20 Again, they're looking with an optical microscopy 21 technique; correct? 22 A Yes, yes. 23 Q So put our date down here. This is 3.30.87. 24 This is the Windsor mill for baby powder, and we have 25 one, two, three, four, five, six, seven, eight, nine,
Page 465 1 It's not like there's a million particles in 2 a thing of talc. You'd probably barely see a million 3 particles; right? 4 A Yeah. 5 Q Yeah. Okay. 6 All right. You can set that aside, sir. 7 This next one will be Exhibit 86. 8 (Exhibit 86 marked for identification) 9 Sir, this is March 30, 1978; right? 10 A Yes. 11 Q Okay. 12 This is two months after the report you and I 13 just looked at; right? 14 A Yes. 15 Q Okay. 16 Here you've got samples that are sent, and we 17 know this is the -- first of all, we knew this last one 18 was the -- was the cosmetic talc? 19 A Yes. 20 Q Okay. 21 Then we know this is the cosmetic talc, too; 22 correct? 23 Is that correct, sir? 24 A Well, it doesn't actually say that. 25 Q What company is it written to?	Page 467 1 ten, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 2 positive results for amphiboles; right? 3 A Yes. 4 Q And some of these results, sir, are up to 500 5 amphiboles per slide; right? 6 A Yes. 7 Q And, to be fair, that's in the tails; right? 8 A Yeah. 9 Q The tails means the portion of the ore that 10 will not be used? 11 A That's correct. 12 Q Right, but in the concentrate, which is the 13 resulting product, we have 30 amphiboles per slide. 14 That first -- very first one; right? 15 A Yes. 16 Q If we go down a little bit, we have a 17 concentrate that has 100 amphiboles per slide; true? 18 A Yes. 19 Q Okay, and then as we get down towards the 20 bottom of the page, we have one with zero, we have two 21 with zero, we have one with three amphiboles per slide; 22 right? 23 A Yeah. 24 Q And then if you go to the next page, we have 25 one concentrate with 65 amphiboles per slide; true?

Page 468 1 A True, yes. 2 Q All right. You can set that aside, sir. 3 A Okay. 4 Just for the record, if I may -- 5 Q Mmm hmm? 6 A -- I'd not read this before -- it does actually 7 say "no fibrous forms were observed". 8 Q It does. It says "no fibrous forms were 9 observed". 10 A Amphiboles, yes. 11 Q Do you know what the detection limit of the 12 method they were using was? 13 A Well, in this particular one it was microscopy. 14 Q Right, but what the detection limit is? 15 A No, I don't know, no. I just record -- I just 16 record that it states no fibrous -- 17 Q That's fair. That's fair. 18 Now, Cyprus started running the Windsor mill 19 when? 20 A 1989. 21 Q 1989. Okay. 22 Who is Alice Blount? 23 A Never heard of her. 24 Q Okay. 25 A I can't help you there.	Page 470 1 one was found to contain amphibole particle size 2 distribution typical of asbestos". 3 Okay? 4 A Okay. 5 Q So one of her samples had an amphibole particle 6 size distribution typical of asbestos; okay. 7 So let's turn to page 227 at the top. Do you 8 see that? 9 A Yes. 10 Q Okay. 11 Just so we can have some understanding of 12 what we're looking at here, if you look at the top of 13 the page there's a table. Do you see that table? 14 A Yes. 15 Q And this is -- it says Figure 3: 16 "Per cent tremolite in talc as determined by 17 the centrifuge/optical method ... compared with that 18 actually present in experimental mixtures ..." 19 So there's a gray bar and a black bar: 20 "The dashed parts of the shaded bars 21 indicates + 2 ... standard deviations or - 2 standard 22 deviations ..." 23 But then it has different samples, and you 24 can see the samples A through K? 25 A Yes.
Page 469 1 Q This will be Exhibit 87. 2 (Exhibit 87 marked for identification) 3 Have you reviewed the paper Amphibole Content 4 of Cosmetic and Pharmaceutical Talcs by Alice M Blount 5 from 1991? 6 A I do not believe I have. 7 Thank you. 8 Q Okay. 9 So you can see this is a paper published in 10 the peer review journal Environmental Health 11 Perspectives in 1991; correct? 12 A Correct, yes. 13 Q All right. 14 Sir, if you will turn to -- well, so you can 15 get a framework for this, all right, the abstract says: 16 "Pharmaceutical and cosmetic-grade talcs were 17 examined for asbestiform amphibole content using a new 18 density-optical method. Talcs under the Food and Drug 19 Administration are not regulated as to asbestos content 20 ..." 21 Now, we talked about that yesterday. That's 22 true; right? 23 A We did, yes. 24 Q "... however, all talcs were well below the 25 level mandated by OSHA ... for industrial talcs. Only	Page 471 1 Q Right. 2 Go down to the bottom of the page. Should be 3 the page that has 14433. 4 What Dr Blount says here is: 5 "The counts shown in Table 1 were made of 6 regulatory fibers, i.e. aspect ratio ... [of] 3:1". 7 So you understand, sir, that asbestos fibers 8 are regulated by OSHA to the extent that they are 9 greater than 5 microns in length -- greater than or 10 equal to 5 microns in length, and greater than or equal 11 to 3:1 aspect ratio; right? 12 A That is correct, yes. 13 Q Okay. So that's what she's talking about right 14 there; right? 15 A Yes. 16 Q Okay. 17 "In some samples there were as many or more 18 nonregulatory particles of amphibole as regulatory 19 particles. The shape of the amphibole varies greatly 20 and seems to be highly characteristic of each deposit. 21 In Table 1, the particles having aspect ratios less 22 than 6:1 are designated cleavages and prismatic 23 pieces". 24 So she says that if it's less than 6:1 it's 25 cleavage and prismatic pieces, even though they may

Page 472 1 still be a "Federal Fiber"; right? 2 A Correct. 3 Q Okay. 4 "Those greater than 6:1 and less than 15:1 5 are labeled 'needles'. 6 Right? 7 A That's what's labeled, yes. 8 Q So between 6:1 and 15:1, you're way over the 9 aspect ratio for a Federal Fiber; right? 10 A For an OSHA fiber, yes. 11 Q Right. 12 "The remainder, which are greater than 15:1, 13 are labeled 'fibers'". 14 Right? 15 A Yes. 16 Q So she has said: well, I'm going to call 17 anything greater than 15:1 a fiber, even though that's 18 five times greater than the aspect ratio set by OSHA; 19 right? 20 A Correct. 21 Q Okay. 22 Go down, and you can see Table 1 is up there; 23 right? 24 A Yes. 25 Q And it says what was found in each sample. In	Page 474 1 fibrils; correct? 2 A Correct. 3 Q Okay. 4 So she's saying that this particle is 5 composed of fibrils; right? 6 A That's what she's stating, yes. 7 Q "The length and width of 100 amphibole 8 particles in this talc were measured." 9 Talc I. So she measured 100 amphibole 10 particles in sample I; right? 11 A She did, yes. 12 Q "The resulting distribution of aspect ratios is 13 shown in Figure 6. The results when compared with the 14 aspect ratios determined for tremolite asbestos with 15 SEM by Campbell et al ... shows sample I has a 16 distribution similar to asbestos". 17 Right? 18 A That's what she's written, yes. 19 Q Then under Discussion, she says: 20 "In those containing amphibole minerals there 21 are two distinct types: cleavage type and asbestos 22 type. These two types show distinctly different aspect 23 ratio distributions as demonstrated in Figure 6 24 (samples I and M)". 25 And if you turn to the next page, she has a
Page 473 1 some there's cleavages. In some there's cleavages and 2 needles. 3 So we know if it's a needle, it's between 6:1 4 and 15:1? 5 A Yes. 6 Q And if she finds fibers, it's over 15:1 aspect 7 ratio; right? 8 A Yes. 9 Q Okay. 10 The next highlight: 11 "The shape distribution of particles for 12 several samples was determined. Figure 5 shows a 13 photograph of a particle of tremolite in sample I". 14 Now, of course, old photocopy, you could 15 barely see it? 16 A Yeah. 17 Q Okay, but that's what's supposed to be there; 18 okay? 19 A Yeah. 20 Q "The particle is composed of fibrils." 21 Now, sir, you understand that asbestos if 22 it -- if it breaks down all the way to its subparts, it 23 can be fibrils; right? 24 A Correct, yes. 25 Q But sometimes it comes in even bundles of many	Page 475 1 table; right? 2 A She does. 3 Q And she has Talc I and she places it, its 4 distribution of fiber sizes and particle sizes, up 5 against regular tremolite asbestos, doesn't she? 6 A She does, yes. 7 Q And Talc I traces tremolite asbestos pretty 8 closely? 9 A Yes. 10 Q Right. 11 Go to her last page, which is near her 12 references. Lastly, she says: 13 "In addition, the tendency to bring down a 14 disproportional number of larger particles has the 15 advantage that with true asbestiform amphiboles one 16 generally sees some particulars showing bundles of 17 fibrils which removes any doubt about the nature of the 18 amphibole". 19 Right? 20 A That's what she's written, yes. 21 Q And the picture she took from sample I of that 22 one fiber was composed of many fibrils; correct? 23 A That would appear to be the case. 24 Q Now, look at the very last page. It tells you 25 the identification of the different samples from A to

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1 O; right?

2 A Yes.

3 Q Sample I that contained all of those cleavages,

4 needles and fibers was Windsor, Johnson & Johnson,

5 Johnson's Baby Powder; correct?

6 A That's what is written, yes.

7 Q Samples J, K, L and M were other Vermont

8 deposits.

9 M was Troy; right?

10 A Yes.

11 Q Okay.

12 Let's go back to the table then on Table 1,

13 which is -- the bottom of that page is 14434.

14 So in J, K and L we know M was Troy, but in

15 J, K and L she identifies cleavages of amphibole;

16 correct?

17 A Yes.

18 Q What she calls cleavages, anything less than

19 6:1; right?

20 A She calls that, yes.

21 Q And in L she identifies needles, which would be

22 6:1 to 15:1; right?

23 A That's correct.

24 Q So, sir, based on this, we know that Dr Blount

25 in a published paper in 1991 identified fibers of

Page 477

1 asbestos in Johnson's Baby Powder; correct?

2 A She identifies an amphibole with the aspect

3 ratio we've described, yes.

4 Q And she fact says that it had a size

5 distribution similar to asbestos; right?

6 A She does, yes.

7 Q And she also says at the very end, she says

8 that if it has particles showing bundles of fibrils, it

9 removes any doubt about the nature of the amphibole;

10 correct?

11 A She states that. That's her opinion.

12 Q All right.

13 You aware of any published criticisms of Dr

14 Blount's paper?

15 A No, I'm not aware of that.

16 Q Okay.

17 Were you -- before I showed this to you, were

18 you aware that there was a published paper that

19 actually addressed the asbestos content of Johnson's

20 Baby Powder?

21 A I've not seen this paper before.

22 Q Okay.

23 Now, that -- just for the record, that was a

24 document that was provided to us by Johnson & Johnson

25 and had the Bates label on it; correct?

Page 478

1 A That appears to be the case, yes.

2 Q All right.

3 This next one will be Exhibit 88.

4 (Exhibit 88 marked for identification)

5 Now, this, of course, would appear to be a

6 better copy of Blount's paper, but we're not going to

7 go back through the paper.

8 If you will turn to -- there's an attachment

9 to this -- three pages in from the end, should be;

10 right?

11 It's dated February 10, 1992; right?

12 A Yes.

13 Q Okay.

14 And Alice Blount, the article of the paper

15 [sic] is writing to someone at Luzenac; right?

16 A Yes.

17 Q Now, Luzenac is a worldwide talc supplier, or

18 was before its name changed to Rio Tinto and then

19 Imerys; right?

20 A Correct, yes.

21 Q Okay.

22 She writes to this individual at Luzenac and

23 she said:

24 "Slim Thompson called recently about my paper

25 in Environmental Health Perspectives".

Page 479

1 And that's the paper you and I just looked

2 at; right?

3 A It is, yes.

4 Q "He said that you had been in contact with him.

5 I am not trying to cause the talc industry any

6 problems. I think lack of knowledge is more a serious

7 problem. I have been told by the Industrial Hygienist

8 that consults for this institution that all talc

9 contains asbestos and we should not use any products

10 containing talc.

11 The reason I have carried out this study is

12 that I am asked to analyze very pure talcs for

13 amphiboles. I takes a great deal [it's probably just a

14 typo] I take a great deal of time to do 100 fields of

15 view. Sometimes it is necessary to go to 1000 fields

16 of view. It is not fun!"

17 Now, you know what she's talking about there,

18 fields of view?

19 A Yes.

20 Q She's talking about looking at an electron

21 microscope grid; correct?

22 A Yes, yes.

23 Q And to scan 100 fields, much less 1,000, can

24 take a long time; right?

25 A Yes.

Page 480

1 Q But the reason you might scan 100 or 1,000 is
2 to improve your sensitivity; right?
3 A Yes.
4 Q Okay.
5 Let's go to the last paragraph:
6 "As I told Slim Thompson I have analyzed many
7 talc samples (only a few reported) and often blind, in
8 that I did not know their sources at the time the
9 analyses were done. I do not believe I am
10 misrepresenting these talcs. For individual deposits,
11 the shape distribution and quantity remains fairly
12 constant over time".
13 Did I read that right?
14 A You did.
15 Q So she's standing by her results; true?
16 A Correct.
17 Q And if you look at the very last page, this is
18 yet another list of the samples; right?
19 A Yes.
20 Q Okay.
21 And if you go to I, again, it says Windsor
22 Vermont baby powder?
23 A Yes.
24 Q Only one baby powder coming out of Windsor
25 Vermont; true?

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1 A Yes.
2 Q That's Johnson's Baby Powder?
3 A Yes.
4 Q And then J, K, L and M are all Vermont talcs,
5 with M being Troy; right?
6 A Yes.
7 Q And it says "floated"; right?
8 A I think that -- yes, yes, it's handwritten, so
9 yeah.
10 Q So we know that those are floated talcs?
11 A Yes.
12 Q From Vermont. Okay. Right, sir.
13 So I'm just going to put on our board for
14 1991 -- I'm going to write: Blount published paper,
15 amphibole cleavage, needles and fibers, and it was in
16 Johnson's Baby Powder; correct?
17 A Correct.
18 Q That's a peer review journal; right.
19 MS FRAZIER: The call got dropped.
20 MR PANATIER: Oh, the call got dropped again.
21 Okay. Let me just finish this question.
22 Q That is a peer reviewed paper; right?
23 A It is, yes.
24 Q I'll write peer review.
25 Right. Let's get back on the phone.

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1 (Off the record at 12:00 noon)
2 (On the record at 12:02 pm)
3 BY MR PANATIER:
4 Q All right, sir. So we're going to skip ahead
5 in years now. We're going to go from '91 to 2002.
6 This will be Exhibit 91.
7 (Exhibit 91 marked for identification)
8 A Thank you.
9 This is an email chain, starting -- starts on
10 February 15, '02, ends on February 22, '02.
11 Q Now, who is Lorena Telofski?
12 A She's a scientist in the research division of
13 Johnson & Johnson.
14 Q And we've already talked about Steven Mann and
15 his title is here, Director of Toxicology; right?
16 A Correct.
17 Q For Johnson & Johnson Consumer Products
18 Worldwide.
19 So he's -- he's not a grunt, so to speak?
20 A No.
21 Q He's pretty high up?
22 A Yes.
23 Q Okay.
24 So he writes to Lorena Telofski on
25 February 15 and he says:

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1 "I'd like to tell the CTFA that we are okay
2 with forwarding that lit[erature] review to NTP".
3 Now, NTP is what?
4 A It's the National Toxicology Program.
5 Q Okay.
6 "Did you have a suggestion on a sentence that
7 addresses the fact that our source of talc 'never' had
8 asbestos in it".
9 Right?
10 A That's what it reads, yes.
11 Q Okay.
12 And he puts "never" in quotes; right?
13 A Yes.
14 Q What does it mean when someone puts something
15 in quotes?
16 A They want to draw attention to the word.
17 Q Okay, and that's how you read it?
18 A That's how I would read it, yes.
19 Q Okay. You can set that aside, sir.
20 This is Exhibit 92.
21 (Exhibit 92 marked for identification)
22 All right, sir. You're certainly familiar
23 with this Exhibit; right?
24 A Yes, we've discussed this.
25 Q So in 2004, a TV station -- it's KCRATV3 in

Page 484

1 Sacramento, California -- they run a story about
 2 asbestos in talc; right?
 3 A They did, yes.
 4 Q Okay.
 5 And you can see that there's a fax on the
 6 cover to Steven Mann from Mark -- is that Monseau?
 7 A Monseau.
 8 Q Monseau -- from Corporate Communications
 9 regarding Asbestos, and it says:
 10 "Last week we were contacted by a reporter at
 11 a Sacramento television station who wanted to get your
 12 reaction to a test they performed on Johnson's Baby
 13 Powder. She has since sent me the attached cover
 14 letter and lab results, which Sarah Colamarino
 15 suggested I share with you. Can you please review?
 16 Sarah will be calling you shortly to discuss. In the
 17 meantime, if you have any questions, ... give me a
 18 call".
 19 Right?
 20 A Yes.
 21 Q And then there's the letter from the television
 22 station to Mark Monseau; right?
 23 A Yes.
 24 Q Greetings Mr Monseau. Thank you for taking my
 25 call last week regarding KCRATV3's Special Report on

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1 asbestos. This is a working story with no airdate.
 2 Our reporter/anchor Dave Walker is investigating the
 3 existence of harmful levels of asbestos in our
 4 community. One of the elements of the story takes a
 5 look at asbestos in household products and building
 6 materials.
 7 One of the items tested by Hayward Laboratory
 8 was Johnson's baby powder, which tested at above normal
 9 levels for asbestos.
 10 I am enclosing a copy of the test and results
 11 for you to look over. If you could please give me a
 12 call once you have reviewed the material, I would like
 13 to talk about the results with you".
 14 Is that what he said?
 15 A That's what it reads.
 16 Q Then there's the lab report. Do you see that?
 17 A I do, yes.
 18 Q Okay.
 19 And this is from a company called Forensic
 20 Analytical; right?
 21 A Yes.
 22 Q And you can see they did transmission electron
 23 microscopy on Johnson's Baby Powder; correct?
 24 A Yes.
 25 Q They also did it on something called Revlon

Page 486

1 Blush; right?
 2 A Yes.
 3 Q And if you look at the results, let's look at
 4 Revlon Blush first. None detected; right?
 5 A Yes.
 6 Q And then we look at Johnson's Baby Powder, and
 7 it says: asbestos type, or types, detected "AN".
 8 You understand that to be anthophyllite;
 9 right?
 10 A That's a reasonable supposition.
 11 Q Okay.
 12 Asbestos weight percentage, .2 per cent;
 13 right?
 14 A That's what it reads.
 15 Q Now, .2 per cent, if you were running XRD, for
 16 instance, on this sample, it would come back
 17 non-detect.
 18 That would be your expectation; right?
 19 A If that was the only test you did.
 20 Q Right?
 21 A Yes.
 22 Q Of course, these guys are using transmission
 23 electron microscopy and they found anthophyllite
 24 asbestos in Johnson's Baby Powder; correct?
 25 A That's what they state they found, yes.

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1 Q Okay. All right.
 2 Now, you were aware of this because this
 3 issue came to your desk; right?
 4 A I was aware of it because I read it in the past
 5 few weeks as part of this deposition.
 6 Q Okay.
 7 A Not to my desk.
 8 Q Okay.
 9 A Only in the last four weeks.
 10 Q All right.
 11 A Few weeks.
 12 Q So this was an independent lab hired by a
 13 television station; right?
 14 A Yes, it's something a television station set
 15 up.
 16 Q Okay.
 17 And that lab, do you have any criticisms of
 18 Forensic Analytical, their credibility, their
 19 qualifications, anything?
 20 A I know nothing about that particular lab.
 21 Q All right.
 22 A It's not one that's used in the industry, to my
 23 knowledge.
 24 Q Right. Sure.
 25 Now, that was dated February 24, '04; right?

Page 488

1 A Yes.

2 Q Okay.

3 I'm going to write KCRATV and they hire an

4 independent lab, .2 -- was it .2 per cent?

5 A Yeah.

6 Q .2 per cent anthophyllite in Johnson's Baby

7 Powder.

8 There should be no asbestos in Johnson's Baby

9 Powder ever, much less in 2004; right?

10 A Correct.

11 Q Okay.

12 A If that is a correct analysis, yeah.

13 Q Right.

14 Now, do you know if Johnson's got involved in

15 any way to stop that report from going on the TV or did

16 it play?

17 A I've no idea.

18 Q Right.

19 A It could have played.

20 Q Okay.

21 This next exhibit will be Exhibit 93.

22 (Exhibit 93 marked for identification)

23 There you go, sir.

24 The reason I asked if it came across your

25 desk was because I have this email between you and

Page 489

1 Steven Mann, who received the correspondence from the

2 television station; right?

3 A Yes.

4 Q Okay.

5 And at this time in '04 you were --

6 A A consultant.

7 Q -- a consultant; you weren't working for

8 Johnson & Johnson?

9 A Not full-time, no.

10 Q Okay.

11 It looks like you guys talked because you

12 start this email with:

13 "Steve.

14 As an afterthought ..."

15 Right?

16 A Yeah.

17 Q So you guys must have spoken by the phone or

18 something?

19 A Yeah, we occasionally -- he's a toxicologist,

20 and we occasionally spoke by phone.

21 Q Okay.

22 He says:

23 "As an afterthought, I would make a

24 suggestion that it is important that you ensure

25 compliance of the current talc with the CTFA

Page 490

1 Specification".

2 Now, you don't state that you dispute the

3 report at all, do you?

4 A No, but to be honest, I don't believe I've ever

5 seen the actual report.

6 It could well have been a verbal

7 communication between myself and Steven Mann.

8 Q And that's fair.

9 A Yeah.

10 Q He certainly would have told you the subject

11 matter of the report?

12 A Yes.

13 Q And the results?

14 A Yes.

15 Q Okay.

16 "A certificate as such from an independent

17 source (RJ Lee) is an easier way of dealing with

18 non-experts (ie media) than talking about the various

19 kinds of mineralogy of talc".

20 Now, did you believe that there was some sort

21 of mineralogical defense to this report?

22 A I think the issue, and it's fair to summarize

23 it, is that the laboratory that was conducting the work

24 was not one that was recognized in the cosmetic

25 industry or the pharmaceutical industry as having

Page 491

1 expertise and long experience in assaying for asbestos

2 or asbestiforms or this kind of material in talc.

3 So it really was a case of is that -- can we

4 rely on these people? Can we not rely on these people?

5 Get an alternative opinion.

6 Q So if a company like Colgate Palmolive hired

7 the very same microscopist to analyze samples of their

8 talc, they shouldn't have done that?

9 A I couldn't say that, because what I can say,

10 speaking for Johnson & Johnson, is that any company

11 that Johnson & Johnson would work with would be people

12 where there was expertise that had been proven over a

13 period of time.

14 It's a reasonable thing to do.

15 Q You mentioned RJ Lee here; right?

16 A Yes.

17 Q And you say an "independent source"; right?

18 A Yes.

19 Q Now, by this point RJ Lee had been doing work

20 for Johnson & Johnson on a fairly regular basis for at

21 least a decade; right?

22 A Yes, yes.

23 Q And they were -- they had been a consultant to

24 Johnson & Johnson for at least a decade by that point;

25 correct?

Page 492 1 A Correct, and the reality is that here in the 2 United States, or anywhere else around the world, 3 there's only a tiny handful of people that you can 4 actually go to and say, "Act independently for me, 5 analyze this material, give me a report". 6 There is literally -- you can count them on 7 the fingers of one hand. 8 Q So do you know whether or not Johnson & Johnson 9 has actually hired RJ Lee as experts in this case? 10 A I do not know, no. 11 Q Okay. 12 And were you aware from your review of the 13 documents that Johnson & Johnson actually paid 14 consultants from RJ Lee to go to China when China had 15 an issue with asbestos in their talc? 16 A I was not aware of that, no. 17 Q All right. That was in about 2009, so you 18 would have been a consultant then? 19 A Yes, yes. 20 Q Do you know who Drew Van Orden is? 21 A No, I don't. 22 Q Okay. 23 All right. So you say here -- you say: 24 "You can then enlist [the] CTFA as a buffer 25 to deal with these issues".	Page 494 1 Q Who was really the main guy on talc. 2 As you said, I think, he was Talc at Johnson 3 & Johnson? 4 A He had 50 -- 50-odd years of experience of talc 5 at Johnson & Johnson, yes. 6 Q And was Bill Ashton respected at Johnson & 7 Johnson through his whole time there? 8 A I would say so, yes. 9 Q Okay. 10 Was he someone who sort of had the final word 11 on talc issues? 12 A Not necessarily the final word, but an 13 important word. 14 Q Okay. 15 And did Johnson & Johnson regularly follow 16 his guidance on talc issues? 17 A He had -- he's no longer with us, but he had a 18 lot of experience and expertise and that would always 19 be given a high value. 20 Q Okay. 21 During the period of time -- and let's just 22 say late '60s and '70s; okay? 23 A Mmm hmm. 24 Q Mr Ashton was a senior individual on the issue 25 of talc; fair?
Page 493 1 So you're telling Steven Mann at Johnson & 2 Johnson he can enlist the trade organization that 3 Johnson & Johnson is a member of as a buffer, what, 4 between the company and the media? 5 A It's an option. You can do it. You can choose 6 to do it or to choose not to do it. 7 It is common practice to use the trade 8 association as part of the public face of the industry. 9 Q Okay. 10 A Because this is just one particular product, 11 but the whole industry could be cross contaminated in a 12 sense by bad publicity. 13 So it makes sense to use a trade association 14 to convey what you want to say. 15 Q And you say: 16 "Feel free to call anytime. Also I know Bill 17 Ashton would want to help and is OK to call at home. 18 In fact he would expect to be involved if his mineral 19 expertise could be of value". 20 And you give his phone number, which is 21 redacted here; right? 22 A Yes. 23 Q Now, Bill Ashton was the fellow we started to 24 talk about yesterday? 25 A Yes, yes.	Page 495 1 A Correct. 2 Q If not the top individual? 3 A Correct. 4 Q Okay. All right. Now, let's go ahead and go 5 off the record. 6 (Off the record at 12:15 pm) 7 (On the record at 12:55 pm) 8 BY MR PANATIER: 9 Q All right, sir. So this will be Exhibit 94. 10 (Exhibit 94 marked for identification) 11 So after you and I had our conversations 12 about your application to be part of an IARC working 13 group in some capacity, I went back and looked through 14 some more emails. 15 So this is Exhibit 94. There you go. 16 You can see there's two emails there. The 17 earlier is at the bottom of the page; right? 18 A Okay. 19 Q And it's from who? Linda Loretz? Is that how 20 you say her name? 21 A Linda Loretz. 22 Q Loretz -- and it's to undisclosed recipients. 23 But who is she? 24 A She was at the CTPA, yeah, at the time. 25 Q So she's at the trade organization; right?

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1 A Yes, yes.

2 Q And I highlighted a part of a paragraph down

3 there. Can you please read what I highlighted that she

4 wrote?

5 MR GAFFREY: Can we get a date on that?

6 MR PANATIER: Yeah --

7 THE WITNESS: Yeah, I'll read it:

8 "The International Agency for Research on

9 Cancer (IARC) has scheduled a re-evaluation of

10 non-asbestiform talc for carcinogenicity. The Working

11 Group meeting will take place on February 7-14, 2006.

12 IARC is accepting nominations for experts to serve on

13 the Working Group that will evaluate talc; the purpose

14 of this e-mail is to see if [the] Task Force members

15 have suggestions for experts to nominate".

16 BY MR PANATIER:

17 Q Okay.

18 She is sending an email to a group of

19 people and she is saying that IARC is looking for

20 nominations for experts; right?

21 A That's my read, yes.

22 Q Okay, and then go to the follow up email at the

23 top. That's from who?

24 A It's from Steven Mann.

25 Q All right. He's at Johnson & Johnson; right?

Page 497

1 A Yes.

2 Q To who?

3 A To Linda Loretz.

4 Q At the trade organization?

5 A The trade organization, yes.

6 Q And what is the first line he says there?

7 A Says:

8 "J&J would like to offer the following expert

9 names for consideration ..."

10 Q And who's the first name he lists?

11 A It's Dr John Hopkins.

12 Q And that's you?

13 A Correct.

14 Q So you were being offered as an expert to the

15 IARC working group; correct?

16 A This would indicate that I was being proposed

17 as a possible expert, yes.

18 Q All right.

19 Can you hand that back to me, so I can get

20 the date on the record. 6.23.05. All right.

21 Sir, what is -- have you visited Johnson &

22 Johnson's website just to see what it looks like or be

23 familiar with it?

24 A Not in the recent months, no. I had no reason

25 to.

Page 498

1 Q What is babycenter.com?

2 A I don't know.

3 Q Okay.

4 A I don't know.

5 Q I want to show you here there's a website

6 called babycenter.com, and I'll show you an excerpt of

7 it.

8 This will be Exhibit 95.

9 (Exhibit 95 marked for identification)

10 Can you see down at the bottom for

11 babycenter.com --

12 A Yes.

13 Q -- it says:

14 "BabyCenter ... [.com] is part of the Johnson

15 & Johnson family ..."?

16 A It actually says:

17 "BabyCenter LLC ..."

18 Q Mmm hmm?

19 A "... is a member of the Johnson & Johnson

20 family ..."

21 Yeah.

22 Q Okay. Right.

23 What does that mean?

24 A Well, you know, I've not read this before, but

25 I'll read it.

Page 499

1 "About BabyCenter LLC ..."

2 It implies that:

3 "In the United States, 8 in 10 new and

4 expectant moms online use BabyCenter each month ...

5 provides parents with trusted information, advice ...

6 support ... Products include websites, mobile apps,

7 online communities, email series, social programs,

8 print publications, and public health initiatives".

9 So it would imply that it's providing

10 information to new moms.

11 Q Okay, and it's something Johnson & Johnson

12 runs; right?

13 A Yes, it would appear to be the case, yes.

14 Q Okay.

15 Right. You can set that aside. Next will be

16 Exhibit 96.

17 (Exhibit 96 marked for identification)

18 There you go.

19 This is from babycenter.com. We pulled this

20 off the site in January. There's a flag there. Can

21 you go to that flag?

22 I think this is under the heading of baby

23 rash. Do you see that?

24 A Yes.

25 Q Okay, or diaper rash, I'm sorry. Not baby

Page 500 1 rash. 2 There's a red box I put around a paragraph 3 there. Can you go ahead and read that out loud? 4 A Okay. It says: 5 "Skip the powder, as the dust can be harmful 6 to your child[ren]'s lungs if inhaled. If you want to 7 use powder, choose one that's made from cornstarch". 8 Q Okay. 9 So BabyCenter, which is part of Johnson & 10 Johnson, is saying skip the powder, it could be 11 dangerous to baby's lungs; right? 12 A That's what it says in this document. 13 Q And it says if you want to use powder, use 14 cornstarch; right? 15 A It's what it says in this document. 16 Q Okay. 17 Now, Johnson & Johnson is still selling talc 18 powder for babies; right? 19 A Correct. 20 Q So this is Exhibit 97. 21 (Exhibit 97 marked for identification) 22 I pulled this off of Johnson's website just 23 to show that if you want to go buy talcum powder that's 24 made by Johnson's, you can buy it; right? 25 A Yes.	Page 502 1 Q There's currently one that has a little picture 2 of a baby's face with an X over the baby's mouth and 3 nose; right? 4 A Yes. From memory, yes. 5 Q Right. 6 When was the first time that went on there? 7 A We discussed this yesterday. I believe in the 8 early 1980s. 9 Q Okay. 10 A Yeah. 11 Q Now, my question, though, is -- we also 12 discussed this yesterday, which is if you use powder in 13 any way, even if you don't purposefully powder near 14 your face, you're still going to breathe in some of 15 that powder; right? 16 A Technically possible, yes. 17 Q So even if you just try to keep powder away 18 from a baby's face and use it on their bottom or their 19 diaper region, they're still going to inhale some of 20 the powder; correct? 21 A Theoretically. 22 Q I mean, more likely than not they are? 23 A Okay. Never proven that. I've not seen any 24 medical evidence of looking at a baby's lungs before 25 and after diapering.
Page 501 1 Q But it seems like BabyCenter, which is run by 2 Johnson & Johnson, is saying don't use powder on 3 babies; right? 4 A Well, that's what it states. 5 Q Right. 6 A Yes. 7 Q So in one place Johnson & Johnson is saying 8 don't use powder on babies, but they're still selling 9 the powder; right? 10 A That's the -- yes, that's the outcome. 11 Q That's an inconsistent position at best; right? 12 A Yes. 13 Q All right. 14 So is there anything, to your knowledge, is 15 there any label or warning on Johnson's Baby Powder 16 that says, "Don't use this"? 17 A No. 18 Q Okay. 19 All right. You can set that aside, sir. 20 A Thank you. 21 Q Is there any warning or label on Johnson's Baby 22 Powder that says, "This can be dangerous to baby's 23 lungs if inhaled"? 24 A There is a warning, from my recollection, on 25 the powder about keep away from baby's nose and mouth	Page 503 1 So it's theoretical. 2 Q We we'd have to look -- 3 A It's speculative. 4 Q -- we'd have to look in baby's lungs to know 5 that? 6 A It's speculative, yeah. At this stage, it's 7 speculative. 8 Q That's really an experiment we can't do? 9 A Absolutely. 10 Q Right. 11 A No, no. 12 Q Right. Okay. 13 So is Johnson & Johnson willing to accept 14 that, more likely than not, if a baby is powdered with 15 talcum powder, some of that will be inhaled by the 16 baby, more likely than not? 17 A Technically, it's theoretically possible, but 18 it's still speculative. 19 Q Let me ask you the reverse, then. 20 Johnson & Johnson is not saying that babies 21 do not inhale the talcum powder when it is used on 22 them, are they? 23 A No. 24 Q Okay. 25 This will be Exhibit 98.

Page 504

1 (Exhibit 98 marked for identification)

2 These are just some of the old advertisements

3 that we were provided by Johnson & Johnson.

4 And the only date I can make out is on the

5 last page. Near the bottom there's a handwritten date.

6 It says April, 1933?

7 A That's what it says, yeah.

8 Q Right.

9 All of these look to be about the same

10 vintage. Would you agree with that?

11 A Yes.

12 Q Okay.

13 A Yeah.

14 Q So let's just talk about the one on the front.

15 It's allegedly a baby talking to his father

16 about how hot it was and how chafed he got; right?

17 A Mmm hmm, yes, yes.

18 Q Okay.

19 (Reporter clarification)

20 And then it says:

21 "The Chief Chemist says baby powders are

22 different, largely because of the difference in talcs.

23 The costly Italian talc used in Johnson's Baby Powder

24 is made up of soft tiny flakes, but the cheaper talc

25 used for some baby powders contains sharp, needle-like

Page 505

1 particles".

2 So they're saying other brands may have

3 needle-like particles; right?

4 A Correct.

5 Q "The trained observer readily sees this

6 difference under a microscope and you can feel it

7 yourself this way. Rub a little Johnson's Baby Powder

8 between your thumb and finger, then try another powder.

9 You'll know soon enough if it's made with inferior

10 talc".

11 Now, let me ask you this: a consumer can't

12 feel talc and know whether or not there's asbestos

13 there; correct?

14 A Correct.

15 Q All right. You can set that aside, sir.

16 This will be Exhibit 99.

17 (Exhibit 99 marked for identification)

18 Sorry, I only have one copy of it, but would

19 you like to see it, Sharla?

20 MS FROST: Yes, please.

21 MR PANATIER: Thanks.

22 Q All right, sir. So we were talking about

23 warnings on the packages. So this is one that we got

24 from Johnson & Johnson. That one's dated 1992; do you

25 see that?

Page 506

1 A Yes.

2 Q And there is a warning there that's prescribed

3 for the labeling; right?

4 A Yes.

5 Q What does that say?

6 A "Warning: For external use only. Keep out of

7 [the] reach of children. Close tightly after use. Do

8 not use on broken skin. Avoid contact with [the] eyes.

9 Keep powder away from child[ren]'s face to avoid

10 inhalation, which can cause breathing problems."

11 Q Now, that's '92.

12 Do you know whether or not that went on there

13 prior to '92?

14 A I believe it did.

15 Q Okay.

16 When was the first time it did?

17 A I can only estimate. I thought it was in the

18 1980s.

19 Q Okay. That's fine. So let's assume that.

20 A Yeah.

21 Q 1980s.

22 Now, everything about that warning are things

23 that were known to Johnson & Johnson for decades before

24 the 1980s; correct?

25 A Yes, I mean, what it's suggesting here is that

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1 good parental behavior would keep baby powder -- it

2 applies to baby lotion, or anything else -- away from

3 baby. So it's not a toy.

4 Q So if a baby accidentally aspires a whole lot of

5 that talc, it's the parent's fault? It's not Johnson &

6 Johnson's fault for not putting a child proof lid on

7 it; right?

8 A No, it's -- there is a point at which

9 responsibility for good parenting or use of a product

10 isn't just the responsibility of the company.

11 You -- you know, as a parent, you should have

12 the common sense to not treat this as a toy, and

13 basically you would not place this in baby's hands or

14 leave it where baby could grab hold of it.

15 Q And I think any parent would agree with you

16 that parents are to be responsible for their babies and

17 children; right?

18 A Correct.

19 Q But Johnson & Johnson also knows that this

20 product was typically stored and kept right next to the

21 baby's changing table; right?

22 A Again, that's speculative.

23 I was a parent with a lot of children. We

24 never kept our baby powder where our kids could grab

25 hold of it. It was something you kept on the shelf in

Page 508 1 the -- in a cupboard, ready for diapering and changing. 2 Q Well, you worked for J&J; right? 3 A Yes. 4 Q Okay. 5 A I did. 6 Q So let me ask this question: is it 7 irresponsible of parents to keep the baby powder at the 8 changing station for the baby? 9 A I wouldn't judge parents' responsibility or 10 irresponsibility. I'm not going to criticize parents. 11 But what I would say, and, you know, having 12 been a parent myself of little babies, is that good 13 parenting, you use common sense. 14 You know, if you've got products -- could be 15 baby shampoo -- you don't want to get that in your -- 16 you don't want to get that in your mouth. 17 There's lots of products that babies will 18 grab a hold of, and you see that with babies. If 19 you've got a baby, you've had a baby, they have this 20 grabbing action. They'll grab hold of anything, and 21 mums certainly know this, and they give baby a little 22 toy to distract them while they're changing. 23 So it's not unusual to say, yeah, we know 24 babies will grab this. A good parent will know that, 25 and in this case you'd say you keep the product well	Page 510 1 to inhale; right? 2 A Yes. 3 Q Okay. 4 So this will be Exhibit 101. 5 (Exhibit 101 marked for identification) 6 So you said Johnson & Johnson stayed up on 7 the literature. 8 Can you see this is from The New England 9 Journal Of Medicine? 10 A Yes. 11 Q Right. That's a pretty big prominent journal; 12 right? 13 A Yes. 14 Q This is dated January 4, 1962; true? 15 A True. 16 Q And it's entitled Fatal Aspiration of Talcum 17 Powder by a Child, Report of a Case by Molnar, et 18 cetera, in New York City; right? 19 A Yes. 20 Q And the intro paragraph says: 21 "The talcum-powder container, often a 22 favorite plaything of small children, may be a source 23 of tragedy in the home. The case reported below 24 demonstrates a rapidly fatal course in a 25 twenty-two-month-old child, who aspirated talcum powder
Page 509 1 away from baby. 2 Q And that's certainly good advice. 3 But Johnson & Johnson had every expectation 4 that many, many, many parents would have this baby 5 powder right next to the changing station; right? 6 A Again, it's speculative. I cannot speculate 7 that the company would think that the product could be 8 right next in -- literally, in hand's reach or arm's 9 reach of a small baby. 10 It's speculative. 11 Q Johnson & Johnson stayed apprized of the 12 literature pertaining to talc throughout the last 13 century; correct? 14 A Correct. 15 Q Right. That's a responsible thing to do; 16 right? 17 A Yes. 18 Q Okay. 19 By the way, the first time that Johnson & 20 Johnson ever said this could be dangerous to a baby is 21 in the '80s, according to you; right? 22 A I believe that was about the time, yes. 23 Q Okay. 24 So before that, a parent might know it's 25 dusty, but they might not know it's dangerous to a baby	Page 511 1 while playing with such a container". 2 Right? 3 A Correct. That's what it states. 4 Q It's publications like these that you would 5 expect J&J to have been aware of? 6 A Yes. 7 Q Okay. 8 And they probably could have gone down to 9 their own library and pulled out this edition of The 10 New England Journal Of Medicine; right? 11 A It's possible, yeah. 12 Q Okay. 13 And this is in '62. Certainly if Johnson & 14 Johnson had cared to, they could have placed a warning 15 pertaining to the potential fatal hazards of massive 16 aspiration of talc onto their product then; right? 17 A It's possible, yeah. It's a speculation, but 18 it's possible. 19 Q Okay. You can set that aside, sir. 20 MS FROST: Was that one 101, did you say? 21 MR PANATIER: Yes, that's 101. 22 This next one is 102. 23 (Exhibit 102 marked for identification) 24 There you go, sir. 25 THE WITNESS: Thank you.

Page 512 1 BY MR PANATIER: 2 Q Now, sir, this one is entitled -- there's an 3 article here, and this is from The Journal of the south 4 Carolina Medical Association, and this one is entitled 5 Poisoning Of The Month, Dusting Pattern Inhalation. 6 Did you see that? 7 A Yes. 8 Q Now, I'm going to represent to you I think this 9 is 1962 or '63. 10 You can see in the references that they 11 actually cite the Molnar paper -- 12 A Yeah. 13 Q -- that with just looked at. 14 A They do, yes. 15 Q Right. All right. 16 "This 14 month old infant was apparently well 17 until approximately five hours prior to admission at 18 which time she was lying on the bed while her mother 19 changed her diaper. An open box of dusting powder was 20 on the bed beside the infant the mother kept her hands 21 on the baby while turning her head to speak to another 22 child and the infant reached for the box of powder and 23 turned it over on her face. The infant immediately 24 coughed and had some respiratory distress". 25 And then you can see down near the bottom:	Page 514 1 A Yes. It's to him. 2 Q To him. Okay. Yes, you're right. 3 A He's not the author. 4 Q It is from someone named NA Poirier? 5 A Yes. 6 Q Okay. 7 It says: 8 "A historical survey of JOHNSON'S Baby Powder 9 has been conducted. The information for the survey was 10 compiled from the files of the Johnson and Johnson 11 museum. 12 The first Baby Powder formula was found in a 13 memorandum ... April 8, 1907". 14 Now, Johnson's was making and selling baby 15 powder for 30 plus years before 1907; right? 16 A It's actually 1894. 17 Q 1894. Okay. 18 It turns out the first formula they could 19 find was from 1907, apparently. 20 A Yes, yes. 21 Q Now, let's go under the formulas, okay. 22 So in 1926 -- well, let me ask you this: in 23 1910, do we know what the source of the talc was, from 24 1910 to 1923? 25 A We believe it's Italian 00000.
Page 513 1 "Respiration become increasingly more labored 2 and finally ceased five hours after admission". 3 So this is a death case; correct? 4 A It's a -- yes. 5 Q Okay. 6 Now, again, this is -- it was nothing special 7 to understand that if someone, especially a child, 8 inhales a lot of a powder -- could be any powder, 9 including talc -- it could kill them? 10 A Yes. 11 Q Right. 12 Again, this 0in the '60s, there was every 13 opportunity, if Johnson & Johnson had cared to, to 14 place that warning that they did in the 1980s or early 15 '90s on the product; right? 16 A Yeah. 17 Q Okay. You can set that aside, sir. 18 This will be Exhibit 103. 19 (Exhibit 103 marked for identification) 20 Sir, this is a Johnson & Johnson memo; 21 correct? 22 A Correct. 23 Q From July 13, 1966. It's entitled Johnson's 24 Baby Powder Historical Survey, Mr WH Ashton. 25 So this is Bill Ashton; right?	Page 515 1 Q Okay. 2 Then in 1926, it says: 3 "Started to change from California Talc to 4 EGT ... 00000 Italian Talc"? 5 A Yes. 6 Q Would that suggest that, actually before 1926, 7 it was all California talc. 8 A Not necessarily. My understanding is that 9 Italian was used certainly at the very beginning. 10 There may well have been a point during the 11 Depression, which is where we're looking at, where 12 maybe it was difficult to get Italian talc. 13 It's speculative. I wouldn't be certain. 14 Q Okay. 15 So if you look in the second big paragraph at 16 the top, it says: 17 "Any ingredient which is not mentioned in any 18 particular change is present as shown in the next 19 previous change in which the given ingredient is 20 described". 21 A Yes. 22 Q Right. 23 So if we read that and then we look at the -- 24 at least what's written here, it would suggest the 25 California talc was the talc that was being used to

Page 516 1 prior to '26; right? 2 A It would indicate that that was a possibility, 3 yes, yes. 4 Q All right. 5 So it says '26: 6 "Started to change ... to Italian 00000 ..." 7 Right? 8 A Yes. 9 Q Okay. 10 Then it says in 1926 by December 9: 11 "On Italian talc permanently". 12 That looks like it continues until January, 13 1941; correct? 14 A Correct. 15 Q Then it changes to Italian and California 16 50/50; right? 17 A Yes. 18 Q And it says California "P special". 19 What's that? 20 A Again, I -- 1941, I don't know what "P special" 21 was. 22 P may stand for "pharmaceutical" grade. 23 It's -- it was obviously a grade that met the 24 requirements of the company. 25 Q Okay, but you don't really know what P means?	Page 518 1 A Yes. 2 Q And that domestic was what? 3 A Well, unless they've changed the source, it was 4 something called California P special. 5 Q All right, and that's what you presume from 6 that? 7 A Yeah. We have no other information to say 8 other than that. 9 Q Then in July of '41, it's 100 per cent that 10 domestic talc; right? 11 A Yes. 12 Q Okay. 13 The next change is February, 1945. The 100 14 per cent is changed back to 75 domestic and 25 Italian; 15 right? 16 A Yes. 17 Q I take it some of the Italian was getting 18 through at that point? 19 A Yes. 20 Q You said the German U-boats were sinking ships. 21 They were sinking Italian ships? Because they were 22 team mates. You understand that; right? 23 A Yes. Their leaders were team mates. I won't 24 say anymore, but I have done a lot of history. 25 The Italians were happy to ship if they could
Page 517 1 A No, I do not. 2 Q Okay. 3 And do you know who the supplier was of the 4 California talc during this period? 5 A I do not, no. 6 Q Okay. 7 The Italian 00000 is your Val Chisone talc; 8 right? 9 A That's correct, yes, yes. 10 Q Okay. 11 Then in 1941, the next change is 75 per cent 12 domestic and 25 per cent Italian; right? 13 A Correct. 14 Q Actually, the Italians were opposing us in a 15 world war at that point; is that right? 16 A Well, they would have been happy to ship, but 17 the Germans were sinking their ships. 18 Q Well, to be clear, I mean -- 19 A It wasn't getting through. 20 Q -- let's not do a history lesson here, but 21 Italy was part of the Axis? 22 A Yes. 23 Q Right. Okay. 24 And so the Italian talc was 25 per cent and 25 75 per cent was domestic; right?	Page 519 1 get it through. 2 Q You were never a U-boat captain, were you? 3 A No, indeed. 4 Q Okay. All right. 5 1946, April -- 6 A I wasn't even born. Come on. 7 Q Okay. That's fair. I believe you. 8 April 5, 1946, it looks like they would use 9 one bag -- one 220 pound bag of Italian with four and a 10 half 50 pound bags of domestic, which looks like that 11 would be roughly 50/50; right? 12 A Yes. 13 Q Okay. 14 It looks like they were trying to use -- 15 trying get to 100 per cent talc -- Italian; right? 16 A Yes. 17 Q So in '46, it becomes 100 per cent Italian 18 talc; true? 19 A Yes. 20 Q Okay. 21 And then in '54, it goes to 60 per cent 22 Italian talc, and then 40 per cent Extra Prima talc. 23 What's that? 24 A I don't know. It's a term I've not come 25 across. So, yeah.

Page 520 1 Q Okay. You can set that aside. 2 This would be Exhibit 104. 3 (Exhibit 104 marked for identification) 4 Right. This is April 9, 1969, from Bill 5 Ashton to Dr Gavin Hildick-Smith; right? 6 A Yes. 7 Q Okay, and the subject is Alternate Domestic 8 Talc Sources. 9 So it's '69, you guys are already running 10 Vermont, right, and using Vermont talc; true? 11 A Yes. 12 Q Okay. 13 It says: 14 "Pete ..." 15 I guess Ashton called him Pete? 16 A That was -- that was the name we all called 17 him, yeah. 18 Q Okay. 19 A It wasn't his real name. 20 Q Okay. You knew him? 21 A Yes. 22 Q Okay. 23 "Pete, we have to firm up the position the 24 Company should have on the presence of the mineral 25 tremolite in talc. Your staff will have to do this for	Page 522 1 penetrate the skin, and cause irritation; consequently, 2 talcs exceeding trace contents have never been 3 approved. Over the past year or two, the medical 4 literature has made reference to potential hazards of 5 talcs containing Tremolite and I have seen some 6 articles under the umbra of environmental health 7 agencies from here and abroad which pinpoint severe 8 objections to that mineral in talcum powders". 9 So here he's addressing the fact that in the 10 literature, which is something he stayed abreast of, 11 right? 12 A He's obviously read it, yes. 13 Q Okay -- that there are objections for potential 14 health hazards for tremolite in talc; correct? 15 A That's what he's stating. 16 Q All right. Now, skip down to the next 17 highlight. He's talking about tremolite. 18 Now: 19 "Some varieties of it match asbestos, and I 20 gather there has been a lot of attention given to the 21 hazards of inhaling minerals of that type lately". 22 Over the top of the second page: 23 "There is nothing we can do about the 24 confused state of affairs on Tremolite from the 25 mineralogical and chemical points of view as far as
Page 521 1 us since the objections to that mineral have been 2 mainly medical or clinical as opposed to chemical or 3 physical". 4 Right. So Ashton is bringing up the fact 5 that the mineral tremolite may have medical or clinical 6 objections brought against it; correct? 7 A He's raising that as a possibility, yes. 8 Q Okay. 9 Now, by 1969, in looking at the Battelle 10 stuff, we've seen yesterday, right -- we've seen dozens 11 of findings at a minimum of Tremolite in the talc being 12 used; correct? 13 A That was reported. 14 Q Okay. 15 A Yes. 16 Q "The reason we have to firm up our position is 17 that we have moved into high gear on some alternate 18 talc sources and it is normal to find different levels 19 of Tremolite in many US talcs". 20 Okay, and that -- certainly, Johnson & 21 Johnson talc was no exception; correct? 22 A Correct. 23 Q "Historically, in our Company, Tremolite has 24 been bad because it has needle-type crystals. Our 25 position has been that these can stand on end,	Page 523 1 historic literature is concerned. 2 The question is ... How bad is Tremolite 3 medically, and how much of it can safely be in a talc 4 base we might develop?" 5 Now, he describes on paragraph 3 on the first 6 page, he says: 7 "... Tremolite has been -- in our Company, 8 Tremolite has been bad because it has a needle-type -- 9 needle-type crystals". 10 Right? 11 A That's what he states. 12 Q And you said in your report from 2015 that 13 asbestos -- it's the asbestos needles which can embed 14 in tissue and cause mesothelioma; correct? 15 A Asbestos -- asbestos can embed and cause 16 mesothelioma, yes, although tremolite can exist in a 17 massive form, which is not asbestos. 18 Q We understand that, but the term that you used 19 in your report was "needles of asbestos"; right? 20 A Needles of asbestos, yes. 21 Q Okay. You can set that aside. 22 So he writes this memo in '69 where he's 23 concerned about the medical aspects of tremolite in the 24 talc; right? 25 A He's asking a question of the medically

Page 524 1 qualified Medical Director. 2 Q Right. 3 A And he's asking at the very end: how bad is 4 tremolite medically? 5 Q Okay. 6 A So he's asking a question. 7 Q This will be Exhibit 105. 8 (Exhibit 105 marked for identification) 9 And here's the answer he gets from the 10 medical department. 11 You can see it's from TM Thompson, MD, a 12 medical doctor; right? 13 A Yes. 14 Q And the medical doctor responds -- this is on 15 April 15, 1969 -- so this is six days later; right? 16 A Yes. 17 Q And he writes back. He says: 18 "Mr ... Ashton: 19 Your inquiry of April 9th, 1969 addressed to 20 Dr G Hildick-Smith has been referred to my attention 21 for reply. 22 Over the years, I have reviewed the 23 literature on the hazards relating to the inhalation of 24 talc particles on several different occasions. In your 25 memorandum, you indicate that Tremolite does have	Page 526 1 So they're certainly aware that just talc by 2 itself can cause a disease of the lungs here; right? 3 A They're aware, if you read the medical 4 literature, as you would have done in 1969, you would 5 have been aware that talc millers and talc miners, who 6 are exposed to extremely high levels, would have a 7 potential to suffer pneumoconiosis. 8 Q Okay. 9 A But that was not the case for the general 10 public. There was no evidence of that. 11 Q Okay. 12 A But extremely high levels in the miners and 13 millers, certainly going back to the 1920s, that you 14 did you get some evidence of pneumoconiosis. 15 Q So by way of introduction, he's talked about 16 talcosis, but he goes. 17 Let's go to the next highlight: 18 "Furthermore, we have occasionally received 19 inquiries from various individuals, including General 20 Johnson and several pediatricians expressing concern 21 over the possibility of the adverse effects on the 22 lungs of babies or mothers who might inhale any 23 substantial amounts of our talc formulations". 24 So Johnson & Johnson is acknowledging that 25 they've had inquiries from pediatricians and mothers of
Page 525 1 needle-type crystals and that our position has been 2 that these could penetrate the skin and cause 3 irritation. Actually, to the best of my knowledge, we 4 have no factual information on this subject. It would 5 seem logical that it could occur, although whether or 6 not it would be of clinical significance would be 7 conjectural. 8 We have been concerned to a much greater 9 extent with regard to possible dangers relative to the 10 inhalation of the talc with a spicule or [a] 11 needle-like crystalline structure as compared with the 12 flat, platelet-type of crystalline structure. There 13 are reports in the literature concerning talcosis, 14 which, as you know, is a form of pneumoconiosis 15 attributed to the inhalation of talc". 16 And I'll stop right there. 17 Pneumoconiosis is what? 18 A It's an inflammatory condition of the lungs, 19 essentially. 20 Q It's -- pneumoconiosis means, broadly, dust 21 disease; correct? 22 A It is, yes. 23 Q Of the lungs? 24 A Of the lungs, yeah. 25 Q Okay.	Page 527 1 babies about whether or not talc could be harmful to 2 them; correct? 3 A That's what the reading says, yes. 4 Q Who is General Johnson? 5 A In 1969, he would have been -- he would have 6 retired, but he was one of the grandsons of the 7 original founder. 8 Q Was his name General? His first name? 9 A He was a World War II General. 10 Q Okay. So they just referred to him as General 11 Johnson? 12 A They did, yes. 13 Q All right. 14 So this is -- he's one of the grandchildren 15 of one of the founders. 16 What was his role at the company? 17 A At one point, he was certainly on the Board, 18 and probably President of the Board in the 1940s, '50s. 19 Q Okay. All right. 20 And then he goes on to say: 21 "In the past, we have replied to the effect 22 that since our talc is essentially all of the 23 platelet-type of crystalline structure, and is of a 24 size which would not be likely to enter the pulmonary 25 alveolae, we would not regard the usage of our powders

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1 as presenting any hazard. Obviously, if we do include
 2 Tremolite in more than unavoidable trace amounts, this
 3 sort of negation of such inquiries could no longer
 4 pertain".
 5 In other words, what he's saying is these
 6 people ask us a question. We tell them basically not
 7 to worry, it's basically platelike. But if there's
 8 more than any trace, we can't make that denial;
 9 correct?
 10 A That's what he's stating, yes.
 11 Q Okay.
 12 A Yes.
 13 Q Skip to the next highlight:
 14 "Since pulmonary diseases, including
 15 inflammatory, fibroplastic, and neoplastic types,
 16 appear to be on the increase, it would seem to be
 17 prudent to limit any possible content of Tremolite in
 18 our powder formulations to an absolute minimum".
 19 Now, neoplastic means cancer?
 20 A It does.
 21 Q Okay.
 22 And he's saying because of these concerns,
 23 any tremolite needs to be to a minimum; right?
 24 A That's what it reads, yes.
 25 Q "To the best of my knowledge, we have never

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1 been faced with any litigation involving either skin or
 2 lung penetration by our talc formulations. Some years
 3 ago, we were faced with a more or less serious problem
 4 resulting from what we considered to have been an
 5 unjust accusation of danger due to the presence of a
 6 small amount of boric acid in our talc. This created
 7 such a furor that we were more or less compelled to
 8 remove boric acid from the formulation. It is
 9 conceivable that a similar situation might eventually
 10 arise if it became known that our talc formulations
 11 contained any significant amount of Tremolite".
 12 Now, I'm going to stop there.
 13 At this point, the general public had no idea
 14 that there was tremolite in any form in Johnson's
 15 products; right?
 16 A Correct.
 17 Q Right.
 18 Johnson & Johnson knew there was, but the
 19 public did not; right?
 20 A Well, that's what it -- what it would infer,
 21 yes.
 22 Q But that was also a matter of objective truth.
 23 The public didn't know there was any tremolite in any
 24 form in J&J, but J&J knew; right?
 25 A They -- that's -- yeah, I'll give you that.

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1 Q Okay.
 2 A That's correct.
 3 Q All right.
 4 "Since the usage of these products is so
 5 widespread and the existence of pulmonary disease is
 6 increasing, it is not inconceivable that we could
 7 become involved in litigation in which pulmonary
 8 fibrosis or other changes might be rightfully or
 9 wrongfully attributed to inhalation of our powder
 10 formulation".
 11 So this doctor in 1969 is predicting that
 12 ultimately Johnson & Johnson could end up in
 13 litigation; right?
 14 A He's suggesting it could happen.
 15 Q And of course I'm asking you these questions
 16 right now in litigation, am I not?
 17 A You are.
 18 Q So he was right about that?
 19 A He was -- he made a proposal, yeah.
 20 Q Okay.
 21 "It might be that someone in the Law
 22 Department should be consulted with regard to the
 23 defensibility of our position in the event that such a
 24 situation could ever arise.
 25 It is my personal feeling that until we have

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1 at least substantial evidence, based on animal work, to
 2 the effect that the presence of Tremolite in our talc
 3 does not produce adverse effects, we should not extend
 4 its usage beyond an absolute minimum previously
 5 mentioned".
 6 Did I read that right?
 7 A You did.
 8 Q As of April 15, 1969, did Johnson & Johnson, at
 9 least until it more investigated the talc or anything,
 10 did it place a hold on sales, mining and manufacture of
 11 baby powder?
 12 A No, because at the time the state of knowledge,
 13 scientific knowledge, was that there was no safety
 14 hazard.
 15 Q Well, look at what he says.
 16 Your doctor says go do the work to prove that
 17 it has no hazard; correct?
 18 A That's correct.
 19 Q Okay.
 20 And in the time that you need to go do the
 21 work, did Johnson & Johnson place a hold on the sale of
 22 this product?
 23 A No.
 24 Q Okay.
 25 Now, did anybody ever write back to Dr

Page 532 1 Thompson and say, "No, you're wrong about whether or 2 not we should minimize the use of this product?" 3 Did anybody, to your knowledge? 4 A To my knowledge, I've no idea whether anyone 5 wrote or did not write. 6 Q Did Johnson & Johnson ever take on a program 7 after April of 1969 to have the public minimize the use 8 of talc? 9 A What I believe was done was a study was set up 10 in which hamsters with dosed with a whole life with 11 Johnson's Baby Powder to look at the lungs and various 12 other tissues. 13 Q So in about 19 -- that would have been about 14 1972 or '73; right? 15 A Well, it takes two years to complete the study. 16 So yes. 17 Q Well, '73 is four years after '69; right? 18 A Yes. 19 Q And this is the test that Johnson & Johnson 20 hired Battelle to do; right? 21 A Battelle did the study, yes. 22 Q And was this the one that Dr Warner was heading 23 up? 24 A He did, yes. 25 Q All right, and they dosed, what, 60 hamsters?	Page 534 1 University? 2 Q He's Mount Sinai? 3 A Mount Sinai, yeah. 4 Q All right. This will be Exhibit 106. 5 (Exhibit 106 marked for identification) 6 There you go, sir. 7 So, sir, this is a memo -- this is from Gavin 8 Hildick-Smith to Dr Fuller; right? 9 A 1971, yes. 10 Q 1971. He meets with Dr Selikoff out at Mount 11 Sinai; right? 12 A Yes, it looks like he's met with him, yes. 13 Q Okay. 14 A Yeah. 15 Q The highlight says: 16 "Prof Selikoff's department has as its 17 mission the isolation and identification of inorganic 18 particles in human tissues and their significance in 19 relation to the production of disease". 20 Now, Mount Sinai was at the forefront of that 21 with regard to asbestos, were they not? 22 A They were certainly one of the leading people, 23 yes. 24 Q Okay. Go ahead and go to the next tissue -- I 25 mean, next tissue? I'm reading a word here. Next
Page 533 1 A I can't remember the exact number. 2 Q Okay. 3 A It was a standard animal test protocol that you 4 do. 5 Q Okay. 6 At the time that Mr Ashton received this in 7 April of 1969, you're not able to state anything that 8 Johnson & Johnson did to minimize the public's use of 9 its baby powder at that time until any tests were done; 10 right? 11 A No, and I think the reason being that the 12 current state of knowledge at that time was that there 13 was no actual hazard that had been identified. 14 The comments here are perceived. There might 15 be a problem. Let's look at it. 16 But it's not an identified problem. 17 Q Dr Thompson specifically put it on the amount 18 of tremolite in the product, too, didn't he? 19 A He talked about that. 20 Q Right. 21 A But he was identifying a hypothetical problem 22 and suggesting that we do some work. 23 Q Okay. You can set that aside, sir. 24 Who is Dr Selikoff? 25 A From memory, he's at -- is it New York	Page 535 1 page. 2 There's a little highlight there: 3 "Dr Selikoff would also be willing to work 4 along with us in developing scientific data concerning 5 the significance and present of inorganic particles in 6 tissue. He provided the attached initial tentative 7 outline of a program that might be followed to provide 8 answers to questions being raised". 9 And if we skip to the end: 10 "In view of the suggestion that talc may 11 occur in tissues, it would seem that we should give 12 serious consideration to initiating the appropriate 13 steps to developing the scientific information to 14 answer a number of questions raised". 15 And then if you go to the end: 16 "Consideration, in fact, should be given to 17 retaining Selikoff's services as a consultant with 18 appropriate remuneration". 19 Which means pay; right? 20 A Yes. 21 Q So Johnson & Johnson in 1971 is considering 22 hiring Selikoff as a consultant; true? 23 A Yes. 24 Q Okay. All right. 25 You can set that aside, because we're going

Page 536 1 to come back to that issue. 2 A Okay. 3 Q This the next one will be Exhibit 107. 4 (Exhibit 107 marked for identification) 5 So you can see from the little cover sheet 6 there from the desk of Jack Walcott. 7 Who's he? 8 A What was the year? '71? 9 Q '71? 10 A I think at that time he would be one of the 11 senior marketing people. 12 Q Okay, and it's to a bunch of the people who 13 we've already seen, including Mr Clare, the President? 14 A Yes, yeah. 15 Q Hildick-Smith, Fuller, et cetera. 16 And he attaches some excerpts from some 17 newspapers; correct? 18 A Correct, yes. 19 Q So in the early edition of The Post, he 20 actually attaches that, and they have a quote from Dr 21 Selikoff: 22 "Mount Sinai asbestos expert Irving Selikoff 23 was quoted as saying: 'No one, particularly children 24 and young people should be unduly exposed. We know 25 that if a person inhales significant amounts of	Page 538 1 the literature relate to employees in factories where 2 they're handling literally tons of the stuff every 3 week. 4 Q Sure, and what was -- what was always stated in 5 that literature is that those employees, if they were 6 at risk for the disease, they wouldn't expect those 7 diseases to develop for 10, 20, 30, 40, 50 years; 8 correct? 9 A Correct. 10 Q All right. Go to the next page: 11 "The EPA chief cautioned in his letter: 12 'While we are in no position to provide evidence that 13 this exposure of infants to asbestos inhalation 14 contributes to disease later in life, the adverse 15 effects of larger exposure have already been proven so 16 definitely that it is only prudent to minimize all 17 exposures unless they can be demonstrated conclusively 18 to be harmless'". 19 And, as a general principle, does Johnson & 20 Johnson agree with that? 21 A Yes. 22 Q Okay. 23 Then, of course, there's one more page there, 24 and this is a statement that Johnson & Johnson put out 25 in 1971:
Page 537 1 asbestos dust he carries a burden that will provide a 2 latent potential for the development of cancer for the 3 rest of his life". 4 Did I read that right? 5 A You did. 6 Q And what he means by "latent potential" is the 7 idea of latency; right, sir? 8 A Yes. Long term. 9 Q And latency -- of course, Johnson & Johnson 10 probably understood since the early 1900s that asbestos 11 diseases were latent; true? 12 A In factory workers, who were exposed to making 13 asbestos-based products, there could be a ten, 20 year 14 time lag, yes. 15 Q Okay. 16 Certainly, by '71, Johnson & Johnson 17 understood that if someone got an asbestos disease, it 18 would be -- could be decades after the exposure; 19 correct? 20 A Theoretically, yes. 21 Q Are there cases of asbestos disease that occur 22 immediately after exposure? 23 A I'm not aware of any, no. 24 Q Right. 25 A The asbestos diseases that are most familiar in	Page 539 1 "Johnson & Johnson takes great care to assure 2 the purity of its products, even to the extent of 3 mining and processing our own talc for use in baby 4 powder. Our fifty years of research knowledge in this 5 area indicates that there is no asbestos contained in 6 the powder manufactured by Johnson & Johnson". 7 Did I read that right? 8 A You did. 9 Q Okay. 10 Now, if we look at our chart, this is 11 June 29, 1971, and we have July, one month later, a 12 report of the Johnson & Johnson Baby Powder ore has 13 trace fibers of tremolite actinolite; right? 14 A That's what it states, yes. 15 Q By the way, for everything I wrote down, as I 16 was going typically I checked with you, but did you see 17 anything that I wrote down that was grossly 18 misrepresenting what we were talking about? 19 A Not grossly. 20 Q Okay, or -- 21 A Maybe an element of clarity that's required 22 because it does occur -- it's so easy to say 23 "tremolite" when the tremolite may be in the 24 non-asbestos form. 25 Q And, in fact, you have -- any time we've

Page 540 1 discussed tremolite, you have mentioned that; right? 2 A I've raised that, because that's important that 3 every time we mention tremolite, we need to identify 4 was it asbestos tremolite, or was it just non-asbestos 5 or massive tremolite? 6 Q And, for instance, in the early Battelle 7 studies, they don't say "massive" or "asbestos". They 8 just use the word "tremolite". 9 So that's what we wrote every time; correct? 10 A Yes, yes. 11 Q So that would have been accurate; right? 12 A It reflected the state of knowledge at the 13 time, yes. 14 Q Okay. 15 Now, 5.10.71, May 10, '71. This is one month 16 before Johnson & Johnson puts out the statement to the 17 public; right? 18 A Yes. 19 Q And 3.44L baby powder has .6 per cent non-talc 20 needles, and Bill Ashton, four days later, says those 21 particles are tremolite; right? 22 A That's what he's stating. 23 Q Right. 24 A But let's be clear, 1971 is before the 25 methodologies that would definitively identify	Page 542 1 A You could, yes. 2 Q Okay. 3 Now, this will be Exhibit 108. 4 (Exhibit 108 marked for identification) 5 So this is a memo from Dr Nashed to 6 Mr Walcott and it's with regard to a meeting that 7 Johnson & Johnson had with the FDA; right? 8 A Yes. 9 Q This is dated July 9, '71. 10 And there for J&J are some J&J folks, as well 11 as Mr Caneer from Colorado School of Mines; right? 12 A Yes. 13 Q So it says: 14 "I stated that, in view of the publicity in 15 New York regarding asbestos in talc, our management has 16 directed us to provide full information to the FDA on 17 our Baby Powder". 18 Right? 19 A Yeah. 20 Q Full information? 21 A Yes. 22 Q So full information means everything? 23 A Yes. 24 Q Right. 25 Now, do you know whether or not at this time
Page 541 1 tremolite were in use. 2 We were not using scanning electron 3 microscopy necessarily on every batch. 4 Q Let me ask you this question. 5 When Johnson & Johnson put out this PR 6 statement in June of 1971, did they say: we have found 7 non-talc needles that are tremolite in our baby powder 8 to the public? 9 A That does not say that, no. 10 Q Okay. 11 And Johnson & Johnson is not saying that if 12 they had wanted to at that time in the '50s or '60s or 13 early '70s, that they couldn't have used electron 14 microscopy, because they could have, couldn't they? 15 A In the '50s and '60s, it wasn't really very 16 well developed. Scanning electron microscopy, 17 transmission electron microscopy, it wasn't at the same 18 sophistication that it was by the late '60s, early 19 '70s. 20 Q Well, certainly everything gets better? 21 A Yes. 22 Q But it had been invented? 23 A It had, yes. 24 Q Right, and you could go buy a TEM in the 1960s, 25 could you not?	Page 543 1 Johnson & Johnson provided all the Battelle Memorial 2 studies on the flotation of Italian talc to the FDA? 3 A I don't have that correspondence. I don't, no. 4 Q Have you ever seen such a thing? 5 A No, but doesn't mean to say it didn't exist. 6 Q Okay. 7 Go down to the bottom. It says: 8 "Mr Caneer reviewed the reports of analysis 9 of Baby Powder and Vermont talc and emphasized the fact 10 that by following standard procedures: microscopy and 11 x-ray diffraction, the samples were found to be 12 substantially free from non-talc particles (about 0.01% 13 of total area particles)". 14 Right? 15 A Yes. 16 Q And we know that the non-talc particles they're 17 talking about are tremolite; right? 18 A Well, it doesn't state that, but we can 19 hypothesize. 20 Q Okay. 21 Well, we know that from a month earlier 22 Ashton identifies the non-talc particles in the 23 Colorado School of Mines memo as being tremolite; 24 right? 25 A He does, yes.

Page 544 1 Q Okay. 2 Now, here they just say "non-talc particles". 3 A Yeah. 4 Q Do you know if they actually told the FDA that 5 that was tremolite? 6 A I do not know. 7 Q Okay. 8 A I wasn't at that meeting. 9 Q Okay. 10 Because there's -- even in high grade talc, 11 there's lots of other little stuff that gets in; right? 12 A There is, yes. 13 Q Right? 14 A A lot of other minor minerals, hematite, and 15 various other things. 16 Q Sure. Dolomite; right? 17 A Yeah. 18 Q So there's lots of non-talc particles, but it's 19 not clear from here that they told the FDA: hey, by the 20 way, the non-talc particles included tremolite? 21 A No. 22 Q Okay. 23 A No, it's not clear, but it could well -- the 24 definition of "non-talc particles" includes anything 25 that's not talc, of which there are probably a good	Page 546 1 MR PANATIER: Pattengill is his name. 2 P-A-T-T-E-N-G-I-L-L. 3 Q And it says: 4 "[The] following are results of x-ray 5 analyses on 344-L Vermont talc product and the 6 six-monthly Vermont product samples". 7 Right? 8 A Yes. 9 Q So they're looking at one, 344L, which we know 10 to be baby powder; right? 11 A Correct. 12 Q And then six-monthly samples, which would be, 13 what, the beneficiated talc? 14 A Yes. 15 Q Okay. 16 Here's what he says. He says: 17 "Semiquantitative x-ray diffraction analyses 18 of the Vermont products and standard mineral samples 19 indicate that essentially no anthophyllite and only 20 minor amounts (below 1%) of tremolite and actinolite 21 were detected". 22 So he says below 1 per cent tremolite 23 actinolite; right? 24 A Correct. 25 Q Below 1 per cent tremolite actinolite.
Page 545 1 half dozen minerals that you might find, which are 2 totally innocuous. 3 Q Right. 4 So unless they tell the FDA, the FDA doesn't 5 know that they found tremolite; correct? 6 A Correct. 7 Q Okay. 8 The FDA at no time has had any right to go 9 into a company's files to investigate cosmetic talc; 10 correct? 11 A Correct. 12 Q All right. You can set that aside, sir. 13 This will be Exhibit 109. 14 (Exhibit 109 marked for identification) 15 Here you are, sir. 16 Now, this is from the Colorado School of 17 Mines to Bill Ashton, July 7, 1971; right? 18 A Right. 19 Q Okay. So we'll go to our chart and we'll add 20 this in. 21 So that would be right here. 7.7.71. 22 And here, and this is Mr Caneer, correct, or 23 it's Pattengill; do you see that? 24 A Yes, yeah. 25 (Reporter clarification)	Page 547 1 And if you look at the next page, we know 2 that tremolite actinolite was found in 344L; right? 3 A Yes. 4 Q And five of the six-monthly samples; right? 5 A Trace, yes. Yes. 6 Q And I'll put trace, TR, monthly samples. Okay. 7 So that's July 7 of '71, Johnson & Johnson 8 finds out about that; right? 9 A Yes. 10 Q Okay. 11 A Although, again, nowhere does it state that the 12 tremolite was asbestos tremolite. 13 Q Well, in fact, all they do there is XRD; right? 14 A Yes. 15 Q Okay. 16 It doesn't say it isn't asbestos. It just 17 identifies the mineral; right? 18 A It identifies the mineral, yes. 19 Q Okay. 20 Now, we know in 1973, Johnson & Johnson is 21 sending their Vermont talc, this very stuff, to Fred 22 Pooley and telling him: please figure out a way to get 23 rid of the tremolite; right? 24 Is that correct? 25 A Is that what you're handing to me?

Page 548 1 Q No, no, no. We talked about this yesterday and 2 this morning. 3 A Okay. 4 Q Remember? 5 A They were asking -- R&D people and asking him 6 to do some experiments. 7 Q And the experiments were to please get rid of 8 the tremolite in the Vermont talc? 9 A They were saying would you take a look -- is 10 there a way of getting rid of it. 11 Q Right. Okay. 12 (Exhibit 110 marked for identification) 13 Now, this is a memorandum of a symposium with 14 the FDA, August 3, '71; right? 15 A Yes. 16 Q A little less than a month after Colorado 17 School of Mines says we found tremolite and actinolite 18 in the baby powder and five of six-monthly samples; 19 right? 20 A Yes. 21 Q Okay. 22 Now, if you go to the page 5, it's marked 23 page 5? Actually, for context, look at page 6 first. 24 All right? 25 You can see that there's lots of different	Page 550 1 I didn't ask you whether you had something to 2 hide. You just told me you had nothing to hide. 3 A Yeah, yeah. 4 Q Okay. 5 So Ian Stewart and Grieger are both from 6 McCrone; right? 7 A Correct. 8 Q Now, go to the page right before that under 9 Analytical Methodology. 10 So: 11 "Dr Langer and Dr Maggiore of Mount Sinai 12 reported that they uses the following techniques to 13 detect and determine asbestiform minerals; light 14 microscopy, xray powder diffraction, electron 15 microscopy, electron microprobe and electron 16 diffraction. During the discussion that followed Dr 17 Langer's presentation he was asked if he had analyzed a 18 sample referred to as 344-L ..." 19 Now, we've seen that before; right? 20 A Yes. 21 Q "... from Johnson and Johnson. He said that he 22 had and that it was a very high quality -- it was a 23 high quality talc". 24 Right"? 25 A Yes.
Page 549 1 people here and there's lots of other companies there? 2 A Yes. 3 Q Well, there's a few. Pfizer is there. 4 Whittaker Clarke & Daniels is there. Johns Manville is 5 there. The CTFA is there; right? 6 A Yes. 7 Q Who has the most people there? 8 A People who are interested, who are Johnson & 9 Johnson. 10 Q Right. Johnson & Johnson had Dr Nashed there, 11 Gavin Hildick-Smith, Rolle, Shelley, Goudie, and then 12 four consultants. 13 A Yes. 14 Q Pooley, Caneer, Stewart and Grieger; right? 15 A Yes. 16 Q And they're even identified as Johnson & 17 Johnson's consultants? 18 A Absolutely, yeah. 19 Q Now -- 20 A Nothing to hide. 21 Q Nothing to hide? 22 A Nothing to hide. 23 Q Okay. 24 A They were consultants. 25 Q Okay. That's fine.	Page 551 1 Q Now, he doesn't say anything about whether it 2 had asbestos; right? 3 A Correct. 4 Q Now, we know that Langer in 1971, in fact, less 5 than a month before this, he tells Johnson & Johnson 6 privately: I think there's chrysotile in your baby 7 powder; correct? 8 A That was a letter, yes. 9 Q Okay. 10 A Yes. 11 Q So he stands up and represents that 344L is a 12 high quality talc; right? 13 A That's what he states, yes. 14 Q Right. So you can set that aside. 15 Let's just remember that date. That was 16 August 3, '71; okay? All right? 17 A Yes. 18 Q Now, we know that a little less than one month 19 before that, Colorado School of Mines had told J&J on 20 July 7 that there was actinolite tremolite in 344L in 21 five of six of the samples; correct? 22 A Correct. 23 Q This will be Exhibit 111. 24 (Exhibit 111 marked for identification) 25 Now, this is dated August 6; correct?

Page 552 1 A It is. 2 Q '71. This is three days after the FDA meeting; 3 right? 4 A Yes. 5 Q Okay. 6 He writes to Mr Ashton. Now, this is 7 Mr Pattengill, who did the 344L and Vermont study on 8 July 7; right? 9 A Yes. 10 Q Because I think you brought this up yesterday. 11 He says: 12 "Dear Mr Ashton: 13 After attending the Washington meeting, 14 August 3, 1971, and listening to the arguments and data 15 presented, I have the following to add to the data 16 previously sent to you concerning the Vermont talc 17 samples. 18 ... In the report of July 7, 1971, there is 19 some question relative to the presence of 20 tremolite-actinolite". 21 So remember we have the July 7, '71, report? 22 A Yes, yeah. 23 Q Where they said: we have found actinolite 24 tremolite. 25 And now three days after this meeting at the	Page 554 1 A Yes. 2 Q Now, can Johnson & Johnson identify for me what 3 standard asbestos-type samples regularly contain 4 tremolite and actinolite? 5 A Okay. The Colorado School of Mines, doing its 6 laboratory investigations, would have sitting on the 7 shelf samples of what are called "standards". 8 There will be a standard of each of the 9 different types of asbestos, different types of 10 non-asbestiform mineral. They have a little sample. 11 So they know what it looks like when they run the test. 12 So in the same room, probably almost on the 13 same bench, they will have samples of non-talc 14 materials, pure samples of different kinds of asbestos 15 or non-asbestos minerals. 16 So they'll be around in the lab. 17 And my read of this was that they said: 18 Whoops, we probably had the pots or the jars open at 19 the time, and it could well have been there was cross 20 contamination. 21 Q So they found asbestos in six of the seven 22 samples; right? 23 A Yes. 24 Q But one of them was clean; right? 25 A Yeah.
Page 553 1 FDA, he says: 2 "The samples were prepared in a room that was 3 not entirely 'clean' ..." 4 In quotes: 5 "... and were prepared in conjunction with 6 standard asbestos-type samples. Subsequent x-ray work 7 on the six-monthly product samples and the 344L product 8 sample shows no definite indications of any 9 asbestos-type minerals within our limits of 10 detectability. The trace amounts I saw were evidently 11 contamination from the standard asbestos samples". 12 Right? 13 A That's what it says. 14 Q So one month after his initial report and three 15 days after this FDA meeting with Johnson & Johnson 16 where the benefits or the quality of 344L are told to 17 the FDA, Johnson & Johnson's consultant writes back to 18 Johnson & Johnson and says: oops, all six samples were 19 contaminated because we prepared them in a room that 20 was not entirely clean; right? 21 A Basically, they said they screwed up. 22 Q Yep. 23 Now -- and they said that they were prepared 24 in conjunction with standard asbestos-type samples; 25 right?	Page 555 1 Q So apparently somehow six of the seven samples 2 were contaminated, and he just happened to remember 3 that three days after that meeting; right? 4 A I don't know. I wasn't there at the time. 5 But it is a well known explanation, not just 6 with this but with microbiology -- many other 7 laboratories will have this -- that if you've got have 8 certain microbes in the lab, you can get cross 9 contamination when you do a test. 10 Q Is it -- 11 A It's not unusual. 12 Q Yeah. Right. If you don't have a good lab 13 procedure for preparing your samples in a clean way, 14 you can have contamination; right? 15 A Yeah, and, you know, back in 1971 -- it was a 16 long time ago -- the processes, procedures were 17 different from what people would do today, or even by 18 1975. 19 Q Right. 20 But he recognized here that if that was the 21 case, it was wrong; they didn't have to prepare the 22 stuff in a dirty room? 23 A He's not saying it's a dirty room. What he's 24 saying is that, because they had positive samples of 25 various other minerals around -- the jar was opened,

Page 556 1 could have been on the microscopes -- there could well 2 have been cross contamination. 3 So they went back and did a review of that 4 again. 5 Q Right. 6 A This is not unusual. This can happen in many 7 other fields. 8 I mentioned it happened -- I've seen it in 9 microbiology as well. 10 Q So how many other times did any of Johnson & 11 Johnson's consultants write them and say: hey, the 12 positives that we found were because we prepared them 13 in a room that was "not entirely clean"? 14 A I don't know, but it wouldn't surprise me if 15 there was others, because the procedures and processes 16 back 40-odd years ago were different from what they 17 would be today. 18 When you and I walked into this room today -- 19 you've probably been on the side walk this morning -- 20 we will have asbestos on our clothes, because it's been 21 around for a long time, it's come from brake linings. 22 So it doesn't surprise you can get a little 23 bit of cross contamination. 24 Now, today in a laboratory, you'd change your 25 clothes. You'd wear a little hat and white coat.	Page 558 1 clean, I assume Johnson & Johnson found another 2 consultant and stopped using Colorado School of Mines? 3 A I don't know. I couldn't assume that. 4 Q Okay. 5 A No. 6 Colorado School of Mines is -- always had a 7 good reputation. 8 Q When they're not contaminating six of seven of 9 your samples? 10 A Well, they obviously learned their lesson. 11 Q If that's what happened; right? 12 A Yes. Well, they said they screwed up. 13 Q That's what they said happened; right? 14 A Yeah. 15 Q This will be Exhibit 112. 16 (Exhibit 112 marked for identification) 17 This one's a little tough to read. This is 18 straight from the -- from the FDA. Actually, this copy 19 might be from Johns Manville, this copy, but anyway ... 20 Do you see at the top it says Division of 21 Colors and Cosmetics Technology, Food and Drug 22 Administration, for a Meeting, August 3, '71? 23 A Yes. 24 Q Do you see that? 25 A Yes, yes.
Page 557 1 You'd ensure that there was no chance of cross 2 contamination. 3 But back in 1971, I think they were saying: 4 yeah, we screwed up. The room wasn't entirely clean. 5 Q I don't want to have to object to 6 non-responsive. 7 A Sorry. Ask the question again. 8 Q Yes, I will. 9 A Yeah. 10 Q The question was pretty simple. 11 Are you aware of any other time where any 12 consultant for J&J, after looking at Johnson & Johnson 13 samples, wrote back and said: the results are not the 14 results we told you they were because we prepared them 15 in a room that was not entirely clean? 16 How many other times? 17 A I believe, having read various reports in the 18 last four weeks, there was at least one other one. 19 Not from Colorado. I certainly think there 20 was another one from another outside lab. 21 Q So after Colorado had at first said that there 22 was tremolite in six of your samples, and then, less 23 than a month later after a meeting where they were with 24 J&J, three days later tell you: by the way, we 25 contaminated all your samples, and they're actually	Page 559 1 Q I think what we have here is we have another -- 2 another set of minutes about the same meeting we've 3 already been talking about; okay? 4 Or it might be another session of the meeting 5 on the same day. Do you see that? 6 A Yeah, yeah. 7 Q They're both August 3, '71, are they not? 8 A Yes. 9 Q Okay. 10 Right. Are you ready? 11 A Yes. 12 Q It just says at the top, Purpose: 13 "To specify a laboratory procedure for the 14 determination of asbestos in cosmetic talcum powders 15 which will give consistent, meaningful results. This 16 may require answers to such questions as ..." 17 And they have a series of questions about 18 defining asbestos, varieties, what particle size ranges 19 do you report, et cetera; right? 20 A Yes. 21 Q Okay. Let's go to the next page. 22 They again show the various Johnson & Johnson 23 people and consultants that were present; true? 24 A Yes. 25 Q Go ahead and turn to -- it's a page at the top

Page 560 1 you'll see it says Research and Engineering Center, 2 August 11, '71. 3 I want to make clear -- you may be on the 4 right page. 5 A Is that Bates 45? 6 Q That's 45. That's right. 7 I want to make clear this is the Johns 8 Manville minutes from that meeting; okay? 9 A Okay. 10 Q I just want to make clear that's what that is. 11 Now, J&J and Johns Manville actually did some 12 work together with regard to microscopy and talc; 13 correct? 14 A I believe I've read that, yes. 15 Q Okay. 16 So let's just go to, at the bottom of the 17 page it should be 49. 18 A Yes. 19 Q Halfway down it says: 20 "WT Cancer -- Colorado School of Mines 21 Research Institute". 22 Do you see that? 23 A Yes, yeah. 24 Q And it says he: 25 "Reviewed petrographic and electron probe	Page 562 1 "Geiger questions some of Art Langer's 2 identification of chrysotile fibrils". 3 Right? 4 A Yes. 5 Q And we talked about what Langer said about 6 chrysotile in Johnson & Johnson's stuff, right? 7 A Yes. 8 Q And: 9 "This was a smokes screen, but a good counter 10 offensive to Langer finding chrysotile everywhere". 11 Right? 12 A Yes. 13 Q So at least the way JM is characterizing this 14 is that McCrone -- McCrone's questioning Art Langer's 15 identification was a smokescreen; right? 16 A Well, that's what Johns Manville have written. 17 Q That's right. Okay. You can set that aside. 18 This next one is 113. 19 (Exhibit 113 marked for identification) 20 August 9, 1971. This is six days after the 21 FDA meeting; right? 22 A Yes. 23 Q Okay. 24 And this is from Shelley to Kramer, but it 25 cc's a bunch of people; right?
Page 561 1 studies of J&J. Showed clean fiber". 2 Right? 3 A Yes. 4 Q Do you know what "clean fiber" means? 5 A No, I don't. 6 Q Okay. 7 A It's not a scientific term. 8 Q Neither do I. 9 But he's one of the scientists you guys have 10 as a consultant; right? 11 A Well, who wrote the minutes? 12 Q Well, J&J did. 13 A J&J wrote the minutes? 14 Q I mean, Johns Manville did. 15 A Okay. 16 Q I believe. 17 A Yeah. So Johns Manville were using the word 18 "clean fiber" -- 19 Q Okay. 20 A -- which doesn't mean much. 21 Q Well, let's go to the next page, and this is 22 under the section for Gene Geiger from McCrone; okay? 23 A Yeah. 24 Q You see it's got what he was doing, right, and 25 then it continues under number 2 on the next page.	Page 563 1 A Yes. 2 Q Okay. Okay. 3 What he says is: 4 "It would seem more than appropriate that we 5 upgrade the quality control on our talc and baby 6 powder, particularly as to the potential asbestos 7 content". 8 Right? 9 A Yes. 10 Q Okay. 11 Now, if to this point there had never been 12 any indication regarding asbestos content, you wouldn't 13 need to upgrade the quality control, would you? 14 A Speculative. Certainly back in 1971, people 15 used words loosely. "Asbestos content" could well have 16 been used loosely, certainly by this particular 17 individual, Mr Shelley. 18 Q Why him? Why particularly by him? Was he a 19 bad employee, or did he -- 20 A No, I've read other correspondence from 21 Mr Shelley and he doesn't come across as definitive. 22 It's flakey. 23 Q Okay. 24 Did any of the seven people he cc'd, 25 including the President of the company, Mr Clare, ever

Page 564 1 write back and say: stop saying there's potential 2 asbestos. That's not true? 3 A No. 4 Q Okay, and did anyone criticize him for being 5 flakey in all of this? 6 A No -- well, I don't know. Certainly, there's 7 nothing in the -- you've not shown me any literature, 8 but ... 9 Q So this guy says that they have to include 10 [sic] the quality control because of potential asbestos 11 content, and your -- Johnson & Johnson's official 12 response to this document is: Mr Shelley was flakey? 13 A That's not the official comment at all. 14 My comment was that Mr Shelley, when you read 15 many of his memos, comes across with terms that are not 16 scientifically exact. 17 Q Okay. 18 A But, you know, he's written what he's written. 19 Q Okay. You can set that aside. 20 A Yeah. 21 Q So remember we looked at a document where 22 Johnson & Johnson had met with Dr Selikoff? 23 A Yes. 24 Q And even considered hiring him as a consultant; 25 right?	Page 566 1 Well, competent scientists. Now, we know 2 that 11 days earlier, Dr Langer had met with Johnson & 3 Johnson and said: there's chrysotile in your baby 4 powder; right? 5 A They had claimed to find that, yes. 6 Q Right. 7 And here Johnson & Johnson is saying: 8 "Dr Pooley's comments on Selikoff and Langer 9 ... echoed what we have been hearing ... competent 10 scientists but political extrapolators". 11 Right? Science good, but some sort of 12 political thing? 13 A Science competent. 14 Q Right. Okay. 15 A Not necessarily good. Competent. 16 Q Okay. 17 So their -- never mind. 18 Okay. This next one will be 115. 19 (Exhibit 115 marked for identification) 20 All right. So this is another meeting with 21 the FDA, July 21, 1971; correct? 22 A Correct. Well, July 20. 23 Q Oh, I'm sorry, July -- 24 A The meeting was July 20. 25 Q That's right. That's right. The memo was
Page 565 1 A Yes. 2 Q That was in 1971; true? 3 A Yes. 4 Q Right. This will be Exhibit 114. 5 (Exhibit 114 marked for identification) 6 So between then and July 20, 1971, we have 7 a memo from Mr Shelley, again, and he supplements a 8 report on his visit to Dr Pooley, July 20. 9 He said: 10 "Dr Pooley's comments on Selikoff and Langer 11 pretty much echoed what we have been hearing -- viz 12 ..." 13 Which means "to the extent that"; all right? 14 A Yes. 15 Q "... competent scientists but political 16 extrapolators". 17 So what is a "political extrapolator"? 18 A I don't know. 19 Q Okay. 20 A Let's read it again: 21 "Dr Pooley's comments on Selikoff and Langer 22 pretty [well] much echoed what we have been hearing ... 23 competent scientists but political extrapolators". 24 Yeah. Maybe they've got an axe to grind. 25 Q Okay.	Page 567 1 July 21; true? 2 A Correct, yes. 3 Q This is authored by Dr Nashed; right? 4 A Yes. 5 Q Okay. 6 Now, we're only going to talk about one 7 paragraph here. It's the one that's highlighted. 8 Dr Weissler -- he's with the FDA; right? 9 A Yes. 10 Q "... wanted to know if tremolite or fibrous 11 talc was found". 12 Okay? And you can see above they're talking 13 about their baby powder; right? 14 A Yes. 15 Q Okay. 16 "We stated that our information is that no 17 asbestos was found and that we will have full detailed 18 reports on the findings in about a week". 19 Right? 20 A Yes. 21 Q So the FDA asked the question: was tremolite or 22 fibrous talc found? Right? 23 A Yes, yeah. 24 Q Now, by this point in 1971, Johnson & Johnson 25 has been finding tremolite in their talc since 1957;

Page 568 1 right? 2 A Yes. 3 Q And they've been finding -- they even found 4 tremolite in a 1958 off-the-shelf baby powder; right? 5 A Yes. 6 Q Okay. 7 But it says here all they said in response 8 was: 9 "We stated that our information is that no 10 asbestos was found ..." 11 But Dr Weissler wasn't asking the word 12 "asbestos". He said "tremolite", didn't he? 13 A Well, I don't know what -- I don't know what 14 exact words Dr Weissler used, but the J&J response was 15 that there's no asbestos. 16 Q Okay. 17 We know there was plenty of tremolite; right? 18 A I wouldn't use the word "plenty". 19 Q Okay. 20 Many instances of the detection of tremolite 21 in the source and flotation talc for Johnson & Johnson; 22 correct? 23 A There have been, yes, yes. 24 Q Okay. 25 A Trace -- trace levels.	Page 570 1 was held with Dr Clark Cooper of the School of Public 2 Health, University of California, Berkeley. Dr Cooper 3 had worked at the National Centre for Urban and 4 Industrial Health and later moved to the School of 5 Public Health in Berkeley. Dr Cooper was Chairman of 6 the National Research Council Review of Asbestos and 7 Its Potential Health Hazards which published an 8 excellent review on the subject. Dr Cooper was called 9 in in the hope that he might be able to attend the FDA 10 meeting on August 3". 11 And that's a meeting we've talked about; 12 right? 13 A Yes. 14 Q It says he's well versed in the literature in 15 the field. I'll skip ahead: 16 "He is in a position to oversee epidemiologic 17 studies, conduct analytical studies on talc and allied 18 materials, and conduct animal studies on appropriate 19 materials. He would be pleased to discuss this area at 20 any time. In asking Dr Cooper his thoughts concerning 21 the asbestos --" 22 (Noise heard from phone) 23 Can you guys mute -- mute your phone? 24 "In asking Dr Cooper his thoughts concerning 25 the asbestos content of talc and the use of talcs for
Page 569 1 Q Well, some were more than trace. Some were 2, 2 3, 4 per cent; correct? 3 A Yes. 4 Q Okay. 5 All right. You can set that aside. 6 This next one will be 116. 7 (Exhibit 116 marked for identification) 8 Okay, sir? All right. 9 Sir, this is a memo and it's from Gavin 10 Hildick-Smith. This particular copy was Dr Nashed's; 11 right? 12 A Yes. 13 Q Because it says it was received by him; 14 correct? 15 A Yes. 16 Q From July 30, 1971. 17 It says: 18 "Our conversation with Dr Clark Cooper ..." 19 Now, Clark Cooper was a very well known 20 public health doctor; correct? 21 A I've certainly heard the name, yes. 22 Q All right. 23 He's at University of California, and Dr 24 Hildick Smith writes here: 25 "At Dr Cralley's suggestion, a conversation	Page 571 1 cosmetics, he indicated that in his opinion there is no 2 place for asbestos in cosmetic talcs and he would 3 withdraw from the market any talcs that contained 4 asbestos. He did not believe that there was a low 5 level of asbestos content in talc which would be 6 acceptable for cosmetic use". 7 Right? 8 A That's what he writes. 9 Q And that is completely in agreement with what 10 you told me Johnson & Johnson's policy on asbestos in 11 talc was; correct? 12 A Correct. 13 Q There's no place for it; right? 14 A Yes. 15 Q And that has always been their policy as long 16 as -- as long as you can remember, as well as from the 17 documents you've reviewed; correct? 18 A Correct. 19 Q But they still felt the need to ask this doctor 20 of public health what his opinion was and whether or 21 not asbestos could be dangerous to talc; right? 22 A Yeah, and, you know, there's nothing unusual in 23 that. It's -- it's common practice in industry to seek 24 opinion from outside experts. 25 Q Okay. All right.

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1 And, in fact, he says he did not believe that
 2 there was a low level of asbestos content in talc which
 3 would be acceptable for cosmetic use, and Johnson &
 4 Johnson agrees with that still today?
 5 A Yes.
 6 Q Okay.
 7 MS FROST: It's 2:15.
 8 MR PANATIER: Let's take a break. Let's take
 9 a break.
 10 (Off the record at 2:14 pm)
 11 (On the record at 2:37 pm)
 12 BY MR PANATIER:
 13 Q So, sir, Mr Shelley, he was the fellow that you
 14 said, you used the word "flakey" and "inexact"; right?
 15 Remember that?
 16 A I have seen some memos where I would comment
 17 that the text wasn't perfect.
 18 Q Okay.
 19 And you said that when he was talking about
 20 his concern over asbestos and needing to improve
 21 quality control for asbestos; correct?
 22 Correct? Was that the memo that we were
 23 talking about?
 24 A It could have been. Yes, it could have been.
 25 Q Okay.

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1 A Sometimes -- what I meant was the terms, the
 2 phrases were not exact.
 3 Q Okay.
 4 Well, let's just get a little bit more info
 5 on who he was. I went and pulled his obituary.
 6 (Exhibit 117 marked for identification)
 7 A Mmm hmm.
 8 Q And it says here that:
 9 "Dr Shelley received his Bachelor of Science
 10 and Master of Science in chemistry from the University
 11 of Kentucky. Dr Shelley, a chemist, was an executive
 12 of Johnson & Johnson's research operations".
 13 So he was pretty high up; right?
 14 A Yes.
 15 Q "He specialized in areas of surgical adhesives,
 16 dental products and headed J&J's exploratory research
 17 laboratories before becoming Director of Research and
 18 Corporate Director of Scientific Affairs."
 19 That's way high up in the company; right?
 20 A It would have been, yes.
 21 Q Okay?
 22 A That was 1981, yeah.
 23 Q "He received seven patents for his inventions
 24 during more than three decades with the company."
 25 So he was a pretty serious scientist and

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1 executive at Johnson & Johnson, wasn't he?
 2 A I would not dispute that.
 3 Q Okay.
 4 And you don't get that high up in this
 5 company by being inexact or being flakey, do you?
 6 A What I said was that the quality of the memos,
 7 the text, was not as exact as you would expect from a
 8 high-flying scientist.
 9 Q Okay.
 10 MS FROST: Was that 117?
 11 MR PANATIER: What does it say on there?
 12 THE WITNESS: Yes.
 13 MR PANATIER: 117, yes.
 14 All right. This is 118.
 15 (Exhibit 118 marked for identification)
 16 It's a little bit earlier.
 17 You had mentioned that earlier, just as an
 18 aside, that talcosis was something that happened in
 19 miners and millers; correct?
 20 A It has been reported, yes.
 21 Q Okay.
 22 Do you see that this is a paper entitled
 23 Pneumoconiosis -- which means dust disease; right?
 24 A Yes.
 25 Q Due to Talc in the Cosmetic Industry; right?

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1 A Yes.
 2 Q And if you go down to the second highlight
 3 there, it says:
 4 "The study indicated a relationship between
 5 the positive roentgen observations ..."
 6 Which is --
 7 A X-rays.
 8 Q -- x-rays?
 9 A Yes.
 10 Q "... and (1) the concentration of dust and (2)
 11 the length of exposure to talc, and the conclusion
 12 reached was that silicate dusts of tremolite talc
 13 induced a fine diffuse bilateral fibrosis of the lungs
 14 (pneumoconiosis)".
 15 Do I read that right?
 16 A You did, yes.
 17 Q Okay.
 18 This is a case report of an individual who
 19 had pneumoconiosis from working in a cosmetic talc
 20 factory; correct?
 21 A Let me just read this.
 22 Q Sure.
 23 At the top of page 392, if you go to that
 24 page --
 25 A Oh, okay.

Page 580 1 Merewether on the front page, Asbestosis and 2 carcinoma of the lung. 3 Cralley, Source of identification of 4 respirable fibers. 5 Asbestos hazards in naval dockyards. 6 Next page. 7 Lieben and Pistawaka, Mesothelioma and 8 asbestos exposure. 9 Mesothelioma in Scotland. 10 Next page. 11 Selikoff and Hammond, Environmental 12 epidemiology. Community effects of nonoccupational 13 environmental asbestos exposure. 14 Selikoff, Asbestos exposure, smoking and 15 neoplasia. 16 Selikoff, Churg and Hammond, Asbestos 17 exposure and neoplasia. 18 Asbestos in the lungs. 19 Selikoff, The occurrence of plural 20 calcification among asbestos installation workers. 21 Selikoff, Relation between exposure to 22 asbestos and mesothelioma. 23 And that goes on for another page there; 24 right? 25 A Yes.	Page 582 1 ... meeting can be summarized as follows ..." 2 So it was a meeting of those three groups; 3 right? 4 A Yes. 5 Q By the way, I do want to point out here, so 6 Johnson & Johnson is really serious about its image and 7 its trademarks; right? 8 A Johnson & Johnson is seriously interested in 9 ensuring the product was safe. So certainly very 10 proactive in meeting with FDA. 11 Q Well, I mean, so this is a Johnson & Johnson 12 memo; right? 13 A Yes. 14 Q Written by one Johnson & Johnson guy to another 15 Johnson & Johnson guy? 16 A Yes. 17 Q Right? 18 And you could see there's a little asterisk 19 after he uses the word "Johnson & Johnson"; right? 20 A Yes. 21 Q And you go to the bottom, and it says -- 22 A Trademark? 23 Q -- "trademark"; right? 24 A Yeah. 25 Q So, I mean, were they afraid that other people
Page 581 1 Q So for a company that never sold a product with 2 asbestos, they sure were doing a lot of research on 3 asbestos, weren't they? 4 A There's nothing unusual in this, that people in 5 R&D will often seek out information that may be 6 relevant to what they're working on. 7 And certainly back in '71, asbestos has been 8 raised as an issue. 9 So my read of that is that the people were 10 doing something very responsible to find out whatever 11 they could about asbestos. 12 Q But the story that J&J has continually told us 13 is that there has never been asbestos, never was, never 14 will be in any product it ever made; correct? 15 A Correct. 16 Q Okay. This is Exhibit 120. 17 (Exhibit 120 marked for identification) 18 This is another memorandum; right? This one 19 is to Mr Fuller and it's from Dr Nashed. 20 Do you see that? 21 A Yes, yes. 22 Q Okay. 23 This is the summary of an FDA meeting on 24 August 11, '72, okay, and it says under Summary: 25 "The CTFA ... FDA ... and Johnson & Johnson	Page 583 1 at Johnson & Johnson would steal their trademarks? 2 A No. I can tell you, because I worked there for 3 long enough, it is a company policy that every time you 4 write a brand name or the word "Johnson's", you put the 5 asterisk with the word "trademark" at the foot. 6 Q Right. 7 A I don't know why, but that was the directive. 8 Q Did they think if you miss it one time, you 9 give up the trademark? 10 A No knows? 11 Q Okay. 12 A You know what you lawyers are like. 13 Q Well, I don't know. I'm not a trademark lawyer. 14 I wouldn't know, but that's a good point. 15 Okay. Go to the second page, under number 7: 16 "In subsequent discussions ..." 17 Now, look, they're talking about Dr Lewin; 18 right? 19 A Yes. 20 Q And Dr Lewin was the one who said he had found 21 chrysotile in Shower to Shower; right? 22 A He claimed to, yes. 23 Q Okay. 24 "In subsequent discussions, Mr Ian Stewart 25 pointed out that light microscopy may not detect

Page 584 1 chrysotile fibers". 2 And that's true, isn't it, sir? 3 A Yes. 4 Q That some chrysotile fibers, while present, may 5 be too thin to be visualized with an optical 6 microscope? 7 A Correct. 8 Q Right. 9 "Dr Weissler said that they recognized that 10 some samples will be passed on that basis but they are 11 willing to live with that". 12 Right? 13 A Well, that's Dr Weissler. FDA. 14 Q That's the FDA? 15 A Yeah. 16 Q Is saying that if there's an optical standard 17 that isn't going to see all the chrysotile that's 18 there, the FDA was fine with that; right? 19 A Yeah. 20 Q Now, Johnson & Johnson was not fine with that; 21 right? 22 A Correct. 23 Q Because Johnson & Johnson would not endorse a 24 standard that would let asbestos past; correct? 25 A Correct.	Page 586 1 A None of those individuals did. 2 Q Okay. 3 A And certainly there were no toxicologists 4 present. 5 Q Okay. 6 Now, let's see, I think that's all I have on 7 that document. Okay. You can set that aside. 8 Now, Dr Nashed, he was -- he's a doctor; 9 right? 10 A He had a PhD, from memory. 11 Q In what? 12 A I think it was probably chemistry, but it's a 13 long time ago. 14 Q Nevertheless, when the FDA proposed a 1 15 per cent allowance of asbestos, Dr Nashed did not voice 16 an objection to that, did he? 17 A Apparently not. 18 Q No. 19 A At least not on that memo. 20 Q This next one will be Exhibit 121. 21 (Exhibit 121 marked for identification) 22 There you go, sir. 23 Now, this is a letter from Dr Nashed to the 24 Department of Health Education and Welfare; right? 25 A Yes.
Page 585 1 Q So let's go to the next sentence: 2 "Dr Shchaffner [again, with FDA] said that 3 this procedure will be adopted in the proposed policy 4 statement. He asked if anyone present had any 5 toxicological objections to the allowance of 1% ... 6 [weight]". 7 And "w/w", is that wet weight, asbestos in 8 talc? 9 A Yes -- no, it's weight for weight. 10 Q Weight for weight. Okay. 11 A Yes. 12 Q "He asked if anyone present had any 13 toxicological objections to the allowance of 1% ..." 14 By weight, basically; right? 15 A By weight, yes. 16 Q "... asbestos in talc ..." 17 A Yes. 18 Q "No objections were raised." 19 A Yes. 20 Q Right? 21 A Yeah. 22 Q Johnson & Johnson was at the meeting; right? 23 A Yeah. 24 Q And when the FDA guy proposed an allowance of 1 25 per cent asbestos, did Johnson & Johnson object?	Page 587 1 Q Is that where the FDA is, in the Department of 2 Health Education and Welfare? 3 A No, that FDA at the Bureau that was met was in 4 C Street, Washington DC. 5 Q No, what I mean is -- what I mean is what is 6 the relationship, if any, between the FDA and the 7 Department of Health Education and Welfare? 8 A They're both separate government departments. 9 Q Okay. All right. Okay. 10 So he writes -- this is a Johnson & Johnson 11 person, and by the way and he blind cc's basically 12 everybody we've talked about. 13 A Yeah. 14 Q Including Mr Clare, the President; right? 15 A Yeah. 16 Q And he says: 17 "Dear Sir: 18 We wish to comment upon the proposed entitled 19 'Food Additives -- ... [Proposed] [sic] Regarding 20 Regulation of Prior-Sanctioned Food Ingredients' which 21 was published in the Federal Register of August 12, 22 1972". 23 Now, at this time the FDA was proposing a 24 regulation on asbestos and talc, as well as a 25 methodology for detecting it; correct.

Page 588 1 A There were. 2 Q Okay. 3 A There were a lot of work going on at the time. 4 Q Yeah. 5 So it says down here: 6 "The assumptions we believe to be incorrect 7 are as follows: 8 1. Talc can be processed to remove 9 asbestos-form particles ..." 10 Right? 11 A That's what it says. 12 Q So what Johnson & Johnson is telling the 13 Department of Health Education and Welfare is, to the 14 extent that they are present, you can't process talc to 15 remove asbestos form minerals -- or particles; correct? 16 A Yes. 17 Q Okay. 18 And then they also say that: 19 "All asbestos-form particles may be injurious 20 to health ..." 21 They object to that, too; correct? 22 A Yes. 23 Q Okay. 24 Now, go down to number 1 below, because they 25 put their basis for their objections, and they say:	Page 590 1 Q Well, is he wrong, too? 2 A Again, there are certain assumptions here, 3 because Nashed is commenting on the Department of 4 Health Education and Welfare proposal where they have 5 made a statement which he or Johnson & Johnson believe 6 to be incorrect. 7 He's being a good scientist and saying: we 8 think that's an incorrect statement that talc 9 processing can be done to remove asbestos particles. 10 Q Well, that's an accurate statement. 11 A That is an accurate statement. 12 Q Right, because they know it to be true? 13 A And he is correcting the Department of Health 14 Education and Welfare. 15 Q Right, because they know from their own 16 experiments that it's not possible; correct? 17 A Correct, yes. 18 Q All right. We can set that aside. 19 All right. This will be Exhibit 122. 20 (Exhibit 122 marked for identification) 21 Now, this is November 29, '72. It is to the 22 FDA from Dr Nashed; right? 23 A Yes. 24 Q And he's -- there's his full title there, 25 Director of Science Information; right?
Page 589 1 "We know of no process that guarantees total 2 removal of all elongated particles from talc. The 3 Johnson & Johnson process for beneficiating Vermont 4 talc, which we believe to be the most advanced in the 5 field, will not guarantee a zero tolerance for 6 elongated particles". 7 Right? 8 A That's what it says. 9 Q And, sir, we know that to be true because we've 10 looked at the actual studies where they've been looking 11 at those floats; right? 12 A Correct. 13 Q And we know that minerals such as tremolite get 14 through; right? 15 A Correct. 16 Q And we know they get in the final product; 17 correct? 18 A There is tremolite apparently in some of those 19 assays, yes. 20 Q But what Nashed is saying here is they can't 21 guarantee zero tolerance for elongated particles; 22 right? 23 A Well, that's what he's saying. 24 Q Okay. 25 A Yeah.	Page 591 1 A Yes. 2 Q Okay. 3 Now, it says: 4 "We were informed by Dr Estrin [who is at the 5 CTFA] ... that Dr Lewin had reported to you that his 6 examination of Lots 108T and 109T of Johnson's Baby 7 Powder showed that they contained 2% and 3% chrysotile, 8 respectively". 9 Right? 10 A Yes. 11 Q And they said: we submitted those two lots to 12 analysis by our five consultants; right? 13 A Yes. 14 Q Including McCrone? 15 A Yes. 16 Q Right. 17 "The results clearly show that the lots in 18 question manufactured from talc from our Windsor Mine 19 in Vermont contain no chrysotile asbestos". 20 True? 21 A Yes, correct. 22 Q And, sir, we know, and I flipped the chart for 23 you, that on October 27 of '72, McCrone did test 108 24 and 109T; correct? 25 A Correct.

Page 592 1 Q They didn't find chrysotile; right? 2 A Yes. 3 Q But they did find tremolite; right? 4 A They found tremolite, but it was never defined 5 as asbestos. 6 Q They found it by optical microscopy, and they 7 said that it was 5 per cent -- half a per cent in one 8 sample and .2 to .3 per cent in another sample, and 9 they described them as "tremolite rods"; correct? 10 A Yes, but they -- 11 Q Okay. 12 A -- didn't describe them as being asbestos 13 tremolite. 14 Q Right. 15 Well, again, this is one of their 16 consultants. They didn't put the word "asbestos" in 17 front of it, did they? 18 A They did not. 19 Q Okay. 20 In this letter, though, remember Johnson & 21 Johnson in an earlier memo said: we have been charged 22 to give full information to the FDA; right? 23 A Yes. 24 Q So in a letter to the FDA about those specific 25 samples, 108 and 109T, they say that their studies	Page 594 1 and read the newspapers, yeah. 2 Q You've had access to the exact same documents 3 I've had access to; correct? 4 A Yes, yes. 5 Q Right. 6 And so I'm only asking you based on what 7 Johnson & Johnson has provided to me; okay? 8 A Sure, sure. Yes. 9 Q This is Exhibit 123. 10 (Exhibit 123 marked for identification) 11 This is a document authored by Gavin 12 Hildick-Smith; right? 13 A Yes. 14 Q And it is to DD Johnston; right? 15 A Yes. 16 Q Who's DD Johnston at this point? 17 A I don't know. It's not someone I've come 18 across. 19 Q Well, Nashed, Petterson, Shelley, Fuller, they 20 all get it; right? 21 A Yes. 22 Q Okay, and this is Dr Nashed's copy -- 23 A Yes. 24 Q -- that we're looking at? 25 A Yeah, yeah.
Page 593 1 showed that it didn't have chrysotile, but they knew it 2 had tremolite, and they didn't disclose that, did they? 3 A No. 4 Q Okay. 5 And, in fact, sir, there was another memo you 6 and I discussed earlier where, it's either Schaffner or 7 it's Weissler from the FDA, says: is there tremolite in 8 your talc? Right? 9 A Yes. 10 Q And they respond and just said: well, there's 11 no asbestos? 12 A Yes, correct. 13 Q Okay. 14 Again here, no mention of the tremolite that 15 was found in the specific samples that the FDA was 16 asking for; true? 17 A Yeah. The FDA asked about chrysotile. 18 Q All right. 19 Now, Johnson & Johnson was pretty active in 20 monitoring folks who had opinions that were negative 21 for Johnson & Johnson; right? 22 A You're stating that. I don't have the evidence 23 for any monitoring program. 24 Q Well, let's be clear -- 25 A They would certainly have read the literature	Page 595 1 Q Okay. 2 Literally, the subject is called Antagonistic 3 Personalities In The Talc Story In The USA; right? 4 A That's the title, yes. 5 Q Okay, and he says: 6 "Mr DD Johnston: 7 The increase in the profile of talc as a 8 potential health hazard has been actively promoted by a 9 number of individuals for a variety of reasons. The 10 start of the attack on talc originated in England at 11 the Tenovus Research Institute in Cardiff where a 12 technician in microscopy published a paper. In the USA 13 the leading group who initiated the attack on talc is 14 located in New York City and consists of the following: 15 1. Dr Selikoff of the Mt. Sinai Hospital, 16 who is an epidemiologist heavily involved with asbestos 17 and its adverse effects on health". 18 Did I read that right? 19 A You did. 20 Q So this individual identifies Dr Selikoff as an 21 antagonistic personality; right? 22 A I don't see the word "personality", but ... 23 Q Well, it's at the top? 24 A Okay. Yeah. You're right. 25 Q Right.

Page 596 1 Go to number 2. 2 A Dr Langer. 3 Q "Dr Langer, who works with Dr Selikoff, is a 4 microscopist who visually identifies chrysotile in most 5 samples of talc that he examines, although, he seldom 6 confirms the identity by chemical means". 7 Again, an antagonistic personality; right? 8 A That's what it says. 9 Q And then he just has a general category for -- 10 on number 3: 11 "There are others in Dr Selikoff's department 12 who have the same mental attitude as Dr Selikoff". 13 Right? 14 A That's what it says, yes. 15 Q He names Jerome Kretchmer, who's a politician 16 in New York, and he's the Director of the Environmental 17 Protection Agency of New York, right? 18 A Yes. 19 Q He names Dr Romer, who's in the same 20 department? 21 A Yeah. 22 Q He even names Dr Weissler of the FDA; right? 23 A Yeah. 24 Q He names Dr Lewin, of course; right? 25 A Yes.	Page 598 1 A Yeah. 2 Q And said: let's pay him; right? 3 A Well, for his advice. 4 Q That's -- is that 124? 5 A 124. 6 Q Okay. 7 (Exhibit 124 marked for identification) 8 All right. This is a meeting on talc at 9 Vanderbilt company head quarters. 10 Now, Vanderbilt had a mine in New York called 11 Gouverneur; right? 12 A I'm aware of that. 13 Q Okay. 14 And this is Hildick-Smith writing this. This 15 is dated January 15, '73: 16 "On Wednesday, January 10, 1973, Mr Bacon of 17 the Vanderbilt Company called to inform me that he was 18 convening a meeting with members of his company and 19 representatives of other companies mining talc with a 20 view to discussing the American Society for Testing 21 Materials' interest in developing a definition for 22 talc, tremolite and asbestos". 23 So that's our context; okay? 24 A 1973, yes. 25 Q All right.
Page 597 1 Q Who was a consultant to the FDA? 2 A Yes. 3 Q Right? 4 Okay. Now, why would Johnson & Johnson want 5 to keep track of "antagonistic personalities in the 6 USA"? 7 Sounds kind of McCarthyist, doesn't it? 8 A It does, doesn't it? 9 Q Yeah. 10 A But, you know, at the time, people used those 11 words -- 1972 -- you are looking for anyone who, for 12 whatever reason, is -- has got an axe to grind. 13 And in this case, we've said that the guy 14 Kretchmer was intending to become Mayor of New York, or 15 his sidekick. So there are various people who have 16 their own axe to grind, and one way of doing that is to 17 come up with a story. 18 It still goes on today. 19 Q All right. 20 A There's different things. So ... 21 Q Well, the number 1 guy, Selikoff, was someone 22 that Johnson & Johnson was going to hire as a 23 consultant; right? 24 A Yes. 25 Q Even met with him?	Page 599 1 A Yes. 2 Q Down next paragraph: 3 "In a discussion with Dr Nashed, it was his 4 opinion that it would not be in our interest to have 5 anyone attend this meeting as we don't have to be 6 associated with those who have an interest in 7 exonerating tremolite. I concur with Dr Nashed and 8 would appreciate your opinion on the subject". 9 So at least their view was that Vanderbilt 10 was trying to exonerate tremolite; correct? 11 A Well, Mr Bacon of Vanderbilt is stating that 12 they were looking to exonerate tremolite, yes. 13 Q Right. Okay. All right. 14 And at this point, does the general public 15 have any idea that there have been numerous tests 16 showing tremolite in Johnson & Johnson's source talc 17 and end product? 18 A I don't know. 19 Q Okay. 20 You're not aware of any -- 21 A No, I'm not aware. 22 Q -- disclosure to the public? 23 A No, no. 24 Q Okay. 25 And then down here, this looks like it's

Page 600 1 Shelley writes back? 2 A Yeah, could be. 3 Q He says: 4 "I agree until -- I agree with you and Dr 5 Nashed. We do not wish to be clearly identified with 6 an attempt to support high tremolite talcs as safe for 7 cosmetics". 8 Right? 9 A Yes. 10 Q So if Vanderbilt had a high tremolite talc, I 11 guess was Johnson & Johnson a low tremolite talc? 12 A Well, from my understanding of the Vanderbilt 13 mine, if that was the Gouverneur mine, that was clearly 14 very, very different from the Johnson & Johnson mines. 15 Very, very different. 16 Q Vanderbilt generally sold a totally different 17 grade of talc than J&J? 18 A Totally different product. 19 Q I understand. Okay. 20 This will be 125. 21 (Exhibit 125 marked for identification) 22 All right. So another memo. This one is 23 from M Goodman, cc'ing five people, including 24 Mr Ashton, to Petterson, and this is entitled Weekly 25 Monitoring of Vermont Talc; right?	Page 602 1 chrysotile, such as quartz or cellulose will give rise 2 to a positive result. This method will not detect 3 other forms of asbestos". 4 Okay. So as far as they're concerned right 5 now, whatever the McCrone method is they're talking 6 about, is for chrysotile, if anything, and nothing 7 else; right? 8 A That particular test, yes. 9 Q Okay. 10 "The method described by Dr Pooley is also 11 used to detect and measure chrysotile". 12 And then at the end of that paragraph: 13 "He reports as a lower limit of detection 14 0.05% chrysotile". 15 Right? 16 A Yes. 17 Q With the concentration method? 18 A With the concentration method, yes. 19 Q "Both methods share the same weakness. They do 20 not measure or detect other potentially troublesome 21 forms of asbestos, such as tremolite, anthophyllite, 22 amosite, or crocidolite. All three techniques require 23 well trained people and of course some highly 24 sophisticated equipment. 25 Presently, QA does not have the equipment
Page 601 1 A Yes. 2 Q So this will -- this is '73. This will give us 3 an idea of what the monitoring was; right? 4 A Sure. 5 Q Okay. 6 It says number 1, and they're talking about 7 talc -- well, let's skip that: 8 "We are currently using this technique ..." 9 X-ray diffraction; right? 10 "... to monitor our talc, the method has a 11 detection limit of ca 1% and it will detect the various 12 forms of asbestos". 13 Right? 14 A Yes. 15 Q Okay. 16 A detection limit of 1 per cent means if the 17 substance you're looking for is there at less than 1 18 per cent, you wouldn't expect to see it; correct? 19 A There would be a lower probability, yes. 20 Q Okay. 21 "The McCrone method for the detection of 22 chrysotile in talc is based on a light microscopic 23 technique. It is neither simple nor specific in that 24 it requires a highly trained optical microscopist to 25 run it and substances with the same refractive index as	Page 603 1 and, I am informed, the manpower to do the job". 2 So he suggests, then, a series of ways to do 3 this testing. 4 A Sure. 5 Q He says: we should take samples from Vermont on 6 a regular basis and send it to ESDP. 7 Now, is that a -- 8 A It stands for Eastern Surgical Dressings Plant. 9 It's the place where the talc was filled into pots. 10 Q Okay. 11 And that is a test for microbial content; 12 right? 13 A Yes. 14 Q Okay. 15 "Al's group would run these samples by 16 straight x-ray diffraction, the McCrone method and the 17 Pooley method, collecting the data and getting a good 18 feel for the techniques". 19 So they're still kind of feeling their way 20 out -- 21 A Yeah. 22 Q -- on what they're going to do; right? 23 A Yes. 24 Q They talk about having people trained by 25 McCrone.

Page 604 1 But if we go down to 6: 2 "We must decide what course of action we will 3 take if any sample gives rise to a positive test". 4 Now, the action they should take with a 5 positive test, sir, based on what you and I talked 6 about, is rejection of the lot, recall of any of the 7 products made from that lot; right? 8 A Or you go to try to find out if the material is 9 chrysotile by whatever means possible beyond x-ray 10 diffraction. 11 Q Yeah, I suppose I'm asking if it's confirmed, a 12 positive test that's confirmed? 13 A Yes. 14 Q Okay? 15 A Yeah. 16 Q If it's confirmed that there's, like, 17 chrysotile asbestos present? 18 A Yes, yes. If it's -- 19 Q That's got to be a recall? 20 A If it is chrysotile, you would expect it to be, 21 yes. 22 Q Okay. 23 You can't use that lot. You've got to reject 24 that lot? 25 A Yes.	Page 606 1 is clear to me that if we find asbestos by the straight 2 x-ray diffraction technique we can not use that batch 3 of talc. But what do we do if we find chrysotile by 4 Pooley's method? Should we use the material?" 5 Now, chrysotile is asbestos; right? 6 A Yes, it is, yeah. 7 Q And he's saying, hypothetically, what if we 8 find it? 9 Because Pooley uses the concentration 10 technique; right? 11 A Yes, yes. 12 Q "Should we use the material?" 13 Now, no one at Johnson & Johnson should be 14 asking the question. The answer is: you do not use the 15 material. 16 Right? 17 A Yes, and I don't know who M Goodman is -- 18 Q Okay. 19 A -- or was. 20 Q Okay. 21 "Since we are dealing with a continuous 22 process, would we have to examine material made from 23 previous shipments?" 24 Well, the answer to that would be yes; right? 25 A Yes.
Page 605 1 Q Right? 2 And if the lot has been processed into 3 product, you've got to get that product back? 4 A Yes. 5 Q Right. Okay. 6 And, as you sit here today, you can't recall 7 that J&J -- you've never seen any record that they 8 actually did reject a lot; correct? 9 A J&J rejected several lots before filling, and 10 in one case I think after filling, where there was 11 microbial contamination. 12 Q Okay. 13 A And we -- you alluded to that on point 1 about 14 microbial checks. 15 So batches were certainly rejected for 16 microbial content. 17 Q Okay, and I'm sorry, I wasn't specific. 18 Johnson & Johnson, to your knowledge, from 19 everything you've seen, never rejected a lot for 20 asbestos content? 21 A I'm not aware that they ever found asbestos to 22 reject a lot. 23 Q So he says: 24 "We must decide what course of action we will 25 take if any sample gives rise to a positive test. It	Page 607 1 Q "If these too show chrysotile, what would we 2 have to issue -- would we have to issue a recall?" 3 Well, the answer to that is yes; right? 4 A Yes, and I think this could well have been M 5 Goodman -- I've never heard of him or her -- could well 6 have been a junior operative who's asking a reasonable 7 question. 8 Q Okay, and we'll see if there was an answer to 9 these questions. 10 "Pete, I do not have answers to these 11 questions and so my recommendation is that we move 12 cautiously on this one, making sure that each step 13 forward is the proper and correct one. Let us not 14 generate unreliable or meaningless data just for the 15 sake of generating data." 16 Did I read that right? 17 A You read -- you read what was written, yes. 18 Q Right. 19 And to be very clear, you and I are not 20 reading front to back all of these memos at all; right? 21 A Correct. 22 Q That could take an eternity? 23 A It would, indeed. 24 Q A literal eternity? 25 A Yes, yes.

Page 608 1 Q Okay. All right. You can set that aside. 2 This next one is 126. 3 (Exhibit 126 marked for identification) 4 All right, sir. Now, you can see this is 5 written by Bob Rolle. It's handwritten. 6 A It is, yes. 7 Q Right. 8 It's received February 12, '73, by Dr Nashed; 9 correct? 10 A Yes. 11 Q And at the top it says: 12 "According to Pooley's report entitled 13 'Report of Dusting Experiment Performed with Johnson 14 and Johnson's Baby Powder', page 12, a baby breathes in 15 a total of ..." 16 And then he has particles per cubic foot, 17 right, and it's 2.2 [sic] x 106? 18 A Yes. 19 Q Right? 20 Now, I think it's obvious I'm not a 21 mathematician. What is 2.2 [sic] x 106, if you know? 22 A It's just over 2 million. 23 Q 2 millions particles per cubic foot? 24 A Yeah. 25 Q Okay.	Page 610 1 A Correct. 2 Q Nevertheless, here in 1973, an individual, Bob 3 Rolle, who's in the Baby Products Company, has set out 4 to figure out if there's 1 per cent asbestos in the 5 talc, how much would a baby breathe; right? 6 A That's -- that's what he's tried to do, yes. 7 Q Okay. 8 But there's no asbestos in their product, 9 right, according to Johnson & Johnson? 10 A Yes. 11 Q Okay. You can set that aside. 12 All right. This will be 127. 13 (Exhibit 127 marked for identification) 14 This brings us back to the memo about Johnson 15 & Johnson discussing Vanderbilt and potentially meeting 16 with Mr Vanderbilt -- or Mr Bacon from RT Vanderbilt; 17 right? 18 A Yes, that's what I read, yes. 19 Q Okay. 20 So this is from Bill Ashton to Hildick-Smith 21 and there's some folks cc'd, and he says: 22 "I attended a meeting with talc manufactures 23 which R Bacon of Vanderbilt called in his New York 24 offices yesterday. Vanderbilt's idea was to try to 25 elicit and unify presentations which talc firms might
Page 609 1 So, according to tests that Pooley did, when 2 a baby is powdered with Johnson & Johnson's Baby 3 Powder, they breathe in 2.12 million particles per 4 cubic foot; right? 5 A If you breathe in a cubic foot, yes. 6 Q Okay. All right. 7 And then it says: 8 "If 1 per cent of these particles were 9 asbestos fibers, then we have .02 x 106 particles of 10 fibers of asbestos per foot; right? 11 A Correct. 12 Q He's actually doing math on how much asbestos a 13 baby or a child would breathe if 1 per cent of the 14 particles were asbestos fibers; right? 15 A Yes. 16 Q Okay. 17 A Breathe in, yeah. 18 Q Yeah. 19 A He's not done the math to say how many you'd 20 breathe out, which when we breathe, we breathe in; we 21 breath out. 22 Q Yes, sure. Sure. 23 Every particle of whatever you're breathing 24 doesn't go straight into your lungs. Some of it comes 25 back out; right?	Page 611 1 present to the USBM ..." 2 That's the US Bureau of Mines; right? 3 A Yes. 4 Q "... at the Talc Safety Symposium scheduled for 5 May 8th, in Washington, DC". 6 Now, go down to number 1): 7 "Johns Manville is going to take the position 8 that tremolite is an asbestos mineral and they will not 9 go along with the type of science which Vanderbilt has 10 been indicating, aimed at confusing the mineralology of 11 talc". 12 Did I read that right? 13 A You read what was written, yes. 14 Q So, at least according to Johnson & Johnson's 15 understanding, Vanderbilt is trying to confuse the 16 mineralology of talc as they go forward with these 17 regulations; correct? 18 A That's -- that's an interpretation. 19 It actually says: 20 "... will not go along with the type of 21 science which Vanderbilt has been indicating, aimed at 22 confusing the mineralology of talc". 23 Q Right. 24 A He's saying that Vanderbilt has been doing 25 this, yes.

Page 612 1 Q Right. 2 That Vanderbilt's strategy or "science" is 3 aimed at confusing the mineralogy of talc; correct? 4 A That's what he's stating. 5 Q Okay. 6 A It's his opinion, yes. 7 Q Right. Right. 8 And I'm relating that correctly; fair? 9 A You're commenting on Vanderbilt's state, yes. 10 Q Okay. 11 And you agree with my interpretation of what 12 he's saying there; right? 13 A Broadly, yes. 14 Q Okay. Right. Okay. 15 So that's all we need from that document. 16 Sometimes these story lines go over several dozen 17 documents, as you've seen. 18 This next one I believe is the next kind of 19 chapter to the Vanderbilt issue. This will be Exhibit 20 128. 21 (Exhibit 128 marked for identification) 22 So the last document was April 13, '73. This 23 is April 24. So 11 days later; right, sir? 24 A Yes. 25 Q It's from Dr Nashed.	Page 614 1 A Yes. 2 Q Okay. 3 Now, remember in the previous memo they were 4 talking about how Vanderbilt was trying to use science 5 to confuse the mineralogy of tremolite; do you 6 recall? 7 A That was the comment, yes. 8 Q Okay, and that now their story was not 9 accepted? 10 A Yes. 11 Q Right. Okay. 12 Bureau of Mines Meeting: 13 "Mr Norwood expressed the view that 14 Vanderbilt is acting very rashly in raising the 15 question on talc safety and he agreed that they are 16 desperate ... if they lose their 'tremolite is safe' 17 argument, they will be out of the talc business and 18 therefore would not be interested in defending safety 19 of talc per se. He felt that questions on safety of 20 talc fibers other than tremolite could reflect on the 21 whole talc industry. He thought Vanderbilt's defense 22 of tremolite is very weak and that the meeting at the 23 Bureau of Mines is bound to raise problems for the talc 24 industry; therefore, they have decided to avoid all 25 involvement with Vanderbilt".
Page 613 1 A Yeah. 2 Q And the subject is Talc/Asbestos, confidential 3 memo: 4 "I talked with Mr Norwood of Pfizer on the 5 phone today to touch base on their current activities 6 and their views on Vanderbilt and the Bureau of Mines 7 meeting". 8 Highlight: 9 "Mr Norwood said that he followed my advice 10 to adopt the attitude that Pfizer is there to see what 11 they can do to help FDA in methodology. He also 12 followed my advice and did not mention that he had been 13 talking to Johnson & Johnson". 14 Okay. Do you know why he gave that advice? 15 A No, I don't. 16 Q Okay. Next page: 17 "He said that subsequent to the meeting, they 18 have been informed by Sherwin-Williams that they will 19 discontinue use of New York talc ..." 20 Now, that's the Vanderbilt talc; right? 21 A Correct. 22 Q "... because of their feeling that tremolite 23 may be a problem, i.e., Vanderbilt's story was not 24 accepted". 25 Right?	Page 615 1 Then he has an Addendum at the bottom: 2 "I called Pfizer today to determine FDA's 3 attitude towards microscopy. Mr Stanley (Mr Norwood's 4 associate) said that the FDA microscopist was of the 5 opinion that optical microscopy was not suitable as a 6 control method. Also, they feel that they have 7 convinced Dr Weissler that scanning electron microscopy 8 is also useless". 9 Okay. Now, is scanning electron microscopy 10 useless for looking for asbestos in talc? 11 A Not if it's done properly. 12 Q Okay. 13 Well, that's a caveat for any analysis 14 technique; right? 15 A Sure. Yes, yeah. 16 Q You've got to do it properly or it could be 17 useless; right? 18 A Yeah, yeah. 19 Q Okay. 20 A And, you know, overall here, I wouldn't comment 21 on what Vanderbilt had been saying in their opinions. 22 Q We only have what's reflected in the memos; 23 right? 24 A Yeah. 25 Q This will be Exhibit 129.

Page 616 1 (Exhibit 129 marked for identification) 2 This is a memo from April 26, 1973, from Mr 3 Petterson to DD Johnson; right? 4 A Yes. 5 Q And it's a discussion of -- the subject is 6 Windsor Minerals and Talc. 7 It says: 8 "Bill Ashton and I visited with Roger Miller 9 and Vernon Zeitz on April 18th". 10 Now, those were the two guys that were 11 involved in Windsor Mines; right? 12 A They are, yes. 13 Q Okay. 14 "We covered a number of points of 15 considerable concern. 16 ... It is our joint conclusion that we should 17 not rely on the 'Clean Mine' approach as a protective 18 device for Baby Powder in the current Asbestos or 19 Asbestos-Form controversy". 20 What do they mean by that? 21 A It means that the clean mine approach is -- 22 which basically says that if you've got a clean mine as 23 far as freedom from asbestos is concerned, that in 24 itself is not the last word. You've got to go a step 25 further.	Page 618 1 And that was a positive thing that Johnson & 2 Johnson would put out to consumers and nurses and 3 doctors; right? 4 A Yes, yes. 5 Q Number 2: 6 "It is possible that the technique of 7 identification for asbestos or asbestos-form materials 8 will be an optical approach. It probably will be some 9 variation of the McCrone method. This method with 10 appropriate concentrating techniques will permit a good 11 laboratory to identify asbestos or tremolite in a talc 12 sample". 13 Did I read that right? 14 A You did. 15 Q Okay. Go to the next page, please: 16 "As for Baby Powder, the entire thrust of our 17 communications with the FDA has concentrated on 18 asbestos as harmful fiber-like material. Sophisticated 19 techniques have been proposed to make sure that 20 fiber-form materials present in samples were identified 21 as being asbestos. The implication is that all other 22 fiber-forms, if present, were talc or other minerals 23 and these were safe. This posture will no longer be 24 satisfactory. If the FDA Food Division, which is 25 moving more rapidly than the Cosmetic Division,
Page 617 1 Q Right. 2 They're saying: we should not rely on, oh, 3 well, we've tested the mine and it's clean, so 4 everything must be clean; right? 5 A Yes. 6 Q Okay. 7 "We believe this mine to be very clean, 8 however -- clean; however, we are also confident that 9 fiber forming or fiber type minerals could be found". 10 And, in fact, sir, we know by this point they 11 had been found; right? 12 A Yes. 13 Q Okay. 14 "The usefulness of the 'Clean Mine' approach 15 for asbestos only is over". 16 Right? 17 A That's what it states, yes. 18 Q Now, up to this point, we've seen a few -- you 19 and I have been through a few PR statements that have 20 been put out by Johnson & Johnson, and one of the first 21 things that they routinely say is: we select our mines 22 to be clean mines; right? 23 A Correct. 24 Q Okay. 25 And: we own our own mines.	Page 619 1 publishes a standard, it will probably be to ban 2 asbestos-form or fibrous material in talc". 3 First of all, did I read that right? 4 A You read it correctly, yes. 5 Q And you know that sort of the history here is 6 that the Food Division of the FDA and the Cosmetic 7 Division were both sort of on their own tracks in 8 developing a methodology for the detection of asbestos 9 in talc? 10 A Correct. 11 Q Right? Okay. 12 Let's go to the next highlight: 13 "Occasionally sub-trace quantities of 14 tremolite or actinolite are identified (Optical 15 Microscope) and these might be classed as asbestos 16 fiber". 17 And that is in line with what we've seen from 18 some of the results we've got on our board; correct? 19 A He said they might be classified -- 20 Q Right. 21 A -- as asbestos fiber. 22 Q Sure, sure. 23 And, of course, we've seen them classified 24 definitively as asbestifiber [sic] by McCrone; correct? 25 A In some cases.

Page 620 1 Q Right. 2 Not in every sample; right? 3 A Yes, yes. 4 Q "We have been pursuing several alternatives to 5 better protect our powder franchise. These include an 6 improvement in the flotation technique to better select 7 platy talc, and perhaps reduce any tremolite or talc 8 shards". 9 Again, that was what we looked at this 10 morning with the suppression methods for asbestiform 11 and chrysotile; correct? 12 A Yes. He said, "perhaps reduce any talc 13 shards". 14 Q Yeah. Well, we know from the experiments that 15 were run that they actually did reduce the asbestiform; 16 correct? 17 A They reduced, yes, tremolite, yes. 18 Q All right. 19 Next page, which is the last page: 20 "It should be cautioned, however, that no 21 final product will ever be made which will be totally 22 free from respirable particles". 23 And, sir, that's true today. Johnson & 24 Johnson talc, baby powder, anybody's cosmetic talc has 25 respirable particles in it; correct?	Page 622 1 A You're looking for a sensitive method. 2 Q Right. Okay. 3 This is Exhibit 130. 4 (Exhibit 130 marked for identification) 5 Right. Do you see that this is entitled 6 Proposed Specs for Analyzing Talc for Asbestos? Do you 7 see that? 8 A Yes. 9 Q Okay. 10 If you turn the page, it's a memo from 11 Shelley to Rolle; correct? 12 A Correct. 13 Q Shelley is the fellow with the five patents, or 14 whatever? 15 A Yes. 16 Q All right. Okay. 17 All right. It says: 18 "I am going to England Friday, May 25. I 19 have been asked to bring along our proposed specs for 20 analyzing talc for 'asbestos'". 21 And then he says: 22 "England is considering method of 23 preconcentrating the asbestos so as to be able to 24 analyze by x-ray. They find no 'asbestos' by doing 25 this with Italian talc. They (Pooley) find 0.05% of a
Page 621 1 A Yes, yes. 2 Q And then c., he says: 3 "Corn Starch is obviously another answer. 4 The product is by its very nature -- the product by its 5 very nature does not contain fibers. Furthermore, it 6 is assimilated by the body". 7 Right? 8 A Correct. 9 Q So cornstarch, again, we've seen it mentioned 10 half dozen times or so by now; right? 11 A Yes. 12 Q Okay. 13 And in 1973, Mr Petterson here is saying: you 14 know, cornstarch is another thing we could look at 15 instead of talc; right? 16 A Yeah, yeah. 17 Q Okay. You can set that aside, sir. 18 Now, earlier you and I talked about how, if 19 you are investigating a raw material for something that 20 could be dangerous, you want to use the most sensitive, 21 best methods possible; right? 22 A Yes. 23 Q You wouldn't want to -- you wouldn't to not use 24 a sensitive method because it happens to find what 25 you're concerned about; right?	Page 623 1 tremolite-type in Vermont". 2 Right? 3 A They find, yes, tremolite, yes. 4 Q Okay. 5 A Yes. 6 Q So they're saying if they use the concentration 7 method, they do see the tremolite in the Vermont talc; 8 correct? 9 A Yes. 10 Q Okay. 11 Now, if you'll go to the page at the bottom, 12 it's 1896, and they're talking about the 13 preconcentration of asbestos Pooley method; right? 14 A Yes. 15 Q Okay. 16 So let's read this carefully and see what it 17 says: 18 "Pooley has developed two techniques for 19 preconcentration of chrysotile and tremolite in talc 20 followed by x-ray diffraction analysis. For chrysotile 21 ... his level of detectability is 0.05% and when this 22 method is applied to Italian and Vermont talc, no 23 chrysotile is detected. The second technique developed 24 also by Dr Pooley involves preconcentration of 25 tremolite in talc (different procedure) followed by

Page 624 1 x-ray diffraction analysis. This technique has not 2 been written up yet, but evidently when applied to 3 Vermont talc 0.05% of tremolite-type is found. The 4 limitation of this method is that it may be too 5 sensitive". 6 Did I read that right? 7 A You read it correctly, yes. 8 Q So limitation -- when you talk about scientific 9 work, a limitation is a weakness; correct? 10 A It is a phraseology. 11 I'm not sure what it meant in this context; 12 whether it might give you false negative or faults 13 positive. 14 It's -- it's what it says. It says what it 15 says. 16 Q All right. 17 So let's be real clear about what it says. 18 It doesn't say "false negative" and it doesn't say 19 "false positive"; correct? 20 A It says it may be too sensitive. 21 Q Right. 22 He says: when he looks at our Vermont talc, 23 he can see .05 per cent tremolite; right? 24 A Tremolite-type, yes. 25 Q Right?	Page 626 1 I think you told me that yesterday. You 2 talked to me at length -- at some length about your 3 consultants, and you said: look, these are scientists. 4 You accept the results? 5 A Yes. 6 Q Right? 7 And so this scientist, Dr Pooley, created a 8 way to be able to lower the limit of detection, meaning 9 to improve the limit of detection; right? 10 A He had an experiment, which it was never 11 commercialized or made available, but he obviously did 12 some experiments to show that that was technically 13 possible. 14 Q Well, and what we know is Johnson & Johnson's 15 commentary was that after they saw that it would see 16 the tremolite, it was too sensitive. 17 So my question is: I assume Johnson & Johnson 18 never adopted that method internally; correct? 19 A It never became commercially available. 20 But the corollary of that is that, which you 21 claim, tremolite was also detectable by the method 22 which was later agreed across the whole industry, which 23 was by the CTFA J4 method. 24 Q That's right, but the J4 was -- had a detection 25 limit that was ten times higher, meaning that the
Page 625 1 A Yes. 2 Q So the limitation of the method is it's too 3 sensitive, meaning -- the converse meaning it would not 4 be a limitation of the method if it was less sensitive; 5 right? 6 A Correct. 7 Q Okay. 8 And that was -- that memo, the memo attaching 9 this was Shelley? Is that who it was? 10 Yeah. Shelley to Rolle; correct? 11 A Probably the other way around, is it? Rolle to 12 Shelley. 13 Q Oh, okay. Sorry. 14 All right. That's all we need on that one. 15 MR GAFFREY: Did we get a date on that? 16 MR PANATIER: Yeah. That is May 16, '73. 17 Okay. 18 Q Do you know after May 16 of '73 -- when we have 19 that method -- do you know if anybody, or have you seen 20 a memo where anybody said: hey, look, we have to use 21 the most sensitive method. If it's sensitive and it 22 sees the asbestos, we have to live with those results; 23 right? 24 A Yes. 25 Q Okay.	Page 627 1 detection limit for CTFA J4 was .5 per cent; right? 2 A Of asbestos? 3 Q Of asbestos? 4 A Yes, yes. 5 Q Okay. 6 It was for amphiboles specifically. So 7 tremolite, actinolite, anthophyllite? 8 A Of asbestos, but not -- the method does not 9 separate out at that point whether the tremolite is 10 asbestos tremolite or otherwise. 11 Q Right. 12 We're talking about XRD right now? 13 A Yes. 14 Q Right, and that's what Pooley was doing; right? 15 A Yes. 16 Q Okay. 17 Pooley had shown Johnson & Johnson that you 18 could have a detection limit down to .05 per cent, 19 which was ten times better than what the CTFA did a few 20 years later; right? 21 A By -- well, about one year later, I think. 22 '73, '74, yeah. 23 But what the CTFA method did was to add on, 24 and J&J took the second level, by adding on electron 25 microscopy, as well as optical.

Page 628 1 And it was electron microscopy which gives 2 you pretty well the same level of sensitivity as Pooley 3 was getting. 4 Q Well, let's be clear, the CTFA method was, 5 first of all, in 1976. 6 You understand that; right? 7 A The final publication was '76. 8 Q Okay. 9 A But J&J was involved in the work up and the 10 development of that method, and pretty well had it 11 in-house from a year or two before '76. 12 Q And did the CTFA method ever actually endorse 13 in any way TEM? 14 A No, J&J took it right from the very beginning, 15 even way before CTFA method was published -- J&J added 16 on the transmission electron microscopy and infrared 17 microscopy. 18 Q The only reason I asked that is you said J4 19 included electron microscopy, but it did not? 20 A No, it did not. 21 Q Okay. 22 A No, J4 was x-ray diffraction plus polarized 23 light microscopy. 24 Q Okay. 25 A J&J added on to raise the sensitivity, and	Page 630 1 Pooley was telling J&J in '73; right? 2 A By using his same x-ray diffraction, but by 3 concentrating it, yeah. 4 Q That's right. Okay. All right. 5 This one will be Exhibit 131. 6 (Exhibit 131 marked for identification) 7 We're going about an hour. You let me know 8 if you need a break. 9 All right, sir. This is a memo dated May 18, 10 1973. It's by GE Heinze and it is to Ashton, Goudie, 11 Rolle, Hildick-Smith, Petterson, Nashed and Shelley; 12 correct? 13 A Correct. 14 Q And the subject is Talc Symposium, Department 15 of the Interior. 16 So he went to the symposium and he took notes 17 by speaker; right? 18 A Yeah. 19 Q Okay. 20 So I just want to go through some of the 21 things he learned. If you turn to page 5: 22 "The following speaker was Dr William 23 NicholSEN, also from Mt. Sinai". 24 Right? 25 A That's what it says.
Page 629 1 we've been talking about sensitivity -- they added on 2 electron microscopy and infrared. 3 Q Okay. 4 But let's be clear, though, about how J4 5 worked, and if we need to pull it, we can look at it. 6 But the way the J4 worked was first you 7 looked at the sample with XRD; right? 8 A Yes. 9 Q And the XRD under the J4 method, put together 10 by the CTFA, the limit of detection was .5 per cent? 11 A Yes. 12 Q If you didn't see anything, you passed the 13 talc; correct? 14 A That is what the method stated, yes. 15 Q If you saw something at .5 per cent, then you 16 went to optical; correct? 17 A Yes, correct. 18 Q So if you don't see anything at .5 per cent and 19 you're using just J4, you pass the talc and you sell 20 it; right? 21 A If you follow that process exactly. 22 Q Okay. 23 A Yes. 24 Q And the J4 method, the XRD at the beginning, 25 the limit of detection was ten times poorer than what	Page 631 1 Q Now, Dr Selikoff and Dr Langer from Mount Sinai 2 were labeled by J&J as -- what was it? 3 A Hostile? 4 Q Hostile? It wasn't hostile. It was a -- was 5 it hostile personalities? 6 Anyway, it was negative; right? 7 A Negative, yeah. 8 Q Okay. 9 "He again reiterated that asbestos standards 10 should be applied to talc standards. He stated that 11 experience has taught that it takes 30 to 35 years for 12 cancer to appear as a result of asbestos exposure and 13 he does not see any reason for talc to be different". 14 And that 30 to 35 years, that's what we call 15 the "latency period"; right? 16 A That's a -- yes, it's a definition. 17 Q Okay. 18 Going on to the next page, it starts on this 19 page: 20 "He indicated that he had seen some data that 21 indicated that fibrous talc exposure is worse than 22 exposure to chrysotile. He also said that you couldn't 23 say that one form of asbestos was better or worse than 24 any other form and that fibrous talc should be 25 considered in the same camp as asbestos".

Page 632 1 Now, Johnson & Johnson knew that there was a 2 certain percentage of their talc that was fibrous; 3 correct? 4 A Yeah, fibrous talc, as we've defined earlier, 5 when you look at it under a microscope, it usually 6 means a plate that's rolled into like a rolled 7 newspaper. 8 Q Okay. 9 "He feels that the present standard of 5 10 fibers per cubic centimeter by optical microscopy is a 11 bare minimum ..." 12 Now, what he's talking about there is the 13 workplace standard under OSHA; correct? 14 A Yes. 15 Q "... his thesis being that for every fiber seen 16 by optical microscopy there are 'hundreds' more which 17 would be seen if transmission electron microscopy were 18 used rather than optical ..." 19 And that goes to that principle that, of 20 course, Johnson & Johnson was aware of, that optical 21 microscopy is not going to see the very, very small 22 diameter-ed fibers; correct? 23 A Yes. 24 Q Okay. 25 A That's why J&J introduced transmission electron	Page 634 1 All right, sir. This is from Dr Petterson 2 and this is a memo that you and I have talked about 3 already, but we hadn't seen it yet. 4 This is August 8, 1973, and this is from Dr 5 Petterson and he says: 6 "I am attaching a copy of our announcement 7 transferring W Ashton and R Russell to the Baby 8 Products Company. We think that this is an important 9 step to utilize our technology and potential 10 improvements in talc, and their subsequent adaptation 11 to improved powder". 12 Next highlight: 13 "We wish to do nothing that would impair our 14 success in continuing to protect this franchise". 15 And they're talking about the baby powder 16 franchise; correct? 17 A Correct. 18 Q Okay. 19 Down near the bottom: 20 "As perhaps you know, our current 21 expenditures on talc are in excess of half-a-million 22 dollars a year. It would appear that we will probably 23 expend about the same amount of money in 1974". 24 Now, what they're talking about right there 25 is the sort of scientific and research wing, their
Page 633 1 microscopy. 2 Q Yes, and we'll talk about that. You've said 3 that many times, and we're going to get to it. 4 "He stated that on balance the current 5 standard is probably not adequate. As far as the use 6 of fibrous talcs in the consumer area was concerned he 7 felt that they should be labeled with cautionary 8 statements on any consumer goods that can be dispersed 9 into the air. He stated that any talc that contains 10 asbestiform minerals or that was a fibrous talc should 11 have the asbestos standards applied to it and that you 12 should use optical microscopy and treat all fibers that 13 you see as if they were asbestos fibers". 14 My question is about the warning statement. 15 Again, this is about a little less than 20 years before 16 the warning statement first appeared on Johnson's Baby 17 Powder; right? 18 A Yes. 19 Q Okay. 20 You can set that aside, sir. 21 This will be Exhibit 132. 22 It's two pages, sorry. 23 It's two pages. Just hold on. 24 (Exhibit 132 marked for identification) 25 Here you go.	Page 635 1 budget; right? 2 In other words, that's not the mining budget? 3 A Yeah, yeah. 4 Q Right. 5 A Yeah. It's an interpretation. 6 Actually, when I first read that, I just -- 7 is that the amount of money that's actually buying talc 8 from the mine? Half a million dollars of bulk talc? I 9 don't know. 10 But that's another -- that's another 11 interpretation of it. 12 Q Well, at this time you guys owned the mine. 13 Did you buy the -- did you buy it from yourself? 14 A Yes. That's a normal process. You -- yeah, 15 it's called "vertical integration" in business. 16 Q Okay. 17 A Yeah. 18 But I don't know what that means, to be 19 honest. I would speculate it could be, as you said, it 20 was an R&D expenditure, or it could be that the company 21 was buying bulk talc to the value of half a million 22 dollars. 23 (Reporter clarification) 24 Bulk talc. 25 Q And when you say "vertical integration", that's

Page 636 1 sort of like Windsor Minerals mines it, they would 2 "sell" it to Johnson & Johnson; right? 3 A Yes. 4 Q Okay. I understand that. I just have never 5 called it "vertical integration", because I'm not an 6 MBA. 7 And then they attached an announcement about 8 this; right? 9 A Yes. 10 Q And it says: 11 "I am pleased to announce that W Ashton and 12 Robert Russell are joining the Baby Products Company 13 Research. Their transfer from Dr Sunberg's group is 14 effective August 15, 1973". 15 So this was sort of that consolidation in 16 Bill Ashton; right? 17 A Yeah, he was -- he was moving two doors down 18 the corridor. 19 Q Okay. 20 A From one management to another. 21 Q All right. And it actually says: 22 "Bill will continue as Research Associate 23 reporting to Dr Hutchins and will be responsible for 24 our long range activities in talc, talc sources and 25 other minerals applicable to Baby Powder".	Page 638 1 expertise than I have. 2 And those, generally within scientists, 3 there's a professional relationship which says: we're 4 not going to interfere with you. Do this. Invoice us. 5 Bill us for the time. Give me a report. 6 We don't have any interference, but we expect 7 a report that's professional, based on your expertise, 8 which is probably better than what I've got. 9 Q Okay. All right. 10 So this is an Exhibit 133. 11 (Exhibit 133 marked for identification) 12 This is from Bill Ashton to Caneer at 13 Colorado School of Mines, who we've seen before; right? 14 A Yes. 15 Q October 10, '73. He says: 16 "Dear Mr Caneer, 17 This confirms our telephone conversation and 18 authorizes you to provide Johns Manville scientists 19 with any help they require which has a bearing on 20 clarifying the nature of talc particles which may be 21 misconstrued to be non-talc particles". 22 A Yes. 23 Q Right. 24 So Ashton at J&J is giving Colorado School of 25 Mines permission to give information to Johns Manville
Page 637 1 Right? 2 A Yes. 3 Q Okay. 4 Now, Colorado School of Mines -- this will be 5 Exhibit 133. 6 (Exhibit 133 marked for identification) 7 Colorado School of Mines was a consultant to 8 J&J, and you have used the term "independent" 9 consultants, right, and I guess it's true that Colorado 10 School of Mines wasn't a part of Johnson & Johnson; 11 right? 12 A Correct. 13 Q But what do you mean when you say 14 "independent"? 15 A Okay. There are many, many different -- when 16 you have a company, you don't have everything in-house. 17 You don't have all the expertise of everything you're 18 going to need. 19 So many -- for example, in my past, I've 20 given our microbiological test samples to independent 21 microbiology labs to say: there is a bacteria in this 22 product, help me find out what it is. You know, is it 23 a problem? Is it not a problem? 24 So it's not unusual to give a project to 25 someone and say: help me find this. You've got more	Page 639 1 and work with them; right? 2 A Yes. 3 Q Okay. 4 "I prefer [sic] particularly to ..." 5 Oh: 6 "I refer particularly to that work which we 7 have developed establishing how rolled up talc flakes 8 can be misconstrued to be serpentine minerals, the 9 pitfalls in drawing wrong conclusions in certain x-ray 10 data and other analytical information which has a 11 direct bearing on establishing the purity and elegance 12 of highgrade talcs such as our materials". 13 Did I read that right? 14 A You did. 15 Q Okay. 16 So Ashton, who is now the talc guy at Johnson 17 & Johnson -- 18 A Yes, yeah. 19 Q -- has given Colorado School of Mines 20 permission to work with JM? 21 A He's given permission to use data that they'd 22 previously developed for Johnson & Johnson. 23 So I think what he's saying there is: you've 24 helped Johnson & Johnson in the past to understand what 25 a rolled up talc product looks like and how it can be

Page 640 1 separated from a fiber that's not talc. We've given 2 you permission to use that information that you've 3 gotten from working with us. 4 Q Okay. All right. 5 Well, let's look at the next memo regarding 6 this issue. 7 So that was October 9. The next one, which 8 will be -- what exhibit was that one, 33? 9 A 33. 10 Q Oh, I think we're out. 11 Can I get some more stickers? Let's take a 12 break. 13 (Off the record at 3:43 pm) 14 (On the record at 3:58 pm) 15 MR PANATIER: And just for the record, 16 Exhibits 89, 90 and 100 do not exist. All right. 17 Q Sir, I kind of pulled out a paper you and I had 18 already been talking about. 19 A Yeah. 20 Q That was the one from April 26 of '73 that 21 talked about the "Clean Mine" approach. 22 A Yes. 23 Q Do you recall that? 24 A Yes. 25 MS FROST: What number is that, please?	Page 642 1 classifiable as fiber". 2 Now, when -- and then it says, of course: 3 "Occasionally sub-trace quantities of 4 tremolite or actinolite are identifiable (optical 5 microscope) and these might be classified as asbestos 6 fiber". 7 First of all, did I read that right? 8 A You read what was written, yes. 9 Q Okay. 10 And then second of all, he says that the baby 11 powder contains talc fragments classifiable as fiber by 12 the definition that is being proposed by the FDA; 13 right? 14 A Yes. 15 Q Okay. Right. You can set that aside, sir. 16 All right. This will be Exhibit 134. 17 (Exhibit 134 marked for identification) 18 Now, remember we had talked about in our last 19 document how Johnson & Johnson had authorized -- you 20 know what, I have three, I have all three -- Johnson & 21 Johnson had authorized the Colorado School of Mines to 22 go help Johns Manville with some talc issues; right? 23 A Yes. 24 Q Okay. 25 So here's a memo soon after that on
Page 641 1 THE WITNESS: 129. 2 MR PANATIER: 129. 3 Q So if you go down to number 4 on that page; 4 okay? 5 A Yes. 6 Q It says: 7 "The problem then is two fold, one for 8 Windsor and one for Baby Powder". 9 So let's go down to B for the baby powder; 10 okay? It's on the next page. 11 We went through some of this, but I didn't 12 get through all of it. 13 It says: 14 "As for Baby Powder, the entire thrust of our 15 communications with the FDA has concentrated on 16 asbestos as a harmful fiber-like material". 17 Then if you go down, it says, starting with, 18 "If": 19 "If the FDA Food Division, which is moving 20 more rapidly than the Cosmetic Division, establishes a 21 standard, it will probably be to ban asbestos-form or 22 fibrous material in talc. That could eliminate the 23 current uses of talc in packaging materials. These 24 talcs contain widely varying amounts of tremolite or 25 fibrous talc. Our Baby Powder contains talc fragments	Page 643 1 October 23, 1973. It's from Ashton to Petterson. It 2 says: 3 "Johns Manville has now contacted the 4 Colorado men but their request is somewhat different 5 than expected. Johns Manville requests information and 6 assistance in the concentrating of asbestos minerals 7 from talc systems". 8 Now, we know that J&J has been dealing with 9 this issue of concentrating talcs to look for 10 tremolite; right? 11 A It could be, or it could infer the flotation 12 process. 13 Q All right. 14 Well, we certainly know that -- well, I think 15 if you read on -- 16 A Yeah. 17 Q -- it says: 18 "This will cause our friend at Golden to look 19 deeply into the use of heavy liquids, density gradient 20 separation, and iodine staining techniques". 21 That's all what Pooley is doing, too; 22 correct? 23 A Yes. 24 Q Right, because he's using the heavy liquids to 25 centrifuge out --

Page 644 1 A Yeah. 2 Q -- some of the talc and be able to concentrate 3 it to lower the level of sensitivity; right? 4 A Yes. 5 Q And now what they're learning is that JM is 6 asking Colorado to do something similar; correct? 7 A Yes, yes. 8 Q Okay. 9 "Such a method could be expected to elicit 10 sub-trace quantities of associate minerals not 11 presently known to exist in many talc systems. 12 I told Mr Caneer, (... [Colorado School of 13 Mines]) to ask John [sic] Manville for a written list 14 of problems they wish him to investigate to make sure 15 there will be no conflicting aspects of interest". 16 Did I read that right? 17 A You read what was written, yes. 18 Q So, basically, the framework is J&J has had 19 Pooley looking at a concentrating technique and they 20 criticized it for being too sensitive because it saw 21 tremolite in Vermont talc; correct? 22 A They criticized it because it was possibly 23 sensitive, but you could achieve the same sensitivity 24 using scanning electron microscopy. 25 Q I didn't ask you about that.	Page 646 1 there will be no conflicting aspects of interest". 2 In other words, Ashton wants to preview what 3 research Caneer is being asked to do; correct? 4 A What he's asking is he wanted to ensure that 5 Colorado School of Mines don't have any conflict of 6 interest, having already told Colorado School of Mines 7 they can share information from Johnson & Johnson. 8 Q And now they're kind of having second thoughts? 9 A Because he's wondering what kind of information 10 they're going to share. 11 Q Right. 12 A Because his original support for Colorado 13 School of Mines was to help identify talc fibers or 14 fibrous talc or rolled talc. 15 So that was the original agreement. 16 So he's saying, if you're talking about 17 anything else, tell me about it. Otherwise, it's a 18 conflict of interest. 19 Q Well, it's a conflict with what J&J is doing, 20 right, because J&J understands that, if you concentrate 21 the talc down, you get a higher level of sensitivity 22 for certain minerals that other folks may not 23 understand are there; correct? 24 A Yes. 25 Q Okay.
Page 645 1 A They criticized it. 2 Q Consider the question I'm asking, which is 3 Johnson & Johnson criticized Pooley's method for being 4 -- their words -- "too sensitive"? 5 A Correct. 6 Q Right? Okay. 7 And now JM and Colorado School of Mines are 8 looking at doing a concentrating technique similar to 9 Pooley's on some talc samples that they have; right? 10 A That's apparently the case, yes. 11 Q And what Ashton says is: 12 "Such a method could be expected to elicit 13 sub-trace quantities of associate minerals not 14 presently known to exist in many talc systems". 15 What he's saying is if they do a 16 concentration technique, they may see some stuff that 17 most people don't know is there; correct? 18 A He said "could be expected". 19 Q Right. 20 A Yes. 21 Q Could be expected. 22 And he said: 23 "I told Caneer ... [at Colorado School of 24 Mines] to ask ... Manville for a written list of 25 problems they wish him to investigate to make sure	Page 647 1 A The word "may" -- may exist; "not presently 2 known to exist". 3 Little bit of hypothetical there. 4 Q Well, of course, it's not a hypothesis for 5 J&J's talc because Pooley did do this method on theirs 6 and did see tremolite; correct? 7 A He saw tremolite, yes. 8 Q Right. 9 A Yeah. 10 Q And so he's saying he wants -- basically, he 11 wants to be able to preview what research Johns 12 Manville wants to do with Caneer to make sure that 13 there's no conflicting aspects of interest; right? 14 A Yes. 15 I think what he's -- my view is what he's 16 asking there is to say if J&J has given Johns Manville 17 approval to share information, that approval related to 18 the original project, which was detection of fibrous 19 talc or fibers. 20 And, you know, if you're going to say 21 anything else, let us know because there may be a 22 conflict of interest. 23 Q Yeah, but specifically what they're concerned 24 is that the method that Johns Manville is looking at 25 having done by Colorado could be expected to elicit

Page 648 1 sub-trace quantities of associate minerals not 2 presently known to exist in many talc systems; right? 3 A Yes. It's a hypothesis. They may not exist. 4 Q Right. 5 And we're talking about they don't want -- 6 they don't want Colorado School of Mines to do this 7 technique on JM's talc, do they? 8 A That's not what it says. 9 It says: if you're going to do it, that's 10 fine. I think that's fine. Go ahead and do it. But 11 let us know in case there's a conflict of interest. 12 You can't stop Colorado School of Mines doing 13 a study. 14 Q Okay. Sure. 15 You can set that aside. 16 This will be Exhibit 135. 17 (Exhibit 135 marked for identification) 18 So this is from William Ashton following up 19 on what we just looked at, and William Ashton says here 20 on November 26, '73, to six different people: 21 "The attached confirms my earlier report that 22 Johns Manville was about to look into concentrating 23 an iodine staining of chrysotile from a talc system. 24 It also documents JM backing off from their 25 allegation that one of our talc sources contained	Page 650 1 didn't go further than that. 2 Q Right. 3 Colorado School of Mines never did it for JM, 4 did they? 5 A I don't know. You'd have to look at JM's 6 documentation. 7 Q Well, you certainly don't have anything inside 8 Johnson & Johnson reflecting the Colorado School of 9 Mines actually went through with it with JM; correct? 10 A No, but there again, would you expect it? I 11 would not. 12 If Johns Manville commissioned some work, it 13 would not necessarily get back to J&J. It would be 14 something that Johns Manville would do. 15 Q Okay. That's all -- that's all pure 16 speculation? 17 A Absolutely, yes. 18 But, you know, Johns Manville was a major 19 corporation. They would be responsible for what they 20 were doing and they wouldn't need to knock on J&J's 21 door and say: can we do this? 22 Q Sir, you have the answer -- you have the answer 23 in front of you, which is Mr Ashton reports they were 24 about to do this, meaning it didn't happen with 25 Colorado School of Mines?
Page 649 1 chrysotile". 2 Right? 3 A That's what it says. 4 Q Okay. 5 So he's saying that they were about to look 6 into this concentrating technique; right? 7 A Yes. 8 Q And they "were about to" means they ended up 9 not doing it? 10 A Yes, but that would have been their choice. 11 Q Okay. 12 A It's not something J&J could have told Johns 13 Manville, a major corporation, that you can't do this. 14 It would have been Johns Manville's personal 15 choice. 16 Q But it clearly wasn't Colorado School of Mines' 17 personal choice, because J&J clearly had control over 18 them; right? 19 A No, they did not. 20 What they -- the relationship with Colorado 21 School of Mines was that J&J gave them approval to 22 share information as to how you might identify fibrous 23 talc or talc in the fibrous form if they were talking 24 to Johns Manville. 25 And that was the end of that approval. It	Page 651 1 A At that the date, 29 October, yes. 2 Q Maybe some time in the future it happens. We 3 do not know; right? 4 A We don't. 5 Q Right. You can set that aside. 6 This next one is 136. 7 (Exhibit 136 marked for identification) 8 All right. This is from Nashed to Mullen. 9 It's very short: 10 "The proposal will have no impact on our talc 11 since the method of analysis in the proposal will show 12 that our talc is acceptable". 13 And just FYI we can probably look at some 14 surrounding documents, they're talking about the FDA's 15 proposed method, but I'll just put that out there for 16 you and then we can verify. 17 A Okay. Sure. 18 Q "However, if they change the method, we may 19 have problems." 20 Now, what about the proposed FDA method would 21 cause them to have problems, if they changed it? 22 A Again, hypothetical question. 23 They've obviously come up with a proposal, 24 FDA proposal, which clearly shows that the J&J talc is 25 quite acceptable.

Page 652 1 You know, if they came up with a totally 2 different method, we may, we may not have problems. 3 Q Right. 4 A Again, hypothetical. It's speculative. 5 Q Right. 6 So like, if we go back -- 7 A This is -- sorry, I'm going to say, just to 8 finish the sentence, this is the kind of thing that 9 scientists say. 10 They often talk in terms of ifs and maybes 11 and what ifs. 12 And so we may have problems. It's a 13 hypothetical. 14 Q A problem is not a good thing. A problem is a 15 bad thing? 16 A Yeah. 17 Q Right. Okay. 18 And it actually does say at the bottom this 19 is in reply to Mullen's question regarding the 20 regulations proposed by FDA; right? 21 A Yes. 22 Q So we know that's what they're talking about; 23 okay? 24 A Yes. 25 Q If my goal is to prevent people from knowing I	Page 654 1 Industry. 2 Do you see that? 3 A I do, yes. 4 Q From Nashed to Whitlock, cc'ing the President, 5 Johnston, Petterson and the whole gang; right? 6 A Yes. 7 Q Okay. 8 Now, there are two drafts here of a statement 9 called Asbestos in Talc; right? 10 A Yes. 11 Q And we know what this is because it says this 12 on the Kennedy hearings page. It says: 13 "As requested in your November 7 letter 14 addressed to Mr D Johnston, we are attaching a brief 15 position paper on 'Asbestos in Talc'. 16 I hope it meets with your approval". 17 Right? 18 A Yes. 19 Q Okay. 20 We have one that is called Version One; do 21 you see that? 22 A Yes. 23 Q It says "Draft". 24 Then we have another one that doesn't say 25 draft on it?
Page 653 1 have bacteria on my skin, right, I can -- I can say: I 2 have looked at it through a scientific technique and 3 there is no bacteria on my skin. 4 Now, if someone requires me to use more than 5 a magnifying glass, I may have problems if my goal is 6 to keep it out of the public knowledge that I have 7 bacteria on my skin; right? 8 A Except that you wouldn't have used a magnifying 9 glass in the first place. 10 Q Well, if I'd wanted to conceal it, I would use 11 a magnifying glass, and say: I've done a test. 12 Right? Okay? 13 A Yeah, but no scientist would accept that test. 14 Q No, of course not. 15 A No. 16 Q In fact, science requires that if you are going 17 to look for something and you need a certain level of 18 sensitivity to do it, you should use the appropriate 19 sensitivity; right? 20 A Yes, and that's called "validation". 21 Q Right. Okay. 22 This will be Exhibit 137. 23 (Exhibit 137 marked for identification) 24 All right, sir. This is December 3, 1973. 25 The subject is Kennedy Hearings on Pharmaceutical	Page 655 1 A Yes. 2 Q Okay. 3 And the one that says draft, okay, it says in 4 the second paragraph: 5 "The selection process begins with choosing a 6 mine site that provides a choice grade of talc that is 7 free of asbestos fibers". 8 Right? 9 A Yes. Yes. 10 Q In the final version, it says: 11 "The selection process begins with choosing a 12 mine site that provides a choice grade of high purity 13 talc". 14 Right? 15 A Yes. 16 Q So they deleted the part that said the 17 selection process begins with choosing a mine site 18 "that is free of asbestos fibers". 19 They no longer said that; right? 20 A Yes. They'd already used the word "asbestos 21 fibers" three lines higher up. 22 Q Well -- well, kind of. 23 A Yes. 24 Q Because what they say above is they say: 25 "The talc used to make Johnson & Johnson

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1 powders is free of hazardous asbestos fibers".
 2 Right?
 3 A Yes.
 4 Q But then they're justifying why in the
 5 subsequent paragraphs; right?
 6 A Yeah, yeah.
 7 Q And in the draft they said, well, the first
 8 step is choosing a mine that's free of asbestos fibers;
 9 right?
 10 A Yes.
 11 Q And they deleted that. They no longer
 12 represented that they were choosing a mine that was
 13 free of asbestos fibers, do they?
 14 A No. They've used a phraseology which, you
 15 know, I would term "consumer speak":
 16 "... a choice grade of high purity talc".
 17 It uses more consumer understood words.
 18 Q Okay.
 19 A Yeah.
 20 Q It just so happens that saying it's free of
 21 asbestos fibers is less consumer friendly than "high
 22 purity talc"?
 23 A Well, you've already said "free of asbestos
 24 fibers" three lines higher. So I don't think they're
 25 hiding anything there.

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1 Q Well, sir, again, you're changing what they
 2 were talking about.
 3 At the very beginning, they're talking about
 4 the product; right?
 5 A Yes.
 6 Q And then they're talking about the mine?
 7 A Yes.
 8 Q And they're saying we start with the mine, and
 9 in the draft it says the mining site is asbestos free,
 10 and in the final, they don't say it's asbestos free;
 11 right?
 12 A No.
 13 They said it's high purity talc.
 14 Q I understand. All right.
 15 You can set that aside, sir.
 16 With regard to the talc and asbestos issue,
 17 everything, at least in the '70s and '80s, went through
 18 New Brunswick, right, worldwide; correct?
 19 A Pretty well, yes.
 20 Q Okay.
 21 New Brunswick is the headquarters?
 22 A Yes, yes.
 23 Q I think we have a document that speaks to that.
 24 This will be Exhibit 138.
 25 (Exhibit 138 marked for identification)

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1 It says December 3, 1973, Corporate Worldwide
 2 Talc Information & Communication. It's by G Lee to
 3 Fuller.
 4 A Yeah.
 5 Q "During Bob Dean's visit last month, the
 6 thought was expressed that it might be timely to remind
 7 our foreign affiliates of Mr Clare's original directive
 8 several years ago requiring all talc and powder
 9 inquiries to be directed to New Brunswick".
 10 Clare is the President; right?
 11 A Yes.
 12 Q "It was general opinion that Dr W Nashed was
 13 the best individual to co-ordinate receipt of and reply
 14 to all scientific and regulatory inquiries. This
 15 procedure would then expedite and insure immediate
 16 response".
 17 Right?
 18 A Yes.
 19 Q Okay.
 20 So really the two chief kind of centralized
 21 players are, you have Nashed, who handles receiving and
 22 replying to the responses, and then you've got Ashton,
 23 who's sort of heading up all of the talc and asbestos
 24 issues?
 25 A The technical issues.

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1 Q The technical issues; right?
 2 A Yes.
 3 Q Okay.
 4 Now, the CTFA in the early '70s advocated to
 5 the FDA that they not pass their regulation on asbestos
 6 and talc; correct?
 7 A You'd need to show me that --
 8 Q Sure thing.
 9 A -- particular article.
 10 Q Sure.
 11 This will be Exhibit 139.
 12 (Exhibit 139 marked for identification)
 13 Sir, can you see that this is a document from
 14 the CTFA, which was the trade organization that Johnson
 15 & Johnson was a member of; correct?
 16 A Yes.
 17 Q To Food and Drug Administration, Department of
 18 Health Education and Welfare; right?
 19 A Yes, yes.
 20 Q Now, we had a little talk about this earlier.
 21 The FDA is part of the Department of Health
 22 Education and Welfare.
 23 A Yes.
 24 Q It's not separate; right?
 25 A Yeah.

Page 660 1 Q It is a division? 2 A It's a division, yes. A separate division, 3 yes. 4 Q Okay. 5 Now, if you will turn to the page at -- it's 6 the very last page, and it's sort of oddly organized. 7 I don't know how they chose to organize this letter, 8 but you can see that they have, on the second page, 9 just so we can orient ourselves, Estrin starts a list 10 that goes 1 through 4, and then you can see 5 is on the 11 very last page. 12 A Can you use the Bates number? 13 Q Yeah. Go to 8245. 14 There you go. 15 A Yeah. 16 Q So the letter sort of continues there. 17 They have some data in the middle of the 18 letter. 19 A Okay. 20 Q Okay. 21 But Estrin, of course -- this is from Estrin. 22 He's the VP of Science for the CTFA? 23 A Yes. 24 Q And he cc's the CTFA Talc Subcommittee and the 25 Scientific Advisory Committee; right?	Page 662 1 A Correct. 2 Q In terms of speaking about lots, what was a lot 3 of talc from J&J's understanding? How much was that? 4 A It would be several tons. 5 Q When I hear about it, typically, I've heard 6 about a rail car being one lot, and typically that 7 could be 20 to 100 tons? 8 A Yeah. 9 Q Does that sort of wax(?) with your 10 understanding? 11 A There may be more than one sample taken from a 12 rail car. 13 Q Okay. 14 A I'm pretty sure there would be. 15 Q But what they're saying is, you know, 16 evaluating the validity of taking a 1 milligram sample, 17 which one thousandth of a gram, from an entire lot; 18 right? 19 A Yes. 20 Q And, of course, as a scientist, sir, you 21 understand that, if you're going to take a 1 milligram, 22 a tiny sample of a larger whole, it needs to be 23 representative of the whole; is that fair? 24 A It does, yes. 25 Q Okay.
Page 661 1 A He does. 2 Q Okay. 3 But let's just go to this part, in the middle 4 of that page: 5 "The CTFA urges deferment of promulgation of 6 the proposal until ..." 7 Okay. Now, urging deferment is asking that 8 something not be passed right now; right? 9 A Yes. 10 Q Okay. 11 And they say it shouldn't be passed until 12 there is a: 13 "Determination of the standard deviation of 14 the proposed compliance test method". 15 This would be the proposed FDA test method; 16 right? 17 A Yes. 18 Q "Evaluation of the validity of the assumption 19 that a single milligram sample can be taken as 20 statistically representative of any lot as well as the 21 limit size of any lot so sampled." 22 And what that means if you're only going to 23 take a milligram sample of a lot, and a lot refers to 24 a unit, usually a shipment unit that a company uses; 25 right?	Page 663 1 Meaning that the whole has to be a homogenous 2 sample; correct? 3 A Correct, yes. 4 Q They say that: 5 "A re-evaluation of the economic cost and 6 practicality of the proposed Compliance Test Methods 7 has to be done". 8 Right? 9 A Yes. 10 Q And: 11 "An intensive search is undertaken for an 12 alternate procedure that is more reliable and more 13 practical than the proposed test methods". 14 And that means they had actually done -- the 15 CTFA had done some round robins testing on different 16 talcs using the FDA's proposed method; right? 17 A Yes. 18 Q And they had wildly varying results; true? 19 A They did, and that's not unusual. 20 Q No. 21 A When a new test method is proposed, different 22 companies do the test and see how well it works. 23 It's called "validation". 24 Q Mmm hmm. 25 So, anyway, so the CTFA here in 1973 is

Page 664 1 telling the FDA: look, you should not pass these 2 relations now; right? 3 A Yes. 4 Q Okay. 5 Now, you can set that aside. 6 Did the FDA ever pass a regulation for the 7 measurement of asbestos in talc? 8 A My understanding is no. 9 Q Okay. 10 This will be Exhibit 140. 11 (Exhibit 140 marked for identification) 12 The entire industry currently is 13 self-regulated; correct? 14 A Correct. 15 Q And it's been self-regulated for ever? 16 A Pretty well, yes. 17 Q 140. All right. 18 Now, this document provided to us doesn't 19 have a date on it, but I think we can look at it and 20 say probably earliest '60s, probably in the '70s, based 21 on what our other documents have looked like? 22 A Probably '70s, yeah. 23 Q Okay. All right. 24 Again, it's not superimportant for placing 25 this one. This is more on the corporate policy issues.	Page 666 1 in ways which can create doubts on talc efficacy and 2 raise unfounded questions on talc safety". 3 So they're considering about -- they're 4 concerned about some research going on overseas; right? 5 A Yes. 6 Q "Such findings will cause new apprehension in 7 the high grade talc market and may have an adverse 8 effect on our business". 9 Fair? 10 A That's what it states. 11 Q Lastly: 12 "Increased pressure from consumer advocates 13 can require such high expenditures for technical 14 support needed to compromise them, that our profits can 15 approach seriously diminishing returns". 16 Did I read that right? 17 A You read what was written. 18 Q Now, a consumer advocate is someone who 19 advocates for consumers; right? 20 A Yes. 21 Q And, in fact, the name of Johnson & Johnson, 22 the name of the company is Johnson & Johnson Consumer 23 Products Company; right? 24 A That's the current name, yes. 25 Q The current name. Okay.
Page 665 1 But the heading is Talc Alternatives; right? 2 A Yes. 3 Q And it says Background: 4 "There are several reasons requiring an 5 increase in research for an acceptable alternative to 6 talc in our body dusting powders. Those reasons are 7 related to the increasing likelihood that the following 8 events will occur". 9 And number 1 is: 10 "Federal regulations may drastically limit 11 the use of talc". 12 And we've seen that kind of discussion in our 13 early '70s documents; right? 14 A Yes. 15 Q Okay. 16 "Tentative regulations under discussion by 17 some agencies involve not only tight or impractical 18 specifications on talc purity, but limitations on talc 19 dust exposure and talc inhalation levels which may be 20 impossible to meet at industrial levels". 21 Right? 22 A Yes. 23 Q 2: 24 "Some overseas scientific investigators are 25 now known to be studying biological responses to talc	Page 667 1 Johnson & Johnson makes products for 2 consumers; right? 3 A Correct. 4 Q And consumer advocates are people who advocate 5 for them or stick up for their rights; right? 6 A Yeah. People like Ralph Nader, and whatever, 7 who was going back in the '60s, '70s, yes. 8 Q Yeah, yeah. 9 Ralph Nader did good things; right? He 10 helped us get rid of the Pinto? 11 A Yeah, and Ford love him. 12 Q Right. I'm sure Ford loves him; right? 13 A Yes. 14 Q But what it says here is pressure from consumer 15 advocates can require Johnson & Johnson to spend such 16 high -- spend so much money; right? 17 That's what it means: 18 "... can require such high expenditures ..." 19 Right? 20 A Yes. 21 Q Spending money: 22 "... for technical support needed to 23 compromise them ..." 24 Now, compromising consumer advocates. 25 What does "compromise" mean, sir?

Page 668 1 A Let's read that again: 2 "Increased pressure from consumer advocates 3 can require such high expenditures for technical 4 support needed to compromise them ..." 5 Gee, that's bad grammar. I don't know. 6 Q "... that our profit --" 7 A I think what he's saying is that we'd end up 8 spending so much money that it would affect profits. 9 Q Right. 10 A I think that's basically what they're saying. 11 Q He's saying -- 12 A The grammar is terrible. 13 Q Yeah. 14 He's saying: we need to spend money on 15 technical support in order to compromise consumer 16 advocates, and our profits can approach seriously 17 diminishing returns because of that; correct? 18 A Yes. 19 Q Okay. 20 A Yes. That is really bad grammar. The word 21 "compromise" is -- 22 Q Yeah. 23 A -- you know, you would -- it just doesn't make 24 sense. 25 Q Yeah, I'm not so concerned about the grammar.	Page 670 1 A Yes. 2 Q And he says: 3 "Today I talked -- I called Dr John Stuart, 4 scientist from the Cosmetics Division of FDA ..." 5 And we've seen his name a few times now. 6 A Yes, we have, yeah. 7 Q He's the one that did the analysis for the 8 Shower to Shower of the Lewin sample; right? 9 A He did, yes. 10 Q Where they found 107 fibers of tremolite per 11 microgram in Johnson & Johnson; correct? 12 A On -- on that -- yes, he claimed to have found 13 that, yes. 14 Q Okay. 15 Here's what he says about the Lewin samples: 16 "Dr Stuart felt that a meeting would be of 17 little value because he had been asked to devote all 18 his time to utilizing the FDA optical microscopy method 19 for examining the commercial talcum powders previously 20 analyzed by Dr Lewin". 21 And you're aware, sire, that that was a 22 pretty long project that the FDA went into where they 23 actually went and looked at all of Dr Lewin's samples; 24 right? 25 A They did, yes.
Page 669 1 A Yeah. 2 Q I'm sort of concerned the point. 3 A Yeah. 4 Q The point is Johnson & Johnson is saying: look, 5 our profits are approaching diminishing returns because 6 we have to spend so much money to compromise consumer 7 advocates; right? 8 A That's what it reads. 9 Q What was the budget for the compromising of 10 consumer advocates at Johnson & Johnson? 11 A I have no idea. 12 Q All right. You can set that aside. 13 Any time I just throw it in that pile is a 14 good sign. 15 Exhibit 141. 16 (Exhibit 141 marked for identification) 17 This is a memo from John P Schelz -- am I 18 saying that right? 19 A Yeah, I believe so. I've never heard that name 20 spoken and I've never met the guy. 21 Q Okay. 22 He writes it to Dr Rolle and he cc's 23 everybody. 24 A Yeah. 25 Q Ashton, Fully, Goudie, all of them.	Page 671 1 Q Okay. 2 "He stated that his work thus far has 3 concurred with Dr Lewin's results except that he has 4 not detected chrysotile in any sample". 5 Right? 6 A Yes. 7 Q So what you know about Dr Lewin's results is 8 that he found tremolite in a number of samples and he 9 found chrysotile, according to him; right? 10 A He claimed to have found chrysotile. 11 Q And what the FDA is saying is they're saying: 12 we're not seeing the chrysotile, but the rest we're 13 confirming; right? 14 A That's what they said at that time, yes. 15 Q And one of those confirmations, of course, 16 would have been Sample 84, which was J&J Shower to 17 Shower; right? 18 A Yes. 19 Q Because Lewin found tremolite in it and so did 20 the FDA; true? 21 A Yes. 22 Q Okay. You can set that aside, sir. 23 MR GAFFREY: What was the date of that? 24 THE WITNESS: It's March 13, 1974. 25 MR GAFFREY: Thank you.

Page 672 1 BY MR PANATIER: 2 Q This will be Exhibit 142. 3 (Exhibit 142 marked for identification) 4 All right. Now, this is June 20, '74, and in 5 1974, just so we can place ourselves, this was a little 6 bit later in the year after they were studying the 7 chrysotile suppression system in the flotation with 8 n-butanol and the citric acid addition. 9 Do you recall that? 10 A I do, yes. 11 Q Okay. 12 So that just kind of puts us in the 13 framework, and this is from G Lee to Petterson, and it 14 says Status -- New Flotation Methods. 15 It says: 16 "This will serve to document the status of 17 the raw talc evaluation program, directed towards 18 qualifying the n-butanol flotation process for use in 19 Johnson's Baby Powder. It should be noted that Windsor 20 Minerals has restated its interest in converting to the 21 n-butanol system only. The n-butanol/citric acid will 22 only be resorted to in the future event of need for 23 greater suppression of asbestiforms". 24 Right? So remember from the tests that were 25 done, n-butanol reduced them a little bit. N-butanol	Page 674 1 "The n-butanol citric acid will only be 2 resorted to in the future event of need for greater 3 suppression of asbestiforms"? 4 A It does state that, yes. 5 Q Right? 6 A Yes. 7 Q So if one of these groups, National Cancer 8 Institute, FDA, NIOSH, a regulatory group, asked them, 9 "Why did you move to citric acid?" Right, the 10 n-butanol citric acid system? They would have to 11 answer well, "We did it to -- for more greater 12 suppression of asbestiforms". 13 Right? 14 A That's a theoretical answer, yeah. 15 Q Well, I'm giving a -- I'm giving a reason for 16 why they say: 17 "... we should of necessity avoid changes to 18 the product which would increase our vulnerability to 19 criticism or suspicion". 20 Can you think of any other reason why they 21 wouldn't do it and why they're concerned about 22 suspicion? Being vulnerable to criticism or suspicion, 23 as you sit here? 24 A No, I cannot. 25 Q Okay.
Page 673 1 with citric acid reduced them a lot more. Remember? 2 A In that particular test, yes. 3 Q Yeah. 4 Turn the page: 5 "Due to continuing and even growing attention 6 shown by scientific and regulatory groups to 7 particulate size, shape and respirable particles, (e.g. 8 Stanton ... [with the National Cancer Institute], FDA 9 Lovelace Aerosol Study, [and] NIOSH) we should of 10 necessity avoid changes to the product which would 11 increase our vulnerability to criticism or suspicion". 12 Did I read that right? 13 A You read what was written, yes. 14 Q Now, it says in the very first part that 15 Windsor Minerals wanted to move to the n-butanol system 16 only, not the n-butanol citric acid system; right? 17 A It does state that, yes. 18 Q And if they went to the n-butanol citric acid 19 system, the reason they would have to give for stating 20 why they went to it was to increase the ability of it 21 to sort of catch and parse out asbestiforms; right? 22 A I don't see that written. 23 Can you -- did you see that written? 24 Q Yeah. I mean, it's written right here in the 25 first paragraph:	Page 675 1 A But it's a hypothesis. 2 It could well have been that if they use the 3 n-butanol citric acid system, it could well have 4 changed the feel of the talc in the way it was 5 presented to the consumer. 6 Again, hypothesis. 7 Q Okay. 143. 8 (Exhibit 143 marked for identification) 9 And you can see the cover here is from 10 Petterson, and he says: 11 "Attached are the questions and answers which 12 I taped at the Anti-Perspirant Panel meeting in 13 Washington". 14 Right? 15 A Yes. 16 Q So apparently he's had them transcribed; right? 17 A Yes. 18 Q Okay. 19 And it says: 20 "Questions from the OTC Panel Presentation of 21 July 9th". 22 Now, "OTC" means over the counter; right? 23 A It does. 24 Q Okay. 25 You can see Pooley's there; right?

Page 676 1 A Yeah. 2 Q And he states here -- these are just different 3 questions and answers, right, and Pooley down at the 4 bottom says: 5 "I would say that the finished product does 6 reflect the ore body, although it does seem to reflect 7 only one sample at only one point in time". 8 Right? 9 So if you have a finished product; right? 10 A Yes. 11 Q It will reflect what was in the ore body at the 12 time that that product was made? 13 A Yes. 14 Q But it really doesn't tell you a lot about what 15 came before it or after; right? 16 A No. 17 Q Okay. 18 Go to page 2. So Dr Miller starts talking 19 and he says: 20 "I would venture to say, that from the 21 standpoint of the consumer advocate or the consumer 22 themselves, they would have very little knowledge of 23 where these talcs come from or where these fibrous 24 products come from. And that one of the interesting 25 potentials, that if one were interested in the	Page 678 1 A Yes. 2 Q Chemical analysis; right? 3 A Yes. 4 Q And so on; correct? 5 A Yes. 6 Q Okay. 7 Dr Miller: 8 "One further point, where all the analyses 9 that were shown in the first table which listed many, 10 many sources ..." 11 I think it's not saying "where"; it's saying 12 "were": 13 "... were all of these by electron 14 microscopy?" 15 Pooley: 16 "Oh, no, these analyses were obtained by 17 x-ray diffraction, thermo gravometric analysis, 18 differential thermal analysis, optical microscopy, and 19 things such as carbon dioxide were done by wet chemical 20 analysis". 21 And Miller says: 22 "Would you say that those methods would leave 23 something to be desired as a control characterization 24 of the talc for their mineral content?" 25 Pooley:
Page 677 1 potential ill effects of these materials, it would be 2 much more direct to look at the products just before 3 they reach the consumer". 4 Okay? As opposed to in the mine; right? 5 A Yes. 6 Q Okay. 7 "Also, Fred, as far as your characterization, 8 everyone recognizes that many of the methods used, that 9 is up until very recently, let's say diffraction, phase 10 contrast, light microscopy, chemical analysis, and so 11 on, are very inadequate to properly characterize the 12 minerals that go into talc". 13 Right, and Pooley says: 14 "Dr Rolle is going to talk about that". 15 Right? 16 A Yes. 17 Q Okay. 18 But what Miller is saying here is, and he 19 identifies several different types of analysis that you 20 and I have talked a lot about? 21 A Yes. 22 Q And says that they are inadequate. Very 23 inadequate. 24 He says phase contrast, which is light 25 microscopy; correct?	Page 679 1 "Well they have their limits of application". 2 And that's true of all of those methods that 3 we've been talking about; right? 4 A Yes, yeah. 5 Q Let's go to page 4, and these -- you can see 6 these are questions at the end of Dr Rolle's 7 presentation, and Miller is talking. 8 Let's see. I've got several highlights. I 9 don't know that we need to go into all of them. 10 We can skip that. Let's go to page 5. 11 So this fellow named Dr Shupline, he says: 12 "Apparently, a limit has been set somewhere 13 that this is safe. I mean the half per cent amphibole 14 asbestos". 15 Now, half a per cent is the detection limit 16 for XRD under CTFA; right? 17 A Yes. 18 Q And Dr Rolle, who's with Johnson & Johnson, he 19 stands up and he says: 20 "That is not true. The problem is that this 21 is a limit of detection of the instrument". 22 Dr Shupline: 23 "Didn't the, wasn't there a United States 24 Bureau of Labor that defines the level, or did I 25 mis-read that? Can it establish the amount of

Page 680 1 amphibole talc that can appear in cosmetic talc -- did 2 I misread that?" 3 Dr Rolle: 4 "I can't testify that it is safe". 5 Right? 6 A That's what it says, although when you read 7 the -- if you go back six lines -- 8 Q Mmm hmm? 9 A -- Dr Shupline is saying: 10 "... half per cent amphibole asbestos". 11 Q Right. 12 A And then further down he's missed off the word 13 "asbestos" in the response. 14 So Dr Rolle is saying that he can't specify 15 that amphibole asbestos is safe. 16 Q No, I understand, but they're talking about the 17 detection limit for XRD; right? 18 A For amphibole asbestos, yes. 19 Q But XRD doesn't detect amphibole asbestos, does 20 it? 21 A No. 22 Q It just detects -- 23 A No, it's just, as we've said before, when 24 you're doing these analyses, you run through the whole 25 battery of tests.	Page 682 1 "Research authorization to replace Ultrawet 2 ... DS ..." 3 That's the reagent they were using; right? 4 A Yes. 5 Q "... and utilize n-Butanol as the flotation aid 6 in the processing of Talc for use in JOHNSON'S ... Baby 7 Powder is provided". 8 Now, there was n-butanol and there was 9 n-butanol with citric acid; right? 10 A Yes. 11 Q Let's go to the bottom. 12 "It is also the R&D opinion, primarily based 13 upon information provided by Windsor Minerals, that the 14 Butanol/Citric Acid flotation aids may provide J&J with 15 a purer and superior talc for the Baby Powder". 16 Now, before you had said: well, I don't know 17 if the citric acid had an impact on the baby powder 18 from a consumer perspective; right? 19 A Yes. 20 Q What they're saying here is all it does is make 21 it better? 22 A Yes. 23 Q Right? Okay. 24 So there wasn't a complaint from a consume 25 acceptance standpoint for the citric acid reagent;
Page 681 1 Q They're talking about the detection limit by 2 DVD for amphibole, is what they're talking about; 3 right? 4 A They are, yes, yes. 5 Q And Dr Rolle is saying: 6 "I can't testify that [that] is safe"? 7 A Yes. 8 Q At .5 per cent; right? 9 A Yes, yes. 10 Q Nevertheless, under CTFA alone, okay, under J4, 11 if you get a pass on XRD at .5 per cent, under CTFA you 12 can sell the talc; right? 13 A Yeah, and that's why Johnson & Johnson took a 14 very responsible position to add on at least two other 15 test methods that would raise the level of detection. 16 Q You've said that many, many times. I'm just 17 going to -- on that I am going to object to 18 non-responsive. 19 Exhibit 144. 20 (Exhibit 144 marked for identification) 21 July 22, '74. This is a letter from Johnson 22 & Johnson from Alan M Marks to Mr Miller, who's, you 23 said, the manager for Windsor Minerals; right? 24 A Correct, yes. 25 Q It says:	Page 683 1 right? 2 A It's not recorded, no. 3 Q Right. 4 "Would you please provide us with the 5 financial considerations and timing to convert to this 6 process". 7 The citric acid process; right? 8 A Yes. 9 Q "Our primary consideration would be to improve 10 the safety and quality of JOHNSON'S ... Baby Powder". 11 Right? 12 A Yes. 13 Q But it was already safe, wasn't it? 14 A Yes. 15 Q Then how can you improve it if it's already 16 safe? 17 A You can improve everything we do in our lives 18 every day. 19 So you could improve on what you have. 20 Q But what about adding the citric acid flotation 21 makes it safer? 22 A Well, it's claimed to make it safer, but as 23 you'll recollect from the publications we looked at 24 earlier, it was a very limited number of experiments 25 and studies.

Page 684 1 My take on that is that, I mean, quite 2 frankly the cost of citric acid is peanuts. It's not 3 an expensive material. 4 So I don't think cost was an issue. 5 Q Yeah, but what we learned from those studies is 6 the addition of the citric acid was specifically 7 introduced to decrease asbestiform and specifically 8 chrysotile in the talc; correct? 9 A Had there been chrysotile present, yes. 10 Q Well, of course, we know that, and I'll 11 approach the -- I'll go ahead and go to the easel. 12 I'm going to go to the easel. 13 Okay. So here we have it. January 1, '74, 14 chrysotile fiber suppression, and what they wrote, and 15 I wrote this down exactly as we took it from the 16 document: the fibrous anthophyllite occurs as a rare 17 mineral in the Hammondsville ore body; right? 18 A That's what it said, yes. 19 Q And chrysotile found in association with 20 Hammond ore body; right? 21 A That's what it said, yes. 22 Q And what they were doing was they were using 23 the citric acid to reduce chrysotile in any talc that 24 came through; correct? 25 A If it had chrysotile present.	Page 686 1 Johnson & Johnson has been co-operating with 2 the Cosmetic Toiletry and Fragrance Association 3 Subcommittee on Asbestos in Talc. In an effort to 4 answer the question about the required degree of 5 sensitivity of the method for assay for asbestos in 6 talc, our statistical group has made an estimation of a 7 theoretical safe level of asbestos fiber in a baby 8 powder using the official TLV for asbestos and the data 9 on dusting of baby powder". 10 Right? 11 A Yes. 12 Q So Johnson & Johnson tries to tell the FDA what 13 might be a safe level of asbestos in talc; right? 14 A They're expressing an opinion. 15 Q And that's the opinion they're expressing; 16 right? 17 A That is, yes. 18 Q "The calculation shows that a substantial 19 safety factor can be expected with talc containing 1% 20 ... asbestos fibers". 21 Right? 22 A That's what it says. 23 Q That's 1 per cent by weight; right? 24 A Yes. 25 Q "Therefore, methods capable of determining less
Page 685 1 Q Right. 2 A Yes. 3 Q That was the purpose of the citric acid 4 additive; correct? 5 A Correct. 6 Q And now you have Johnson & Johnson saying: 7 let's add the citric acid to improve the safety of the 8 baby powder; right? 9 A Yes. 10 Q The only reason to do it, per the experiments 11 that were done, were to reduce asbestiform and 12 chrysotile? 13 A If they'd been present. 14 Q Okay. 15 You're disputing that they were present, 16 apparently? 17 A Apparently. 18 Q Okay. 19 This will be Exhibit 145. 20 (Exhibit 145 marked for identification) 21 This is a letter from Johnson & Johnson, Dr 22 Nashed to Dr Schaffner at the FDA; right? 23 A Yes. 24 Q September 6, 1974: 25 "Dear Dr Schaffner:	Page 687 1 than 1% asbestos in talc are not necessary to assure 2 the safety of cosmetic talc. The report is attached 3 herewith". 4 Right? 5 A That's what it says. 6 Q So Johnson & Johnson, a company that, according 7 to you, has no asbestos in their talc, is telling the 8 FDA 1 per cent asbestos in talc is safe; right? 9 A Well, whoever wrote this letter -- 10 Q Nashed. 11 A -- is hypothesizing that if asbestos were 12 present in talc, then even at 1 per cent, based on 13 extrapolation from the occupational health -- the 14 official threshold limit values, which OSHA had 15 accepted for adults working in asbestos facilities, if 16 you extrapolate that, then using that same data, 1 17 per cent would be safe. 18 Q Right. 19 A But it's a hypothetical -- you know, the whole 20 thing is hypothetical. 21 Q Yeah. 22 Johnson & Johnson is telling the FDA that 1 23 per cent asbestos in baby powder would be safe, based 24 on their calculations; right? 25 A Based on calculations extrapolated from the

Page 688 1 OSHA data, yes. Yes. 2 Q Right. 3 And as a result of their extrapolated 4 calculation on an allegedly safe amount of asbestos in 5 baby powder, they tell the FDA as a result: 6 "... methods capable of determining less than 7 1% asbestos in talc are not necessary to assure the 8 safety of cosmetic talc". 9 Right? 10 A That's what he's saying. 11 Q That is what he's saying; right? 12 A That's what he's saying, yeah. 13 Q And he's writing this to the FDA on behalf of 14 Johnson & Johnson? 15 A He's -- yes, he's an employee of Johnson & 16 Johnson. 17 Q Right. 18 A Yeah. 19 Q They're advocating a method with a level of 20 sensitivity of no lower than 1 per cent to the FDA; 21 correct? 22 A He's -- he's suggesting to FDA that they are 23 comfortable with 1 per cent. 24 Q Yeah. 25 A Or FDA should be comfortable with 1 per cent.	Page 690 1 tremolite. We've talked about chrysotile. Not found. 2 So that is -- that is still very debatable. 3 Q Okay. At this point -- 4 A In the powder. 5 Q -- at this point, Johnson & Johnson is still 6 saying there was never any asbestos in its powder? 7 A Yes. 8 Q Okay. 9 And despite, for instance, Dr Blount -- Dr 10 Blount in 1991 tested Johnson's Baby Powder 11 off-the-shelf; right? 12 A She claimed to have found a fibril, yes. 13 Q No, not a fibril. She claimed to have analyzed 14 over 100 amphibole fibers out of J&J; right? 15 A She claimed to, yes. 16 Q Right. 17 Are you aware of any editorial letters, any 18 academic work that was ever done to refute Dr Blount's 19 paper? 20 A I'm not aware any was done to confirm or 21 refute, no. 22 Q Now, that was a peer reviewed paper; right? 23 A Yes. 24 Q You've authored peer reviewed papers, have you 25 not?
Page 689 1 Q Right. J&J is telling FDA they should be 2 comfortable with 1 per cent; right? 3 A He's suggesting that FDA could be comfortable 4 with 1 per cent. 5 Q Okay. 6 Well, he's not very equivocal. He says: 7 "Therefore, methods capable of determining 8 less than 1% asbestos in talc are not necessary to 9 assure the safety of cosmetic talc". 10 Those are his words; right? 11 A Those are his words. 12 Q Okay. 13 A Yeah. 14 Q Do you have any -- do you have any indication 15 that the general public that is buying Johnson & 16 Johnson's talc products, then, after then, or now, ever 17 knew that Johnson & Johnson was telling the FDA that 1 18 per cent asbestos would be safe in baby powder? 19 A Well, they're not -- yeah, I don't, no. No. 20 But, of course, as we've seen so many times, 21 there never was 1 per cent asbestos in baby powder. 22 Q Whatever the percentages are, it was present; 23 correct? 24 A I don't necessarily concur with that. 25 We've talked about tremolite, non-asbestiform	Page 691 1 A I have, yes. 2 Q Right. 3 Peer review process means that other 4 researchers blindly read the paper and evaluate it for 5 its scientific credibility; correct? 6 A Yes, yes. 7 Q All right. 8 And that paper was published in a peer review 9 journal? 10 A It was. 11 Q All right. 12 So this will be 146. 13 (Exhibit 146 marked for identification) 14 Memo from Lee to distribution. So it must 15 have been one of those wider distribution lists; right? 16 It doesn't have everybody listed here, but it 17 says "To: Distribution". That usually means more than 18 one person; right? 19 A Yes. 20 Q Okay. 21 Subject is February 13, 1975, CTFA Talc 22 Subcommittee Meeting with the FDA. 23 So another meeting with the FDA; right? 24 A Yeah. 25 Q Let's go to the bottom of page 2:

Page 692 1 "Mr G Sandland ..." 2 Now, is he with Johnson & Johnson? 3 A I've never come across that name -- 4 Q All right. 5 A -- on any J&J letterheads, no. 6 Q All right. 7 "Mr G Sandland stated that a regulation of 1% 8 asbestos in talc was not only achievable by thoroughly 9 tested methods, but also gave a safety factor of 48,300 10 ..." 11 And that is the Silverston [sic] calculation, 12 which you understand is the calculation that brought 13 them the 1 per cent number in the previous document? 14 A Yeah, it's probably based on the accepted level 15 by OSHA in factories. 16 Q Yeah. 17 A Yes. 18 Q "Mr Eiermann bluntly stated that the 19 calculation was wrong, since the standard of 2 20 fibers/cc is not a time weighted average. Before we 21 had a chance for rebuttal Dr Schaffner ..." 22 Now, he's with FDA; right? 23 A Yes. 24 Q "... said that the ... [Silverston] [sic] 25 calculation was foolish since no mother was going to	Page 694 1 A I don't know. 2 Q Okay. 3 Well, let's just take that one as a 4 hypothetical. 5 If you put on your baby powder, "Contains 6 .006 per cent chrysotile asbestos", do you think moms 7 would buy it? 8 A No, but let's step that back. 9 You said, "Had they ever refuted it?" And I 10 said, "I don't know". 11 But what I do know is that, certainly back in 12 the early 1970s, a number of the researchers were 13 totally confused over the differentiation between 14 chrysotile and chlorite, and that was a major problem 15 by the methodologies that had been used in the early 16 1970s. 17 Q That was a -- that was a general problem with 18 XRD; right? 19 A That was a general problem, yes. 20 Q But if you're .006, you're not talking about 21 XRD, are you? 22 A No, no. 23 Q And you're not saying that McCrone was 24 confused, are you? 25 A Well, without seeing the full lab report, I
Page 693 1 powder her baby with 1 per cent of a known carcinogen 2 irregardless of the large safety factor. Because of Dr 3 Schaffner's strong stand we did not correct 4 Mr Eiermann's misunderstanding of the calculation". 5 Right? 6 A Yes. 7 Q Okay. 8 So the FDA guy says: look, if a mom knows 9 that theres 1 per cent any carcinogen, they're not 10 going to powder their baby with it; right? 11 A Absolutely. 12 Q Let me ask you this question: we've seen some 13 figures put out by McCrone for some testing of Johnson 14 & Johnson's talc, and I'll take one. I think there was 15 one that was .006 per cent chrysotile; do you recall 16 that? 17 A That's what they claimed. 18 Q Okay. 19 A At the time, yes. 20 Q Right. 21 Johnson & Johnson never refuted it, did they? 22 A I don't know. 23 Q Right. 24 You're not aware of it, as you sit here 25 today, are you?	Page 695 1 wouldn't know whether they were confused, or whether 2 there was any follow up to say was it a trace that was 3 in the lab? 4 We talked about that. 5 Q Mmm hmm. 6 I'm going to go ahead and use the chart 7 again. 8 So let's just -- let's look at -- let's look 9 at some of these results we have; okay? 10 Let's look just look at some of the 11 percentages that we've been given. 12 In 1971, we have .01 per cent chrysotile in 13 Johnson's Baby Powder. 14 If Johnson & Johnson said on the bottle, 15 "This product contains .01 chrysotile asbestos", do you 16 think mothers would buy it? 17 A No. 18 Q Okay. 19 Let's look at the FDA's results. 20 This would be 107,000 tremolite fibers of 21 actinolite tremolite per gram. 22 If Johnson & Johnson said to mothers on the 23 bottle, "This contains 107,000 tremolite fibers per 24 gram", do they you think they would buy it? 25 A No, but they wouldn't use the word "tremolite

Page 696 1 fibers". 2 The question is: was that asbestiform 3 tremolite, or not asbestiform? 4 Q Well, it's fibers; right? 5 A It's -- it's a loose terminology. 6 Without actually doing the fine detail 7 microscopy -- scanning microscopy, we've not seen that 8 differentiation in the report. 9 Q Okay. All right. 10 At worst, if a mother saw that, she'd say, 11 "What is fibrous tremolite?" Right? 12 A She could well ask that question, yes. 13 Q Let's look at this one from 1974, the samples 14 from Argonaut. 15 If the bottle said, "This contains 16 .0005 per cent chrysotile" or ".007 per cent 17 chrysotile", or ".001 per cent chrysotile asbestos", do 18 you think a mom would buy that? 19 A If it was in the asbestos form, no. 20 Q Well, chrysotile is always in the asbestiform? 21 A It is, yes. If it was chrysotile. 22 Q Okay. 23 A If it was validated as chrysotile. 24 Q Well, this is the report. The report is the 25 validation of the analysis.	Page 698 1 Q Okay. 2 On the following page, they -- it's at the 3 top. It says: 4 "The committee discussed the results of the 5 round robin testing of samples to evaluate the 6 DTA/optical microscope procedure for chrysotile and the 7 x-ray diffraction/optical microscope procedure for 8 amphibole, developed by the Ad Hoc Methodology 9 Committee". 10 So here in '74 they are trying to develop a 11 method; right? 12 A Yeah, it's an ongoing process -- 13 Q Yeah. 14 A -- whereby you develop methods and try to 15 improve the methods, yes. 16 Q Like I said, and at this point we know they've 17 already told the FDA: hey, you guys hold off on a 18 regulation. We're going to try and do it ourselves; 19 right? 20 A We're going to do a good job, yes. 21 Q We're going to do a good job. 22 By the way, when they finally passed J4-1, do 23 you think they did a good job? 24 A Yes. 25 Q Okay.
Page 697 1 Do you understand that? 2 A Yes. 3 Q Okay. 4 And then this one from October, '74, one 5 sample, chrysotile fibers at .006 per cent, and I 6 already asked you about that one. 7 A Yeah. 8 Q If Johnson & Johnson disclosed that there was 9 .006 per cent of chrysotile asbestos in baby powder, do 10 you think a single mother would buy that? 11 A No. 12 Q Okay. 13 Right. This next exhibit would be 147. 14 (Exhibit 147 marked for identification) 15 All right. Okay. This is a -- Meeting Notes 16 of the CTFA Talc Subcommittee; right? 17 And there's George Sandland there at the top. 18 He's the Chairman; right? 19 A Yes. 20 Q He's with Bristol-Myers; correct? 21 A He is, yes. 22 Q This is from December 4 of '74, and you can see 23 that there's at least two people here from J&J, George 24 Lee and Robert Rolle; right? 25 A Yes.	Page 699 1 Is that a question, or are you -- 2 A Are you asking me a question? 3 Q No, it sounded like you went, "Yes?" 4 A Yes. 5 Q But you're saying: yes, they did a good job? 6 A They did a good job. 7 Q Okay. 8 Now, what they have here is they have the 9 investigators and the results. So they have three 10 people that looked at three different samples; right? 11 A Yes. 12 Q And they knew what was in the samples, because 13 the only way you can evaluate the investigator is to 14 know what's in the samples? 15 A Yes. 16 Q Right? 17 So they have McCrone, Lucy and Walter 18 McCrone. Now, they were a husband and wife that ran 19 McCrone; right? 20 A I believe so, yes. 21 Q Okay. 22 They've got Pfizer, and they have a guy named 23 D Hamer from Johnson & Johnson; right? 24 A Yes. 25 Q Okay.

Page 700 1 So sample A: 2 "Talc sample from Pfizer containing 3 chrysotile and antigorite". 4 McCrone didn't see it; right? 5 A That's -- well, that's what it says, yes. 6 Q Right. It says, "none detected, pass"; right? 7 A Yeah, yeah. 8 Q Johnson & Johnson and Pfizer did see it; right? 9 A Yes. 10 Q Okay. 11 Now, ultimately, Johnson & Johnson was 12 sending its weekly samples and bi-weekly samples to 13 McCrone; right? 14 A Yes. 15 Q Okay. 16 Then down at the bottom it says: 17 "The only other back-up procedure would be 18 TEM ..." 19 That's transmission electron microscopy? 20 A Yes. 21 Q "... which theoretically is satisfactory, but 22 which has the following disadvantages: 23 1. Lack of availability to most talc users". 24 A Yes. 25 Q And:	Page 702 1 Q Right. 2 A And still are, but they were -- in this report, 3 the CTFA are writing the CTFA overview. 4 Q Right. 5 And Johnson & Johnson had no objection when 6 the CTFA wrote to the FDA and said: don't pass the 7 regulation right now, did they? 8 A I'm not aware of that. 9 Q Okay. 10 A But certainly the industry was heavily working 11 into alternative test methods. 12 Q Okay. 13 A Which was considered better than the FDA. 14 Q By them; right? 15 A Yeah, and that was proven with the methods that 16 were later adopted. 17 Q So what you're saying is it was proven that the 18 CTFA method they eventually drafted was better than the 19 FDA method; right? 20 A The method that J&J adopted was better than the 21 FDA method, which included transmission microscopy. 22 Q Okay. So that's kind of a different point. 23 My question is: was the method that the CTFA 24 developed, the one that they told the FDA to wait for 25 before they passed the regulation -- was that better
Page 701 1 "Its ultra sensitivity could be a problem". 2 How can ultra sensitivity, when you're 3 looking for tiny, tiny, tiny things, and you want to 4 know if they're there, how is ultra sensitivity a 5 problem, sir, unless you don't want to find it? 6 A Well, it certainly wasn't a problem to Johnson 7 & Johnson because they were pretty quick to adopt that 8 method. 9 Q When did they adopt it? 10 A I believe it was about the same time as J4-1. 11 Q Around '76; right? 12 A Yeah -- well, no. They'd already adopted the 13 first version of J4-1 12, 18 months beforehand. So 14 we're looking at '74, '75. 15 Q All right. Okay. 16 And I think we have more specific documents 17 on that. 18 But the bottom line is Johnson & Johnson is 19 part of the CTFA and the CTFA is saying that the 20 disadvantage of TEM is its ultra sensitivity; right? 21 A The CTFA is speaking for the CTFA, not for 22 Johnson & Johnson. 23 Q Well, Johnson & Johnson part of the CTFA; 24 right? 25 A They were a member, a paid member.	Page 703 1 than the FDA method? 2 Sir? 3 A I'm just -- just thinking ... 4 Q Okay. 5 A I don't know the answer to that question. 6 Q Okay. All right. 7 A I don't know the answer to that question. 8 Q That's fair. 9 This is a memo from Johnson & Johnson 10 December 17, '74, and it's to Estrin at CTFA and John 11 Menkart at Clairol; right? 12 A Yes. 13 Q Okay. 14 (Exhibit 148 marked for identification) 15 It says: 16 "The talc task force has completed the 17 process of development of analytical procedures for 18 determining the presence of chrysotile and tremolite in 19 talc. We believe it is critical for the CTFA to now 20 recommend these methods to the FDA before the art 21 advances to more sophisticated techniques with higher 22 levels of sensitization". 23 A Sensitization, yes. 24 Q Right? 25 A Okay.

Page 704 1 Q Johnson & Johnson is saying that we should move 2 for the adoption of our methods before better methods 3 come along; right? 4 A Yeah, but that's not unusual. 5 You start with a method and then, as 6 different methods become available, and we talked and 7 DTA and talked about transmission scanning transmission 8 electron microscopy, infrared -- those are methods that 9 you can add to it. 10 But it's a -- my read of that is that they're 11 saying, back in December, '74: we need to get something 12 done, and so this is as good as it's going to get in 13 December, '74. 14 Q Okay. Well, let's read that. 15 A With option to say if and when things come 16 along later, they can be added to it. 17 Q I feel like you and I are reading a different 18 sentence. 19 A Okay. 20 Q So let's read it together again; okay? 21 "We believe it is critical for the CTFA to 22 now recommend these methods to the FDA before the art 23 advances to more sophisticated techniques with higher 24 levels of sensitization". 25 Right?	Page 706 1 Q "This memo is to request authorization from the 2 Management Board of \$90,000 to cover additional 3 recommended safety studies for talc. This money is not 4 present in the current R&D budget. 5 Our current posture with respect to 6 sponsorship of talc safety studies has been to initiate 7 studies only as dictated by confrontation". 8 What that means, sir, is their policy to that 9 point has been to only do studies when they're 10 confronted by something; right? 11 A Yes. 12 Q Okay. 13 So instead of being proactive, they're being 14 reactive; correct? That's what that means? 15 A No, not necessarily. 16 When you do a scientific study, you do so on 17 the basis of valid technical reason. You're not going 18 to spend millions and millions of dollars doing 19 hypothetical studies. 20 So in this particular case, the 21 confrontation, as it's described, took the form of 22 reports, publications, meetings with FDA, et cetera, 23 which suggested that more information needs to be 24 gleaned from the scientific literature. 25 And so here we're saying: go ahead and do
Page 705 1 A Yes. 2 Q And, in fact, in the previous document the CTFA 3 is saying the problem with TEM, which would be a more 4 sensitive method, is that it's more sensitive; right? 5 A Yes, they are. 6 Q All right. You can set that aside, sir. 7 Is it still Johnson & Johnson's position that 8 Johnson & Johnson would have always advocated the most 9 sensitive methods for the detection of asbestos in talc 10 after we've seen these two documents? 11 A The most sensitive methods are still the same 12 ones, which, you know, line up with scanning or 13 transmission electron microscopy, in addition to the 14 CTFA method. 15 Q Well, I'm not asking you to list the methods. 16 I'm asking you whether or not Johnson & Johnson 17 actually advocated the most sensitive methods? 18 A If the methods had been scientifically 19 validated, yes. 20 Q This will be 149. 21 (Exhibit 149 marked for identification) 22 All right. Now, the heading of this 23 document -- this is from G Lee, it says Strictly 24 Confidential, March 3, 1975; right? 25 A Yes.	Page 707 1 some studies. 2 Q But what they're saying -- that wasn't quite my 3 question. 4 My question was: instead of being proactive, 5 what they're saying is that their philosophy to that 6 point had been to be reactive. 7 In other words, doing the research in 8 response to confrontation; right? 9 A Yeah. You wait until you've got an issue 10 that's worth spending \$100,000, \$200,000. 11 Yeah, if someone's coming up with a good 12 idea, or a challenge in this case, you say: yeah, that 13 could be worth checking that out. 14 Q He doesn't say "good idea" or "challenge", 15 though, does he? 16 A Well, "confrontation" is the word he's used. 17 Q It is, yes. 18 A And I used the word "challenge" because very 19 often when companies are confronted, they're confronted 20 with a piece of information, and you say, "How do I 21 deal with that?" 22 One way would be to: let's do some studies. 23 Let's find out more. 24 Q Sir, you didn't write this memo, though? 25 A I did not, no.

Page 708 1 Q Okay. 2 A I would not use that form of language. 3 Q Right. 4 Someone else wrote this memo, and this was 5 someone who had at least some responsibility for talc 6 back in the '70s; right? 7 A Yes. 8 Q Okay? 9 A Yes. 10 Q And he said their current posture was to: 11 "... initiate studies only as dictated by 12 confrontation". 13 Those were his words; right? 14 A They were, yes. 15 Q Okay. 16 "This philosophy, so far, has allowed us to 17 neutralize or hold in check data already generated by 18 investigators who question the safety of talc". 19 Meaning that if you do it in response to 20 something that's out there, you already know what 21 they're going to say, so you can respond to it sort of 22 on all fours; right? 23 A That's an interpretation. 24 Q It's a pretty fair interpretation, isn't it? 25 A Say it again?	Page 710 1 MS FROST: Okay. We can do that. 2 (Off the record at 5:07 pm) 3 (On the record at 5:20) 4 BY MR PANATIER: 5 Q This will be Exhibit 150. 6 (Exhibit 150 marked for identification) 7 A Thank you. 8 Q Sure. 9 Sir, this is a privileged and confidential 10 meeting. It says Privileged and Confidential Meeting 11 XII; right? 12 A Yes. 13 Q And it says at the top To: Dr Rolle, Strictly 14 Confidential, copies to Estrin and JM Pisani; right? 15 A Yes. 16 Q Now, at the top it's dated July 14, 1975; 17 right? 18 A Yes. 19 Q Okay. 20 So just for context, it says at the top: 21 "The FDA-OTC Antiperspirant Panel met on July 22 9 and 10, 1975 in Conference Room F, Parklawn Building, 23 Rockville, Maryland. All members of the Panel were 24 present except for Drs Shefter and Clayton". 25 Okay? And it says that somebody named Dr
Page 709 1 Q Yeah. 2 If you know what someone's, say, criticism of 3 the safety of talc is -- 4 A Yes? 5 Q -- you already know what their criticism is -- 6 A Yeah? 7 Q -- then you know exactly what you have to 8 respond to; right? 9 A Yes. If you've got the data, yes. 10 Q Okay. 11 "The principal advantage for this operating 12 philosophy lies in the fact that we minimize the risk 13 of possible self-generation of scientific data which 14 may be politically or scientifically embarrassing". 15 He said that, didn't he? 16 A He did, yes. 17 Q So he explains exactly why it has been good to 18 only respond when confronted; right? 19 A Yes. 20 Q You can set that aside, sir. 21 Okay. 22 MS FROST: We've been going a little more 23 than an hour. It's entirely up to you. 24 MR PANATIER: Yeah. Let's take a break and 25 figure out where we are. Let's do that.	Page 711 1 Albert Miller, a physician associated with Mount Sinai 2 Hospital, was there too; right? 3 A Yes. 4 Q If you look at the next two paragraphs, we know 5 that Hildick-Smith was there. We know that Dr Rolle 6 was there; correct? 7 A Yes. 8 Q Okay. 9 And Dr G Lord was there. He's the Director 10 of the Johnson & Johnson Research Foundation; right? 11 A Correct. 12 Q Let's go to page -- at the bottom it's 10571. 13 Should be a highlight there? 14 A Yeah. 15 Q It says: 16 "Dr Miller ..." 17 Well, for context, that paragraph starts: 18 "Questions raised during the CTFA 19 presentation included: Why were hamsters used in the 20 inhalation study? (Battelle had noted in other studies 21 the ability to produce asbestos in hamsters.) Dr 22 Miller noted that amosite is very similar in 23 composition to tremolite and wondered if more concern 24 should not be shown because, in his judgement, amosite 25 is closer to true talc than tremolite".

Page 712

1 But then he goes to another topic, which is:

2 "Dr Miller was very concerned over the

3 methodology for the determination of ... [asbestos]

4 ..."

5 He says "asbestosis", but I think he means

6 asbestos.

7 A Yeah.

8 Q "... materials in talc and believed that the

9 CTFA approach was not as sensitive as it should be".

10 So this is sort of a recurring theme we've

11 seen; right?

12 A Yes.

13 Q Okay.

14 If you go to the next page -- well, let's see

15 here ...

16 If you go to page at the bottom it's 574,

17 okay, and it's still Mr Miller:

18 "He questioned the specificity of the CTFA

19 method for determining fibrous content and wondered if

20 more sophisticated techniques should not be utilized".

21 Then if you turn to the next page, the

22 Conclusion is:

23 "Thus, the most sensitive practical method

24 should be adopted as the official standard".

25 A Yes.

Page 713

1 Q So people are advocating for that; right?

2 A Yes.

3 Q Okay.

4 By the time the CTFA J4 method was adopted,

5 was it the most sensitive, practical method?

6 A It was the most sensitive, practical method

7 that had been validated.

8 Q Validated means?

9 A By -- by -- well, checked out, tried out by

10 various companies in the industry to say is this -- is

11 this going to work, yeah.

12 Q And they -- in your opinion, they did that?

13 They validated CTFA J4?

14 A They had, yes.

15 Q Okay.

16 All right, sir. You can set that aside.

17 This will be 151.

18 (Exhibit 151 marked for identification)

19 You see this is the minutes of the Talc

20 Subcommittee, and it's a meeting that was held on

21 March 15, 1976?

22 A Yes.

23 Q It's between the CTFA, and I believe the FDA is

24 there. Yeah. It says:

25 "Mr Sandland highlighted the results of the

Page 714

1 Friday meeting with [the FDA,] the Food and Drug

2 Administration".

3 Right?

4 A Yes.

5 Q Now, George Lee from Johnson & Johnson is

6 present. You see him in the first list of people;

7 right?

8 A Yes.

9 Q And it looks like they had two sessions and he

10 was there at the second session, too?

11 A Yeah.

12 Q And then if you turn the page, there are six

13 people there from the FDA; right?

14 A Yes.

15 Q Okay.

16 I just want to focus on something the FDA

17 guys said at the very end. So if you'll go to the last

18 page, there should be a highlight there.

19 A Yes.

20 Q Got it?

21 A Yes.

22 Q "Dr Schaffner ..."

23 He's with the FDA; right?

24 A Yes, he is, yeah.

25 Q "... suggested the possibility of having

Page 715

1 industry report periodically on the results of its

2 analysis to the FDA. Dr Estrin ..."

3 Who we know to be the head of -- or the Vice

4 President of Science; right?

5 A Yes.

6 Q "... responded the subcommittee would give

7 serious consideration to the suggestion".

8 Right?

9 A Yeah.

10 Q So the FDA is saying: look, perhaps you guys

11 could give us periodic reporting of your testing?

12 A Yes.

13 Q Right?

14 And the CTFA guy says: we'll seriously

15 consider that.

16 Right?

17 A Yeah.

18 Q Okay.

19 That would be a good thing to do; right?

20 A Yes.

21 Q Okay.

22 This next exhibit will be 152.

23 (Exhibit 152 marked for identification)

24 Okay. So this is now March 31, '76. This is

25 13 days later.

Page 716

1 A Yes.

2 Q Right?

3 Another meeting of the CTFA. You can see

4 that George Lee and Robert Rolle for J&J are there;

5 correct?

6 A Yeah.

7 Q Okay. No one from the FDA is there. Do you

8 see that?

9 A Yeah.

10 Q Okay.

11 If you turn to the page under Periodic

12 Reporting; do you see that?

13 A Yes.

14 Q "The Subcommittee agreed on the success of the

15 presentation of summary reports given to the FDA. Dr

16 Estrin suggested the Subcommittee should not obligate

17 itself to give periodic reports to FDA but urged

18 members to build their database so that at some time in

19 the future the Subcommittee can decide whether the time

20 is right to present FDA with an update on industry

21 analysis".

22 Did I read that right?

23 A Yes.

24 Q So 18 days prior, the FDA guys say: it would be

25 great if you would give us periodic reporting. And the

Page 717

1 CTFA says: we'll give it serious consideration; right?

2 A Yes.

3 Q And then 13 days later, they say: we're not

4 going to; right?

5 A Well, the CTFA, not Johnson & Johnson, were

6 saying that they can decide when the time is right.

7 Q Is there a --

8 A They're not saying they're not going to do it.

9 Q Yeah.

10 A They're going to say: when the time is right,

11 yeah, we'll do it.

12 Q They didn't agree to obligate themselves to

13 periodic reporting to the FDA; right?

14 A They did not agree, no.

15 Q Is there a footnote somewhere where it says

16 Johnson & Johnson strenuously objected?

17 A No.

18 Q Okay.

19 This next exhibit will be 153.

20 (Exhibit 153 marked for identification)

21 March 22, 1976. This was a memo by Bruce

22 Semple.

23 Now, this is the first time we've mentioned

24 him. Who was he?

25 A Yeah. He was the Director of Medical Affairs.

Page 718

1 He was Medical Director.

2 Q Is that a --

3 A He was an MD.

4 Q Is that a pretty high up role?

5 A Yes, yeah.

6 Q So he has a phone dialogue with Dr DH Groth at

7 NIOSH; right?

8 A Yes.

9 Q NIOSH is the National Institute for

10 Occupational Safety and Health; true?

11 A True.

12 Q Okay.

13 So let's see here ...

14 It says here:

15 "She ..."

16 They're talking about another doctor:

17 "She then asked him about asbestos, and he

18 said that this was a different problem, and that he

19 would not recommend using talc on babies because of the

20 possibility of asbestos inhalation, regardless of the

21 contamination level. He felt that this would

22 constitute an unnecessary risk".

23 Now, we have seen I think two or three other

24 instances, sir, where doctors have recommended against

25 the use of talc on infants, starting in the '60s;

Page 719

1 correct?

2 A There have been, yeah.

3 Q Okay.

4 A An individual doctor can have an opinion.

5 Q Sure.

6 A That's obviously her opinion.

7 Q Sure.

8 Nevertheless, after each one of these times

9 where a doctor has said, "I don't recommend the use of

10 talc on babies", Johnson & Johnson did continue to

11 sell, and sells to this day, talc for babies; correct?

12 A Yes.

13 Q Okay. All right.

14 Next one is going to be 154.

15 (Exhibit 154 marked for identification)

16 November 15, 1976. This is Bill Ashton to

17 Jerome Krause at the Colorado School of Mines; right?

18 A Correct.

19 Q Okay.

20 And he just says:

21 "Dear Jerry:

22 This letter transmits two assignments ..."

23 Right? So now he's giving the Colorado

24 School of Mines assignments; right?

25 A He is, yes.

Page 720 1 Q Okay. 2 And, of course, we saw before the last time 3 we -- you and I discussed the Colorado School of Mines, 4 it was when J&J had given them permission to work with 5 JM; right? 6 A On the issue of fibers in talc. 7 Q Right. 8 A Yes. 9 Q And ultimately that specific work got shut 10 down. We don't know if it ever came back; right? 11 A Well, we don't know it ever got started. 12 Q Right. In fact, it didn't get started. 13 A Yeah. 14 Q They said they were about to do it; right? 15 A Yeah. We don't know if it ever got started, 16 yeah. 17 Q Right. 18 So let's look at part 1b) of assignment 19 number 1. 20 Well, you know what, actually let's look at 21 1: 22 "With the attached letter of November 3rd, 23 there is a draft of an article on talcum powder assays 24 as prepared by our John Schelz. The article is to be 25 accepted by the Journal of Toxicology & Environmental	Page 722 1 Colorado School of Mines, he'd be -- have a geology, 2 rather than an MD, qualification. 3 Q Yeah, he's a geologist. 4 A Yeah. 5 Q Okay. 6 B): 7 "I suggest that you also review it in the 8 light of the article which you and I have discussed and 9 on which you are starting". 10 Now, are you aware that Ashton and Krause 11 actually did publish a paper together? 12 A I'm not aware of that. 13 Q Okay. 14 A No. 15 Q "You recall we planned to call your new article 16 something like Pitfalls in Analysis of Mineral Powders 17 for Asbestos Mineral Contents. That is to say, review 18 the Schelz article draft with your proposed article in 19 mind so we do not wind up opening up any pitfalls in 20 the Schelz draft which will appear under the J&J 21 umbrella". 22 In other words, Schelz is writing an article; 23 you're writing an article; make sure you don't say 24 anything that casts any doubt or is in conflict with 25 Schelz's article; correct?
Page 721 1 Health. The outlook is that it will appear in the 2 January issue which is the same issue as that in which 3 your letter to the editor is expected, wherein you 4 refute Langer's recent work". 5 Right? 6 A That's what it says. 7 Q Now, you're aware that Dr Langer, Dr Rolle and 8 Dr Selikoff in 1976 published a peer reviewed paper 9 looking at the asbestos in 20 different consumer talcum 10 powder products; correct? 11 A I have seen that publication, yes. 12 Q Okay. 13 And J&J, along with Colorado School of Mines, 14 were orchestrating refutations to Langer's work; 15 correct? 16 A Correct. 17 Q Under b) it says -- oh, well, let's look at a): 18 "We need an early critique from you on the 19 draft as it stands per the attached". 20 So Johnson & Johnson, a talc manufacture and 21 seller, is co-ordinating with a doctor, theoretically 22 independent doctor, on how to refute Dr Langer's work; 23 right? 24 A Yeah, he's dealing with Dr Krause, who I don't 25 know, I've never met him, I would assume at the	Page 723 1 A Well, that's probably a slight extrapolation of 2 what the guy is actually saying. 3 He's saying: review it with the proposed 4 article in mind so we don't wind up opening any 5 pitfalls in the Schelz draft. 6 In other words, if there's something that 7 you're going to say, make sure it's not incorrect. 8 Q Right. 9 Well, it's not in conflict with Schelz? 10 A Or not in conflict, yes. 11 Q Right? 12 A Yes. 13 Q So they're kind of co-ordinating their 14 scientific papers; right? 15 A Well, I wouldn't use the word "co-ordinating". 16 Q That is what this letter is, isn't it? 17 A Colorado School of Mines is very much an 18 independent research institute. It's equivalent of a 19 university. So you're not going to get them to change 20 what they want to write. 21 If they want to write an article, they would 22 do so with all the professionalism that that kind of 23 institute would do. 24 Q That's the ideal, isn't it? 25 A It is.

Page 724 1 Q And this is an institution that we have seen in 2 this letter being given two assignments by J&J. 3 A Yes. 4 Q And in another letter being authorized to talk 5 to another company about a certain issue; correct? 6 A About an issue that was already confidential 7 between them and Johnson & Johnson, looking for fibrous 8 talc in talc, yes. 9 Q Well, when they wrote their memo about it with 10 the JM study, they didn't say they were shutting it 11 down because it was confidential. 12 They were saying they were worried that it 13 might disclose things that were not yet known about 14 sub-trace minerals in talc; correct? 15 A Who is "they", sorry? 16 Q Johnson & Johnson? 17 A Johnson & Johnson. 18 Well, Johnson & Johnson never shut down 19 the -- the original correspondence with the School of 20 Mines, the Colorado School of Mines, related to an 21 approval that Colorado could talk to Johns Manville 22 relating to work they'd done with J&J on looking for 23 talc fibers in talc specimens. 24 At a later date, as you rightly said, they 25 came back with the idea that maybe they wanted to look	Page 726 1 you would influence unduly, and I think that's not an 2 unreasonable thing to say. 3 Q Okay. 4 A I do not believe that J&J would ever influence 5 Colorado School of Mines not to initiate a project with 6 a company like Johns Manville. 7 Q All right. 8 Well, let's just look at how Ashton talks to 9 the Colorado School of Mines. Look at the bottom of 10 number 2, the second assignment which was to test some 11 talc: 12 "We will be verbally reviewing this in more 13 detail shortly so that we are both in agreement on the 14 scope of that assignment and how it is to be reported". 15 Right? 16 A Yes. 17 Q Okay. You can set that aside. 18 If you want to be done now, we can be done, 19 or I can grab a few more. 20 It's up to you guys. We're at about a half 21 an hour since we -- 22 MS FROST: Why don't we -- 23 MR PANATIER: Call it a day? 24 MS FROST: -- call it quits for the day? 25 MR PANATIER: Okay.
Page 725 1 at other things which were not -- which J&J was not 2 party to. 3 So they were separating those two very 4 clearly. 5 Q The end result was the work never happened? 6 A And that was a relationship between Johns 7 Manville and Colorado School of Mines. 8 Now, it was not a Johnson & Johnson decision. 9 Q You know that because other times you've 10 speculated about phone calls maybe happening, and yada 11 yada yada. 12 But here you're willing to just volunteer 13 that Johns Manville and Colorado School of Mines, 14 together without J&J, decided to shut down this work 15 that J&J didn't like. 16 Is that fair? 17 MS FROST: And, Chris, I've been good about 18 not making objections either, but that one is getting 19 really close to the line. 20 MR PANATIER: You can answer. 21 THE WITNESS: I am speculating based on the 22 way that scientists operate. 23 BY MR PANATIER: 24 Q Okay. 25 A And Colorado School of Mines are not someone	Page 727 1 Right. We're off the record for today. 2 (Whereupon the deposition was adjourned at 5:37 pm) 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

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CERTIFICATE OF DEPONENT

I, JOHN HOPKINS, hereby certify that I have read the foregoing pages, numbered 1 through 348, of my deposition of testimony taken in these proceedings on Wednesday, August 16, 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:

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ERRATA SHEET

Priority-One Court Reporting/Veritext
 718-983-1234
 ASSIGNMENT NO. P1-2657979
 CASE NAME: Herford, Verdolotti, Teuscher & Etheridge v. Asbestos/Johnson & Johnson
 DATE OF DEPOSITION: 8/16/2017
 WITNESS' NAME: Dr. John Hopkins Vol 2

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Dr. John Hopkins Vol 2
 (Notary not required in California)
 SUBSCRIBED AND SWORN TO
 BEFORE ME THIS _____ DAY
 OF _____, 2017.

NOTARY PUBLIC
 MY COMMISSION EXPIRES _____

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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 Wednesday, August 16, 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
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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
Wednesday, August 16, 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 28, 2017.....

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CERTIFICATE OF COURT REPORTER

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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 28, 2017

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